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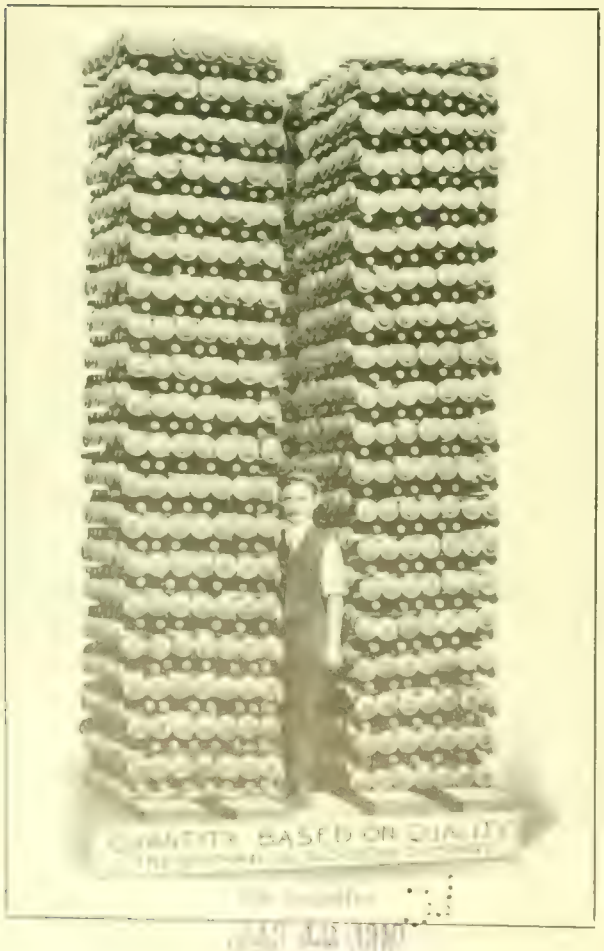

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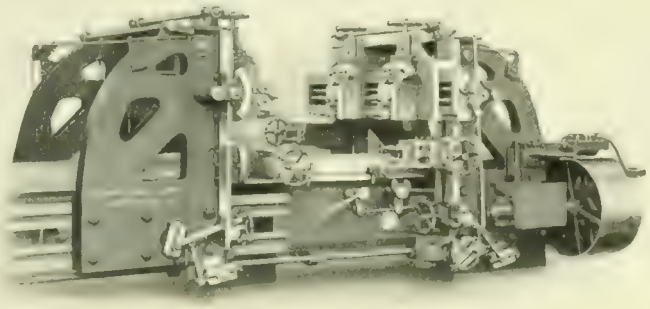

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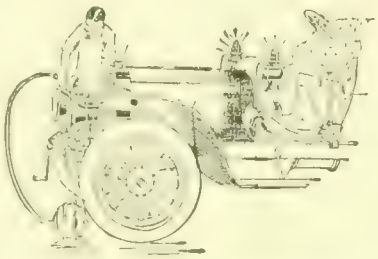

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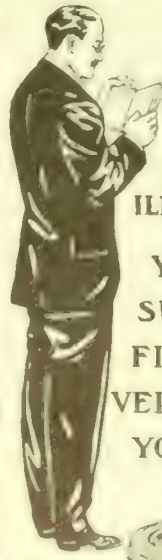

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Editorial Comment

The New Year.

The old Latins consecrated this month to the worship of the god whose two faces let him look both backward and before. Every opening year is properly a time for review as well as preview; but the backward glance should be brief, while the forward look should yield a fixed vision of goals to be reached. The business men of Worcester are doubtless willing to leave behind them some of the trying experiences of 1908, and to greet the brighter promise of 1909. To each of our readers, near or far, this Magazine offers heartiest wishes for individual attainment of cherished hopes. A year ago we were privileged to send forth as a New Year's greeting, "A Business Man's Resolutions," from which we have heard again and again most appreciatively. This year we offer our readers a supplementary page on which the poet's inspiration and the artist's skill have worthily collaborated, in the hope that this deep and true note of a city's life may find a response in many hearts. We believe our readers will join with us in extending appreciative thanks to the author, Rev. Shepherd Knapp, pastor of the Central Congregational Church of this city.

The New Civic Year.

At the recent city election Hon. James Logan was elected mayor for a second term by an increased majority, Mr. Arthur B. Brunell also winning as candidate for alderman-at-large. The campaign was waged strictly on the lines of business policies and methods in city administration; and Mr. Logan's frank and full rendering of the account of his stewardship was endorsed by the popular vote summoning him to carry forward the plans and principles of civic service which have been conspicuous in his work of the last year. Without discussing the degree to which national party lines were followed or disregarded in this result, we feel moved to affirm that the issue of this campaign is a vindication of the theory that the city's business should be handled like one's private business; and that when a man conspicuously successful in large corporate responsibilities is willing to give himself to the city's interests with like ability and fidelity, a majority of far-sighted citizens will be glad to avail themselves of such leadership, irrespective of partisan affiliations.

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Another Year of No-License.

Greatly to the surprise of some, Worcester remains for a second year in the no-license column, by a reduced but decisive majority of over two hundred votes. The battle upon this issue was fought in complete separation from that for the election of city officials, as ought always to be the case. Barring some reprehensible attempts at illegal registration, for which the responsible leaders rather than their weak tools ought to be punished, this contest was waged on a high plane of educational appeal to hard fact, rather than through mere sentimental and emotional platitudes. The no-license committee was composed of some of the strongest business men of Worcester, and they made their fight with rare skill and resourcefulness. Without trying to pass upon some disputed points as to how and why and by whom the advocates of the open saloon were defeated, we believe it true that the satisfaction of multitudes of business men with the effect of no-license as they had witnessed it for six months, and the desire to have longer test of this method of handling the liquor traffic, were strong if not overpowering elements in the result. Indications abound as to the deep interest felt elsewhere in this decision of Worcester to continue the largest no-license city in the world.

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Progress Toward Industrial Education.

A public hearing held in the City Hall a short time ago brought out an extended discussion of the way in which the management of Worcester's coming trade school should be related to the control of the taxpayers. The members of the Industrial Commission, who have given much time and toil to the investigation of this matter, asked that a board of nine trustees be chosen by the city legislature to have charge of this new department of popular education. Representatives of the School Committee urged that for the sake of unifying our system this new department should be placed wholly in the hands of the present School Committee of thirty. This difference of opinion connects itself with a most unfortunate discord in Massachusetts between the Industrial Commission and the State Board of Education over the future establishment and control of these greatly-needed opportunities for boys and girls in our great industrial centres to gain access to better and more practical training for the mastery of trades. Such a controversy should never have arisen, and ought speedily to disappear. The ordinance proposed by the committee, creating a commission of thirteen members, chosen in part by the City Council and partly taken from the School Committee and from city officers, is more than an ingenious compromise; it is a recognition of all parties interested in this movement, and an attempt to divide between them in wise proportions the responsibility for this new undertaking, which now ought to materialize speedily.

A Convention for Boards of Trade.

In commenting last month upon the congress of governors and their invited guests held recently in Boston to consider the interests of New England, we ventured the suggestion that in some way that movement should be made less exclusive and more popular in its constituency and brought into more vital touch with the industrial and commercial life of this section. We are rejoiced to see, as a step in that direction, action by the executive officers of the Massachusetts State Board of Trade looking to a convention of commercial organizations in this Commonwealth, for the popular consideration of similar questions and for such concerted action as will maintain and increase the industrial standing of the old Bay State and develop her natural resources. We note, as an outcome of the governors' congress, a plan for uniform legislation in the different New England States touching the regulation of automobiles, and we sincerely wish this all possible success; but there are tasks for practical business men, rather than for law-makers, to undertake; and if every commercial and business organization in the State should send its best representatives to such a gathering where there could be the utmost freedom of discussion, we believe much good might be accomplished. We trust this project will be carried through, and may lead to larger affiliations among boards of trade and similar organizations throughout all New England.

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The Civic Federation and Trade Agreements.

There is no group of men to whose efforts in behalf of industrial peace the nation owes more than to the Civic Federation and its distinguished chairman, Hon. Seth Low. The recent meeting in New York city was notable for many striking features connected with the harmonious meeting of men who on many points are at strife with each other. The chairman's address contained an elaborate discussion of the present status of the trade agreement, including a defense of the right and reasonableness of the trade union. Among other things Mr. Low said:

> I read in the paper the other day that there are 89,000 stockholders in the Pennsylvania Railroad Company. No one contends that these people organize into a company in order to fight labor. They organize because they have to in order to work together; [illegible] they are represented in every use made of their capital by their officers. Can any one seriously contend that these 89,000 stockholders, speaking through their [illegible] 160,000 employees: "We insist upon dealing with you, man by man; we will not recognize [illegible]" Is it not rather clear that the 160,000 employees, so far as their interests are common, must unite if they are to have anything at all to say as to the conditions upon which they will work; and, if they unite, they must have an organization and they must be represented by their officers. And is it not further clear that they are justified in organizing along the lines of their trade, if they wish to do so, rather than in groups as they [illegible]

Why Labor Organizes.

As against the claim that labor organizes simply because capital has already done so, and out of hostile motives, Mr. Low adds:

> It is sometimes said that labor organizes because capital [illegible] It is a misleading statement, because it obscures a much more fundamental truth. And it is an unfortunate statement, because it immediately suggests antagonism to capital as the motive behind all organization of labor. Labor organizes for the same reason that capital does, and for no other; and both organize because without organization neither can enjoy the benefits that come from combined action. Take another illustration. The United States Steel Corporation employs, in round numbers, 200,000 men. Of this vast army of workmen, about 44,000, nearly all of them representatives of organized labor, own stock in the corporation. In their capacity as stockholders these 44,000 workmen are represented by officers of the corporation. Can it be contended that they are any less free, or have any less right to be represented, in their capacity as workmen, by the chosen representatives of their trade organization? And when the two attributes of holding stock and taking employment are thus united in the same persons, will any one any longer contend that these men, as workmen, organize for the purpose of antagonizing themselves as capitalists?

Mr. Low concludes his discussion with this statement, which may be considered as the well-established conviction of the organization he represents:

> The National Civic Federation believes that the trade agreement is the best method yet devised, in this age of universal organization, for promoting alike industrial peace, industrial well-being and industrial progress. For this reason the federation proposes to do everything in its power to promote the use of the trade agreement in a constantly widening field.

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A Practical Demonstration.

The most notable example of a trade agreement which this country has seen is probably that secured through efforts of the Civic Federation in 1903, between the anthracite coal miners and the operators. The award of the Board of Conciliation expired in 1906, and was then renewed for another three years. In a volume recently issued the public is given access to the entire working of the plan during those first three years; and it is a remarkable showing, which ought to be convincing to all parties, that the present trade agreement which expires next April ought to be renewed for another three years. From 1903 to 1906, 136 complaints, some against the miners and some against the operators, were heard and adjusted. In the second triennial period thus far, only twenty-two complaints have been made to the board, which speaks volumes as to the improved conditions in the anthracite regions.

It seems almost incredible that a plan evolved to meet a condition of such peril and working so well should be abandoned.

An Impending Calamity.

It needs no commission to discover that one of the most practical ways to help the farmers—and every one else—is to take prompt action to protect from drought and deluge the sources of our rivers. The water famine which has fastened itself upon New England at the beginning of winter is a disaster which threatens serious consequences. For the present our large cities are exempt from danger; but our smaller towns and many of our farming regions are not so well provided. If the ground freezes and winter conditions continue without any additional rain, serious inconvenience and suffering may occur. The high price of milk in our cities has excited alarm for the last few winters; that price may easily soar still higher in

coming months and with better reason, if the lack of water compels the selling of herds and the consequent diminution of milk supply.

The connection of this drought with the ruthless devastation of our forests has been set forth in strong words by Governor Guild in a recent article in the New England Magazine, in which he says:

> No rain! New England roads are choked with dust. New England harbors are filled, not with fog, but with the acrid smoke of forest fires. New England rivers shrunk to small threads of water leave beds of sewage and the spawn of all diseases on their banks. Year after year Congress and the Speaker have been forewarned of what might come. Year after year the national government has turned a deaf ear. Millions for the runways of the irrigation streams of the West. Not a cent for forest reserves at the head of New England rivers to save the water power of New England
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> And if the mills stop and the cattle sicken and the children die, the guilt shall again be at the door, not of the President, who has done his best, not at the door of the national forester, who has given all his energy to prevent it, but at the door of finish [illegible] as you like.

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Postal Savings Bank.

The platform of the Republican party endorsed this project. President-elect Taft has committed himself emphatically in favor of it, and Postmaster-general Meyer expresses the confident hope that by March 4 next this measure which he has so earnestly championed will be a law. While this matter concerns directly the sparsely settled regions, its success would indirectly benefit the whole country by calling into circulation large amounts of money. While depositors are to receive 2 per cent. interest, postmasters are to place the deposits in the United States banks of their communities, which will allow the Government 2.5 per cent. This will secure a circulation for this money in the vicinity from which it is drawn; its safety, of course, being guaranteed by the government. Some of the special advantages of this are well stated in the World's Work:

> "In the Pacific States the average distance that men have to go to reach any bank is 55 miles; in the Southern States, 33 miles; in the Middle States, 25 miles. This is, of course, a prohibitive distance. In the New England States, where savings banks are accessible to most of the population, they have deposits of more than a billion and a quarter dollars—more than in all the rest of the Union except New York. There is no doubt that accessible and safe depositories for savings in every part of the country—and only postal savings banks, of course, can be made so accessible—would put many hundreds of millions of dollars into circulation that are now hoarded in small sums; and that is enough money to make an enormous difference to the prosperity of the country.
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> "During the last fiscal year more than seventy-two millions were sent abroad by postal money-orders only; and it is known that much of this was sent for deposit in foreign postal savings banks."

Labor and Capital in the Courts.

The fining of the Standard Oil Company, and its expulsion from Missouri by the Supreme Court of that State, and the sentence of jail imprisonment upon Mr. Samuel Gompers and two other officers of the Federation of Labor, are events of large significance in their bearing upon the future freedom of trade in this country. The end of these cases in the courts is not yet, and may not be reached for months or years; it is therefore too early to review all the matters involved. It is timely, however, to recall the saying of President Roosevelt to the effect that no man is above the operation of law, and no man beneath its workings. It is well that both labor and capital should be impartially called to account for any actions that interfere with the free exercise of traffic; it is unfortunate, though perhaps unavoidable, that the representatives of great wealth should escape with a fine, while the men of moderate means are to be imprisoned. It is also to be regretted that in the case of the labor leaders the judge forgot his position and made himself practically the advocate for one of the parties in the suit. We endorse fully the following words from the Outlook:

> His opinion is a passionate attack, if not upon trades unionism, certainly upon a federation of trades unions.
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> It is evident that the undue heat of Mr. Gompers in a political campaign, a heat for which some excuse may be found in the fact that he was campaigning, excited a like quality in Judge Wright, for whose passion the same excuse cannot be found. His opinion illustrates quite as strikingly as any quotation he makes from Mr. Gompers' writings the "furious" way and the "turbulence" of spirit and of measures which he condemns in the accused before him. In the court-room, when the sentence was pronounced, the dignity of language was all manifested by the supposed criminals, and the passion by the judge. Happily, this opinion is an exception to what is the general, though we regret not to say the universal, spirit of the judiciary.

A New Policy of National Development

The opening days of December at our national capital were marked by the assembling of Congress for its last session; but there were other gatherings during that week in Washington which revealed higher degrees of statesmanship and seem likely to result in far greater achievement for the country's welfare than anything now proceeding from legislators who seem bound to vent their spite and press their quarrels with the present chief executive up to the last moment of opportunity. The Southern Commercial Congress, the second gathering of the Governors' Conference and the National Conservation Commission, and the meeting of the National Rivers and Harbors Congress formed an unprecedented combination of commercial and industrial leaders from all parts of the nation, representing every phase of political opinion; and all of them demanding with one voice a revolution in our national methods of dealing with the resources of this country. For any one privileged to be present at portions of all three assemblies, and to feel through personal intercourse the spirit which was in them all, there must be a deepening conviction that the United States is about to enter a new era of development. Hitherto individualism has been the controlling genius of our growth in wealth. The single chieftain has marshaled his forces, sometimes indeed gathering around a great group of retainers and subordinates, and has gone forth to amass a fortune. Often his endeavors have resulted in large gains in wealth to others than himself; but only as an incident to his own masterful progress. When possible he has used laws for his convenience; when impossible he has at times defied them all. A new day is dawning, in which the efforts of individual captains of industry are not to be suppressed or discouraged, but supplemented by far-

sighted national enterprise, working to create wealth for all by conservation and development. Individual greed in its grasp for monopoly has at last aroused this nation to a determination to save what is left of our common resources, and to rescue them from exploitation by privileged parties. For six months the scientific and statistical bureaus of the government have been working on an inventory of this wealth; and when the total of present and potential values is made public, we shall be ready for the next step, a plan for utilizing to the full the gifts which Providence has put within our possession.

The most significant note of this remarkable series of gatherings was the motto of the Rivers and Harbors Congress: "A Policy, not a Project." The phrase recalls the hundreds of millions of dollars which have been wasted in disconnected efforts at public improvement, as the result of log-rolled river and harbor bills. Over against this the country sees with relief the plan of a commission that shall survey the whole field, take account of the needs of all, and plan for the harmonious development of all resources by united enterprise and for the enrichment, not of a few nor merely of many, but of all this people. When south and north and central west and Pacific coast join with one voice in this demand, the days of the "pork-barrel" statesmen and their domination over law-makers and laws are numbered. When representatives of extreme states' rights announce their conversion to the necessity of national action to supplement and even supersede the control of separate states over streams which are the sources of navigable rivers and the reservoirs for inter-state irrigation, we must recognize new forces at work in our midst. As one watched Mr. Taft and Governor Johnson sitting side by side upon the platform at the opening session of the Governors' Conference, fully at one in the ideas there finding utterance, it was impossible to escape the impression of a new unifying force in the policies of this nation. It is neither possible nor needful to fully forecast the directions and extent to which that force may in future days carry us in commercial and industrial progress; but it will pay every business man in the United States to keep a watchful eye upon the swiftly advancing stages of public sentiment and combined endeavor.

Worcester's Share in the Tuberculosis Fight

Bulking large in the thought of the medical fraternity of the nation, as the magnitude of the task that confronts them in their anti-tuberculosis crusade becomes more and more apparent, is a solution through a national board of health.

Communities and commonwealths have wrestled with the problem of the extinction of this great white plague and failed. The cry now everywhere goes up that the nation must take the matter up, and it must not fail!

The feeling that it will not fail is based on something besides mere hope. There is good solid faith behind it, the mountain-moving kind of faith. In this warfare the forces that make for success are greater than the forces that make for failure. The disease, great as is the destruction it causes, numbers fewer victims to-day than ever before in its history, because many facts about it are the common property of 80,000,000 people.

The growth of this knowledge and the passionate longing for physical well-being on the part of every man, woman and child in the United States must be the reliance of all the crusaders against tuberculosis. No man desires this disease for himself and no man is safe from it. Under the circumstances it is a self-evident fact that men will do all things necessary to stamp out a fire that annually burns up millions of dollars' worth of human productive energy; and that the precautions taken by the individual states will be taken more intelligently and more extensively by the nation, with correspondingly greater and more gratifying results.

In this great fight against pulmonary consumption there had to be a leader, a pioneer to pave the way, and there has been one—Massachusetts. In proportion to her population she has done more than all other states, and she has another honor—she did it first. If all the states had as wise, as intelligent and as high-minded legislation as Massachusetts, tuberculosis would be robbed of much of the terror it still possesses. But back of this legislation even in Massachusetts reposed the human great first cause, the impulse to help and to rescue others. In one statute after another the heart of the old Bay State has recorded its throbbings in formal but none the less effective phraseology, until the world has come to understand that here is a commonwealth that not only elevates the man above the dollar, but absolutely ignores the dollar when his physical well-being is at stake.

In this humanitarian movement Worcester has led from the first, not blindly and impulsively, but intelligently and generously. The Worcester Magazine portrays elsewhere the admirable work done in this community in the suppression of this disease by Dr. Melvin G. Overlock, and other names will occur of men no less devoted who have accomplished much along these lines. But the physician who devotes his life to the study of bacteriology and the extension of the sovereignty of preventive medicine, is not alone entitled to the credit of the high plane Massachusetts has achieved in stamping out this plague. The capitalists, the rich men, the manufacturers, the heads of our great industries, have also played their part in making Massachusetts a model for other states.

The co-operation that the manufacturers of Worcester are giving Dr. Overlock in his attempt to stamp out the disease in this community, the willingness, nay, eagerness they have shown to care for their sick employees afflicted with the disease, have not been done with a desire for notoriety. It was simply a habit of mind; the recognition on their part of a solemn duty they owed their dependents as well as a desire to keep them up to high-water mark of efficiency.

We hear too much nowadays of the Osler theory, of the discarded wage earner, of the hard-hearted employer. It is worth while noticing such an instance as this, where employer and employee know and respect each other, and that the course pursued by the manufacturers of Worcester in caring for their help is precisely that which the vast bulk of employers everywhere are ready to follow when once it is pointed to them.

The beautiful thing about this generous and honorable course is the fact that it will react in a closer bond of unity between employer and employee, and each coming to know the other better will be cemented more firmly together in that solid foundation of loyalty of concord and of peace upon which all successful business rests.

Municipal Expenditures of Worcester and Her Neighbors

A Study in Comparative Statistics by Mr. Frank E. Williamson, City Auditor.

"HELLO! Here comes that confounded bookkeeper to see how many bricks I am using on this job," were the remarks made by a workman employed by a large and successful manufacturing corporation which maintained an accounting system at no small expense to ascertain the cost of their product.

It has been the study and aim for years by experts in municipal accounting, and the organized effort of the National Municipal League, to establish a scientific method which would be recommended and adopted by comptrollers and auditors, and bring municipal accounting under a uniform system of bookkeeping and classifications, to present data which will admit of ready comparison relative to cost of maintaining specific public services, such as schools, police and fire protection, the relative cost of construction and maintaining sewers and streets, and the per capita revenue derived from all sources, or from any specific source; but owing to the differences in accounting systems and methods of various cities, whose systems and methods are almost as numerous as the cities themselves, this is at present attended with many difficulties. The application of these observations was recently well made by Prof. Charles J. Bullock, who said:

> It is highly desirable, from a practical point of view as well as a scientific, that we know in the first place whether the expenditures are increasing more rapidly than population. In many branches they are. In some others it is not certain. We need to know, if possible, whether they are increasing relatively to the growth of wealth and industries of the country, from which must be drawn the revenue for meeting the expenditures thus created. We need to know whether the increase is uniform all along the line, and whether we must look for a continued increase of these expenditures.
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> So that while this movement is to be commended as of great practical value for the improvement of the financial standing of our cities, it has far-reaching importance when we look upon it as a movement for gathering data essential to enable the student of modern social conditions to determine whither our civilization is tending and whether it is likely to prove a failure or success.

By an act of Congress, approved May 1, 1898, the Commissioner of Labor was authorized to compile and publish annually statistics of all cities having a population of over 30,000, of which there are 154. In 1903 Congress transferred this work to the Bureau of Census, and to do this work, requiring three months' time, forty accountants are employed, at an expense of $40,000 annually. Although some cities had made advancement (as their reports show), I believe these government accountants by visiting all the largest cities annually, meeting those in charge of and assistants in accounting departments, asking questions, explaining the government form of reports, have had their weight, and made the first real advancement of actual work in the establishment of a uniform municipal accounting system. By the best authority I am at this time able to obtain, uniform accounts have been installed in Ohio, Wyoming, Iowa, Minnesota and our dear old Commonwealth.

In 1906 the General Court passed a law that the auditor or accounting officer of each city or town shall annually furnish to the Chief of the Bureau of Statistics of Labor, a detailed statement of all receipts and disbursements, with other information, and the work of compilation was placed in charge of Mr. Charles F. Gettamy, who with staff deserves great credit for the admirable manner in which the work was wrought out. As a rule statistics are dry, and sometimes the substance is too remote, but this has been overcome to a great extent in his report by giving per capita and percentages, and as they are quite instructive I quote some figures and comparisons from his latest report. This presentation is clearly to afford opportunity for comparisons upon a uniform basis, and if they do not answer they certainly raise many interesting questions.

Among the various municipal departments of the cities quoting their running expenses upon a per capita basis, it appears that our cities spend more, proportionately, for education than for any other purpose, 28.06 per cent. The city of Everett spends, proportionately to her other expenditures, more for education than any other city in the Commonwealth, 42.68 per cent.

The thirty-three cities in this Commonwealth had a net debt of 4.98 per cent; towns, 3.07 per cent. of their valuation; sixty-two towns have no indebtedness.

For economy of space I have taken the ten largest cities for comparison:

	Net debt per capita	Percentage net debt of valuation	Per capita valuation
Boston	$111.90	5.26	$2,127.47
Worcester	38.45	4.10	936.96
Fall River	35.96	4.63	775.84
Cambridge	80.48	7.59	1,060.35
Lowell	28.78	3.72	773.75
Lynn	39.41	4.94	798.43
New Bedford	39.95	4.62	864.27
Springfield	27.66	2.44	1,135.21
Lawrence	28.90	4.08	707.54
Somerville	20.55	2.43	845.86

The above figures show that while Boston has an enormous debt per capita, its percentage is small, owing to its great wealth.

Percentage division of expenses of the thirty-three cities combined, and the municipal departments of the ten largest cities:

	[illegible]	Boston	Worcester	Fall River	Cambridge	Lowell	Lynn	New Bedford	Springfield	Lawrence	Somerville
Education	28.06	23.14	32.79	28.32	29.66	29.40	28.02	31.25	34.44	33.23	34.70
Highways and Bridges	20.62	18.21	20.48	25.80	23.78	23.42	22.45	17.90	25.03	20.90	17.07
Police	10.11	11.52	8.56	10.72	9.74	10.53	9.80	13.24	7.78	9.44	8.41
Public Health and Sanitation	9.01	9.86	13.25	3.86	12.13	5.69	8.79	8.43	7.19	7.86	12.57
Fire	8.81	8.44	10.47	10.66	6.78	10.18	10.70	9.07	9.86	9.74	7.67
General Administration	7.60	7.96	5.59	6.95	6.59	9.09	8.27	7.51	4.47	5.26	6.94
Charities and Correction	6.10	7.59	2.68	7.81	2.85	7.46	3.58	5.95	3.59	8.10	3.02
Recreation	4.92	8.21	1.76	1.35	4.44	1.48	3.48	1.81	3.00	1.81	3.43
Libraries and Reading Rooms	2.03	2.10	2.26	1.80	1.55	.97	1.96	2.08	3.13	2.15	2.09
Protection of Life and Property other than Police and Fire	1.80	2.32	1.58	1.72	1.85	.98	1.02	.68	1.20	.81	1.77
Soldiers' Benefit (estimated)	.94	.65	.58	1.01	.63	.80	1.93	2.08	.31	.70	2.33
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It cost the people living in the thirty-three cities of the Commonwealth $17.70 per capita for actual maintenance of their various municipal departments. If Boston be eliminated, the average per capita for the thirty-two cities is $13.97. It cost the people much to maintain their Boston.

Comparison of aggregate current expenses and valuation:

	Per capita current expense	Per capita valuation	Percentage of aggregate current expense of valuation.
Boston	$26.69	$2,127.47	1.25
Worcester	14.98	936.96	1.60
Fall River	12.08	775.84	1.56
Cambridge	17.16	1,060.35	1.62
Lowell	14.00	773.75	1.81
Lynn	13.03	798.43	1.63
New Bedford	12.18	864.27	1.41
Springfield	16.97	1,135.21	1.49
Lawrence	11.00	707.54	1.56
Somerville	13.95	845.86	1.65

Education.

We often hear it said that money expended for education is well invested. Of the ten largest cities in the State, Worcester stands fourth as per capita expense, and sixth as to expense per pupil; therefore, the city's investment in the educational line is moderate. It costs Boston $40.95, Springfield $39.83, Lowell $37.64 to Worcester $32.95, expense per pupil, and do we hear of any better results? Worcester should congratulate itself on the economical and efficient management of its public schools.

	Per cent	Expense per pupil	Per capita expense	Population	For teachers salaries	For text-books and supplies	For night schools
Boston	23.14	$40.95	$6.18	606,216	$2,653,679.50	$102,222.95	$98,525.50
Worcester	32.79	32.95	4.91	131,518	450,441.11	27,827.26	22,006.11
Fall River	28.32	27.30	3.42	107,581	240,099.80	18,117.68	11,648.66
Cambridge	29.66	34.56	5.09	99,168	321,184.45	18,437.18	11,705.50
Lowell	29.40	37.64	4.12	96,011	230,324.21	14,465.85	20,461.51
Lynn	28.02	29.65	3.65	78,691	199,682.72	17,071.15	3,415.00
New Bedford	31.25	32.84	3.81	76,600	197,325.22	16,371.60	5,466.50
Springfield	34.44	39.83	5.84	76,202	263,709.41	26,860.79	10,855.00
Lawrence	33.23	34.82	3.66	72,144	175,259.10	12,451.26	1,542.96
Somerville	34.70	30.29	4.84	71,260	244,423.46	16,342.40	9,573.00

Fire and Police.

	Population	[illegible]	Population per [illegible]	Fire Department Per capita expense	Fire Department Percentage	Police Department Per capita expense	Police Department Percentage
Boston	606,216	40.63	14,920	$2.25	8.44	$3.07	11.52
Worcester	131,518	38.50	3,416	1.57	10.47	1.28	8.56
Fall River	107,581	38.08	2,825	1.29	10.66	1.29	10.72
Cambridge	99,168	7.15	13,870	1.16	6.78	1.67	9.74
Lowell	96,011	14.27	6,728	1.43	10.18	1.47	10.53
Lynn	78,691	11.22	7,013	1.39	10.70	1.28	9.80
New Bedford	76,600	19.80	3,869	1.10	9.07	1.61	13.24
Springfield	76,202	31.99	2,382	1.67	9.86	1.32	7.78
Lawrence	72,144	7.24	9,965	1.07	9.74	1.04	9.44
Somerville	71,260	4.12	17,296	1.07	7.67	1.17	8.41

Five out of ten largest cities in the State expended more per capita upon their highways and bridges than Worcester, two for library and reading-rooms, five for recreation, and nine for charities and corrections:

	Highway and bridge, per capita expense	Library and reading-room per capita expense	Recreation, per capita expense	Charities and corrections per capita expense
Boston	$4.86	$0.56	$2.19	$2.03
Worcester	3.07	.34	.26	.40
Fall River	3.12	.22	.16	.94
Cambridge	4.08	.27	.76	.49
Lowell	3.28	.14	.21	1.04
Lynn	2.93	.26	.45	.47
New Bedford	2.18	.25	.22	.72
Springfield	4.25	.53	.51	.61
Lawrence	2.30	.24	.20	.89
Somerville	2.38	.29	.48	.42

Sanitation.

The history and facts of the city of Worcester sewage system would fill a book by itself. I doubt whether the archives and municipal records of any other city would show a like experience.

In the inaugural address of Mayor Richardson in 1855, the subject of sewerage was recommended to the attention of the City Government, but no decided action was taken until 1866, when Mayor Blake mentioned the importance of sewerage. Many petitions were presented, which seemed to have had effect, for action was taken by the City Council and a special committee of seven was appointed to consider the subject of and devise the means to accomplish a proper system of sewerage. This seems to have been the first real beginning of Worcester's sewerage system, and how little it was then realized what an expensive proposition the tax-payers were to meet! On the following October the committee made an interesting, able, thorough and comprehensive report.

In 1867 legislative permission was obtained to take certain brooks for sewage purposes, all of which, directly and indirectly, emptied into the Blackstone river.

FRANK E. WILLIAMSON

The city's growth was steady and healthful. In 1867 the population was 30,580, and in 1888 it was 70,389, an increase of over 100 per cent. And during this time sixty-eight miles of sewers were laid, at a cost of $2,484,103.25.

With the increase in population came the necessary additional demand for city water. Babbling brooks of pure water were diverted and taken into the water supply, and reached the Blackstone River through the sewerage system. Consequently, instead of being enough of pure water in the river of sufficient capacity to dilute the sewage, the river itself became nearly an open sewer, and then trouble began.

Neighboring towns and mill owners down the river made a justifiable appeal, and the General Court in 1886 passed an act that the city of Worcester shall, without being limited to any particular system, within four years, remove from its sewage before its discharge into the Blackstone River the offensive and polluting properties and substances therein, so that after its discharge into said river, or its tributaries, it shall not create a nuisance or endanger public health. From the best information I have succeeded in obtaining, this act was passed without a suggestion as to method or offer of financial assistance.

The report of the Government Bureau of the Census reads, "The Worcester sewer purification works have been the scene of many large scale experiments or practical tests on methods of treating sewage." These experiments were made at a large cost, from which the whole State and country receive benefit.

In 1888 certain preliminaries to purification were entered upon by the city, and in 1889 the City Council ordered chemical precipitation works, and partly as a result of the litigation by the town of Millbury, which sought relief from alleged nuisances, said to be due to the incomplete purification of the sewage by chemical precipitation alone, the city began in 1898 the construction of intermittent sand filters, and the total cost to the tax-payers, incidental to sewage disposal and purification to November 30, 1907, was the enormous sum of $3,025,495.78, and I am told on good authority that seventy more filter beds are required, at a cost of about $350,000.

Worcester expended more, proportionately, for conservation of public health and for sanitation, during the year 1906, than any other city in the State, namely, 13.25 per cent. It expended more per capita than Fall River and Lowell combined.

Classified expense from 1888 to 1907, inclusive, is as follows:

Purification, care of plant and filter beds,	$508,889.80
Purification, maintenance of plant,	805,984.13
Purification, land damages and litigation,	73,870.57
Sewer separating system,	1,021,301.28
Interest,	615,450.00
	$3,025,495.78

FIRST PRIZE PHOTOGRAPH—UNIVERSITY PARK
C. H. LAMBREAU, M. D.

And there was expended for

Construction of new sewers and catch-basins,	$1,385,862.17
Maintenance,	407,982.73
	1,793,844.90
	$4,819,340.68

For every dollar the city expended during these twenty years for new sewers, catch-basins and maintenance, $1.68 was expended for purification and expense incidental thereto.

It is a fair question as to whether the State should not assume a part of this burden. Arguments have been offered in regard to State aid, similar to those advanced successfully for bringing the inauguration of State aid in the construction of good roads. These arguments would be even more applicable to the case of sewage disposal, since this is ordinarily of little derived benefit to the cities which pay for it, but is largely for protection of those lower down the drainage valley. Just how large a proportion of the cost should be borne by the State, and under what conditions such aid should be rendered, are matters which would require careful consideration. It seems proper that the cost of the sewer systems themselves should be borne by the city in which they are located, since they alone are benefited by them, but sewer disposal works, which are erected largely for safeguarding the health of other communities, would seem to be deserving of State aid to an even greater extent than our public highways. It is practically certain that some such financial aid should be given to cities and towns, when necessity demands, for the construction of works which will be of value to other communities than those carrying out these undertakings, and where so much may be accomplished by co-operation.

[illegible] THE CLASSICAL SCENE NEAR COLES SQUARE
[illegible]

Worcester's Leadership in a Great Crusade

Early Efforts and Latest Gains in the Fight against Tuberculosis

The death of a little Syrian girl of sixteen, friendless, obscure, unknown, a mere waif floating among the flotsam and jetsam of the tide of immigrants that annually ebbs and surges through the streets of Worcester had power to alter and transform and dominate the thoughts and aspirations and laws of a great state. Living, she was a mere unit in a table of statistics, a little more valuable than a dog, but not quite so valuable as a horse. Dying, she laid her dead hand on the heart of this community and in the pang that it suffered as it felt the shock, a new soul awoke—the soul of sympathy and brotherhood and love that is voicing itself in practical acts more and more every day, and never so plainly, and so practically, and so helpfully, as in this dawn of the twentieth century.

DR. MELVIN G. OVERLOCK

This little Syrian, who had no friends, or kindred, or money, had one thing that touched her more nearly than any of the three. She had consumption, and in those black days, ten years ago, to have consumption and to be poor was worse than being condemned, for the condemned are cared for and protected and may be pardoned and restored to society. But for the poor consumptive there remained only pauperism, isolation and death—the poor farm and the open grave.

And here comes the personal living element into the narrative. The little consumptive could not go to the City Hospital, for they would not take her there, and so she was smuggled into another institution under the guise of a typhoid fever patient.

Then, of course, the subterfuge was at once discovered. When it was found that she had consumption in its most advanced stages, great indignation was expressed. An effort was made to find her friends, and, learning that she had none, the city authorities were notified and in a dying condition the girl was raced to the poor farm, where she died almost as soon as she arrived, far from her beloved Syria, alone, a pauper.

Dr. Melvin G. Overlock learned this story and it moved him profoundly. He knew how great was the horror of tuberculosis; he knew how stringent were the rules of the City Hospital against the admission of such cases; he knew what was the law with reference to the sick poor, that if they were unable to care for themselves, and no one would care for them, they must become paupers, no matter how honest, how thrifty or how virtuous when well, and his heart burned within him.

At the next meeting of the trustees of the City Hospital he made an impassioned appeal to the board to erect either a consumptives' ward in connection with the hospital or, better still, a sanitarium or consumptives' home under its auspices and control, where unfortunates like the little Syrian might at least die in comfort.

He urged the trustees to take some action so that the hospital could be made available to those who needed it most, the incurables, who were absolutely friendless, and pointed out that as long as it turned any resident of Worcester from its doors that needed help, it could not truly lay claim to being truly a city hospital; but the management, realizing how rigid were the rules with reference to chronic cases, and knowing how well nigh impossible it was to alter the charter of the institution, were obdurate. They did not regard tuberculosis as curable, and they did regard Dr. Overlock as a trifle hysterical, and his ideas as extremely chimerical. Consumption was a dread fact to be accepted like cancer and leprosy.

Courteously but firmly they endeavored to show Dr. Overlock how misguided was his zeal.

But Dr. Overlock was insistent. He didn't know how he was going to prevent a repetition of that scene down at the Home Farm with the little Syrian girl's wasted form lying cold and still on the white cot waiting for a pauper's grave, but he knew he must prevent it somehow, and like a flash the inspiration came to him, "the press."

"Gentlemen," he said, "if you don't do something about this matter, I will take it up with the newspapers. I believe there is humanity enough in this community to alleviate the sufferings of the blameless poor. I hope there is enough to prevent their filling a pauper's grave simply because they have consumption instead of some other disease."

Then up rose Col. Samuel E. Winslow and moved that the whole matter be laid before the city government.

"To-day, thank God," says Dr. Overlock, "as a result of that meeting it is no longer possible to pauperize the consumptive. An enlightened public sentiment has placed laws on our statute books making such an infamy impossible, and among all the splendid acts performed by Colonel Winslow in his active and useful life none perhaps was fraught with greater value to the race than the stand he took that day to have this whole matter passed upon by a competent tribunal. I felt that something should be done, but if it had not been for Colonel Winslow's aid I do not think I could have brought it about.

"Another man to whom great credit is due for the action subsequently taken is Mayor Edward F. Fletcher," Dr. Overlock states.

"Mayor Fletcher was at the head of city affairs at that time, and from the moment the subject was first broached to him until he went out of office, he was an untiring

advocate and assistant in the work of placing Worcester in the very front rank of cities grappling with this problem.

"It must be remembered that at that time humanitarian work in behalf of the consumptive was in its infancy. The State Sanatorium at Rutland was not opened until Sept. 23, 1898, and the famous Millet Sanatorium at East Bridgewater not until 1900. Practically every bit of the anti-tuberculosis sentiment in Massachusetts is the work of the last ten years. It required courage for a man to attack this disease in any large way ten years, or even eight years ago, and Mayor Fletcher is entitled to the highest praise for the pioneer work he did in this community in behalf of the sufferers from this dread malady. I can never be sufficiently grateful for the co-operation, sympathy and moral support that I received in this movement while he was chief executive of Worcester, and while the anti-tuberculosis crusade was still in its infancy.

"I do not blame any of the men, either my professional brethren or the city, who failed to see the importance of this movement in its early days as I saw it. They have atoned for their conservatism many times over by the splendid unselfish work they have all done and are constantly more and more doing, but I cannot help feeling that Mayor Fletcher has not received his due meed of praise for the stand he took at the very outset of this movement. He helped lay broad and deep the foundations for the splendid public sentiment with reference to stamping out this evil, which has always made Worcester notable among the cities of this country."

Mayor Fletcher at once took the matter up with the city councils, preparing a message embodying the sentiment of the trustees, and at a subsequent meeting of both branches two councilmen, an alderman, the Mayor and Dr. Overlock were constituted a commission to investigate the whole subject and recommended to the city government what further action should be taken to provide Worcester with a place where the friendless poor, dying of consumption, could be cared for without danger of pauperization.

The commissioners went to New York and at the hands of Mayor Seth Low, then at the head of the New York city government, received every courtesy possible to be extended to the most distinguished visitor from a foreign land.

New York's Initiative

New York at that time, as a part of its splendid eleemosynary system, was caring for a large number of consumptives on the islands in its harbor. No finer set of public institutions in America exists than those owned by the city of New York, and the best was none too good for the poor consumptive, even then in the metropolis. While cities were either limping reluctant at the rear or else totally indifferent to the condition of their sick poor, New York had made provision in buildings formerly occupied by the insane for single persons afflicted with tuberculosis, while on one of the most beautiful islands in the bay—North Brother—cottages had been constructed, where the father and mother, both stricken with the same disease, could die in peace together.

The Worcester men were impressed with what they saw in New York, and on their return to Worcester they impressed others, with the result that there was organized what was called the Worcester Consumptives' Home. At the time this was formed there were but three such institutions in the United States.

This article is not concerned with the fortunes or misfortunes of the Consumptives' Home Association. It is still in existence, and has land for a site for a building and money which may sometime be invested in a structure, but like so many other movements of the sort the men behind the home soon saw that this movement had outrun any mere local control. In a bound it had become state wide in its scope. Only now are even the wisest among us coming to realize that it is not state but national in its bearings.

It was, however, immediately apparent that Worcester alone could not grapple satisfactorily with this gigantic problem. Worcester is made up of many peoples, many races. Thousands of men and women in Worcester come from long distances over seas. The Scotch, the Irish, the English, the Swedes, the Italians, are all here, some of them by the thousands. Then there are the other little known races, the Croatians, the Montenegrins, the representatives of the septs and clans and tribes of all the countries on the globe, all of whom have centred in this vast industrial workshop.

When these people fell ill of consumption, if they had friends they sent them to their old homes to die. In some cases these homes were in Massachusetts, but in most cases they were outside her borders. The men engaged in stamping out tuberculosis saw at once that they must take prompt steps to enlist the state in this movement, for it was too vast for any one community to handle of itself. The thought presented itself simultaneously to humanitarians and the medical fraternity that an effort must be made to arrest the cases at the beginning rather than to allow them to drift along until they were incurable.

Out of this feeling grew the Worcester Tuberculosis Association, an independent organization, which has done and is doing magnificent work in this community in caring, in their own homes, for those cases of tuberculosis in which it is obviously financially impossible for the sick person to employ competent medical assistance.

Meanwhile, the State had taken the matter up, and at the Rutland Sanatorium had provided a place where all could go that were in the incipient stages of the disease, at a purely nominal charge of $4 a week. How meagre this charge as compared with the actual cost to the State can be understood when one learns that in 1905 the expense per capita was $8.83 per week. In 1906 it was $9.38. In 1907 it had risen to $10.07, and last year it was probably more than ever before. The State voluntarily pays much more than one-half of the cost of keeping every patient that goes to Rutland. In the meantime, Massachusetts, to her eternal honor be it said, has passed a law making it an impossibility ever hereafter to pauperize a consumptive.

So great has the success been of the institution at Rutland, and so extensive are the demands made upon it, the Legislature of 1907 passed a law and appropriated the money necessary to erect three others, one at North Reading, in northeastern Massachusetts; one at Lakeville, in southeastern Massachusetts, and one at Westfield in the Connecticut valley, near the West Springfield line. By 1910 the State will be provided with as complete facilities for handling tuberculosis patients as any state in the Union.

The change in sentiment in Massachusetts with reference to the location of these new sanatoria is an evidence of the marvelous transformation that the public mind has undergone in the last eight years, due to the impetus that Worcester gave to humanitarian, practical and courageous handling of this disease.

The First State Sanatorium

The sanatorium at Rutland, in this county, was the first state institution of its kind to be erected in America, and Worcester County will have for all time that honor as its own. But it was not obtained without a struggle, and against deep-seated and powerful prejudice. Many good people in Rutland believed that the establishment of such a sanatorium there was a menace to the communal health, and they did all that they could to prevent its location in the town.

An examination of the vital statistics of Rutland discloses, however, that the death-rate in that town from tuberculosis has never been so high since the sanatorium was established as it was prior to its coming. In the six years from 1881 to 1886 inclusive, the deaths in Rutland from tuberculosis were fourteen; in the six-year period, from 1899 to 1904 inclusive the last six-year period available—the deaths have been but eight. The town averaged for twenty-four years two deaths from tuberculosis in a population of about 1000. During the six-year period, ending in 1904 with an increased population, the deaths instead of totalling twelve were but eight. These facts have had a mighty influence in convincing the public that the segregation of consumptives is not a menace to the community where the retreat is located, and is of inestimable value to the sufferers themselves.

We have seen the movement to provide suitable rest and recovery houses, known as sanatoria, grow from a city to a state function, maintained by taxing the whole people instead of being dependent upon the philanthropy of a few of the people, and we shall now see the co-operation and response that the people themselves have made under the leadership of the eminent and devoted men who are giving their lives and dedicating their careers to the extinction of this disease in Massachusetts.

Recognizing the fact that if tuberculosis in this State was to be stamped out it must be attacked in its strongholds, the State Board of Health, in its report to the Legislature of 1906 on the sanitary condition of factories, laid especial emphasis on the influence and lack of ventilation in many of the manufacturing institutions of the State, and made a number of recommendations concerning the protection of the health of the employees in these and similar workshops.

State Inspection

As a result the State was divided into fifteen health districts, in each of which a state inspector of health, a physician, was appointed, one of whose principal duties is to gather all information possible concerning the prevalence of tuberculosis, and to disseminate knowledge as to the best method of preventing its spread.

Under the provisions of this act all minors employed in factories are subject to examination by the inspector, who is required to call any condition of ill health or physical unfitness to the immediate attention of the child's parents or employers, and also to the State Board.

Furthermore, the inspector is required to ascertain of every minor employed in a factory or workshop of any kind if the family history of said minor discloses illness or death due to tuberculosis. When such proves to be the case, the inspector may make a physical examination of the deponent, and whether a physical examination is made or not, the inspector submits a concise report on the immediate sanitary conditions under which the minor works, apart from the general report, which covers details relative to the lighting, ventilation and cleanliness of the entire factory. In this way the State Board obtains a clear, concise and accurate history of all the cases of possible tuberculosis coming under the inspector's notice.

Logically enough the appointment of the health officer for the eleventh district, covering the city of Worcester, came to Dr. Overlock. His district comprises not only this city, but the towns of Auburn, Brookfield, Charlton, Douglas, Dudley, Leicester, Millbury, Northbridge, North Brookfield, Oxford, Southbridge, Spencer, Sturbridge, Sutton, Uxbridge, Warren, Webster and West Brookfield. A recapitulation of the names of these towns is alone sufficient to signify to any one acquainted with industrial conditions the task that lies before the doctor, as well as the mighty responsibility resting upon him for the physical welfare of these thousands of working men and women.

The act under which Dr. Overlock was appointed was not approved until June 19, 1907, but in the brief period of a little over a year in which the Doctor has acted in this capacity, he declares that he can observe a marked improvement in the conditions surrounding the industrial workers in this district.

"You cannot," said the Doctor, "speak in too high terms of the high character and lofty purpose of the manufacturers, employers and capitalists in this district. I have had to do constantly with them for years, but never in so close and intimate a way as during the past few months. In many cases the recommendations that I have made have caused expense and been perhaps unwelcome on that account, but I have never been refused a request and never have met a rebuff. In every instance the employer has met me more than half way. If I thought anything needed changing in order that the health of the employees might be further safeguarded, it has only been necessary to suggest. I have never had to command, to say nothing of a prosecution.

"I understand that there are districts where the inspectors have had a different experience, but I want to say for the employers of Worcester County, as I have met them, that they are as fine, as honorable and as high-minded a body of men as there are on earth. Indeed, many of the factories that I have entered might well serve as models."

The Doctor's tribute to the employers in his district as a whole is all the more gratifying when one stops to think what an inspector is charged with. His duties fall into four classes:

First, *all* influences which may be dangerous to public health; second, the prevalence of tuberculosis in his district; third, the health of all minors employed in factories; and fourth, the sanitation of factories, slaughter-houses, public buildings and tenements in which clothing is manufactured.

In the performance of these duties those comprised in the first and second classes, the inspectors act as intermediaries between the State Board of Health and the local health authorities. Under the third and fourth clauses, relating to the health of minors and sanitation, the inspectors act independently of local health authorities, and under the direction of the State Board of Health.

The Scope of Investigations

In all these phases of sanitary work the investigation of the prevalence of tuberculosis plays an exceedingly important part. The inspector in a factory community bears in mind the hygiene of the town or city, especially

in the workmen's quarters, and is ready to make an investigation of the existence of tuberculosis or of any other disease dangerous to the public health.

Within the factory the inspector, knowing that tuberculosis of the lungs is a common consequence of overcrowding and exposure to vitiated air and dust, including the various kinds of trade dust and other impurities injurious to health, which are generated in the course of the manufacturing process carried on therein, pays especial attention to ventilation. If, in his opinion, mechanical appliances are necessary for the protection of employees against dust, he may require that such appliances be installed and used.

It is of the gravest consequence that factories and workshops shall be well ventilated and not overcrowded. Persons who work day after day in crowded rooms, which are not properly ventilated, must after a time suffer a loss of resistance to disease, and as a result become more susceptible to tuberculosis. This is especially true of a workshop where many people work side by side, some of whom may be suffering from tuberculosis of the lungs. For this reason the health inspectors are particularly zealous in securing fresh air for all employees.

It is well known to all specialists in tuberculosis that fresh air and sunshine are its deadly enemies and dampness and darkness are its warm friends. Sunlight will kill the tuberculosis germ in about twenty minutes, and for this reason sunlight, fresh air and nourishing food, instead of drugs and a closed room, are now prescribed by every tuberculosis specialist in America.

Dr. Overlock was appointed inspector for the eleventh district July 17, 1907, and after a preparatory period spent in familiarizing himself with the duties of his position, he decided to inaugurate the system of conferences or talks to employees, which have now become such an essential part of his work. So far as he knows these heart-to-heart talks, as he calls them, are original with him. He believed that the best way to prevent tuberculosis was to go directly to those most vitally interested—the wage-earners themselves. When they contract consumption, their value to their employer and their usefulness to themselves cease. It is obvious that it is their principal business to avoid the disease if possible. And Dr. Overlock being a practical man determined to ask the employers of his district to allow him to meet their employees personally and in mass and tell them the danger that threatened them, and how by a little care they could avoid it.

The Employers' Response

The response on the part of the employers of Worcester was not only hearty and immediate, but all the employers and health authorities in the towns around Worcester in his district have shown the liveliest interest in these conferences, and the demands upon his time to deliver addresses before bodies of working men and working women have come to make serious inroads on his time.

Not only have the employers freely granted him access to their work-rooms, and given him every assistance in addressing their employees, but a large number of them [illegible]

To the [illegible] of Worcester and Worcester County manufacturers, be it said, they were the first in all the land to make the motto, "An injury to one is the concern of all," a living truth instead of a glittering generality.

The little town of Oxford, with its 3000 inhabitants, took first place in this movement. For years Oxford has been a plague spot of tuberculosis, no less than eighty-seven persons dying in this one town from 1861 to 1865 of this dread disease, and during the entire fifty years, from 1851 to 1900, the deaths in Oxford from this disease aggregated 460, or an average of more than nine a year. From 1900 to 1907 there were twenty-three deaths, only four of which were since 1905.

The credit for this change is principally due to the humanitarianism displayed by the concern known as the A. P. Joslin Company, which has a large factory in the town. Knowing the prevalence of tuberculosis in Oxford, the company from the outset has been especially active in investigating conditions in its factory, and in caring for any cases found among its employees. Notices calling attention to the prevalence of the disease, the proper measures to be taken to control it, describing its symptoms, and urging all employees who have any reason to suspect that they have been attacked to consult a reputable physician at once, are posted in the factory.

Furthermore, relief to the families of the consumptives is given, and the firm agreed to pay the board in the sanatorium at Rutland for at least three months of any found to be suffering from the disease.

The beneficial effect of this policy upon the health of their employees has been reflected in the health of the town, not one death from tuberculosis in Oxford being reported in the year 1906.

This movement in Worcester was begun, as so many noble movements have been, by David H. Fanning, president of the Royal Worcester Corset Company, who, on Nov. 14, 1908, announced that hereafter if any among his more than 1200 employees fell ill of consumption, they would be given thirteen weeks' treatment at the Rutland Sanatorium, free of charge, at the expense of the corporation. This is the probationary period in the treatment of the disease, and is generally sufficient time to ensure recovery if it is attacked in its incipient stages.

Closely following upon the announcement from the Royal Worcester Corset Company came similar action by the Sherman Envelope Company; from S. Slater & Sons, Inc., at Webster, by Hon. Charles G. Washburn, president; the U. S. Envelope Company; Brewer & Company; J. E. Snyder & Son; George C. Whitney Company; M. J. Whittall for Whittall's Carpet Mills; Linehan Corset Company; Spencer Wire Company, by H. W. Goddard, treasurer; Hon. Channing Smith for the mills at Cherry Valley, Leicester; Worcester Bleach & Dye Works Company, Morgan Construction Company, and the Samuel Winslow Skate Company.

The Final Goal

And now comes the next and final step in the war of extermination that is being waged against this disease.

To-day Worcester, through its splendid and self-sacrificing Tuberculosis Relief Association, is doing practical, preventive and curative work, keeping one nurse steadily employed in ministering to cases of this kind. The Memorial Hospital and the Worcester City Hospital each maintains a tuberculosis clinic. One of the physicians on the City Hospital staff directs the outside work of that institution, making as many visits as are necessary in co-operation with the tuberculosis nurse. The association sends some patients to the State Sanatorium, but as far as possible cares for them in their own home, and Dr. Overlock, with the zeal of a missionary, labors untiringly to extend the circle of employers who will throw their shel-

tering arm around the unfortunates in their employ who may be stricken with this disease and be unable to care for themselves.

As the public has become educated to the necessity for concerted action, if this disease is ever to be stamped out, the desirability and necessity for a national body to have charge of the physical health of the republic has dawned on the thought of America. It is obviously futile for Massachusetts to spend her time and money and skill in stamping this plague out if Minnesota or Mississippi are indifferent to its growth and spread. There are, it is estimated, 600,000 consumptives in the United States today, and if the disease is ever to be eradicated it must be fought with equal vigor and along the same intelligent modern preventive lines in every one of the forty-six states, the territories, and the District of Columbia.

Hence, the agitation for a national board of health which now has risen to a popular and well-nigh universal demand. Association after association for the prevention and cure of tuberculosis has been formed, until now a new one is organized almost every day in the year, and every time one is formed the clamor for the organization of a national board of health becomes more and more insistent. Everywhere the states recognize the fact that Massachusetts has a model system for stamping out this malady, and that it is yearly producing, thanks to the enthusiasm of men like Dr. Overlock, a larger and larger percentage of men and women saved from the clutches of this insatiable monster by the use of modern methods, preventive medicine and princely generosity from the Commonwealth. What Massachusetts is doing tuberculosis experts in other states desire to do, but through penuriousness, ignorance or bigotry, they are in many cases restrained from doing. The result is that in such a state "superfluous lags the veteran on the stage," restraining the progress of the whole grand army of experts, who know the malady must be stamped out in all states as well as in one state if America is ever to have immunity from the great white plague.

These are terrifying figures: There are 86,000,000 people in America today; 200,000 of this number, careful and reliable statisticians estimate, die every year of tuberculosis. Eleven and two-tenths per cent., one ninth of all who die, die of this disease. Such being the case, 9,632,000 persons are doomed to die of tuberculosis unless the disease can be stamped out.

Look at the economic waste. Prof. Irving Fisher states that the money cost of tuberculosis alone, including capitalized earning power lost by death, exceeds $8000 per death, so that the hand of this destroyer has already laid its paralyzing grasp upon $1,100,000,000 worth of human productive energy per annum, and of this cost two-fifths, or more than $444,000,000, falls on others than the consumptive. Is not this a subject vast enough and terrible enough to call for national action and national control? Measured by the hard, cold standard of money alone this dread disease, unless checked, will levy toll on the American people to the terrifying extent of $77,056,000,000. As has been well said, "These figures and facts ignore sympathy, ignore considerations of humanity. They take no account of heartbreaks following the visitation of death. They appeal simply to the unfeeling spirit of economy. It would require an annual payment of over $770,000,000 for a hundred years to pay this mortgage without interest."

National Action Imperative

Nothing less than the nation can grapple with such a problem. Without fear of criticism, and under the broad provisions of the Constitution, which in Act I, Sec. 8, provides that Congress shall have power to "provide for the common defense and general welfare," it is thinkable that it can institute a national board of health. Nothing is more certain than that the "general welfare" of the nation is wrapt up in nothing else so much as the general protection of the health and lives of its citizens.

There has been no commodity of which civilization has been so wasteful as human life. There is no field in which the economic returns to society are so promising, measured in uplift, or measured in dollars, or measured in any known form of productive energy, as in the field of preventive medicine, in the field of proper sanitation, proper hygiene and proper living.

As Hon. J. Sloat Fassett of New York has recently so eloquently declared: "Tuberculosis as a national disease invades more homes, destroys more lives, impairs more efficiency, costs more money, more agony and sorrow than any other one preventable disease. Its suppression absolutely may not be expected, but its practical extermination may be confidently hoped for if society moves along the lines already clearly laid out for it. The significance of the suppression of tuberculosis cannot be adequately stated further than to say: In no known field of human enterprise would society reap so rich a harvest for its endeavors."

In this glorious work Massachusetts leads and has always led. And among all the cities of the Commonwealth none has shown a more progressive, a more humanitarian and a more unselfish spirit toward the poor, the forsaken and those condemned to die than Worcester.

That it has taken this high and honorable place, and that to-day it stands in the very vanguard of American cities, is due perhaps, more than to any other one, to the tireless, unselfish, intelligent and devoted efforts of the health inspector for the eleventh Massachusetts district, Dr. Melvin G. Overlock.

And back of him and back of the movement is the shadowy form of a little child buried in a potter's field. Upon this community that simple, unmarked grave has had a mightier influence than the coffined dead lying in their marble tombs in a hundred of God's acres. She was a consumptive, and she died a pauper, but the little Syrian girl did not die in vain.

Social Welfare Work

The Wire Goods Company's Dining-Hall

The Wire Goods Company, at its factory on Union Street, is carrying out an experiment in social welfare in connection with its shop employees that is so interesting and has worked so satisfactorily that it has become a matter of interest to all employers of labor in and out of Worcester confronted by similar conditions.

Many of the employees of the Wire Goods Company live at a long distance from the factory and were formerly in the habit of bringing a bottle of cold tea or coffee to eat with a cold lunch at noon, as the time or expense precluded their return to their homes at the noon hour.

The long labor period from the early morning breakfast to the supper at night with only a cold meal intervening at noon not only impaired the efficiency of the help, but served to render them dissatisfied with their work and less contented with their daily routine.

The managers of the concern realizing this fact and

sympathizing with the employees' viewpoint decided [illegible] years ago to furnish hot coffee to all who desired it.

One of the foremen was given charge of the matter and a special coal-heated apparatus was purchased of Clark-Sawyer Company, the best coffee obtainable was purchased and, thanks to a local caterer who furnished the necessary instructions, the help were soon enjoying a hot and fragrant cup of coffee with their noon meal. This was sold to the employees for the modest price of two cents a cup, or three cups for five cents.

The plan worked so successfully that the company was encouraged to extend its scope. It was evident if the employees could have some central meeting-place, a dining-hall for example, the noon meal, instead of being a time of depression, could be made one of the most enjoyable periods of the day. It would also be easier to serve the coffee in some large vacant apartment where the help could all gather.

Luckily at this juncture it was discovered that there was among the employees an excellent cook, and a vacant room was found on the top floor of the factory, where two of the shops were joined together. Here was space for a kitchen, dining-hall, and smoking-room for the men, permission to install the latter having been obtained from the insurance authorities.

The chef was instructed to have dinner ready at 12 o'clock noon, daily, five days in the week, no meal being served on Saturday, a half day in the shop.

The help go to the wash rooms at 11.55, and they find dinner waiting for them when they enter the dining-hall. The tables are of solid birch and are spotless.

Each employee has his or her own place and occupies it. This avoids confusion and gives the employee a certain sense of possession. No attempt is made to put the dining-hall on a charity basis. As a matter of fact it has been operated so far at a slight loss, but the company believes that the money is well invested and that the small amount charged up to profit and loss in this connection more than comes back to them both in enthusiasm and accomplishment.

On Monday the cook serves beef stew or vegetable soup, crackers and doughnuts; on Tuesday frankforts and mashed potatoes, bread and butter; on Wednesday baked beans, bread and butter; on Thursday fricassee beef, mashed potatoes, bread and butter; on Friday fish or clam chowder, crackers and doughnuts.

In addition tea, coffee and milk are served as the diner prefers, and several different varieties of pie are kept for those who desire a little dessert. The help can purchase coupon slips for the tea, coffee and milk, as the case may be. Six of the milk checks are sold for ten cents. The coffee and tea checks are twelve cents for six. Pie is sold for three cents a piece.

The company makes no distinction in the food served. Frequently not only the heads of the departments, but Mr. Reginald Washburn himself, treasurer of the company, and the office force go to the dining-hall for their noon lunch, and the same food is served them that is served the employees.

[illegible] COMPANY DINING ROOM

It does, however, make a distinction in the price charged the help for the dinners based on the amount of their remuneration. An accurate check is made of those present at each meal, and at the end of the week those earning $10 or over have 60 cents deducted from their pay and those earning less than $10 have 50 cents deducted.

Although the plan is not as yet self-supporting, the company believes it will be. Only about fifty employees now take advantage of the arrangement, and as nothing but the best meats are purchased, it has not been possible as yet to figure a profit. With a larger attendance in the dining-hall or a reduction in the price of meats, this difficulty will be overcome. The financial loss was anticipated. It has been less than expected and is made up many times by the efficiency of the work in the afternoon.

After the meal the men retire to the smoking-room and play cards, and the girls sit about, read, chat, or crochet, as they please. There is a napkin at every plate and the tables when they are cleared of food are pieces of attractive, solid-looking furniture.

The walls have not yet been decorated with pictures by the employees, but the girls have hung handsome China silk curtains at the windows and have thus helped soften the barren appearance of the room. The company feels that the room is peculiarly the property of the help and would be glad to see them make it as homelike as possible. The smoking-room communicates with the main dining-hall, but when the door between the two is closed, no odor of tobacco reaches the girls at the tables outside.

The kitchen is fitted up with all the conveniences found in a first-class restaurant, including a big gas stove and a capacious refrigerator. This room, like all the others, is a model of neatness.

The dining-room is managed by the company, assisted by the heads of departments, foremen and subforemen, all of whom meet at stated intervals, dine together and discuss any questions bearing on shop management that may be suggested.

There is no labor charge against the dining-room except the wages of the chef.

The girls in the factory take turns, volunteering to wait on the table. The company is perfectly satisfied from an economic standpoint that the dining-hall is a valuable addition to its equipment, and it would be very glad to furnish further information to any manufacturer contemplating a similar step.

WIRE GOODS COMPANY—KITCHEN

Current Educational Questions

A Model School Building

As part of its winter's work the Worcester Public Education Association has arranged a series of monthly meetings for the consideration of current educational questions. At each meeting a thirty-minute paper dealing with some phase of school work or school administration is to be read by a member of the association. Following the paper there will be a brief general discussion.

The association aims to induce as many people as possible to take an active interest in the work of the public schools, and to furnish a forum where teachers, members of the School Committee and others may come together for the discussion of school matters. The meetings, which are open to the public, are held in the city missionary's room, Y. M. C. A. Building, on the second Tuesday of each month, at 4.30 in the afternoon.

At the first meeting of the season, held on Dec. 8th, Superintendent of Schools Homer P. Lewis presented a paper on "A Model School Building." Mr. Lewis spoke in part as follows:

Schoolhouse architecture is in process of evolution. If we look at schoolhouses in this city built thirty, twenty, or even ten years ago, we shall see that while attempts were made to use the best methods of heating and ventilating, apparently no attention was paid to matters of lighting or proper seating of the pupils. For many years foreign countries, notably Germany, France and Switzerland, have been studying the lighting of schoolrooms. To those countries we must look for expert opinion.

As one of our statesmen has said, the greatest asset of this nation is the health of the people. To secure this is one of the functions of the school. There can be little doubt that the physical defects of children, most of them curable, many of them cultivated by school conditions, are the cause of most crimes and of a vast amount of inefficiency as well. If we agree with an expert criminologist, who has lately asserted that a large percentage of crime is due to imperfect sight, the matter of proper lighting of schoolrooms becomes very important.

When a new school building is needed, the first consideration is that of location. It should be as near the centre of the district from which it is to draw, and as remote from trolley-lines, railroads and much-traveled streets as possible. High ground should be chosen and a dry, gravelly soil. Made land or damp ground should be avoided. Representatives of the Board of Health might well be consulted in selecting the lot, as is done in Germany and in Scandinavian countries.

If possible, the school grounds should be large enough to give considerable space to lawns, shrubbery, etc., and to give thirty square feet of playground for each pupil, exclusive of the site of the buildings. This is to be enjoyed not only by the pupils during the recesses of the school, but by the children of the neighborhood

WIRE GOODS COMPANY—SMOKING ROOM

[illegible] should be covered with gravel, or with gravel mixed with sand, or in some cases with brick.

[illegible] architecture, e- wont to make the exterior of the school building and its relation [illegible] the whole building is planned as to shape and dimensions, he proceeds to divide it as best he can into the requisite number of rooms, with a mere chance regard to the use to which the rooms are to be put.

Now the real unit which the architect should have in mind is the schoolroom. The schoolhouse is merely a collection of schoolrooms, each perfectly adapted to some special use. No feature of the schoolroom necessary to make it a model in every important particular should be sacrificed to make it conform to some plan of the exterior architecture. It is, however, perfectly possible so to arrange and group the several rooms as to produce a building with a dignified and pleasing exterior.

Mr. Lewis then gave a summary of expert opinion, both European and American, regarding the proper dimensions of a schoolroom. There is substantial agreement that for a class of from forty to forty-eight pupils a room 30 to 32 feet long, 22 to 25 feet wide, 13 to 14 feet high, and with windows correctly located, will meet all the requirements of floor-space, light, air and acoustic properties. These dimensions are either realized or approximated in most modern school buildings abroad.

In our own country we have been exceedingly slow to give any heed to hygienic demands except such as relate to the amount of air supplied to the pupil. Our rooms are generally too low and improperly lighted. Although there is not full agreement in respect to the best method of lighting a schoolroom, the majority of experts favor lighting from one side only, the left-hand side. Lighting from the side in front of the pupils is evidently objectionable, inasmuch as the light shines directly into the eyes of the [illegible] Light from the right hand throws all work with pen or pencil into the shadow of the pupil's hand. Shadows or half shadows thrown upon the work tend to injure the sight. Light from two sides, the left hand and the rear, is permissible, at least in cases where sufficient light cannot be obtained from the left-hand side alone; but in no case should the light from the rear be allowed to overpower the light from the left. As regards the amount of light furnished, the rule is well established that the window area should be from one-fourth to one-sixth of the floor area.

After some further consideration of the problem of lighting, which he regards as the most important question still to receive its due share of attention from American schoolhouse architects, Mr. Lewis spoke briefly of other matters. He mentioned the proper method of finishing walls, suggested improvements in the system of ventilation and the arrangement of schooolhouse basements, and finally discussed certain features of construction which would tend to lessen the danger from fire. As this brief abstract will indicate, the paper was full of interesting information and suggestion. From time to time Mr. Lewis illustrated his points by referring to conditions in certain Worcester schoolhouses.

The discussion was opened by Prof. George I. Alden. In answer to questions asked him regarding the present architectural status of the Worcester schools, Mr. Lewis informed the meeting of some of the alterations recently made in a few of the older schoolhouses of the city with a view to securing better light and ventilation. Most of these buildings, however, could not possibly be made to conform to all the requirements of modern schoolhouse construction. The only remedy is to replace them by new ones as fast as the city can afford it. The three new school buildings shortly to be erected by the city will probably embody most of the features which experts [illegible]

The next meeting of the association will be held on the afternoon of Jan. 12th. Prof. E. Harlow Russell will speak on "The Relation of the Normal School to the [illegible]

The Mechanics Association's Coming Exposition

One of the distinguishing events of 1909 in our city is to be the Mechanical and Electrical Exposition, to be given by the Worcester County Mechanics Association in their building, March 27 to April 3 next. Under the energetic leadership of President Daniel E. Denny, the membership of this organization has been greatly increased, and under the direction of a large and representative committee, which has been holding weekly meetings for the last two months, excellent progress has been made in the plans. A carefully planned system of exhibits guarantees a remarkably comprehensive display of Worcester industries.

The choice of superintendent or manager has fallen upon Mr. H. F. Campbell of Boston. Mr. Campbell is thoroughly experienced in exposition work, having been closely connected with nearly all the large exhibitions

H. F. CAMPBELL

that have been held in recent years in the East and as far west as Chicago. If all the thousand and one details of the Exposition are not carried out in a pleasing and satisfactory manner, then the new superintendent will retrograde from his methods of the past.

He has had close business relations with the newspaper publishers of New England, and much of the publicity given the great shows held in Boston the last few years is due to the large number of articles from the pen of Mr. Campbell, relating to the electrical, automobile, boat and engine and office appliance exhibitions with which Mr. Campbell has been connected.

He has already done much preliminary work for the Worcester Exposition, and states that everything looks bright for a very successful and business-like show. His headquarters are at Mechanics Building.

The Worcester Magazine has been chosen as the official organ of the Exposition, and our March issue will be a "Progressive Worcester" number, in which we hope to surpass all our recent efforts at increased size and circulation of the Magazine. Full details of this will appear in our next issue.

TAORMINA

The Italian Catastrophe

The geographical territory comprised under the name of Italy consists of a peninsula 700 miles long in the south of Europe, lying between the Tyrrhenian and Adriatic Seas, and bounded on the south by the Mediterranean. Mapped, this peninsula resembles a high-heeled boot, with the magnificent island of Sicily at the toe. Here at the very close of 1908 occurred the most awful as well as most spectacular catastrophe of modern times. In the earthquake shocks and tidal wave of Dec. 27 and 28, and the minor shocks that have continued ever since, and still continue, more than 100,000 persons have certainly lost their lives, and some estimate the casualties at twice that number.

Devastation throughout the province of Calabria, with its 6660 square miles, and the island of Sicily, with 11,290 miles more, appears to be complete. Reggio and Messina, two large and prosperous cities, have been overthrown, also many smaller towns and localities.

The suffering attendant upon the disaster has awakened the sympathy of the world, and hundreds of thousands of dollars have already been subscribed to pay for food and medical supplies.

Worcester has not been behind her sister cities in her contribution. More than $2500 had been subscribed when the Worcester Magazine went to press, and the fund here had hardly gotten under way. Thousands of Worcester's Italian-speaking people are interested in the section where the disaster occurred. Many of them came from there when they came to America, and large numbers still have relatives in the region destroyed.

Of peculiar interest to large numbers of Worcester society people is the picture we present above of Taormina, the home of two former Worcester men, Charles A. Williams and Walter Scott Kennedy. We are enabled to present this picture through the kindness of Miss Frances C. Morse, 57 Chatham Street, who owns the original, and who has twice visited Taormina, which she describes as one of the most beautiful spots on the globe. That was Cardinal Newman's eulogy of the spot, and Miss Morse says it is not overdrawn. In the winter season it is filled with tourists from all parts of the globe. It is in the very heart of the earthquake zone. Mount Ætna with its snowy peak being plainly visible at the left of the picture, and for days it was feared that Messrs. Williams and Kennedy had perished. Latest advices state, however, that they are alive and uninjured. The two gentlemen are just completing a villa in Taormina, and have had a good opportunity in this terrific cataclysm to observe the stability of the site they have chosen for their new home.

Mayor Logan's Second Inaugural

It is a pleasure to place again upon a page of this Magazine a face seen in this connection one year ago, and to give some brief extracts from the message with which Mr. Logan entered upon his second term of office as Mayor of Worcester on Monday, Jan. 4. His address abounded in clear and strong statements of the underlying principles of good citizenship, and in allusions to intelligent and active participation in all civic duties. It also dealt with sufficient detail upon the fiscal conditions of the city and the immediate problems which confront it. It is evident that his experience during the past year has enabled him to lay foundations on which more conspicuous superstructures may rise in the coming months. He was explicit in exemplifying the principle that city affairs should be conducted as conscientiously as any private business; and equally convincing in pointing out certain factors in a representative government which made the precise following of such methods impossible.

While much of the inaugural message was of necessity devoted to technical details, there were certain portions which have a wider interest than simply among the residents of Worcester. We are moved, through a par-

HON. JAMES LOGAN

donable pride, to quote a passage which sets forth one notable achievement of our voters:

> In the State of Massachusetts at the State election in 1907, 166,405, or 30 per cent. of the registered voters, failed to go to the polls to vote. There is hardly a [illegible] in the State in which the stay-at-home citizens could not have controlled for good or ill the election, in other words, the destinies of the cities and towns in the Commonwealth are in the control of the stay-at-home citizens who neglect their duty at the caucus and the polls. That ought to be a sobering thought for men [illegible] and who have the welfare of the country at heart.
>
> It is with satisfaction and pride that we place on record the fact that in the city of Worcester the sense of civic responsibility in respect to voting is on a higher plane than the average throughout the State; that in the city of Worcester at the municipal election on Dec. 8, 1908, only 8¼ per cent. of the registered voters failed to vote, and this is one of the most hopeful signs of the times.

THOMAS F. GANNON

WALTER F. MELLEN

GEORGE N. JEPPSON

FREDERICK N. COOKE

A considerable portion of the message dealt with the importance of the most approved and scientific methods of figuring costs and keeping the financial statements of a city's affairs. One passage here, as illustrating the Mayor's general position on this subject, is reproduced:

> More and more the accountant is to be a prime factor in the development of industrial and municipal efficiency. More and more the management is to be guided and its actions determined by the facts developed in the accounting department. By analysis and comparison, the accountant will develop a knowledge of the weak spots in the working organization, bringing them to the attention of the management. This department will be to the management what the mariner's compass and the sounding lead are to the captain and the pilot of the great ocean liner, without which the vessel with its precious cargo of lives and merchandise would be dashed upon the rocks. Then having wrought out the figures, they must be given publicity.
>
> Publicity in the financial affairs of the municipality will keep out graft and corruption. It is because the people do not know about their own business that the grafter is permitted to get in his work. The best policeman in the dark alley is the electric light, and publicity in financial matters will do for the municipality what the electric light does for the dark alley.

CHARLES A. KELLY

HERBERT N. LEACH

A natural curiosity was felt in what might be said concerning playgrounds, a subject in which Mayor Logan has long been deeply interested, and upon which there was a strong favorable expression of sentiment at the last election. The point of using park lands for playgrounds was discussed in the following terms:

> The legislation embodied in Chapter 513 of the Acts of 1908 is simply a beginning and without doubt will be amended at the next session of the Legislature by more detailed legislation, specifying the area of playgrounds, their uses, where located, etc. As I understand it, there is a question whether land which has been acquired for parks can be used for playground purposes.
>
> I see no reason (though there may be a legal reason) why in every park of the city, where there is sufficient area, playgrounds cannot be planned for. If we have sufficient land in some of our parks for playgrounds, it would be simply a waste of the people's money to buy more, simply because our parks may be so tied up by statutes that we must keep them for ornaments rather than put them to a higher use. If this is so, then the sooner we have legislation that will cut the red tape the better, so that our parks may be used for the benefit of those who need them most.

Six new members appear in the upper branch of the city legislature. Of these, George N. Jeppson, the new President of the board, succeeds Alderman Mark M. Patterson as the representative of ward one in the upper branch. Mr. Jeppson is the assistant superintendent of the Norton Company, and resides at 286 West Boylston Street, in precinct two of that ward. He is a Republican.

Herbert N. Leach, the new alderman from ward two, lives at 22 Perkins Street, in precinct one of that ward. He is the treasurer of the J. W. Bishop Co., contractors and builders, and succeeds Alderman John P. Holmgren,

elected a representative to the General Court from this ward. He is a Republican.

Charles A. Kelley, the new alderman from ward four, is a mason by occupation, with an office at 311 Main Street. He resides at 37 Harrison Street, in precinct one of that ward and he succeeds James H. Mellen, elected a Representative from that ward to the General Court. Mr. Kelley is a Democrat.

Thomas J. Gannon, the new alderman from ward five, is a real estate agent and lives at 171 Washington Street, in precinct three of that ward. He was formerly a sealer of weights and measures. He is a Democrat and succeeds Cornelius S. Mannix.

Frederick N. Cooke, who is the new alderman from ward seven, comes to the upper branch from an excellent novitiate in the council, where he was regarded as one of the ablest members. Mr. Cooke is the manager of the Postal Telegraph Co., and resides at 5 Lagrange Street, in precinct one of the seventh ward. He succeeds Charles H. Harris. He is a Republican.

Walter L. Mellen, the new member from ward eight, is a member of the general contracting firm of Henry Mellen & Sons and resides at 43 Queen Street, in precinct two of that ward. He succeeds Alderman John W. Mitchell. He is a Republican.

Business Conditions in Worcester County

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Worcester's volume of trade during the first ten months of 1908 will pass into commercial history as being more or less interrupted and curtailed by the depression prevailing on all sides, but during the last two months of the year a gradual and conservative expansion has occurred in all departments, and what is most of all encouraging is the general confidence in the outlook. Leading stores have reported a favorable volume of holiday business in comparison with last year, and many plants are increasing their working hours, or quota of help.

The latest figures of the Bureau of Manufacturers for last year and the two preceding years are as follows:

Year	Capital devoted to production	Value of product	Yearly wages
1907	$30,178,687	$68,623,320	$15,207,356
1906	30,743,339	66,826,385	14,123,095
1905	28,193,058	55,526,781	12,499,669

In spite of the financial disturbances, building operations for the year were but slightly retarded, figures for the past four years being as follows:

Year	Number of permits	Value
1908	1,102	$2,286,761
1907	1,028	2,985,136
1906	925	3,500,000
1905	739	2,300,000

The following is a comparative statement by months of Worcester County failures for the past three years:

1908.

	No.	Liabilities	Assets
January,	17	$86,506.00	$31,967.00
February,	8	56,123.00	6,201.00
March,	9	52,999.00	15,485.00
April,	14	188,293.00	140,950.00
May,	3	5,608.00	2,415.00
June,	3	233,573.00	96,250.00
July,	7	80,308.00	42,950.00
August,	7	9,288.00	2,514.00
September,	10	57,833.00	16,537.00
October,	8	113,573.00	45,023.00
November,	6	23,126.00	5,146.00
December,	7	18,321.00	5,665.00
Totals,	99	$1,225,551.00	$411,103.00

1907.

	No.	Liabilities	Assets
January,	13	$102,313.00	$35,265.00
February,	6	60,576.00	16,978.00
March,	9	61,679.00	7,712.00
April,	12	298,591.00	141,673.00
May,	6	32,454.00	10,370.00
June,	10	19,843.00	2,830.00
July,	4	25,341.00	17,670.00
August,	2	22,260.00	9,510.00
September,	3	7,200.00	2,000.00
October,	3	10,954.00	1,425.00
November,	7	204,951.00	78,961.00
December,	12	121,468.00	28,940.00
Totals,	87	$967,630.00	$353,334.00

1906.

	No.	Liabilities	Assets
January,	7	$130,850.00	$29,111.00
February,	10	23,390.00	7,791.00
March,	10	49,949.00	3,811.00
April,	7	47,771.00	6,710.00
May,	11	35,567.00	13,906.00
June,	5	48,796.00	23,638.00
July,	12	28,189.00	7,060.00
August,	11	52,901.00	32,545.00
September,	3	19,301.00	10,645.00
October,	12	88,074.00	35,973.00
November,	11	55,857.00	43,662.00
December,	11	33,710.00	8,009.00
Totals,	110	$614,355.00	$222,861.00

Worcester Quotations

(Reported by Kinsley & Adams.)

Dec. 28, 1908

BANKS

	Bid	Asked
Worcester National Bank	195	200
Mechanics National Bank	115	125
Worcester Trust Co.	250	.....
Merchants National Bank	150	.....
Millbury National Bank	75	.....
First National Bank, Webster	.....	.....
Fitchburg National Bank	.....	.....

MISCELLANEOUS

	Bid	Asked
Norwich & Worcester R. R. Co. preferred stock	205	.....
Providence & Worcester R. R. Co. stock	255	.....
Worcester, Nashua & Rochester R. R. Co. stock	.....	.....
Worcester Gas Light Co. stock	230	240
Worcester Electric Light Co. stock	225	235
Crompton & Knowles Loom Works preferred stock	.....	.....
Graton & Knight Mfg. Co. common stock	120	130

Graton & Knight Mfg. Co. preferred stock	110	115
Royal Worcester Corset Co. stock		....
Wright Wire Co. common stock	....	102
Wright Wire Co. preferred stock	....	102
United States Env. Co. common stock	40	.....
United States Env. Co. preferred stock	98	101
United States Env. Co. 5% bonds	5¼ basis	..
Norcross properties 6% bonds	....	....

Recent Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

E. F. Fletcher, Gun Cleaner, No. 904,122.

An expanding cleaner for shot guns, consisting of a woven wire cleaner containing an elliptical resilient sheet metal tubular expander severed along a zig-zag line. The device is constructed to be attached to a cleaning rod.

H. Wyman, Automatic Weft Replenishing Loom, No. 904,290.

A mechanism for controlling the movement back and forth of the filling supply magazine, so that the magazine will be normally stationary during the normal operation of the loom. This magazine only moves when substantial exhaustion of filling in the active shuttle has indicated for a fresh bobbin to be supplied to this shuttle of a different color from that in the bobbin in position in the magazine, and after the filling has been supplied, the magazine remains stationary until the first movement of the shifting shuttle boxes moves the magazine, to return to its normal position.

F. R. Batchelder, Carrier for Trench-diggers, No. 904,596.

A carrier for folding trench-diggers, having a flexible sheath to receive the blade so that the digger can be placed in position on the carrier by introducing the blade into the sheath from above. The support is provided with a guide for the joint of the blade, and the sheath with metallic guards at the ends to guide the blade into proper position and prevent cutting.

F. R. Batchelder, Carrier for Trench-diggers, No. 904,597.

A carrier for folding trench-diggers, consisting of a rigid frame having guides and a crossbar to receive the joint between the blade and the handle of the digger, and a sheath secured to this frame by rivets. Straps are attached to the frame to support the carrier.

S. A. Reeve, Compound Explosive Motors, No. 904,807.

This motor has compressors external to the explosion cylinder and works on a high-pressure cycle, which is compounded or conducted in stages on both the compression and expansion sides. Low stage charge compressors, having common piston structures with the explosion cylinders, are attached to the inner ends of opposing explosive cylinders. Air is compressed in these compressors and passes through the carburettors into the explosion cylinders, where it is still further compressed by the back stroke of the piston prior to ignition.

F. E. E. Marble and C. A. Hammar, Tool-Holder, No. 905,898.

A tool-holder to drill at an angle which is provided with means for feeding the tool as the shaft rotates, which may readily be thrown out of operative connection. [illegible] be fed by hand or operated without feeding.

F. A. Robbins, Trolley Device, No. 906,161.

A method of supporting the trolley harp and wheel in such a manner that they will be movable with respect to the trolley-poles, and will be pressed up therefrom by a direct spring pressure toward the trolley wire without binding action.

H. M. Smith, Shears for Cutting Sheet Metal, No. 906,572.

A sheet metal shear capable of cutting an irregular line and especially adapted for cutting sheet metal in architectural designs. The shear consists of a fixed and a movable blade, each composed of a series of knives, the movable blade being carried by a vertical reciprocating gate.

Honorary Life Members of the Worcester Continentals

We are requested to insert in this number the following list of honorary life members of the Worcester Continentals, which, by oversight, was not furnished us with other list of members printed in connection with the interesting article in our December issue:

Baldwin, Capt. John S.	Kent, Charles F.
Bullock, Col. A. George	Kinney, A. B. F.
Crawford, O. T.	Manning, S. W.
Dodge, Thomas H.	Maynard, Wm. H.
Eddy, Henry W.	Munroe, A. C.
Ewell, William F.	Prouty, C. N.
Gunnison, Rev. Almon	Rice, Wm. E.
Hall, Rev. Edward H., D.D.	Taylor, Ransom C.
Harrington, Chauncey G.	Whittemore, Eli J.
Harris, Rev. Moses H.	Willard, W. H.
Hewett, George F.	Witter, H. M.
Heywood, Samuel R.	Wood, Edwin A.

Current Events

City Hall and Departments.

Dec. 1. Increase in pay for public school janitors is recommended by sub-committee on schoolhouses and adopted by the city government.

2. At a meeting of the City Council the recommendation of the Committee on Police for an addition to Station 2, and a detention station at Lake Quinsigamond, is referred to the Finance Committee.

The Board of Aldermen adopt decrees to make public Beacon Street, Bigelow Court, Dewey Street, Tufts to May Street, and to build sidewalk on East Central Street.

8. Mayor James Logan is re-elected by a majority of 2,376.

12. The no-license majority is increased from 186 to 209 by a recount of the votes.

14. Mayor James Logan appoints a committee of fifteen to plan a Worcester observance of the 100th anniversary of the birth of Abraham Lincoln.

17. The Republican aldermen-elect name George N. Jeppson for President of the Board.

23. Mayor Logan and Superintendent of Street Lighting Henry A. Knight sign a three-year contract with the Welsbach Street Lighting Company of America to provide 500 Welsbach lights for the city at $25.80 per lamp.

General City Happenings.

Nov. 25. Opening day Fourth Annual Food Fair and Home Furnishing Exposition in Mechanics Hall.

27. Citizens' Thanksgiving service in First Baptist Church, Hon. George H. Utter, ex-governor of Rhode Island, principal speaker.

30. Worcester Merchants Association Board of Directors elect the following officers: President, E. E. Dodge; Vice-president, W. J. Woods; Secretary, E. B. Clapp; Treasurer, Elwood Adams.

Twenty-first anniversary of the New England Order of Protection, in Association Hall, with 400 members present.

The petition of the N. Y., N. H. & H. R. R. to unite the Norwich to the Worcester division by erecting a bridge across South Bridge St., discussed before the Railroad Commissioners.

Dec. 1. Thirty-third annual banquet of Fire Patrol and presentation of gold badge to Fire Department Surgeon George H. Hill.

Worcester Academy buys eleven acres of the Willard F. Pond estate, making one of the largest school athletic fields in the country.

At the annual meeting of the Worcester Society of Antiquity, Mander A. Maynard is re-elected president; C. E. Burbank and Miss Adeline May, vice-presidents; Walter Davidson, secretary; Frank E. Williamson, treasurer; and Ellery B. Crane, librarian.

3. Southgate Street is opened to traffic, making the first step of eliminating the grade crossings.

At the annual meeting of George H. Ward Post 10, G. A. R., William B. Lowney is re-elected commander.

6. Worcester Elks hold memorial service for their dead in Franklin Square Theatre.

7. At the annual meeting of the Worcester Golf Club, J. MacDonald Stone is elected clerk and Herbert E. Kelley treas

8. Massachusetts State Grange opens its thirty-sixth annual convention in Association Hall, a three-day session.

9. Worcester Police Relief Association holds annual ball with over 2500 present.

Worcester Speedway Club holds annual banquet in Hotel Warren and elects Hon. E. A. Cowee president and Harry W. Marsh secretary.

Battery B, First Battalion Field Artillery, dedicates its new armory.

10. Worcester Branch of the National Metal Trades Association holds its annual banquet at State Mutual restaurant.

14. Corner-stone is laid for the new Hahnemann Hospital, Mr. David H. Fanning officiating.

15. New steel bridge over the Boston & Albany division tracks at Gates Street extension, and the Cambridge Street bridge over the New Haven road are opened.

16. Worcester County Sons of Brown hold their annual banquet at the Worcester Club, with President W. H. Faunce of the university and Governor James H. Higgins as speakers.

24. The award to build the new Union Station is given to Woodbury & Leighton, a Boston contracting firm.

25. The Salvation Army distribute over 350 baskets of food among the poor families of the city.

27. 1800 French-speaking people attend the lecture and sacred concert given for the benefit of Notre Dame Church, in Poli's Theatre.

Personal.

Dec. 1. Rev. G. H. Gagnon, assistant curate at Notre Dame Church, made successor to Rev. Fr. St. Onge, Fiskdale.

2. William H. Cook elected President Worcester County Musical Association.

J. P. Coghlin elected member of Executive Committee of American Automobile Association in New York.

3. Samuel H. Pitcher resigns his office as Assistant City Engineer.

9. Mrs. Caroline M. Thayer dies at her home, aged 82 years and 10 months.

10. E. Harlow Russell resigns as principal of State Normal School, to take effect Sept. 1, 1909.

13. J. Lewis Ellsworth, secretary State Board of Agriculture, gives a talk at the Civic Service House in Boston.

14. Rev. Dr. Andrew Burns Chalmers, of Plymouth Congregational Church, elected President of the Congregational Club.

15. Hon. William A. Lytle presides over meeting of the special committee of the State Board of Trade in Boston.

Prof. George Edgar Gladwin, well-known Worcester artist, observes 80th birthday.

17. Arthur H. Burton elected President of the Association of Massachusetts Tax Assessors at a meeting in Boston.

19. S. E. Hanson appointed agent to collect historical data, by the Swedish Historical Society of America.

28. Henry T. Williams, a prominent Worcester business man, dies at his home, aged 44 years.

The New Treasurer of the Mechanics Savings Bank

CHARLES L. BURLEIGH

Charles L. Burleigh, for the past ten years a clerk in the employ of the Mechanics Savings Bank, has been made Treasurer of that institution, succeeding the late Frank W. Cutting, whose untimely death so mystified Worcester people last month. Mr. Burleigh is thirty-one years old and in his clerical capacity he was brought into close and intimate companionship with Mr. Cutting and is thoroughly conversant with his excellent business methods. He comes of distinguished parentage, his father having been in the service with Gen. A. B. R. Sprague, the President of the bank.

For many years Mr. Burleigh senior has been one of Worcester's leading patent attorneys and his son's elevation to a position of so much dignity and importance is most gratifying to him. The new Treasurer is noted for his affability and worth, not less than his capability and talents.

Worcester's Commercial Travelers.

It was a privilege and pleasure for the Secretary of this Board to sit down as a guest with the Worcester Commercial Travelers' Association at their recent annual banquet at the Bay State House on December 18. One could hardly ask for a more goodly fellowship of undoubted "hustlers" than those who gathered round the festive board and made the banquet hall ring with their rendering of popular songs. Besides the bounteous bill of fare provided by the new manager of the Bay State House, Mr. George A. Keeler, each guest found by his plate No. 1 of the Magazine of the Worcester Commercial Travelers' Association, produced in superb form by the Commonwealth Press of Mr. O. B. Wood, and containing some valuable and interesting matter. Its reference to our Board of Trade is so friendly and appreciative that we quote from it.

There is probably no organization in the city of Worcester having permanent headquarters that can prove itself of such material advantage to the members of this association as the Worcester Board of Trade. Its membership is composed of the business men of Worcester. Its rooms are convenient of access, pleasant and commodious, a good place for business appointments and opportunities for touching elbows with those you wish to meet either in a business or social way, that should be taken advantage of by our members. "Become a Booster and Boom Worcester."

The Secretary's Corner has been an increasingly busy place during the last few weeks, partly because of work incidental to the closing of the year; more largely because of the broadening activities of our organization, and the greater number of individual members of the Board who are undertaking specific tasks in its service. Looking back to the months of last summer, when unbroken quiet would reign in these rooms from morning till night, and then looking around upon the steady stream of callers who now have to wait their turns in transacting their business, a cheering contrast is in evidence. More and more the business men of this city are turning to the Board of Trade for definite help in their various undertakings. The specific things requested are not always in our immediate power to perform, but the growing number of requests is a token of the larger place the Board of Trade is coming to hold in public thought.

It was in response to this request for more service that the directors sent the Secretary on a week's tour of investigation to Newark, Washington, Baltimore and Williamsport. A morning spent with Secretary Reilly in the first named city found him just beginning a scheme for aiding new enterprises and strengthening those requiring enlargement, a plan which has excellent features designed to investigate thoroughly the merits of a new business, and also to guarantee its proper management, if aided, for the protection of the interests of any minority holders of stock. At Washington and Baltimore some successful methods of stimulating suburban trade for retail merchants were found, and have been placed in the hands of our Committee on Mercantile Affairs for their consideration. At Williamsport the Secretary was privileged to make a careful study of the guarantee credit plan, which has given that city a wide reputation for hospitality to desirable new enterprises. This has been in successful operation during the last seven or eight years, in which time that industrial centre has doubled in size. All these plans will receive the earliest possible attention of the proper committees.

The Secretary recognizes something more than mere methods or the multiplication of individual endeavors as responsible for the present conditions in our organization as we cross the threshold of a new year. In the last analysis success is a matter of spirit and feeling rather than of methods or machinery. The increased local sales of our Magazine, and the many kind words which have been spoken concerning the last two numbers, and the larger spaces taken by our advertisers, are tokens of a kindly attitude of mind which cannot be misunderstood.

The most significant proof of a growing interest in the Board of Trade, in the outlook from this Corner, is the movement among the business and professional men of this city for swelling the ranks of its members. Beginning last May, in the most unpromising period of the year, new members began to appear, one by one; and for the last three months there has been scarcely a week in which some new names have not been added. Up to December the number of such was 36, which, in addition to 34 members of the Glee Club, who were added to our list by vote of the directors, gave a total of 560. Since the first of December our Membership Committee, under the leadership of Mr. Louis H. Buckley, and an auxiliary committee of twenty, have been engaged in a quiet but vigorous campaign. Over a thousand letters and sample copies of the Magazine have been sent to carefully selected names. At our New Year's evening reception the result of all these combined efforts was reported, as detailed elsewhere, bringing our total membership up to 692.

In this connection another point deserves notice, and that is the voluntary and spontaneous expression of this good feeling. One member of the Auxiliary Membership Committee, who brought in sixteen applications, reported the use of less than three hours of his time in securing these names, nearly all of them being ready at once to sign the applications, and only two men declining. A considerable number of signed blanks have been sent to the office by mail, and several have called to make personal request for membership. One newly enrolled member at once went out and brought in two additional recruits. In view of these facts it seems clear to the Secretary that there is a widespread and increasing volume of approval and good feeling toward the Board of Trade, which promises even better things in the immediate future.

It is worth noting that this movement is wider than any one organization. Worcester men are more and more feeling ready and glad to get together for common endeavors to promote the common good; witness the increase in the ranks of the Mechanics Association, and the results of Hon. W. A. Lytle's vigorous—also irresistible, as the Secretary can testify from personal experience—canvass for active members for the Worcester Continentals, in view of their approaching trip to represent our city in the parade at Mr. Taft's inauguration. All of which augurs the best kind of prosperity in all ways for our city in 1909 and all following years.

In view of this large increase in our membership, there is timeliness in the action of the Directors at their last meeting, in appointing a committee on revision of by-laws, especially to consider the proper number of committees and the definition of their duties. In becoming acquainted with the methods of other bodies like our own, the Secretary is impressed with the much larger range of activities often accepted by more numerous and larger committees, to each group. The revival of interest in our organization is due to the expectation that we are about to accomplish things, rather than because of achievements to which we can already point; it therefore devolves upon us to see to it that as fully as possible our new members, as well as our old ones, have the largest possible opportunities of service provided for them.

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

Officers

President, GEORGE F. BROOKS — *Vice President*, J. RUSSEL MARBLE.
Secretary, JOHN L. SEWALL — *Treasurer*, SAMUEL D. SPURR.

Directors

GEORGE F. BROOKS, CLARENCE W. HOBBS, JOHN J. POWER,
GEORGE F. BOOTH, JOHN W. HIGGINS, EDWARD J. CROSS,
ARTHUR C. COMINS, WINTHROP HAMMOND, DR. THOMAS HOWELL,
J. RUSSEL MARBLE, WILLIAM FORSBERG, CHARLES T. TATMAN,
DAVISON E. BOOTH, VICTOR E. EDWARDS, CHARLES L. GATES,
CHARLES S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
HERBERT H. FAIRBANKS, WILLIAM WOODWARD.

Counsel for the Corporation, WILLIAM H. SANFORD — *Auditor*, H. WARD BATES

Our New Year's Reception

On Friday evening, Jan. 1, a date overcrowded with social engagements of all kinds, about one hundred and forty of the business men of this city visited our rooms and shared the festivities appropriate to the day and season. The occasion was entirely informal, but manifestly enjoyed by all present. In the absence of Mr. J. Russel Marble, another member of the Committee on Meetings and Reception, Mr. Arthur C. Comins, presided with a facility which will make him in future demand for like services. Addresses were made by Mr. Charles H. Norton; Mr. Daniel E. Denny, president of the Mechanics Association; Hon. W. A. Lytle, Mr. Harry W. Goddard, President George F. Brooks, and the Secretary, who was drafted by Mayor Logan to speak for him as "acting mayor." The first thing upon the programme was the reading of the list of new members, added during the last few weeks, by Mr. Louis H. Buckley, chairman of the Membership Committee; and the closing feature of the speaking was an enthusiastic talk by Hon. Edward F. Fletcher, chairman of the Seattle Excursion Committee, upon that coming event; this was followed by the distribution of the printed itinerary of the trip, and the opening of the books for registration of those intending to go. A buffet lunch was served, and the Glee Club enlivened the evening with their music. The spirit of gratification over the unparalleled work of the Membership Committee and their helpers on the Auxiliary Committee, and the display of great hopefulness for the future, were everywhere manifest. It gives us great pleasure to record the names of new members brought in during the month of December, which will be found on the following page.

A New Helper

With the beginning of 1909 we are privileged to welcome to our office a new worker in the person of Mr. Herbert N. Davison, who takes up the duties of Assistant Secretary. During recent months it has become evident that with the enlarged size of the Magazine, and the increasing demands for purely secretarial labors, it was impossible for one man to do justice to it all. The Publication Committee have recently made a report upon the progress of the Magazine for the first year under its enlarged form, and recommended that instead of hiring a second man to edit the Magazine, as has been done twice in the past, a general assistant to the Secretary be employed, who should divide his time as might seem expedient between the Magazine and the general work of the Board. Mr. Davison, who has made many friends in this city since his employment upon the staff of the Worcester Telegram, has been rendering some help upon the Magazine during the last few months. We feel confident that with his assistance our plans for advance steps in coming months will rapidly materialize.

Hereafter the office hours of our force will be arranged as follows: Mr. Sewall will regularly be at his desk in the morning from nine o'clock till noon, and by special appointment until 1.30 p.m., to meet any who may find that hour convenient for them. From two o'clock p.m. until five p.m. Mr. Davison will be in the office, Mr. Sewall planning to take that time for calls in the city. Mr. Bosworth will regularly be at his desk in the office from noon till 1 p.m.

A Significant Movement

Every commercial organization in New England, and especially in Massachusetts, should study carefully the achievement of the business men of Boston in "getting together" in one comprehensive organization, which is to include and take the place of the separate bodies which have hitherto been laboring independently in a field where no logical lines of demarcation exist. The Merchants' Association and the Chamber of Commerce have voted to consolidate under the latter name, and to begin operations as soon as the Legislature shall grant a charter. The aim of the new movement is stated by President Rothwell of the Chamber of Commerce as follows: "An organization so inclusive, so thoroughly representative, and so powerful as that which is now proposed could speak with compelling force in all matters of public concern, national, state and municipal." President Storrow of the Merchants' Association declares: "We want every man doing business in greater Boston, who has brains and public spirit, to join the Merchants' Association and go with us into the Chamber of Commerce." The Boston Transcript makes the following editorial comment upon this action:

> The consolidation is the full flower of a tendency that has been for a long time manifest. It mobilizes the business forces of the city. It co-ordinates those various elements of strength and influence that have suffered from a waste of power by operating upon independent if not sometimes conflicting lines. When the new Chamber of Commerce speaks and acts, it will be speaking and acting not simply for an association, but in the name and for the interests of business Boston, and to a large extent for all New England, or at least the northern portion of it. It means increased economy of operation and greatly increased power and influence. It is a propitious opening for the new year.

The Boston Herald, under the caption, "Two Thousand Man Power," makes the following pertinent suggestions as to the relation of such an organization to individual effort and initiative:

> Organization is not all. In itself it accomplishes little. There have been organizations in the past. And there have been dinners and speeches and resolutions for good and against evil, but now the time has come for work. The dinners and the speeches and the resolutions will continue to have place, no doubt, but these delightful expressions must be supplemented by work if results are to be accomplished.
>
> The work which the amalgamated associations of business men in Boston may do is unlimited. If the new association, by whatever name it may be known, is to achieve success, it must be success for Boston, and it must enlist not merely the membership, but the work of men who have at heart the interests of the city.

"Worcester Chamber of Commerce" would not sound bad. How much larger must this city grow before such a name will be fitting?

"Industrial Worcester"

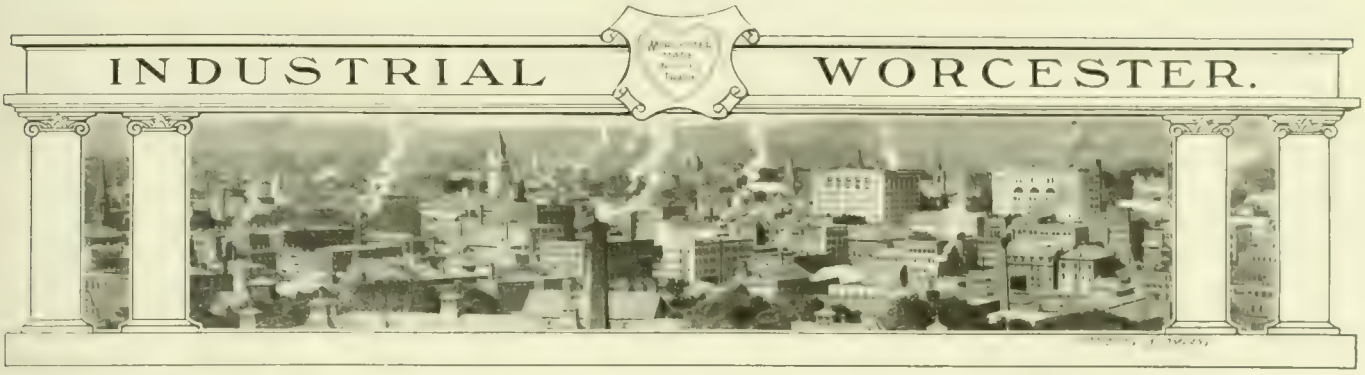
We are glad to dignify with new embellishment of the engraver's art a distinct department of this Magazine, which is henceforth to be known by the above title. We would not narrow the scope of this publication to any one portion of our civic life; but we feel that the importance of our manufacturing interests warrants a larger and fuller treatment of them in these columns: and when we are fairly adjusted to the new plans for the new year, we hope to make this portion of the publication both larger and better than ever before. We do not forget that the factories of this city have formed the foundation for its growth hitherto, and must continue to be the chief factor in its enlargement in population and remunerative business. We have reason also gratefully to recall their generous patronage in our advertising columns, which alone has made possible the advance steps we are taking this year. It is our purpose under the head of "Industrial Worcester" to keep our readers informed both as to the prosperity and progress of long-established enterprises, and also to acquaint them with new concerns and novel features of industry which may from time to time appear. While this department will be "last," we feel sure it will not be "least" in the attention it will win from our readers.

133 New Members of the Board of Trade—Total, 697

William D. Kendall,
W. D. Kendall, [illegible] Main
Herbert A. Pike,
Boston Pressed Metal Co., 171 Union
Elmer H. Loring,
W. [illegible] & Sons, [illegible] Union
Edward H. Moore, [illegible] Estate, [illegible] Catharine
Frederick N. Cooke, [illegible]
[illegible] Co., [illegible] Main
John F. Wheeler, [illegible]
[illegible] Co., 171 Main
Martin T. Gallaher, [illegible]
C. W. A. [illegible] Bank, [illegible] Station
F. Lincoln Powers, Clerk,
[illegible] Co., [illegible] Southgate
Hiram S. Powers, Clerk,
Frank E. Powers, Coal, 20 Southgate
John H. Wheelock, [illegible] and Mat[illegible]
W[illegible] Fuse Co., [illegible] Hamilton Rd
James V. Critchley,
Critchley Machine Screw Co., 100 Beacon
Ralph L. Morgan,
Morgan Truck Co., 21 Lincoln
Edward W. Dodge, [illegible] Greendale
Charles H. Norton,
Norton Grinding Co., Greendale
Oakley S. Walker,
[illegible] Company, [illegible] Union
Charles E. Chase,
W[illegible] 4 Walnut
Thomas E. O'Connell,
[illegible] Pleasant
William Banaghan,
[illegible] Main
Henry L. Green, [illegible] Main
Frank Tupper,
[illegible] W[illegible]
John B. Mess,
[illegible] W[illegible] Main
Chester W. Doten,
[illegible] & Co., [illegible] Main
Hobart A. Whitman,
[illegible]
James H. Watson,
[illegible]
LeRoy J. Richner
[illegible]
Walter S. Doane, [illegible]
Charles C. Lowell,
[illegible]
Louis F. Bachrach, [illegible]
[illegible]
Maurice F. Katz, [illegible] Main
George A. Cragin,
[illegible]
Charles W. Trask,
[illegible]
Alexander O. Hoettmann
[illegible]
Charles R. Standerant,
[illegible]
Edgar L. Danforth,
[illegible] Main
Samuel L. Goldstein [illegible] Main
George E. Buck
[illegible]
Moses H. Goldman
Globe Credit Co., 419 Main
Arthur L. Nye
[illegible]
Irving O. St[illegible]
[illegible]
Caspar M. Bo[illegible]
[illegible]
Robert H. [illegible]

Mauritz Johnson,
Upholstery & Drapery, [illegible] Main
Carl A. Carlson, Painter, [illegible] Frederick
Charles A. Poole, Traveling Salesman,
N. E. Biscuit Co., Nebraska
Philip J. Mann,
Dr. Mann Home Remedy Co., 540 Main
Dr. Charles H. Perry, Veterinarian,
[illegible] Park Ave.
Alfred N. Magoon, Contractor, 751 Main
Dr. Olney Draper Phelps,
Police Ambulance Surgeon, 12 Waldo
Edmund F. Hunt, Salesman,
Builders' Finish, 34 Piedmont
James P. Higgins, Insurance, 44 Front
James Thurman,
Coal and Manufacturers' Supplies, 78 East
Worcester
Thomas H. Gage, Jr.,
Smith, Gage & Dresser, 390 Main
John Wheeldon,
Am. Steel & Wire Co., S. [illegible] Wks., 767
Millbury
U. Waldo Cutler, Retired, 63 Lancaster
Guy E. Stephens, Manager
Gas Appliance Store, 286 Main
Oscar H. Hemenway, Baker, 16 Mayfield
Rev. Clifton H. Mix,
Pastor, Pilgrim Church, 1 Field Rd
Charles S. Allen, Grocer, [illegible] Pleasant
H. Paul Buckingham,
Arcade Malleable Iron Co., Box [illegible]
King
John M. Russell, Investments, 340 Main
Hervey L. Woodward, Teachers' Agency,
390 Main
Herbert N. Davison, Assistant Secretary,
Board of Trade, 11 Foster
Eleazer D. Jorjorian,
New Venus Dyeing Co., [illegible] Harrison
Guy Francis Wheeler, Life Insurance,
390 Main
Arthur B. Chapin, Jeweler, 330 Main
Albert E. Newton, Sec.-Treas.,
Prentice Bros. Co., 667 Cambridge
Harry V. Prentice, Treasurer,
Prentice Bros. Co., 667 Cambridge
Vernon F. Prentice, President,
Prentice Bros. Co., 667 Cambridge
Albert I. Johnson,
[illegible] & Prentice Co., Cambridge
Charles Polachi, Baker, [illegible] Madison
Ludvig Anderson, Grocer, [illegible] Perry Ave.
Richard P. Power, Manager,
Worcester Foundry Co., [illegible] Mechanic
Lorne R. Fowler, [illegible]
Worcester Furniture Co., [illegible]
Martin L. Pomeroy,
M. P. [illegible] & Co., [illegible] Summer
Robert A. Holmes, [illegible] Pleasant
William V. Garbutt,
W. [illegible] & Co., 14 Pleasant
Rufus S. Dixon, Paints and Oils, 222 Front
Henry V. Leslie,
Worcester Electric Light Co., 66 Faraday
Samuel Kumin, Shoddy Mfr., 311 Main
Fred M. Hudson,
[illegible] Co., 1 Eaton Pl.
George W. Ikreger, [illegible]
Daniels-Cornell Co., Mulberry cor. Fulton
Calvin Farnsworth, [illegible]
Union Station
Harry A. Clark,
[illegible]
Dr. Arthur C. Doten, Physician and Surgeon,
[illegible]

Albert H. Anthony, Sec. and Treas.,
Anthony Screw Co., 326 Chandler
Andrew Arvidson, Baker, 75 Water
Charles A. McCaffrey, Jr.,
With M. J. Whittall, Brussels
Charles L. Burleigh, Treasurer,
Mechanics Savings Bank, 393 Main
Gardner H. Manning, Clerk,
Worcester Machine Screw Co., 70 Beacon
Charles A. Harrington, Clerk,
C. A. Harrington & Co., 518 Main
Charles Case,
Charles Case Shoe Co., 42 Thomas
Charles H. Clarendon,
Leicester Polar Spring Co., 28 Myrtle
Earle Brown, Lawyer, 390 Main
Duane B. Williams, Druggist, 16 Lincoln Sq.
Herbert E. Davis, Druggist, 602 Main
Frank J. Boyce, Builder, 284 Webster
Norman F. Tucker, Contractor, 562 Pleasant
Selden B. Libby,
Armsby & Libby, 100 Mechanic
William A. McAllister, Clerk,
Cameras and Photo Materials, 376 Main
William S. Piper,
Spencer Wire Co., 91 Webster
Frederick W. Perkins,
Perkins & Butler, 546 Main
Peter R. Culbert, Newsdealer, etc., 334 Main
Henry A. Knight, Superintendent,
Street Lighting, 11 City Hall
Samuel H. Pitcher, Civil Engineer,
S. H. Pitcher & Co., 418 Main
John J. Adams,
Manufacturing Cutting Dies, 85 Mechanic
Josiah B. Shattuck,
Worcester Truck Co., Commercial
Paul Potter, Lawyer, 340 Main
Myron P. Converse, Teller,
Worc. Five Cents Savings Bank, 316 Main
Frank E. Murray, Undertaker, 48 Green
Frank A. Atherton,
Refrigerator Manufacturer, 185 Park Ave.
Oscar L. Clough,
Oliver Typewriter Co., 18 West
Charles H. Ellsworth, Farmer, Burncoat
John W. Armour,
Pattern Making, 33 North Foster
Thomas F. McGauley, Merchant
[illegible] Cambridge
Fred Midgley, Real Estate, 390 Main
Daniel W. Lincoln, Lawyer, 390 Main
Henry H. Lepper, Lawyer, 390 Main
Charles L. Putnam, Contractor, 390 Main
Peter T. Dolan, Lawyer, 390 Main
Arthur J. Young, Lawyer, 390 Main
Robert C. Booth,
Logan, Swift & Brigham Co., 75 Grove
Charles Callahan, Undertaker, 7 Temple
Geo. E. Deland, Deland Bros., 22 Exchange
Noble O. Hayes, Clerk,
Logan, Swift & Brigham Co., 75 Grove
Donald B. Logan,
Logan, Swift & Brigham Co., 75 Grove
Christian Nelson, Grocer, 5 Perry Ave.
James C. Blake,
Storage Warehouse, 44 School
Abbott T. Wheeler,
Logan, Swift & Brigham Co., 75 Grove
Chester T. Reed,
Reed & Prince Mfg. Co., Duncan Ave.
Marc A. Perkins,
Perkins, Durant & Co., 41 Thomas
John M. Calvin, Stable, Rear 180 Front
William P. Farrell,
J. W. Grady & Co., 68 High
Stephen M. Sargeant, Manufacturer, [illegible] Duke



"WORCESTER-MADE" MOTOR-TRUCK A MONEY-SAVER

BY A. R GRUNDELLE

The gasoline motor-truck has come to stay, prejudice and old-fashioned conservatism to the contrary notwithstanding. The modern manufacturer requires quick action. The motor truck gives it and, if built right, serves him better and more economically than does the slow-moving horse-drawn dray. With a motor truck heavier loads may be carried at a greater speed, while the labor item remains practically the same. Maintenance cost is correspondingly lower.

R. L. MORGAN

The average double-hitch, with maximum load, cannot be worked continuously for more than seven hours a day without making a heavy depreciation in value. A motor-truck, if necessary, may be run upwards of twenty hours a day, and will hold a constant speed throughout, as required. The longer the hauls the less the per-ton-mile-cost becomes, providing full capacity of vehicle is used. Motor-trucks take up less room, are quicker to start, quicker to stop, and easier to manipulate. They run freely backward as well as forward; a material saving in loading and unloading time. Horse teams consume fully half their working hours making distances; and the average heavy-laden team travels only three miles an hour under best conditions. A five ton motor truck on the contrary can carry a greater tonnage, and can deliver the loads in three fourths the time. You can outwalk a heavy-laden team. The motor-truck, carrying upwards of 10,000 pounds, rolls along easily ten to twelve miles an hour.

"Build a motor-truck right, and it will invariably do your maximum hauling in the minimum of time, at a lower cost per ton than is possible in the case of horse teams," said Mr. R. L. Morgan, designer and builder of the "Worcester-made" five ton gasoline truck.

"Comparative results prove beyond doubt the economy of mechanically-propelled vehicles over the physical. The one requirement, however, is that they be built right. The average business man, having seen 'roadside troubles' of touring-cars and cheaply-made commercial vehicles, hesitates superseding the horse. Nevertheless my truck has hauled maximum loads under favorable and adverse circumstances for many a long month, and to-day with the snow on the ground she is capable of carrying maximum loads at a lower cost per ton than is possible in the case of horse-drawn teams. The one secret of her success is that in this truck lies the hard and costly experience of eight years. I have long since learned simplicity of construction, quality of material and honest workmanship make for success."

The Morgan truck is of the vertical 4-cyl. type; water jackets cast integral; 40 h.p. with reserve of 10 h.p.; total loading area, 72 sq. ft.; total length, 14 ft.; normal load capacity, 10,000 lbs.; weight, 7000 lbs.; wheel base, 108 inches; gasoline capacity, 25 gals. Throttle controlled by lateral-slide foot lever; speed controlled by single hand lever; brakes, internal expanding on rear wheels, diameter of braking-drum being 18 inches with 4-inch face, insuring perfect braking. Pressed steel wheels. Frame, channel steel, 6-inch section, reinforced by substantial transverse cross-bracing and gussets. Steering gear—pinion and sector; 24-inch wheel; clutch, multiple disc, metallic. Nickel steel crankshaft and countershafts. Countershaft may be externally locked, enabling car to pull herself out of mudholes under her own power. Planetary or epicyclic form of speed change gear. Speed under maximum load, 10 to 12 miles per hour. Parts interchangeable and accessible. Gearing, high, 9:1; low and reverse, 27:1. Tires, front, 5 inches by 36 inches; rear, dual, 4 inches by 36 inches. Chassis is capable of having any type body put on desired. Operation, simplest possible.

THE MORGAN TRUCK

It is not generally known that Mr. Morgan is the designer of the victorious "1908" American cars that won the recent New York-Paris race.

THE BECKER, RICHNER, WENDELL COMPANY

The Becker, Richner, Wendell Company, manufacturers and dealers in cotton and wool waste, shoddies, etc., 191-193 Summer Street, are doing a large and increasing business at that location in wool, cotton and worsted waste. The concern has been in business two years and removed from Vine Street to its present site. At this point it has one of the most complete warehouses in New England for the handling of waste, it only being exceeded in size by one concern in Providence. It

has enlarged its quarters from 1000 feet to 2500 or 3000 feet in the two years, and its customers now extend from the Atlantic to the Pacific. It employs twenty people constantly, and it utilizes only the latest and most improved sanitary methods in the sorting of its waste. Its three dusters have a capacity sufficient to care for thousands of pounds of waste annually, and no pains are spared to turn out a uniform and carefully graded product. The manufacturers that the concern sells are among the leaders in their several lines and the company makes a special effort to please individual customers.

The building of the company backs up to the Boston & Maine Railroad, and a spur track gives the concern splendid facilities for loading and unloading shipments of five cars at a time. Leroy J. Richner is the President and local manager of the company, and is one of the progressive and enterprising young business men who are doing so much to make the superiority of Worcester made goods and Worcester collected goods known to the world.

BOYNTON & PLUMMER, INC.

The business of Boynton & Plummer, manufacturers of blacksmith tools and machinery, has been incorporated as Boynton & Plummer, Inc., under Massachusetts laws, with a capital stock of $40,000. W. J. H. Nourse is the president; William H. Wilder of Gardner, Mass., treasurer; E. F. Hodgson of Dover, Mass., vice-president, and Paul Wilder, Gardner, clerk.

The business was recently purchased by William H. Wilder from the estate of James Kindred, who had conducted it for years and who recently died. Mr. Wilder is the head of the [illegible] Oil & Gas Stove Company, Gardner. Mr. Hodgson is the President of the E. F. Hodgson Portable House Company, Dover. Mr. Nourse is too well known to Worcester people to need any introduction.

It is the purpose of the company to develop further its present line of tools and to make a specialty of garage equipments. For many years the concern has enjoyed a most enviable reputation for its success in manufacturing upright and horizontal hand and power self feeding drilling machines, hand and power shaping machines, hand and power bolt cutters, portable forges, etc., and its reputation for high-class work will be steadily maintained by the new management.

SAMUEL H. PITCHER, C. E.

Samuel H. Pitcher, for the past thirteen years employed as assistant engineer of the city of Worcester, opened an office January 1 at 418 Main Street for the practice of civil engineering, specially along the lines of hydraulic and mill engineering, reinforced concrete work, sewerage and sewage disposal, water works and municipal engineering generally.

Mr. Pitcher has had more than twenty years' experience in civil engineering on many important works, among them the city of Newark's water supply with the East Jersey Water Company, the development of water power on the Androscoggin River at Rumford Falls, Maine, the building of the Rumford Falls Electro-Chemical Company's plant, and the practical and varied work of his department in Worcester.

NEW PIANO AND ORGAN PLAYER BUILDERS

Tunstall, Biggar & Tunstall have begun building piano and organ players at 258 Park Avenue, and they bring to this business as a firm, years of experience and patents of the

M. C. BOYD & BRO. COAL WORCESTER COAL CO.

MANUFACTURERS, ATTENTION!

If you get short of Bituminous Coal

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Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

One of the largest Life Insurance Agencies in this section.
1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.

[illegible] The automatic registering mechanism, which is a feature of their piano player, is possessed by no other piano player [illegible] the granted patent issued to them on [illegible] The great difficulty experienced in the operation of most piano players is in "tracking" the music. There was difficulty with the 65-note piano player in this direction, and within a month the piano players of the country have met and adopted the 88-note player as the standard. This being the case, the spaces left in the piano player register for the transmission of sound from the music roll through the pneumatics to the instrument itself are rendered smaller than at present, and the difficulty in "tracking" the music correspondingly greater. Messrs. Tunstall, Biggar & Tunstall by an ingenious device at the ends of the register, which includes a bellows working automatically, are able to make any music roll, no matter how [illegible] at the edges, work perfectly on one of their instruments.

The trouble with most piano players is not through their action, for that has been rendered as nearly perfect as possible, but through the vagaries of the music rolls. This piano player will play any roll of music made by any manufacturer and will play it perfectly until the roll is absolutely worn out. They claim that there is no other piano player made that will so adjust itself to the mutations of the ordinary music roll.

The concern will make a specialty of building piano players to insert in pianos already built, and will for $150 install their players in any piano now in use. They will also make piano and organ players for the trade.

THE LUXOGRAVURE PROCESS OF ENGRAVING

The new luxogravure process of engraving, a splendid example of which forms the frontispiece for this issue of the Worcester Magazine, is the achievement of John C. Woodbury, president of Woodbury & Company, Inc., engravers of this city, and is an excellent example of the work Mr. Woodbury and his concern are doing in providing an improvement, both on the photogravure and the gelatine plate.

The luxogravure gives a much greater painting effect than photogravure, that is, it preserves the atmosphere, perspective and tone of a painting, where photogravure loses all this very largely, in a certain hard metallic steel plate quality. It also holds detail much more perfectly than photogravure.

The luxogravure plate is printable under a wider range of conditions than the photogravure plate; for instance, strong plate lettering can be printed from the same plate with the most delicate and tone effects in luxogravure where this is impossible in photogravure.

Compared with gelatine printing, luxogravure has all the advantages which pertain to plate printing, the rich velvety dark tones and the luminous qualities of the darker tones. It also excels in comparison with gelatine in holding the brilliancy of lights without any harshness in the general effect, and the plate prints uniformly up to the proof, while a gelatine plate is constantly varying with every change of temperature and humidity, which makes an edition from gelatine printing vary greatly. Indeed at times it is almost impossible to get two impressions alike from a gelatine plate.

Mr. Woodbury, recognizing the great and important field occupied by the halftone, determined if possible to produce a process that would be as superior to the photogravure as the halftone itself is to the wood engraving, and the results he has attained after three years of hard and conscientious effort in producing a plate with greater range and artistic possibilities than the photogravure possesses are most gratifying to him.

The luxogravure has many qualities to recommend it as compared with the photogravure, not the least being the element of cost. It cannot only be produced at a more reasonable figure than the photogravure, but it does much finer work and the impressions from its plates do not vary a particle. Mr. Woodbury has taken as high as 25,000 impres

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Mr. M. N. Conger, formerly with the Woodbury-Carlton Co., has associated himself with us and has charge of this important department. He has made Commercial Photography a specialty and is very successful in securing the most effective views of manufacturing plants, machinery and products. In conjunction with the unequalled photographic facilities of the Schervee & Bushong establishment, you will appreciate the superior service we are able to give you.

Our first-class equipment insures promptness, which will be appreciated by business men who must have their work on time.

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Estimates on Jobbing

Wheeler Foundry Co.

138 Mechanic St., Worcester

Richard P. Power, Mgr. **Telephone 372**

sions from one of these luxogravure plates without apparent deterioration.

He has employed it in commercial work, to which it lends itself readily because of its reasonable cost and striking fidelity to details, and he has also employed it to great advantage in the reproduction of paintings and other works of art.

The luxogravure can be used with equal advantage on any grade of paper, its results on the more costly papers being particularly high class, and for all classes of work for which the photogravure has hitherto been employed, Mr. Woodbury affirms his belief in its undoubted superiority as well as its more moderate cost. The word luxogravure is a trade word and is the exclusive property of Woodbury & Company.

WORCESTER RAILWAY SUPPLY CO.

The Worcester Railway Supply Company, manufacturers of fenders and other supplies for street railways, has moved into new and superior quarters on Webster Street, in the factory of the Curtis Manufacturing Company, and is expecting to do a very much larger business in its new location than in the old one on Park Avenue. It will have 3500 feet of floor space in the new factory and the opportunity for the development of its business will be much greater in the new location than in the old. It is already doing a large business in the manufacture of the fender on the big Los Angeles contract recently obtained, and there is every reason to believe that the company will land one at an early date for San Francisco that is even larger than the one on which they are now at work. This concern that has now obtained permission to enlarge its capital stock to $50,000 is one of the solid substantial young industries of Worcester that have gone right into the market as a producer from the very start, and the success it has achieved has been due to the fact that it had a meritorious and superior invention for sale.

ELLA H. EDDY, OVERGAITER MANUFACTURER

One of Worcester's smart energetic business women is Ella H. Eddy, overgaiter manufacturer at 86 Mechanic Street. She has been in business in this city for eighteen years, and her trade has at various times extended all over the East. Now it is confined pretty generally to seven or eight states. The Eddy overgaiter has always been characterized by merit, and while her Worcester trade has never formed an appreciable part of her business, it has not been because the goods she made had not warranted home consumption. Whoever has worn these gaiters in Worcester or out of it has seen right away that he had a first-class article on, and the more he has worn her goods the surer he was of that fact. She conducts her own business and attends to all the details not only of the manufacture but of marketing the product. She has sixteen different and distinct patterns that she puts out, and manufactures these goods in all lengths and styles except the heavy leather goods. She is particularly anxious to increase her local business, and will make one pair or any number of pairs, if her customers will only come to her place of business in the second story of the block, 86 Mechanic Street, and make known their wishes.

The new typographical features in this number of the Magazine, which speak for themselves, are largely responsible for the delay of several days in the appearance of this number. We are sure that our readers will appreciate and approve these changes, especially the grouping of representations of some of our leading industries on the back cover page. Hereafter we expect to send out the Magazine, as recently, during the first seven days of the month of issue.

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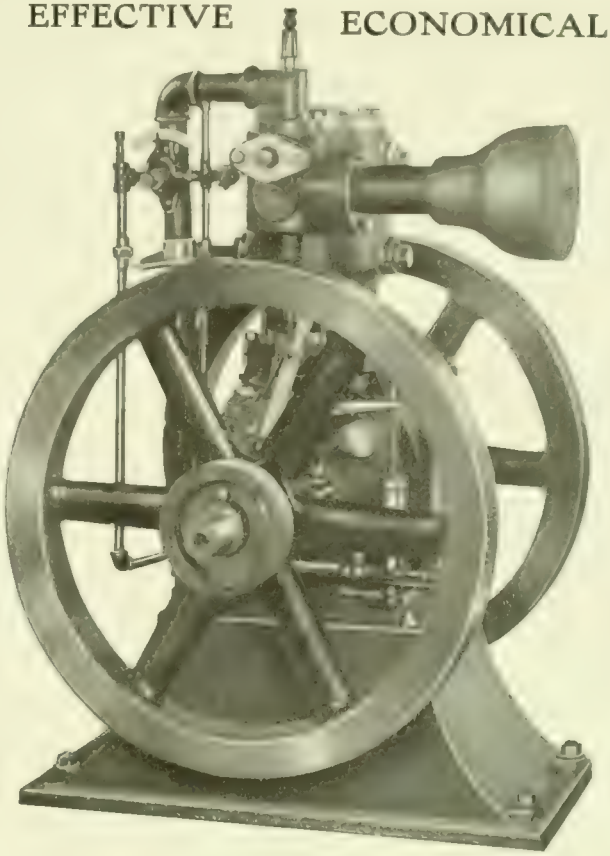
EFFECTIVE ECONOMICAL



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No. 2	United States Envelope Co.,	Holyoke, Mass.	No. 6	National Envelope Co. Div.,	Waukegan, Ill.
No. 3	White, Corbin & Co. Div.,	Rockville, Conn.	No. 8	P. P. Kellogg & Co. Div.,	Springfield, Mass.
No. 4	Plimpton Mfg. Co. Div.,	Hartford, Conn.	No. 9	Whitcomb Envelope Co. Div.,	Worcester, Mass.
No. 5	Morgan Envelope Co. Div.,	Springfield, Mass.	No. 10	W. H. Hill Envelope Co. Div.,	Worcester, Mass.

INDUSTRIAL EDUCATION NUMBER.

The WORCESTER MAGAZINE Illustrated

"WORCESTER MADE INVITES TRADE"

MONOLITHS FOR U. S. TREASURY BUILDING. WEBB GRANITE AND CONSTRUCTION COMPANY.

Published by Worcester Board of Trade.
FEBRUARY, 1909

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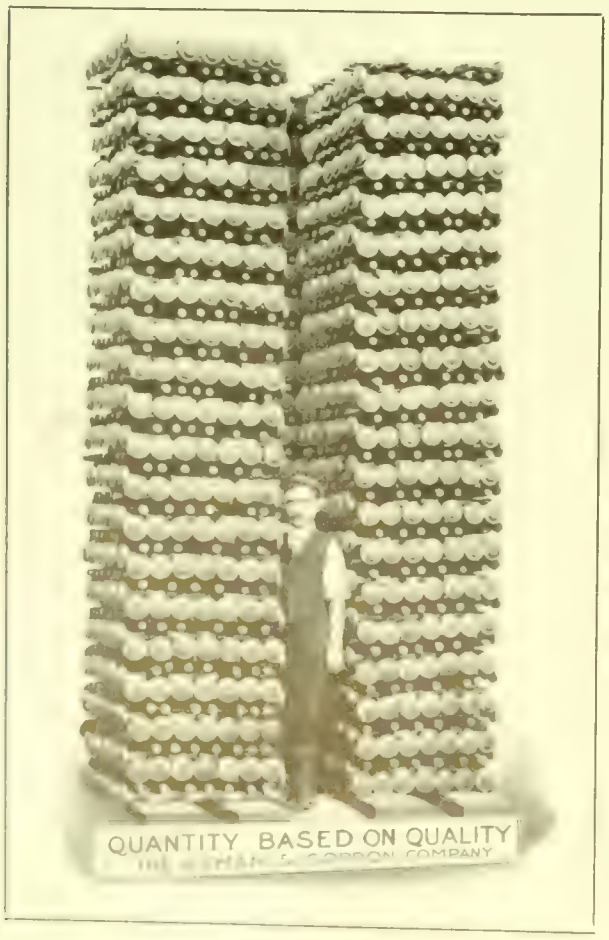

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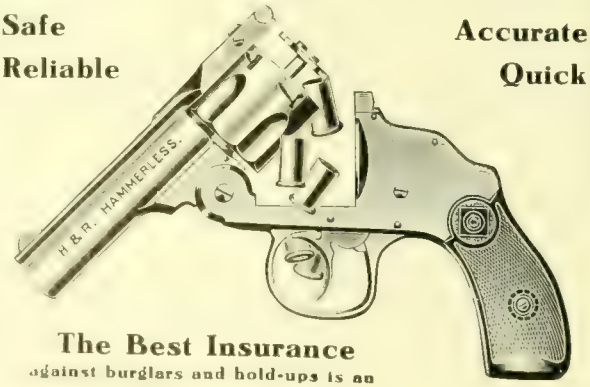

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The WORCESTER MAGAZINE

Editorial Comment

Appreciation of Our Last Number.

We wish gratefully to acknowledge the many kind words which have come to us concerning the appearance and contents of our opening number for 1909, which as a whole would have been impossible but for the increased office force co-operating in its production. One letter received from a prominent merchant whose home is near North Worcester, voices what many others have personally remarked:

As a member of the Board of Trade I wish to express my high appreciation of the last number of the Worcester Magazine, not only for its general excellence, but for the several interesting articles, viz., "Municipal Expenditures of Worcester and Her Neighbors," and "Worcester's Leadership in a Great Crusade"; also for the beautiful cut of Worcester, and the poem by Shepherd Knapp. As a resident of the country, and a worker in the city, I can fully admire "God in the [illegible] I shall frame this picture.

On the principle that actions speak louder than words, we have also been pleasantly assured of popular approval of our efforts, from the fact that the entire output, barring only a few copies for permanent files, was practically exhausted at the local newstands not many days after publication. We are therefore increasing the number of this month's edition.

Special Features of this Number.

The interest manifested in the story of the beginnings of Worcester's battle against tuberculosis warrants the space given in this number to the account of the admirable service steadily carried on by the Association, of which Dr. Getchell is the honored head and inspiring promoter. Industrial education also claims special notice as the fruition of long cherished hopes and patient endeavor comes nearer. The discussion of "State and Municipal Finance," by one of Worcester's honored sons of an illustrious father, will command, we are confident, the same degree of favor in print which it received when spoken; it carries a message applicable to other states than Massachusetts. The graceful tribute of Rev. Dr. Garver to one who has so long served the city in connection with its higher intellectual life, will also find a hearty response from all our citizens and from the far wider circle where Mr. Green is so well known. A suggestive feature will also be found in the panel picture upon our front cover, which shows how Worcester industry is in demand at the very Capitol of the nation.

"Make the Next Number Better!"

Under the stimulus of this motto we are preparing to give our readers in March a magazine which in some ways is without precedent in the history of this publication. In honor of the Mechanics Association and its coming exposition, and through the hearty support of our leading manufacturers, we shall offer a "Progressive Worcester" number, which will call attention to the marvelous industrial advance of the last half century since the Association was founded, and describe both by text and illustration some of the achievements of the present, with their prophecies of yet grander things to come. It will contain a history of the Mechanics Association, with pictures of many of its former presidents. Its larger purpose will be to help Worcester face its present problems with the same energy and progressiveness which lifted it in other days from littleness to greatness—qualities which alone will keep her from falling behind her civic competitors in the strain and rush of present competition between different sections and cities of our land. We expect a large demand for this number, which will be nearly twice the size of any of its predecessors.

The National Council of Commerce.

The last few weeks have been crowded with events in the broader realm of our national life, which have a plain bearing upon our city's commercial and industrial welfare, and which therefore merit attention in these columns; only a few of which can be touched, and that most briefly. Of commanding importance is the publication of the proceedings of the first annual meeting of the National Council of Commerce, held at the office of the Secretary of Commerce and Labor in Washington in December last. This meeting is the outcome of a gathering held the year before; it resulted in a hearty endorsement of the plan of Secretary Strauss, whose far-sighted and tireless efforts in behalf of our nation's industrial welfare deserve grateful appreciation. The detailed statement of the coming work of this organization is worthy of careful attention:

(a) To receive reports and communications from commercial and other bodies as to their needs in the promotion of foreign and domestic commerce.

(b) To receive and act upon information and suggestions from the departments of the United States Government of interest to the business world.

(c) To furnish the Secretary of Commerce and Labor and other representatives of the United States Government with authentic information as to the needs and conditions of different industries.

[illegible] Department of Commerce and Labor.

[illegible] mercial and trade bodies in arranging for the representation of American products at international expositions.

(f) To confer with the departments of the United States Government with a view to promoting the trade interests of the country.

(g) To confer with the Secretary of Commerce and Labor regarding legislation necessary to promote foreign and domestic [illegible] such work.

(h) To promote friendly coöperation between commercial organizations throughout the United States.

We are sure that Worcester and its Board of Trade need to secure the benefits derivable from this new factor in the nation's industrial progress, and to bear a fair share of the work of making it a success.

Congress and the President.

The athletic not to say combative atmosphere which in recent months has pervaded the White House has been inhaled by the legislators at the other end of Pennsylvania Avenue, and has excited vigorous emulation. Apparently emboldened by the reflection that they had no more favors in the line of appointments to ask from the chief executive, there has been an exhibition of "president-baiting" by Congress, which may have been enjoyable sport, but was sadly neglectful of the work which these men are paid to do. We are glad to see the name of Worcester's Representative, Hon. Charles G. Washburn, among the regrettably small minority on the motion for tabling a portion of the President's message. With matters of the gravest importance to the business interests of the country demanding immediate consideration, such a display of temper is ill-timed and childish, whatever may have been its provocation.

Forest Reservation at Last?

A welcome sign of sanity and regard for the well nigh universal sentiment of the Atlantic seaboard is observed in the emergence from the Committee of Agriculture, by the narrow margin of one vote, of a halfway measure for forest preservation. This bill, in which Congressman John W. Weeks had a leading share of authorship, falls short of doing justice to the situation, and will render a too tardy relief for the head waters of New England's rivers; but its provision for paying for future forest reserves out of accumulating proceeds of earlier receipts from public lands is diplomatic and avoids any new appropriation. We earnestly hope that the "powers that be" in the House of Representatives will graciously consent to the enactment of this bill.

Boston's Finance Commission.

The completion of a great task by public-spirited citizens who have gratuitously given to their city days and months of their valuable time, is an event deserving widespread admiration and appreciation. Its value as an example of civic devotion and practical patriotism reaches much farther than the immediate and direct [illegible] Boston [illegible] the pitiable slough of debt and corruption, where the Commission found the city. By the fearless probing of all municipal and county management some glaring abuses were discovered. Even some of Boston's most eminent citizens were convicted of criminal conspiracy and falsehood and forced to pay heavy fines.

The following tribute to the Commission's work is from a comparative newcomer to Boston, Mr. Ryerson Ritchie, and therefore peculiarly significant:

> Left to itself, neglected by the business men, Boston suffered, as all large cities have suffered—from the spoilsmen. I need not tell you what the evils were—vultures fattening upon the body politic. The situation became intolerable and the public debt unbearable. A finance commission was appointed, the result of an indignant public demand. Its members were nominated by the leading commercial and civic organizations—nominated on merit. The personnel of the commission was remarkable, for every member of it was "a man among men."
>
> That Commission has rendered to the city of Boston the greatest service that has probably ever been rendered by any body of its citizens in all its history—and that is saying a great deal. The work of the Finance Commission is almost finished. Its investigations, analyses, deductions and recommendations are public property. They have aroused a new consciousness of civic duty.
>
> This great and honorable commission has had its share in driving Boston's commercial bodies into union. It has shown what can be done by unselfish, loyal service to the community and has inspired the business men with the spirit of service.

The Regulation of Corporations.

It is well that at last, after enduring a dreary amount of demagogic clamor against corporations, that we are approaching the judicial and authoritative determination of their rights and obligations. On this general subject, prompted by this recent decision in the Waters-Pierce case, the Wall Street Journal says:

> It is an axiom of mathematics that the whole is greater than a part, and it may be assumed as absolutely that the creature cannot be greater than the creator. Anybody who buys the securities of a corporation knows, or ought to know, that it operates subject to the law of the State and the Federal Government. It is in fact created by the sovereign people and they have rights of continuing regulation which no legislature can barter away. No corporation in this country can ever become independent of the public will, and it has been shown repeatedly that there is due and effective process of law to check any attempt to do so. In other words, corporations must obey the law.

We wish that these other words of this influential paper might also have a wider circulation, especially in quarters where only anti-corporation vituperation gets a hearing:

> There are plenty of corporations all over the United States, the vast majority in fact, who are doing business in a lawful manner and making satisfactory profits. They are protected against confiscation, provided they can show that legislation is confiscatory. They keep out of the courts and out of the limelight very much as 98 per cent. of our brokers and merchants do. The small but disorderly minority gets far more than its fair share of advertising, just as certain Socialist newspapers exploit Wall Street's 2 per cent. of dishonesty and ignore its 98 per cent. of fair dealing. Our modern industrial system is based upon the corporation idea and in the end reasonable regulation will be found to be no detriment.

Some Notable Decisions of the Courts.

A healthier atmosphere ought to pervade the business world as the result of recent convictions of offenders against the laws of business honesty and fair dealing. It is well that a financial freebooter like Cardenio F. King should follow C. W. Morse into prison, and begin to do some honest hard work for the benefit of the community. Every business man of San Francisco has his opportunities for honest gain improved by the final conviction of Reuf. If similar punishment can overtake the corruptionists of Pittsburg, the effect on this section of our national domain will be equally salutary. The courage displayed by judge, jury and prosecuting attorney in Tennessee in convicting the night-riders deserves applause from all parts of the civilized world, and forecasts better conditions for free management of business affairs throughout the entire South. Perhaps most far-reaching of all is the unanimous decision of the United States Supreme Court upholding the courts of Texas in imposing on the Waters-Pierce Oil Company a fine of $1,623,500, installing a receiver and expelling the company from the State.

The Railroads and Returning Prosperity

The opening days of December found this country in a sanguine frame of mind, with some cheering tidings of enlarged employment of labor and ordering of supplies. Large predictions of rapidly returning prosperity were scattered broadcast, and the conditional prophecies that hinged upon the election of Mr. Taft became positive declarations that now all was to be well.

The closing days of January, it must be frankly admitted, do not verify as fully as could be wished either the hopes or the predictions of mid-November optimism. The deficit in the treasury of the United States continues to mount up; and the general upward trend of orders two months ago is by no means universally sustained. One significant fact is the continued poor condition of the steel industry, on which depends so much of our industrial progress. When the last quarter of 1908 closed, it was found that instead of the increase in orders of 1,500,000 tons, which had been confidently expected, there was a gain of only 180,000 tons, and that made in October; showing that the optimistic reports of November and early December were without valid foundation. So far in 1909 there is no evidence of any marked improvement in the steel situation.

When we ask where such improvement should come from, there is only one answer that can be given. Our railroads must come into the market for supplies. Are they doing it to any extent? Are they able to do so? They sorely need to make immediate and enormous purchases; the railway equipment of the country needs to be doubled at once; but where are they to get the money? Here is the way in which the Railway World views the matter:

> The country needs railroads; without railroads its development must be seriously interfered with. This development must come from the investment of private capital. Private capital will not come into railroad securities to the necessary amount without a promised larger return. This larger return cannot be obtained by reducing wages or prices; and it must come from an advance in rates. If, therefore, the public desire an extension of the railway system they must consent to pay higher freight rates, whose chief burden will fall not upon the consumer, but upon the manufacturer and middle men, and which will be returned many times over in higher values of property and larger earnings of industry.

This seems logical, until we come to the assertion that none of the burden of these higher rates will fall upon the consumer. This can be verified or disproved only by a test which, in our judgment, neither the manufacturers nor the consumers of Worcester are anxious to have made.

It is not necessary just now to discuss who is responsible for the present dilemma in which our railroads find themselves. Some of our readers throw the blame wholly and vehemently upon one who has been carrying a big stick for some time past, and who has not always walked softly. Others will say that the railroads need blame only themselves, in view of lawless rebates and stock gambling wreckage. The vital question just now is, How are we to get general prosperity when our railroads are crippled for equipment and in financial straits? How are factories to be crowded with railway orders when railways cannot sell bonds, make further loans, or increase their earnings by higher rates?

We have but a single contribution to offer to this discussion. In our judgment the time has come in many parts of our land, including Massachusetts, for a fairer treatment of the railways in matters of legislation. At the Southern Commercial Congress last December there was unanimous and strong expression of the belief that confiscatory State legislation had seriously hindered the industrial development of the South. In this State to-day, a great railway system is beset with legal embarrassments, and is peculiarly exposed to legislation by our General Court, which may be dictated by unworthy motives or unfounded emotionalism. We have no wish to appear as an advocate for the New Haven road; we recognize fully some of its past sins both of omission and commission; but we believe it is possible for the General Court to make bad matters much worse in the next few months by legislation which is shaped by a rabid and unreasoning anti-corporation sentiment.

We commend to our readers, without comment, the following editorial utterance of the Wall Street Journal, whose reputation for ability and impartiality is well known:

> The one solid fact underlying the whole subject is that the New Haven road for more than two years has been a veritable target for Massachusetts politicians. The company, it is said, does not maintain a lobby on Beacon Hill. Whether there is any relation here between cause and effect, each may judge for himself.
>
> Under the reasonable laws of the State of Connecticut, the New Haven road has been able to raise capital for its development and expansion. Millions have been expended in Massachusetts for various improvements and betterments, for the erection of costly terminals, for eliminating grade crossings, for establishing an unsurpassed passenger service, etc.
>
> Of all roads in New England, it alone was not subject to criticism during the traffic congestion of 1906-1907. It voluntarily established in Massachusetts and along its lines a maximum passenger tariff of two cents a mile, an object for which many of the states of the country have been fighting in their courts and legislatures for two years. But from the State to which it has given the most, it has received back the least.

A National Inventory

The merchant who never takes account of stock is not likely to continue indefinitely solvent. Until recently, however, no one has ever thought of applying that axiom to national action. The adversaries of President Roosevelt have recently manifested a virulence possible only in a land like ours, the last few weeks, showing that there is no depth of disgraceful billingsgate in which congressmen and some editors will not mire themselves in efforts to make some mud cling to his garments; but it is difficult to conceive how any intelligent American citizen can fail to approve what is likely to stand out in history as Theodore Roosevelt's greatest constructive act, the inquiry into the actual extent of our national resources, which has led to the recent publication of a report by the National Conservation Commission. It is hard to see how any narrow or embittered partisanship can criticise the President's introductory description of this report:

> [illegible] most fundamentally important documents ever laid before the American people. It contains the first inventory of its natural resources ever made by any nation. In condensed form it presents a statement of our available capital, in material resources which are the means of progress, and calls attention to the essential conditions upon which the perpetuity, safety and welfare of this nation now rest and must always continue to rest. It deserves and should have the widest possible circulation among the people. The facts set forth in this report constitute an imperative call to action.

It is impossible to summarize, and difficult to characterize comprehensively, the report as a whole. When one tries to measure in his mind the bulk and worth of 1,400,000,000,000 tons of coal, it is a good deal like trying to realize the distance to one of the remoter fixed stars. We find it hard enough to comprehend the official reports of the harvests of 1908, aggregating in value $3,600,000,000; but who is able to grapple mentally with what it really means to increase by intensive farming the productiveness of our soil until we can raise on the same land now possessed enough food for 250,000,000 people annually? Some of the startling facts about waste, however, are more readily comprehended; as, for instance, the statement that the building operations of the country in a single year average $1,000,000,000; while we suffer fire to burn up just about half that amount, four-fifths of which, or $1,000,000 a day, might be saved by due caution. Any man who possesses sufficient intellectuality to learn his own name can comprehend what it means to use up three feet of wood for every one foot which we grow.

In an industrial age where the lesson of the danger of little wastes and the value of slight economies is so universally accepted, it would seem as if nothing more than the publication of these facts would be needed to impress upon us the necessity for sane and prompt action. That this action should be at once deliberate and adequate is evident. That it must be far-reaching if at all adequate, is also apparent. That future generations, for whom we are unselfishly acting in proposed conservation, should share with us a part of the financial burden, if it can be properly accomplished, is also axiomatic.

Prior to any action, however, should be information and appreciation. This report of the Conservation Commission should be put in suitable form for widespread distribution. Its gratuitous passage through the mails would be quite as justifiable as the reports of some of the speeches recently made in Congress. It should be made at once a subject for study in all the common schools of America; any teacher with the slightest power of adaptation could find in it some fascinating material for practical problems in arithmetic and for supplementary lessons in geography. We sincerely trust that the matter it contains may not drop out of public thought as swiftly as the daily paper containing it passes into oblivion.

A Pioneer in Industrial Training

In any résumé of progress in planning and starting industrial training, especially as adapted to Worcester's needs, it is proper to call attention to the name and labors of one man who has reason for rejoicing over the present status of affairs; and this without in the least degree detracting from the honor due many of his associates. This movement, which we have elsewhere discussed at some length, was needed quite as much ten years ago as now; but most people were then blind to the fact. One of the men who discerned the signs of the times was Mr. Milton P. Higgins, who has most fittingly been chosen as President of the new Board of Trustees, and whose picture we are pleased to present to our readers. Fortunately this gentleman had a voice as well as vision, and the capacity for aggressive and persistent effort in advocating his views. Equipped by broad culture and able to command time and extensive travel as aids to his investigations, he has continued to speak and write upon this theme with power and perseverance. As early as 1899, Mr. Higgins, at a meeting of the Society of Mechanical Engineers in New York city, presented a paper in which he outlined, almost word for word, the fundamental plan for a trade school such as is now proposed for our city. This was met with strenuous opposition; but a year later at Cincinnati he renewed and elaborated his ideas. From then until now, here at home and as a member of the State Commission on Industrial Training, he has continued his interest and activity, never materially altering his original plans.

We congratulate Mr. Higgins upon the progress which he now sees, and upon the honorable part which he has had in securing it. We are moved also to offer even heartier congratulations to Worcester upon what has been already attained through the work of Mr. Higgins, and the labors of his associates upon the Commission appointed by Mayor Duggan for our city. With Mr. George F. Brooks, the president of this Board of Trade, as vice-president, and Mr. Charles F. Marble as secretary, the new Board of Trustees should take up their duties with hopefulness and enthusiasm. While it is not to be expected that absolute unanimity of judgment will follow their doings, they have a right to ask for the loyal support of the city government, and of all fellow citizens in the tasks before them. Let us remember that this movement for vocational education is still in the experimental stage; and that some important facts about it can be demonstrated only by experience; but let us never doubt that success of the most gratifying character is sure to follow their endeavors if properly supported, and that there is nothing to-day which augurs more for the industrial and commercial prosperity of Worcester than the prosperity and progress of this school.

Milton P. Higgins.

President of the Industrial School Trustees

Progress in Industrial Education

Worcester's Latest Advance. Developments in Other Cities

The genius of Worcester is productivity. Here, as in every New England community possessing wealth and traditions, there is a large intellectual class. Many of these men and women have had the advantage of a college training; all of them have pronounced literary tastes. They play an important part in the life of any community. They fill our professions and are leaders in public sentiment.

However influential they may be, they represent at least only one side of Worcester—the scholastic side. There is another Worcester that they do not represent at all. For years the educators of New England, following the traditions of old England, have trained the head at the expense of the hands. Although in this republic there should be no such thing as classes, the schools have consciously or unconsciously caused a separation between the man who worked with his head and the man who worked with his hands; and as a result caste has been created in our land. The scholar has taken his place in society as a gentleman, and the workman has taken his place in society as a laborer; and between the two a great gulf has been fixed.

So much for the sociological side of this question. Recognizing the necessity for industrial training in a republic dependent for its future prosperity and prestige on the superiority of its workmanship, technical schools sprang up; fostered by the government they have done good work in training engineers, superintendents and foremen—the master workmen of the various crafts.

The demand, however, for these highly trained men, these directors-general of industrial progress, has been limited. Many a boy after fitting himself for a position at the head of an industry has found himself unable to secure a situation such as he felt was worthy of his talents. He has had to take an inferior place and his whole life has been embittered by the thought that he was out of his sphere.

All this time the demand for the man in the ranks, for the skilled machinist and mechanic, has been growing greater and greater. When the men who are now passing off the scene of action were boys, there was such a thing as an apprenticeship system; and it was a very real and thorough system. Even in the carpenters' trade men had to give seven years of their time before they were entitled to write themselves down as journeymen. The growth of the labor unions and the tremendous swing and rush of modern times have combined to crowd the apprentice out of the trades and to render it impossible for modern industries to make a place for him. Where he has been able to get a trade, he has in too many cases been obliged to "steal it," as the phrase goes.

Sociologists and manufacturers alike have recognized the impasse that our civilization has reached in this regard, and for more than ten years have been groping in the dark for a way out.

All the traditions of teaching, as has been said, have tended to educate boys specifically for the professions and girls for positions as teachers. Recognizing the fact that the professions were becoming overcrowded, commercial schools for both sexes have been established by private enterprise during the last quarter century; and business colleges, so called, are now more plentiful in America than leaves in Vallombrosa.

But neither the commercial colleges nor the technical schools gave the manufacturer what he wanted nor the boy what he needed at the bench and the lathe. The real problem was overlooked. It was how to teach boys in trade schools the fundamental things that would enable them to step into their fathers' shoes and make the American mechanic of the twentieth century as superior to all competitors as was the American mechanic of the nineteenth century.

GEORGE F. BROOKS,
VICE PRESIDENT, INDUSTRIAL SCHOOL TRUSTEES

For our city this problem is, as was said at the outset, real and vital; more so for Worcester, possibly, than for any other in New England. The intellectual life of Worcester is desirable and must not be lessened; but if Worcester is to have a quarter million of inhabitants it will be because her industries have attracted capital that can find here productive returns for employing 20,000 or 25,000 more skilled workmen than are now at work here. It cannot be successfully controverted that the men who made Worcester what it is to-day were not afraid to work with their hands. If there is to be a yet greater Worcester it must be made by men who can do more and better work with their hands than their fathers. If they can achieve this it will be no slight attainment and Worcester need not fear for her future fame.

It was to answer this demand that the trade school first took shape in the minds of manufacturers and workmen alike in Worcester. Other cities had worked the problem out in their own way. The textile industry has been particularly favored in the establishment of schools to teach that trade; but Worcester with its diversity of interests needed something different. Each community that has taken up this problem has found its own particular difficulty awaiting it; but Worcester has had more perplexities to master than almost any other community; and it is a matter of sincere congratulation that in the preliminary work among us there has been

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GEORGE F ALDEN

CHARLES R JOHNSON

GEORGE N JEFFERSON

such a sincere, unselfish and able commission at work as that appointed by Mayor Duggan.

The city government, by an ordinance adopted last month, has finally placed the control of the industrial school in this city in the hands of thirteen men, of whom Mr. Milton P. Higgins has been chosen chairman. The portraits of these trustees appear in this number of the Magazine; they are representatives of every branch of our city government and of many of our great industries. They are all practical men; and they realize that they have a practical as well as great work before them. They should receive the cordial coöperation not only of the city government but of the citizens as well; for the work they are undertaking is of vital interest to every man, woman and child in Worcester. They should have and doubtless will receive such money as is necessary, together with the coöperation of the State, to equip and maintain a first-class shop, where our boys and girls can receive a practical training for the business of life. Here the boys can be taught to become bread-winners and the girls trained to be home-makers; for on this result depends the future not only of Worcester industrially, but of Worcester socially. The shop that these gentlemen propose to establish will at the outset accommodate two hundred pupils; and it is proposed to give them a four years' course in practical training for their life work; to teach them things that will enable them to go out into life as skilled producers. They will be taught how to make machinery and to make it scientifically; how to take it apart and how to rebuild it so that it will be a better machine when it leaves their hands than it was in the first place. Not only will the boy be taught how to handle tools, but he will get an equal amount of theoretical training. He will be instructed in the general knowledge and practice of drawing and machine designing and pattern-making. He will learn foundry moulding, shop arithmetic and all the other essentials of a thorough equipment along that side of his trade.

It is not proposed to make this apprentice a producer in the sense that his product shall enter the market to compete with what his father makes for pay in another Worcester shop. The trustees believe that they can set the boys at work making articles that are not now manufactured in Massachusetts. Furthermore they hope to spend much time taking apart and rebuilding second-hand machinery. They believe that there is no more practical way of learning a trade than this.

What about the girls? It is gratifying to know that they are to have a large part in the proposed Worcester trade school. A score and more of the more prominent Worcester women, representing all the leading women's clubs, organizations and activities, have taken this matter up and are even now formulating plans which they hope will gain the approval of the trustees. The trustees' only desire is to give the men and women of Worcester in this school what they really need. It has been organized along practical lines to fill a practical want in this community. Its aim will be to make the working men and women of the next generation more serviceable to others and more contented with their lot than were their parents.

It is in no sense a rival or a supplement to any school now in existence. It is a new departure, its sole aim being to provide a practical four years' course in industrial training during the high school period for boys and girls who are not fitted or do not wish to take either the English or classical courses prescribed in the schools now existing.

The only difference will be that in this trade school the scholar at graduation will be fitted to earn his living by his head and hands both, instead of by his head alone.

CHARLES F MARBLE

JOHN M BUCKLEY

LOUIS M BUCKLEY

JOHN R BACK

A suitable lot has been chosen for the school; a large number of pupils are already awaiting admission, and it is the sincere hope of those acquainted with the work already accomplished that the movement will be formally launched this fall.

Industrial Education in Other Cities

The characteristic of industrial training seems to be its diversity. No hard and fast rule for the conduct of these schools can be laid down. In order that our readers may obtain a comprehensive knowledge of the situation, the results already attained and the methods employed in various centres, the following extracts are presented:

This subject is treated at length and in a large way in the January issue of the Textile Manufacturers' Journal, its annual review number.

It seems to be the general consensus of opinion of all the writers that the industrial education pure and simple is going to be more costly than the educational methods it succeeds.

Speaking along this line E. W. France, director of the Philadelphia Textile School, the pioneer institution in this country in furnishing technical education, quotes Prof. Saddler of Manchester University. The latter, who is regarded as one of the greatest English educational experts of the present day, says:

> Technical instruction rightly understood is the best preparation for subsequent success in responsible positions in the workshops or the factory and a necessary supplement to and accompaniment of workshop training. If, however, technical instruction is to be really useful and effective it must be given by men who are thoroughly well acquainted with the best current practice of the trades for which their pupils are being prepared, and in point of equipment and illustration it must be thoroughly up-to-date. Hence it follows that efficient technical instruction must be a very costly thing. It will flag and fail unless it is in close touch with the employers of labor and with actual conditions of employment, and it must rest throughout upon a sound basis of general education and of accurate scientific information.

The result as it has been worked out in Philadelphia is to provide employers, superintendents and overseers rather more generally than loom fixers, section or second hands and mere mechanics.

Mr. France states that in and around Philadelphia alone there are 32 owners or part owners of textile establishments, operating 2216 looms and employing 3000 hands, who graduated from his school.

In addition there are hundreds of others, he says, who are holding responsible positions in mills, factories and dye-houses, besides the men who have gone into the commission end, and the impression gained from Mr. France's article is distinctly along the line that the graduates of the Philadelphia school are a superior class of workmen, capable of taking important positions in the textile industry upon graduation.

The view is further buttressed by facts submitted by Charles H. Eames, principal of the Lowell Textile school, Lowell, Mass., and with reference to that school Principal Eames declares:

> Results of a recent canvass of the alumni lead to the belief that nearly 60 per cent. of the graduates from the day classes are receiving a salary of over $1,000 a year; 20 per cent. are receiving $2,000 and over, with some cases of $4,000, $5,000, and $7,000 salaries. The first graduate has not yet been out from the school ten years. The following is a list of the number of graduates occupying the different positions in the industry—this includes the class graduating in June, 1908:

Positions Attained by Graduates of Day Courses.

Principal of textile school or departments	3
Teacher industrial school	11
Mill owner	1
Mill corporation treasurer	1
Mill agent	3
Mill assistant superintendent	9
Mill superintendent	11
Mill assistant manager	1
Mill foreman of department	18
Mill purchasing agent	1
Mill auditor and accountant	8
Textile designer	30
In commission house	8
Electrician	1
Assistant engineer	1
Draughtsman	3
Chemist and dyer	29
In business, textile distributing or incidental thereto	33
Journalist	2
Student	2
Total	176

CORNELIUS F. CARMODY

JOHN P. CASEY

NICHOLAS J. SKERRETT

The new school at Lawrence was opened last October with a registration of more than 900 males and 600 females. This school has independent buildings and is in charge of an independent board of five trustees: Dr. M. F. Sullivan, president of the Lawrence Board of Trade; James Barnes, of the American Woolen Co.;

Walter H. Summersly, agent of the Atlantic Cotton Mills; Atty. A. N. Dooley and John B. Cameron, of the Central Labor Union. The Principal is William H. Dooley. A certificate is awarded each person completing a course, and day courses are formed for the convenience of those who cannot attend nights.

No entrance examinations are held, the only qualification being that the applicant for admission be an operative. The school is free and the text-books used are edited by the instructor and printed by the commission, and the problems, drawings and notes used in the school room are the problems, drawings and notes coming from the shops, so that the students get shop practice from the start.

These notes and problems are obtained by means of a question box. The instructors are all practical men working in the industries and conversant with the needs of the operatives.

The school has already installed over $32,000 worth of woolen, worsted, cotton and steam machinery.

Courses in woolen and worsted manufacturing have been arranged, and instruction is given in all the various processes employed in adapting the wool fiber to cloth, viz.: sorting, scouring, carding, combing, spinning, designing, weaving, dyeing and finishing.

The Textile Review goes on to say:

Besides lectures and recitations on dyeing, students perform careful and systematic experiments as to the nature of the various dyestuffs and mordants, their coloring properties, their action under various circumstances, and conditions under which they give the best results. The more representative dyestuffs of each class will be applied to cotton, wool and silk, and each student will be obliged to enter in an especially arranged sample book a specimen of each of his dye trials, with full particulars as to conditions of experiment, percentage of compounds used, time, temperature of dye-bath, etc. For convenience and economy most of the dye trials will be made upon small skeins of swatches of the required material, but from time to time students will be required to dye larger quantities in full-sized dyeing machinery under conditions of a practical dye-house. By use of a small printing machine the principles of calico printing are illustrated, and the practical side of the subject will be studied with dyeing machines, vats, etc.

In industrial chemistry particular attention is paid to those subjects which are of especial interest to the textile worker, such as oils, soaps, gas and the coal tar industry, and the manufacture of important chemical compounds, such as the common acids and alkalies, bleaching powder, various mordants, etc. Cabinets containing the various dyestuffs, chemicals and by-products of wool grease are on exhibition in the dye-house, and students have an opportunity to study them.

One of the strong departments of the school is the course in steam engineering and electricity. The course consists of lectures by men who are specialists in their respective branches, arithmetic and practical mathematics for engineers, firemen, etc., and laboratory practice in steam engineering. The steam engineering laboratory is one of the best equipped in the country, consisting of different types of boilers, steam heating apparatus with appendages, different pumps in sections, sectional valves and gauges, all the boiler accessories, steam engines, generator and many other machines. In addition to all these, pictures, blueprints and sketches of the above apparatus and other machines are on the wall for careful study. This is the first free engineering laboratory in this country.

It is proposed to establish a secondary industrial school at Lawrence with a somewhat less pretentious course of study, somewhat lower in its requirements and giving instruction of a character more directly vocational or more directly industrial. A canvass has been made of the city and 500 boys have already enrolled themselves in this school, which will give three years' training to boys of high school age in either the metal or textile industry.

In Chicago there is still another method in vogue. The manufacturers have taken up the matter there in connection with the Lewis Institute, which is the highest secondary school in the city. They are sending their apprentices to the school half the time, the boys alternating shop and school work a week at a time in each. A manufacturer may send two or four apprentices to the school and the Institute may also send scholars to the shops. A tuition fee of $50 is paid for each boy by the employer, who also pays him $5 for every week he works in his shop. The boy thus receives instruction free for eight hours a day, five days a week, and wages at the rate of $2.50 per week for two years. The employer pays $180 for the instruction and work of each boy for fifty-two weeks. Instruction is given at the school in physical science and the principals of mechanics, in machine sketching and mechanical drawing, in such shop work as will supplement the work which the boys are doing in their employers' shops, and in English history and mathematics.

Commenting on this plan Charities and Commons remarks:

It is not supposed that a skilled workman can be produced in two years by the combined effort of school and shop. But it is believed that this combination may maintain a keener interest in both than a boy would be likely to have in either. It will also more closely correlate the technical and practical training for a trade. And it surely offers a more practical preparation to acquire through further practice and experience the mastery of a skilled trade.

At the very outset of the experiment trouble with a labor union was encountered in sending two boys from the school to a shop. While they worked in the unskilled departments no objection was made, but when they were placed at work among the most highly skilled workmen, these men "walked out," telling the managers they would not work with college boys. When, however, the officers of the union explained the scheme of training to them and the assurance of the directors of the Institute was given that they had no purpose to furnish strike breakers to complicate industrial differences, the employees returned to work, apologized for their misunderstanding the situation and said they would offer no further objection to the students. While there is a prejudice upon the part of those who have learned their trade in shop apprenticeships against the graduates of technical schools, practical opposition to school training for trades is gradually being overcome.

At Northampton the finance committee of the city government is wrestling with still another problem: how to lend efficient aid to Smith's Agricultural School, so that it can do effectual industrial training in accordance with the devisor's will, which provided that each boy in the school shall receive a loan of $200 when he becomes twenty-one. He shall pay interest on this for five years and then shall receive the loan as a gift. Indigent boys whose homes are in Northampton or certain towns in Hampshire and Franklin counties can obtain a loan of $500 under similar circumstances. The school is to be erected at once; the State will contribute $10,000 toward its maintenance. Oliver Smith's generosity will help support all poor boys who attend, and the city itself will furnish the remainder of the funds necessary for equipment and maintenance.

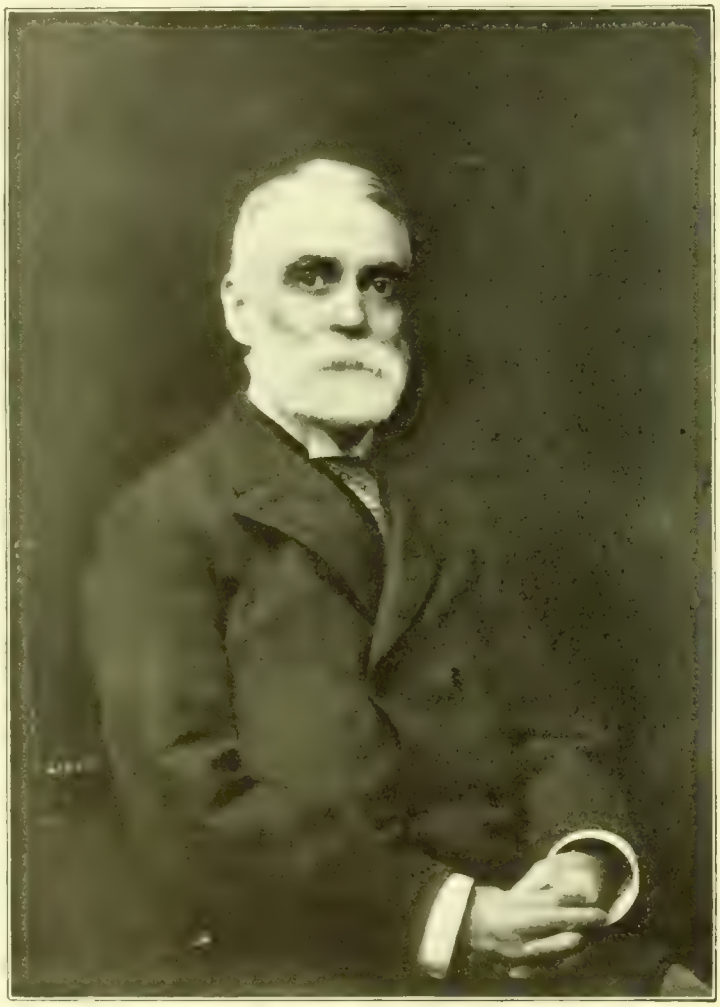
Samuel Swett Green—An Appreciation

By Austin S. Garver

"THERE is no city so great or renowned that it does not wear its library as the chief jewel in its crown." This statement of Senator Hoar may be taken as expressing the feeling of the people of Worcester towards their Free Public Library. They have supported it generously, and their use of its facilities has showed a steadily growing appreciation of its value. They may well take pride in its history and in what it has accomplished.

The library was founded in 1859 through the liberal gifts in books and money of Dr John Green. It was opened to the public in 1860, and in the following year occupied the building erected for the purpose on Elm Street. From a quiet and modest beginning it increased rapidly in size and efficiency, its scope widened, its methods were constantly improved, its influence spread and deepened, and its reputation extended, so that it was soon recognized as one of the foremost libraries in the country. Worcester has much reason for congratulating herself on an institution that has been so useful at home, and has given her so much renown abroad.

The success of the library is due, in large measure, to the long and notable service of its librarian, Samuel Swett Green. His connection with it covers a period of forty-two years, first as director for four years, and since 1871 as its executive head. And now that he has resigned his high office, it is fitting to look back at the period just closed and to attempt some appreciation of the service that has been rendered. For this purpose nothing more is required than a plain statement of facts.



SAMUEL SWETT GREEN

When Mr. Green took charge of the library in 1871, it was still in its infancy and had made little impression on the community. Few availed themselves of its advantages. In fact people generally did not know what use they could make of it. The first thing to do was to educate them to think of the library, not merely as a receptacle for books, or an opportunity for students, but as a place to obtain information and help in answering questions on every possible subject. And the next thing to do was to equip the library to meet these awakened needs by multiplying books of reference, by making the reading-room attractive, and, above all, by a spirit of cordial and hospitable welcome for every inquirer.

In these things was struck the keynote of the policy of the new librarian, and there is no better evidence of his signal fitness for the position than his clear perception at the very beginning of his official career of what one of the chief aims of a free library should be. It was novel doctrine then. Even librarians had not awakened to the need of such a development, so that when, in 1876, at the meeting in Philadelphia, where the American Library Association was formed, Mr. Green read a paper advocating closer personal relations with the people, and describing the practice that had been followed here for several years with great success, his communication made a profound impression. It was received with as much surprise as approbation. Its recommendations were discussed in leading newspapers, and almost at once the methods that had been first put in operation here attracted attention throughout the country. The New York World went so far as to suggest that all public librarians and their assistants be required to pass an examination on the contents of this address. The plan thus outlined has been followed to the present time, with the result that the reference department increased during the first five years more than three-fold, and has been resorted to more and more by every class of inquirers, so that now over 80,000 volumes a year are given out for consultation alone.

In another important direction Mr. Green's administration led the way for the libraries of the country. He was the first to establish close and helpful relations between the library and the public schools. The feasibility of this kind of work was questioned for a time, but it was demonstrated here not only that it could be done, but that it was a means of great benefit both to teachers and pupils. It was evident at once that studies, especially in history and literature, were made more vivid and real through access to a larger range of

books and illustrations. It was but another step in this direction to place in the school-rooms themselves small collections of books, to guide children in their reading as well as to aid them in their studies. The success of the plan was so complete that now the ideas which were enunciated and practiced here are accepted principles of library economy everywhere, in Great Britain as well as in the United States.

In the effort to encourage popular interest in and appreciation of art, the library has taken a leading part. In connection with the Art Society, of which Mr. Green was at one time President, and in which he has always been interested, it has held many exhibitions of great educational value. It has also given frequent exhibitions from its own splendid treasures. In carrying out the plans of the librarian for the diffusion of knowledge in the things of art, the library has made a fine collection of over four thousand of the best photographs of the masterpieces of painting and sculpture, which are used freely for the instruction and enjoyment of old and young.

In his efforts to make the library serve the greatest possible number, Mr. Green has not overlooked the needs of the special student. He was a pioneer in the movement for a system of inter-library loans, which is now in general use in this country. By this arrangement a person engaged in making special investigation has the resources of the libraries of the country placed at his hand.

This is a record of notable achievement, especially when viewed as marking the development of the public library from a semi-private collection of books to a vast central educational institution deserving the appellation of "The People's University." And in this remarkable progress in which Worcester always had a place among the leaders, there were no violent changes. It was the natural evolution of one governing idea. Mr. Green recognized at the beginning that "the test of the success of a library is its usefulness." The simple desire to make the library useful in the highest degree to all the people was the spring of his plans and efforts, and the guide of his enthusiasm. It was this that prepared the way for every new venture, and made the step, however bold, a safe one for others to follow.

He was ever an ardent advocate of his methods, both by voice and pen. Papers and reports on a great variety of subjects connected with library administration are to be found in professional publications, and have been printed in separate pamphlets, or in volumes which he has edited. His influence has spread far, and even in England, France and Germany the work done in Worcester has been studied as an example to be followed.

The high regard in which he is held by the profession is indicated by the honorary positions he has occupied. He was one of the founders of the American Library Association, of which he was twice Vice-president and once President, and its delegate to the International Congress in London. He is an original Fellow of the Library Institute. He has been a member of the Public Library Commission of the Commonwealth since its appointment by the Governor, and has done excellent service in that capacity, so that there is scarcely a town in the State that has not a library. He was for many years a member of the Committee of the Overseers of Harvard University to make an annual examination of the University library. He delivered annual courses of lectures on "Public Libraries as Popular Educational Institutions" to the students of Columbia College.

Besides this professional activity Mr. Green has been an honored member of various historical and other organizations, like the American Antiquarian Society, the New England Historic-Genealogical Society, the Colonial Society of Massachusetts, and has contributed to their proceedings historical and biographical sketches of importance, some of which have had separate publication. He is further a member of several social organizations, as the Worcester Club, and the St. Wulstan Society, and has found time for an active participation in affairs of general interest, as Treasurer of the Natural History Society, Treasurer of the Public School Art League, President of the High School Association, Trustee of Leicester Academy. This list, which might be greatly extended, is sufficient to show the esteem in which he is held by his associates and fellow citizens.

But it is by his work as librarian that he will be best remembered. By birth and education, by local and family traditions, by ample culture enriched by travel, he had peculiar fitness for the high position to which he was called thirty-eight years ago, and which he has filled with so much distinction. By nature and habit a student, he met the problems he had to face with keen insight, and showed a rare executive capacity in their solution. Earnest and indefatigable in carrying out his own methods, he had always a quick and generous appreciation of the excellence of the work of other men. He bent all his ability and energy to the one end of making the library a power in the community, and success has crowned his life-long endeavor.

What the Worcester Free Public Library is to-day is due in part to the generous financial support of the city, to the care and intelligence of the Board of Directors, to the loyal corps of assistants inspired by the ideals of their chief, but most of all to the librarian himself for the wisdom, energy, tact, patience, versatility, geniality and sympathy which he has brought to the discharge of his duties.

Mr. Green is fortunate in that his long service has enabled him to bring his plans to successful completion. Coming to the position while yet a young man, he has given his whole life to this noble public service. He has realized what President Eliot called the secret of the happy life—"the most satisfactory thing in all this earthly life is to be able to serve our fellow beings." This solid foundation for contentment surely is his. He has found joy in his work, and perpetual youth in his relation with young people. He has himself said: "There are few pleasures comparable to that of associating continually with curious and vigorous young minds, and of aiding them to realize their ideals."

In the hearts of the thousands he has helped, as well as in the visible institution he has directed and stamped with his own genius, he has left a memorial with which he may well be content. And as he retires from the exacting detail of official duty, to enjoy the "still air of delightful studies," which have been the solace of all his years, he bears with him the thanks, the good wishes, and the high regard of the whole community.

Serus in cœlum redeat.

Better Hospital Provision for Chronic Tuberculosis

Annual Report of the Worcester Tuberculosis Relief Association

THE annual meeting of the Worcester Tuberculosis Relief Association held last month was rendered notable by the earnest plea made by the President, Dr. Albert C. Getchell, in favor of opening the City Hospital to all tuberculous patients on precisely the same basis that all other patients are admitted to that institution. There has been a sentiment in that direction, and more or less agitation, for many years; but Dr. Getchell in his report, for the first time so far as is known in this country, makes the claim that hospitals have no right to discriminate against persons suffering from this disease. Coming from a physician of his standing and repute his utterances will be read with the utmost interest.

The work done by this association is so vital to the welfare of Worcester that the Worcester Magazine feels that its readers will be interested in the complete résumé of its efforts contained in the subjoined reports.

President Getchell's Report

The past year has been marked by unusual activity and progress in anti-tuberculosis work. The sixth International Congress on Tuberculosis was held in Washington last fall. It brought together a large number of workers, both medical and lay, from all parts of the world and greatly stimulated activity in our country.

In Massachusetts the agencies created by a recent Legislature, namely, the commission to build three additional hospitals for consumptives, and in general to promote the work and the system of State inspectors of factories, have been in active operation and the results of their work are plainly evident.

It is a source of gratification that in this city we have kept pace with this onward movement. The work which the association has done in the past has been carried on with increased efficiency. As before sputum boxes have been furnished free to all applicants, also circulars of information; and a propaganda of education has been kept up through the public press. A special committee has systematized the matter of lectures, which have been given by members of the association both in this city and in neighboring towns.

The response to our appeals for funds was hearty and generous. Particularly do we note with gratitude and satisfaction two bequests: one of $500 from Charlotte E. W. Buffington, in memory of her mother, to be called the Charlotte Eaton Walker Fund, and one of $2,000 from the estate of Mrs. Melissa W. Wilson.

At the beginning of the year the association decided to increase the field of its activity and hire a trained nurse, whose time should be exclusively devoted to tuberculosis work. In February Miss Marjie B. Libby was employed and has been constantly engaged in the work since. The scope and efficiency of her activity will be seen by her report.

It is to be understood that while she attends the clinics at the City and Memorial Hospitals and supervises the treatment of the patients who come there, it is expected that she will respond to the call also of any physician who needs her assistance in the care of his poor consumptive patients.

One of the duties of Dr. W. Irving Clark, at the tuberculosis clinic of the City Hospital, is to visit patients at their homes. He has not only done this, but has visited such other patients as need medical attention and who had no physician, thereby greatly increasing the efficiency of our outside work.

To increase still further the value of the work that he is doing, Dr. Clark intends to establish a tuberculosis class; indeed, he would have done this before now had he not been ill.

The Association has carefully considered the matter of establishing a day camp, and decided not to do so for these reasons:

To make a suitable camp and maintain it properly would cost more money than we have at our disposal, even if we gave up the work we are doing. And of the two, we think our present work more necessary and valuable. Moreover, every patient that we have felt would be materially benefited by the treatment in a day camp, we have caused to be sent to the State Sanatorium at Rutland. If the patient was not able to pay the four dollars a week required for residence there, we have canvassed for him the probable sources of revenue; friends, benefit associations, church societies, benevolent persons, and if all these means failed, we have drawn from our own funds. Again the city of Worcester is well situated for the home treatment of consumption. It is on hilly ground, its altitude within the corporate limits of the city from five hundred to a thousand feet above the sea level. Many of our patients live in houses that have a porch which can be made into a sleeping porch. Some live on high land and have open spaces about their houses.

Last summer Dr. A. A. Bemis, of Spencer, offered us the use of a shack and tents he has on his farm there. We were able to send out two patients only, as the season was pretty well advanced. But we plan next summer to take the matter into early consideration, that we may profit from his kind offer.

It will be noticed that Miss Libby, in her report, speaks of better hospital provisions for chronic cases. This need is soon felt by every one who engages in the work.

To-day the tubercular patient is in a peculiarly distressing position, a very anomalous one, for the disease that is the cause of the most illness the general hospitals refuse to treat within their walls, or receive the patients for so short a time that the relief afforded is unimportant.

The reason for this paradoxical state of affairs is the old idea that tuberculosis means hopeless invalidism. This is very far from the truth. One does not need to have much experience with tuberculous persons to learn that very many with definite pulmonary lesions live in good health for years, following their daily vocations. Tuberculosis is a disease of many types. This is one type and by no means an uncommon one. Moreover, many diseases that were formerly not recognized as tubercular are now known to be such. Examples of these are certain forms of bronchitis, pneumonia, pleurisy, and cases of so-called grip. These are excluded from our hospitals, if they are known to be tubercular, which is the diagnosis a careful and skillful physician will make.

Another class that should have access to a general hospital is those suddenly taken with acute illness, high fever, hemorrhage, the accident of pneumothorax, and such other conditions as require constant and definite medical attention.

Again, such cases as are likely to die within a short time, and who cannot be properly cared for at home, should be sent to a general hospital.

Further, some applicants for admission to the State Sanatorium are so worn out with work and ill health that they present a condition apparently unsuitable for admission to that institution. It is not an uncommon experience to find that many of these persons put to rest so improve that their prospects are altogether changed. A brief residence in a hospital will settle this question. Patients of the foregoing types should not be discriminated against any more than other sick people are.

When one with Bright's disease, liver disease, heart disease, rheumatism, and such like trouble, applies, the question that presents itself to the hospital authority is not, shall we cure this patient, but does he need the care that our hospital is expected to

give? If he does, he is admitted and either cured or relieved of his trouble so that he can take care of himself. If, on the other hand, he is not benefited, but lapses into a state of chronic invalidism, some proper disposition is made of him. The tubercular patient should have the same opportunity.

It is evident that in this discussion we have not included the typical hopeless consumptive who lingers along without active symptoms. Such a one needs not the elaborate paraphernalia of a general hospital, but a much simpler equipment to care for him until death comes. It should be noted that many of these cases may be properly cared for in their homes with such supervision as our special clinics and special nurse afford.

While we recognize the fact that any complete scheme for the care of the poor consumptive in Worcester must include an institution not a part of a general hospital for hopeless cases, and while we are of the opinion that the number of such cases is smaller than it is generally thought to be, yet we recognize the fact also that a new institution of this kind is not likely to be provided in the immediate future, and furthermore, if it were provided it would fall short of solving the problem. We are of the opinion that at the present time nothing will go so far toward a satisfactory solution of the difficulty as for the general hospitals to cease to exclude tubercular patients because they are tubercular, and receive them on the same footing that other sick persons are received. This can be done at once. The whole history of hospitals has demonstrated that tuberculosis does not spread in hospitals, so that there can be no objections on the ground that it is a dangerous disease to admit into a hospital ward; and with the porches and grounds that our three general hospitals have, as they are now equipped, they can give very effective treatment to tubercular patients. But if the City Hospital, situated as it is, were to provide a suitably constructed ward of forty beds, to include both men and women, this with the other agencies already in operation here, and soon to be put in operation in the State, would go a long way toward settling the perplexing question of caring for the sufferers of chronic tuberculosis in the city of Worcester.

Before the holiday season, the National Red Cross Society submitted to us a proposition to sell their stamps, the net proceeds of the sale to go to our work. We accepted their offer and have realized a good sum of money, as will be seen from the Treasurer's report. The stamps were placed on sale in many of the stores, and we desire to express to the merchants and others our appreciation of their hearty and efficient aid. Particularly, also, would we mention the Consolidated Street Railway Company, which placed our signs in the cars; Mr. L. B. Fiske, who gratuitously posted our large posters about the city, and Mr. O. B. Wood, who did printing and other work for us without pay.

We wish to express our thanks, too, to the Street Railway Company for the free pass it has given our nurse.

Our work is a part of the charities of the city, and it is effective, as we co-operate with the different organizations, and they with us. In particular would we acknowledge our thanks and indebtedness to the District Nursing Association, the Associated Charities, the Temporary Home and Day Nursery, the Overseers of the Poor, the Board of Health and the hospitals.

In such a subject as this, it is the personal touch which most powerfully appeals; and we draw largely also, in the paragraphs which follow, from the record of the experiences of the faithful visitor whose presence has proved such a benediction in so many Worcester homes:

Annual Report of Marjie B. Libby, Nurse

In investigating cases many practical problems arise which it is very difficult to overcome. It is easy for a physician to give general instructions, but very difficult to have these carried out. The outdoor rest prescribed can be had only by those who have piazzas and plenty of warm clothes. Open windows are objected to by other members of the family; milk and eggs are beyond the modest means of many.

Men must keep on working to support their families and women must keep house and tend the children.

Thus, it is almost impossible in many cases for the patient to receive the three essentials of treatment: rest, fresh air, milk and egg diet. Many cases see the doctor, listen to his advice and then go home and lead their old lives, not through carelessness, but because they cannot make a change without help. Often we are called upon such cases, which are too far advanced for Rutland and too weak to work. On asking a patient why he has not followed his doctor's advice he will say, "I cannot sleep outdoors, for I have not the place, and if I had, I have not the clothes to keep me warm. And how can I have perfect rest with six children all making a noise at the same time, or all hungry and crying for food. Could any man rest? No! And as for eggs, I cannot afford them, for you know it is pretty hard to support eight on eight dollars a week; buy food, wood, coal and pay house rent, to say nothing of clothes. It is only this year that we have not had enough; always before I have made twelve dollars a week."

What do we do in a case like this? In several cases we have been able to get the patient into the City Hospital for a short time. While this relieves home conditions somewhat, it is not a sufficient length of time to have done much for the patient, and he returns to the same old home. If possible we have the patient sleep out on the back veranda or in the back yard. Medical aid is furnished if the patient is not able to attend the clinics. Medicine, sputum boxes and in many cases eggs are provided by this Association. When the case becomes a bed case, it is transferred to the District Nursing Association. A consumptive is a great care during the last few weeks of life; often he is not able even to wipe his own mouth after expectorating; it frequently falls to a small child to care for the patient while the mother is at work. In all cases we try to have the children sent to the Temporary Hospital and Day Nursery, where we are sure they are well cared for and free from infection.

The majority of our patients have slept out of doors all summer and many are still doing so. We have arrested the disease in only nine cases, but one of these was very interesting; it was a young person of about twenty-six years, too far advanced for Rutland, sent home from City Hospital because she was tubercular, and nothing more could be done for her. The case was transferred to us in February, and had been in bed since July, running a temperature of a hundred and three almost every afternoon. She had very rapid pulse, and was very nervous. We instructed and advised as we do all cases, and tried to make her see that it was not necessary to die just because she was tubercular. She followed every instruction, not failing in one. In April she was able to be up; her temperature and pulse gradually dropped. Her cough stopped and she gained forty-two pounds, from ninety-five pounds on leaving City Hospital, to one hundred and thirty-seven pounds to-day. She is now able to do general housework for several in the family.

Through the kindness of several ladies we have received and distributed thirty-two dozen eggs for our patients, and two dollars to be spent for eggs. If the public would realize the value of eggs to every patient, we are sure we should receive many more. Several months ago the Association decided that all money paid in by patients for care given them, and books sold them, should be spent for patients' necessities.

Out of one hundred and sixty-four cases, we have had only thirty bed cases, fourteen of which were cared for by the District Nursing Association.

Out of 164 cases attended, 58 were reported by City Hospital; 44 by Memorial Hospital; 27 by doctors; 13 by friends; 14 by the family and 8 by charitable associations. Of these 164, the children numbered 26, and there were 57 men and 81 women.

In the following statistics, nursing visits and business visits are given:

A nursing visit is one in which something is done for the patient. He or she is bathed, encouraged, medicine administered, and the room straightened up and windows opened.

A business visit is one in which social problems are considered, as the employment of other individuals in the family, how finances may be procured to help the invalid, how food may best be provided, or arrangements made for patient to be sent to a hospital.

Nursing visits, 2107; business visits, 671; sent to Rutland, 7; sent to Memorial Hospital, 5; sent to City Hospital, 8; sent to Home Farm, 2; number of deaths, 36; unable to locate, 6; not tuberculous, 5; number left town, 12; disease arrested, 9; remaining under treatment, 74.

The following were the nationalities represented by the 164 patients: Irish, 75; Swedes, 25; French, 20; Hebrew, 12; American, 11; English, 4; Polish, 4; German, 4; Armenian, 4; Finnish, 2; Turks, 2; Greek, 1.

The following report, showing a most gratifying increase in the funds of the Association, was submitted by Treasurer Earle Brown:

RECEIPTS.

Balance Jan. 1, 1908, as per Treasurer's report, 1907,	$131.19
Total subscriptions,	890.00
Special fund and bequests,	2,500.00
Red Cross stamps, receipts to date,	143.80
Interest on bonds, etc.,	43.81
	$3,708.80

DISBURSEMENTS.

Salary of nurse from Feb. 22, 1908, to Dec. 31, 1908,	$543.00
Expenses of nurse,	33.53
For Red Cross stamps,	54.00
Patient's board at Rutland,	22.60
Printing, supplies and sundries,	131.70
Investment of funds,	1,944.50
Balance Dec. 31, 1908, in hand,	979.47
	$3,708.80

We earnestly trust that before another twelve months pass, a large increase of available resources will appear upon the books.

Commenting on the work of the Association as a whole, Dr. W. Irving Clark, clerk, calls attention to the coöperation that characterizes it, and all other humanitarian movements here, and points out the way in which it attempts to supplement as well as make use of all the remedial agencies that are so plentiful in Worcester. He says:

Before the Worcester Tuberculosis Relief Association established a special nurse to investigate and instruct tuberculosis patients, efforts had been made by the physicians of the Memorial and City Hospitals to see patients who applied for treatment at their own houses as well as at the clinics. This effort was made because it was realized that object lessons and explanations in the home itself were necessary, to impress cleanliness and the proper mode of living on many patients. It was soon found, however, that it would be almost impossible to do this work in a thorough manner, owing to the number of patients, the distances between their houses, and especially the lack of time at command of the physicians themselves. It was at this time that the Association decided to employ a nurse, and the immediate result was most satisfactory. The physicians now turned over the direct supervision of the patients to the nurse, being able in this way to give more time to the consideration of those too sick to go to the dispensaries, and more care to individual cases. It will be seen from this that the Association gave a direct helping hand to the two hospitals, which were giving treatment to the tuberculous. It has been the policy of the Association to co-operate to its fullest extent with all Worcester institutions which could help the tubercular sick; thus through aiding the clinics by its nurse it depends upon the District Nursing Association for the care of its bed patients, who require actual nursing, baths, etc., also upon the Temporary Home to keep children of tubercular parents free from infection.

Besides spreading the usual anti-tuberculosis propaganda, there has been a movement for direct instruction. Lectures have been given at several mills and other places by Drs. Lincoln, Getchell and Clark in which definite information was given the employees. The importance of this work can be instantly recognized when it is remembered that the workers in factories represent the greater part of the population of Worcester, and that at the factory it is possible to reach an audience impossible to collect in any other way. The lectures have not been given in a haphazard way, but certain important points about tuberculosis have been developed and explained.

Thus the men having been collected, the speaker begins by telling them what tuberculosis is, the bacillus which causes it, and that this bacillus is found in the sputum of a patient suffering from tuberculosis. This naturally leads to the danger to the community of the careless consumptive, who can spread the disease in all directions by spitting on the floor or street. It is explained to them how the sputum dries and the dust bearing the germs is breathed in by the unfortunate tenants of an infected room. Special attention is given to the floor which women sweep and upon which children play. The sputum covered floor is the breeding ground of the disease. It is impressed upon the audience that a person may be exposed to consumption without catching it, but that this is only true where the individual is in perfect health. They are urged to keep themselves strong and well by breathing good air at night and eating wholesome food during the day. It is pointed out that tuberculosis is a home disease, that it is seldom contracted in factories or shops. When one has the disease at home all are in danger, but this danger only exists when the consumptive spits on the floor. If the sputum is carefully disposed of there is little danger. It is then urged that the habit of spitting be abolished, for if the consumptive sees others spitting he will spit too.

Going from this the audience is told of the danger of letting a cough go without care. The relative curability of the disease in the incipient stage and its hopelessness later, is dwelt upon, and they are urged to go and see a doctor for any cough which has lasted for more than a month. We close by emphasizing the fact that the danger of catching the disease is slight except in rooms infected by a careless consumptive, that the consumptive is not at all dangerous if careful of his sputum, that they should sleep with their windows open, be out of doors whenever possible and not spit on the floor.

The Association hopes by means of these talks to spread a clear knowledge of the fundamental facts about tuberculosis. It would seem that in a city of the size and education of Worcester, it should be possible, with the agencies at hand, to reduce materially if not check the inroads of the disease. It is toward this end that the Association is bending every energy, and it looks to the people of Worcester to support it in its work, which consists not only in caring for unfortunate consumptives, but preventing the spread of the disease in their families and in the community at large.

Welfare Work

Sanitary Conveniences at the Heald Machine Shop

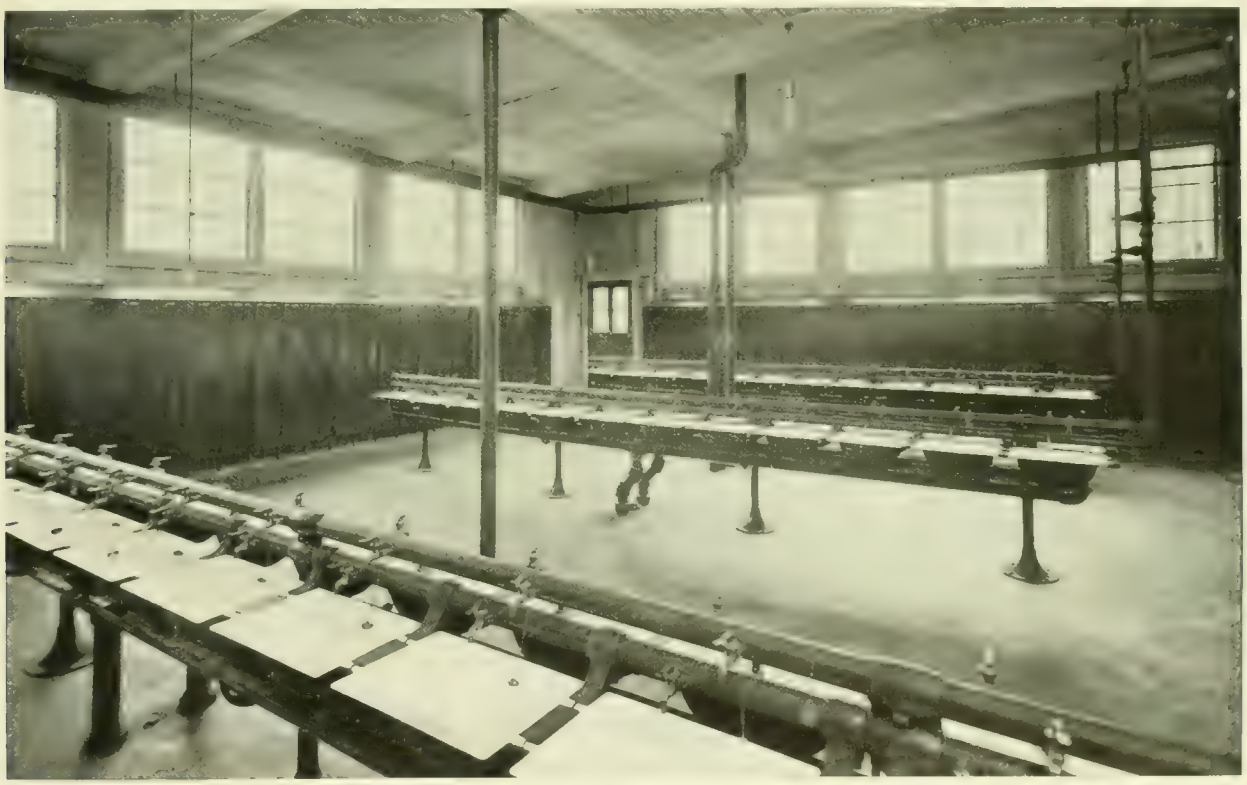
IN a recent speech Mr. Carnegie declared that "dividends are paid as much by machines as by men, and they should always be considered in combination. If a man worked for nothing and wasted twenty-five per cent. of the time of a $5000 machine, he would be very dear compared with a $5-a-day man who kept the machine up to its limit of production. The management which fails to secure the normal output from the entire plant by failing to induce men to work up to their highest efficiency is not a good management."

This was the theory adopted by Mr. James N. Heald, the treasurer of the Heald Machine Company, when he started in business at Greendale, and every step taken since has been along this line. He has never sought to make a cheap grade of goods, but has always striven to make his product the very best that the market afforded. With this end in view, he has hired the finest available class of mechanics; he has paid the utmost attention to his machinery in order to secure scientific accuracy, and he has surrounded both men and machinery with every convenience and improvement that modern hygiene and mechanical excellence could devise.

His shop has always been noted for its lighting facilities, and when it was more than doubled in size about two years ago, Mr. Heald determined to give it another feature that would make it attractive to his workmen. Accordingly, he installed at one side of the shop a fine toilet-room and wash-room. He spent $2500 on this one feature alone, and he says it has paid for itself in the added efficiency of the men.

It is conveniently located on one side of the centre of the plant, and is ample not only for the number of men now employed, but for the future growth of the company. The toilet-room is equipped with six hoppers and the same number of urinals; the closet bowls are automatic in their action, flushing twice whenever used. These fixtures, of the best type and of perfect hygienic construction, are separated by a thick wall from the lavatories, and so arranged that the floor can be flushed and the apartment kept thoroughly cleansed all the time.

The lavatories, of which a cut is given, comprise seventy-two individual porcelain enameled sinks, each equipped with hot and cold water, and arranged in convenient rows. Around three sides of the room are the latest type of sanitary metal lockers, absolutely germ proof, conveniently near the sinks, so that a workman loses no time in washing and changing to street clothing.



LAVATORIES AND LOCKERS AT THE HEALD MACHINE SHOP, GREENDALE

Mr. Heald states that in constructing this room he aimed to have enough lockers and sinks so that each man could have his own place and wash in absolutely clean water, a thing that cannot be done where the men use a common sink.

As regards the claim of employers that workmen do not appreciate social-welfare efforts of this type, Mr. Heald testifies that his men value it very highly. The result of installing these sanitary conveniences has been to make them not only more cleanly in their habits, but better satisfied with their place of employment. Other things being equal, Mr. Heald says a workman would rather work for him and enjoy these privileges than to work in another establishment lacking sanitary conveniences of this type. As a result, his company gets and keeps a superior class of workmen, and is amply satisfied with the experiment from every point of view.

A Notable Anniversary

Address by Hon. Joseph Walker, "State and Municipal Finance"

THIRTY-TWO years ago the invitation herewith printed was sent out among the citizens of Worcester, and is here reproduced as an interesting reminder of bygone days. It was decided by the Committee on Meetings and Receptions to hold the monthly smoke-talk on this date, and to invite as the speaker the honored son of one who was a dominant spirit in the affairs of our city at the former date.

In the absence from the city of Mr. J. Russel Marble, Mr. Arthur C. Comins presided. The committee were exceedingly fortunate in securing the presence of Mr. J. Brainerd Hall, who was the Secretary of the Board of Trade on the occasion commemorated. Mr. Hall gave a most delightful bit of reminiscence of the beginnings of this organization and proved himself the possessor of a wealth of knowledge about early days from which this Magazine will hope to draw in the future. The Glee Club fairly outdid themselves in their selections; and the catering by C. S. Longley was greatly appreciated.

The main address by Mr. Walker, for several years a member of the Ways and Means Committee of the General Court, and now Speaker of the House of Representatives, was followed with closest attention and interest, and has since received deserved attention and commendation from the local press. We are glad to present the full text of this address, as follows:

L. J. KNOWLES, *President*, JOHN D. WASHBURN, *Corresponding Sec'y*
CHAS. B. WHITING, *Treasurer*. J. BRAINERD HALL, *Secretary*.

The Worcester Board of Trade

WILL DEDICATE THEIR NEW ROOMS,

Thursday Evening February 1st

At 6 o'clock.

You are cordially requested to attend, and meet, as invited guests:

HIS EXCELLENCY ALEXANDER H. RICE,
HON. WILLIAM CLAFLIN.
HON. J. W. CANDLER, President of the Boston Board of Trade.
HON. A. W. BEARD, " " " "
JAMES ALEXANDER, ESQ., " " " "
HAMILTON A. HILL, ESQ., " " " "
COL. A. G. ATWOOD, " " " "
HON. RODNEY A. WALLACE, Pres't of Fitchburg Board of Trade.
HON. GEORGE F. VERRY, President of Citizens Exchange.
THE MAYOR OF WORCESTER,
HON. ALEXANDER H. BULLOCK,
HON. GEORGE F. HOAR,
HON. CHARLES DEVENS, JR.,
HON. P. EMORY ALDRICH,
HON. FRANCIS H. DEWEY,
HON. ISAAC DAVIS,
HON. STEPHEN SALISBURY,
HON. W. W. RICE,
HON. D. WALDO LINCOLN,
HON. JOHN D. BALDWIN,
HON. WILLIAM KNOWLTON

A Collation will be served at 7 o'clock.

Very Respectfully,

R. S. V. P.

L. J. KNOWLES,
J. H. WALKER,
A. N. CURRIER,
E. B. STODDARD,
Reception Committee.

Worcester, Mass., January 30, 1877.

Mr. President and Gentlemen: I am glad to be in Worcester to-night. The first fifteen years of my life I spent here. The last fifteen years I have lived in my new home of Brookline. I find, however, that the first fifteen years of one's life is a much longer period than the last fifteen. I still feel that I am coming home when I come to Worcester, and the loyalty and warm-heartedness of my friends here, as well as the fact that my mother and the old homestead are still here, intensify that feeling. It is a pleasure for me to speak before the Worcester Board of Trade because of the fact that my father played such a large part in its life. I am also glad of this opportunity to speak to you because I believe that it is in organizations of this kind that the soundest and safest public opinion is formed. I shall speak to you to-night on

State and Municipal Finance.

I fear that the expenses of the Commonwealth and of her towns and cities (I might add those of the nation as well) are getting away from us. There seems to be no adequate system of control. By excessive borrowing and other devices of postponement we put off the day of reckoning.

Increase in Expenditure.

The expenses of the Commonwealth during the last fifteen years, and especially during the last five years, have been increasing at a rapid rate. In 1893 the expenses paid from revenue amounted in gross to about $6,500,000. Last year they amounted to over $12,000,000. That is, in fifteen years they have nearly doubled. During the same period the revenue has increased from about $4,500,000 to about $6,900,000. The fact that the expenses have increased faster than the revenue has resulted in an increase in the state tax. The state tax during the first ten of the fifteen years fluctuated from $1,500,000 to $2,500,000. During the last five years it has crept up to $5,500,000. The Commonwealth is growing in population and in wealth. It is to be noted, however, that the expenses are growing much

faster than either the population or the wealth. The expense of running the Commonwealth in 1893 was per capita about $2.90. To-day the expense per capita is $4. The expense per $1000 of valuation was in 1893 $2.70. To-day it is $3.40.

This great increase in the last few years is due in part to the natural growth of our institutions due to increase in population, increased cost of living, shorter hours of employment, higher standards; but the greater part is due to entirely new burdens assumed by the Commonwealth. Since I have been in the Legislature the Commonwealth has assumed the care of the insane, the consumptives, the crippled children, the adult blind. It has established free employment bureaus, the Commission on Industrial Education, the office of State Forester, and the Gypsy Moth Commission. It has largely increased its expenditure for state roads, for improvement of harbors, for the militia, for armories, for health inspection, and in many other directions. All these things have added to the burden which the state carries. The increasing tax rate of cities and towns indicates that local expenses also are increasing faster than valuation.

JOSEPH WALKER

Increase in Debt.

Even more impressive than the increase in the expenses of the Commonwealth during the last fifteen years is the increase in debt during that period. The net debt of the Commonwealth, exclusive of the metropolitan debt, was, in 1893, a little over $7,000,000; to-day it is over $17,500,000. There has been a steady increase in debt each year during the past fifteen years. Town and city debts are also increasing. The debt of the city of Boston to-day is over $100,000,000, not counting its share of the metropolitan debt, and its tax rate is also increasing. The capital city and metropolis of this Commonwealth is to-day wallowing in the slough of financial despond. The time has come when the citizens of this Commonwealth should sit up and take notice. I do not wish to be sensational. The purposes for which the Commonwealth spends money are all worthy and proper. I do not believe there is waste, and I have never seen any signs of dishonesty. Extravagance is a relative term. If, however, expenditure is increasing much faster than population and valuation, that fact should receive earnest consideration. If this rapid rate of increase goes on unchecked, the time will come, if it has not now arrived, when the burden of taxation will become excessive. The industries and commerce of Massachusetts will seriously suffer, and her prosperity will be checked.

Lack of Control Over Expenditure.

I wish to call your attention to the methods, in the Massachusetts Legislature, of receiving estimates and of making appropriations. I wish to bring out the fact that the Commonwealth exercises no adequate control over expenses or over the exercise of the borrowing power. We have in this country no responsible ministry, either in the state or in the nation, to make up the budget, to study the relation between expenses and income, and be held responsible for the state of the treasury. Under present methods in Massachusetts departments, boards, commissions and officers make up their own estimates, and hand them in to the auditor. He simply transmits them to the Legislature. Before such estimates reach the Legislature it is the duty of no one to examine them and consider their gross amount in relation to the revenue of the Commonwealth. Consequently, the only restraint over requests for money is the self-restraint of those making the requests. Each department, board and commission is interested in its own work, and, without restraint, asks the Legislature directly for what it needs, without taking into consideration the amount requested by others, the revenue of the Commonwealth, or the effect of its estimates on the state tax.

This lack of financial responsibility leads directly to rapidly increasing expenditure, without due regard to the ability of the Commonwealth to pay. The Commonwealth is but the aggregate of her citizens, and she, like any individual citizen, if she is to remain solvent and sound financially, must carefully consider proposed increase in expenditure in relation to her income and her financial resources before entering upon such increase in expenditure. This is so self-evident that I believe you will agree with me that the time has come when the Governor should be made responsible for the budget by endorsing it before it is submitted to the Legislature, or if this is impracticable or undesirable, that he be required to appoint a responsible board of estimate and apportionment to do this necessary work. To-day the Legislature itself, acting through its Ways and Means Committee, alone stands between the treasury and those seeking money. This committee has not the time and is not in a position to do the work thoroughly, and its reports are easily upset in the Legislature by combinations of those seeking appropriations.

Lack of Control Over Borrowing.

More serious still is the lack of policy and the lack of control in borrowing money. The important question as to whether the money for an expenditure should be borrowed or should be taken from annual revenue is now decided in an offhand and an irresponsible manner. Generally the auditor or his chief clerk consults with the Ways and Means Committee, and the matter is lightly settled, influenced by a desire to keep down the annual state tax. I believe that the greatest evil in our state and municipal finances to-day is the unrestrained exercise of the power to borrow money. Money is borrowed by towns and cities—frequently for current expenses—to keep down the tax rate. This practice amounts to nothing less than deceiving the tax-payers as to the burden of expenditure which the local government is imposing upon them.

Although the state has not in recent years borrowed money for strictly current expenses, I believe that she has borrowed money for the purpose of keeping the state tax within bounds when, on sound financial principles, it ought not to have been borrowed. This also deceives the tax-payer. There is but one way to keep municipalities and the state sound financially, and that is to be frank and honest with the tax-payers. "Pay as

you go" is the only sound policy. If a city cannot afford an expenditure, it ought not to be made. It but leads to bankruptcy when a city or a town borrows when it cannot afford to pay from revenue. Moreover, to borrow is much more expensive than "to pay as you go." Even at 3½ per cent. interest amounts to as much as the principal in twenty-eight and a fraction years. Borrowing compels a city to pay twice for an improvement. I drew up some tables a few years ago to show the expense, in the long run, of the policy of borrowing for improvements as compared with the policy of "paying as you go." They showed this:

Suppose on the average a city spends $100,000 a year for school buildings or any other improvements. If you "pay as you go," the cost to the city is, of course, just $100,000 per year. Now suppose the policy of borrowing each year the $100,000 for twenty-year periods be adopted. Assume that the interest paid is only 3½ per cent., and that the earnings of the sinking funds average 3 per cent. The result is that during the first thirteen years after establishing the borrowing policy the city improvements would cost the city annually less than $100,000, but beginning with the fourteenth year, and forever afterwards, the annual cost to the city of $100,000 worth of improvements would be more than $100,000. At the expiration of the twenty years, when the first loan becomes due, the annual cost would be not $100,000, but $144,261.20. In other words, after the policy of borrowing is once established, the annual cost of $100,000 worth of improvements, forever afterwards, as long as the policy is adhered to, would be $144,261.20. Is not this an extravagant policy?

If the serial bond form of issuing loans were adopted instead of the sinking fund form, the cost would be less. Under the serial bond form the cost of $100,000 worth of improvements would be $136,750 as against $144,261.20 under the sinking fund form. Incidentally, I might remark that the sinking fund system should be abolished and the serial bond system of issuing loans substituted. This should be done in the interests of economy and simplicity, as well as to insure certainty and promptness of payment. I notice that the Finance Commission has recommended this reform for the city of Boston.

The true policy is this: Never borrow for current expenses; never borrow for annually recurring expenses. These should be treated as current expenses whether they be for schoolhouses, for paving streets, or for any other expense which occurs annually. The permanency of the improvement has nothing to do with the question. Will cities and towns never learn that an expense cannot be escaped by borrowing for it, but that, on the other hand, the expense is thereby increased! The only legitimate reason for borrowing money is to prevent violent fluctuations in the annual tax rate. If a large and unusual expenditure comes in some one year, like the building of a new city hall, establishing a new water system, etc., which expenditure would cause, if assessed in that year, a sudden and great increase in the tax rate, it is obvious that the money must be borrowed. Find out, therefore, the average amount required for improvements, and put such amount into the annual tax levy. Borrow only for large and really extraordinary expenditures. The less borrowing, the less the burden of taxation in the long run.

The fear of an increase in the tax rate, which gives immediate notice to all tax-payers of an increase in expense, is the only effective restraint upon extravagance in city government.

It is obvious that it is for the political interest of any particular city administration to keep the tax rate down in order to make a good showing before the people. The ordinary taxpayer looks at his tax bill and seldom thinks of the debts which may have been incurred merely in order to permit a lower tax rate for that year. Thus is the tax-payer deceived. The temptation of any particular administration to borrow for an expenditure rather than to put it into the tax rate is great. I have watched this tendency, and I know that it is resulting disastrously all over the state. Cities and towns are constantly coming to the Legislature for the right to borrow outside the debt limit, and to refund loans for which proper sinking funds have not been provided. Under a mistaken theory of non-interference with local self-government, these requests are almost invariably granted. In fact, the Legislature is frequently helpless in the matter, for the municipality may have already exhausted its borrowing power within the debt limit for expenses which ought to have gone into the annual tax levy, and the particular expenditure for which money is to be borrowed outside the debt limit may not only be legitimate, but necessary. Boston has borrowed more outside the debt limit than inside the debt limit.

What Are We Going to do About it?

First, the Commonwealth should adopt sound policies herself. Then she should supervise the financial affairs of her municipal corporations, in the interest of the local tax-payers. General laws, not special laws, should be passed, which would provide simply for letting in the light on the financial affairs of cities and towns, and for holding in check the natural but disastrous tendency to borrow too much.

What Supervision is Necessary?

First. Each city and town should be required to keep a modern and proper set of books. The state should require these books to show in a uniform way certain things which the tax-payers ought to know. The Commonwealth has given the Railroad Commission power to prescribe the form in which railroads should keep their accounts. Why should she not prescribe the form in which cities and towns should keep their accounts?

Second. The state should inspect and audit the books and accounts of each municipality at least once a year, and report the result of its inspection to the Legislature and to such municipality. If the state inspects the books of private banking corporations for the benefit of its depositors, why should she not inspect the books of her own public municipal corporations for the benefit of the tax-payer?

Third. The state should more completely do what it now does, viz.: collect municipal financial statistics and issue properly analyzed comparative tables, so that one municipality could see whether or not some other municipality under similar circumstances is doing similar work more cheaply than it is doing it.

Fourth. Exercise some form of control or restraint over the exercise of the borrowing power. This is necessary because the political interest of any particular administration in this respect is, as I have shown, inconsistent with the permanent interests of the municipality. This evil is widespread and serious.

In short, the Commonwealth should prevent all concealment, compel open and frank dealing on the part of local governments with tax-payers. To let in the light is no infringement on the right of local self-government.

Thrifty New England people are beginning to see that the real forester of this section of the United States is the Maine man who set out 20,000 young trees on his own land last year and then offered the State $1000 to be given out in prizes annually for good lots of young forest growth, the appraising to be done carefully by men chosen for the work. That should guarantee not only the interest of hundreds of farmers and other land owners to plant trees, but the attention of the entire State on the forests as wealth-makers for the State as a whole.

January Trade Conditions for Worcester County

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

The anticipated progress during the month has developed slowly and along conservative lines. Complaints of unseasonable weather and quiet conditions are still numerous in some retail lines, but on the whole, the volume has not suffered materially by comparison with conditions of a year ago.

Leading industries have been gradually increasing their working forces and output, and the gains established during the past few months have been fully maintained, but with the exception of a few lines, the output is still below normal. A better demand is experienced among manufacturers of textile machinery. The business among machine-tool manufacturers is still spasmodic, but they feel much more encouraged over the outlook as the inquiries for future business continue to grow more numerous. Plants are running on an average of from 35 to 55 hours a week, with about 50 per cent. of their full complement of help.

There is still but little demand reported by woolen manufacturers, particularly for cheaper lines, but plants making cotton and woolen worsteds report a fairly active market.

Failures for the month numbered ten, with liabilities of $37,242, assets of $7,270, compared with the same month of last year, when they showed a total of seventeen, with liabilities of $86,506, and assets of $31,967.

MONEY IN CIRCULATION.

During January Circulation Decreased $1,003,157—Per Capita $35.00.

Washington.—The Treasury Department reports the total money in circulation on Feb. 1 as follows:

	Feb. 1, 1909	Feb. 1, 1908
Gold coin,	$605,944,900	$641,496,096
Gold certificates,	838,307,539	769,629,359
Standard silver dollars,	72,770,675	89,557,092
Silver certificates,	461,362,763	453,413,640
Subsidiary silver,	131,487,554	130,701,055
Treasury notes of 1890,	4,509,724	5,392,484
United States notes,	338,019,020	339,171,655
National bank notes,	638,910,371	665,001,318
Total,	$3,091,312,546	$3,094,362,699

Circulation per capita, $35; Feb. 1, 1909, $35.61; Feb. 1, 1907, $33.96; Feb. 1, 1906, $31.88; Feb. 1, 1905, $31.07; Feb. 1, 1904, $30.61; Feb. 1, 1903, $29.48; Feb. 1, 1902, $28.77.

Recent Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

George H. Coates, Massaging Implement, No. 906,772.

An operating device for a massage pad provided with means for regulating the amplitude of the movement of this pad. The turning of a milled nut varies the position of a pin operating in an oblique slot to vary the angle between the axis of the rotating shaft and the longitudinal axis of the carrying lever, and thus regulates the vibratory movement.

Theophilus Brown, Manure Spreader, No. 907,124.

A pulverizing rake for that class of manure spreaders in which the beater is capable of being moved toward and away from the load. A rearwardly moving beater is operatively connected with a rocking rake frame, whereby both the rake and the beater may be simultaneously thrown into and out of their operative position by the action of a single lever.

Frederick L. Wood, Die, No. 907,667.

A die plate seated in a groove in a die body, one edge of the groove being vertical and the other inclined downward and outward, one edge of the die plate being bevelled to fit the inclined edge of the groove, and the other vertical to fit the corresponding edge of the groove. Screws pass through the die plate into the die bed to hold the plate in the groove.

J. P. Bird, Scoring Machine, No. 907,674.

A machine for cutting or scoring cardboard on lines upon which the cardboard is eventually to be bent in the manufacture of paper boxes. A reciprocating pusher, operating on a table, is driven by elliptical gears arranged to vary the speed of this pusher, so that the slowest speed occurs at the beginning and end of the reciprocating movement.

H. W. Munyan, Battery Connector, No. 907,872.

A connector consisting of a continuous conductor having resilient coiled terminals in one integral piece, with the conductor forming compressible springs at the ends thereof.

H. D. Sargent, Garment Supporting Loop, No. 907,893.

A suspender link consisting of a single piece of spring wire provided with a loop to engage the suspender end and separate hook ends for engaging the shank of the button.

W. S. Metcalf, Envelope Blank Punching Machine, No. 908,116.

A machine for forming an opening in the body portion of an envelope blank before the latter is folded, in order to disclose an address placed upon an inclosure in the completed envelope. A blank is advanced by a pair of reciprocating gripping jaws into contact with gauge plates, which registers the same, prior to punching, and a second pair of gripping jaws is provided to remove the blank from under the punch and place it upon the stack.

Randolph Crompton, Filling Carrier for Weft Replenishing Looms, No. 908,209.

A filling carrier having the first few winds thereon wound in one direction, and the remaining winds of filling wound thereon in a reverse direction.

Lewis T. Houghton, Top Roll Mechanism, No. 908,464.

A top roll mechanism having guard fingers situated between the pairs of top rolls for the purpose of limiting the traverse of the yarn or roving.

Worcester Quotations

Reported by Kinsley & Adams.

Jan. 28, 1909.

BANKS.	Bid.	Asked.
Worcester National Bank	195	201
Mechanics National Bank	115	...
Worcester Trust Co.	250	.
Merchants National Bank	150	.
Millbury National Bank	70	80
First National Bank, Webster	120	
Fitchburg National Bank	150	.....

ELECTRIC ROADS.	Bid.	Asked.
Boston & Worc. St. Ry. Co. 4½ p. c. bonds ...	93	98½
Worc. & Southbridge St. Ry. Co. 4½ p. c. bonds	. .	96
Worcester Consolidated 4½ p. c. bonds.	93	95
New England Invest. & Security Co. pref. stock	77	.....
Worc. Rys. & Investment Co. stock	55	....
Worc. Consolidated St. Ry. Co. 5 p. c. bonds	98	102½
Worc. & Marlboro St. Ry. 5 per cent. bonds...	98	...
Worc. & Webster St. Ry. Co. 5 p. c. bonds....	95	..

MISCELLANEOUS.		
Norwich & Worcester R. R. Co. preferred stock	200	210
Providence & Worcester R. R. Co. stock. .	260	265
Worcester, Nashua & Rochester R. R. Co. stock	140	142
Worcester Gas Light Co. stock .	247	.....
Worcester Electric Light Co. stock.....	240	.....
Crompton & Knowles Loom Works pref. stock	140	.....
Graton & Knight Mfg. Co. common stock...	120	.....
Graton & Knight Mfg. Co. preferred stock	110	.....
Royal Worcester Corset Co. stock.....	150	.....
Wright Wire Co. common stock	95	.....
Wright Wire Co. preferred stock.....	97½	.....
United States Envelope Co. common stock....	35	41
United States Envelope Co. preferred stock..	105	107
United States Envelope Co. 5 per cent. bonds..	5⅛ p. c. basis	
Norcross properties 6 per cent. bonds		100

Current Events

Personal and General City Happenings.

Dec. 29. Daniel E. Denny elected President of the Worcester County Republican Club, succeeding Leon Rice Partridge.

Miss Eldora M. Aldrich, Treasurer of the Worcester Woman's Clubhouse, reduces mortgage $500, leaving debt at $18,500.

Dec. 30. Worcester Republicans give a reception and dinner in Bay State House to Mayor James Logan.

Dec. 31. Sibyl A. Merriam of Leominster leaves $2000 to Worcester Academy to found two $1000 Edward P. Merriam scholarships.

Jan. 1. New Year's reception to 128 new members of the Board of Trade.

Single ride fares on Boston & Worcester Street Railway increased from five to six cents.

American Express Company reduces its minimum rate from Boston to Worcester from 25 to 20 cents.

Eighth annual report of Worcester port of entry shows imports for year 1908 amounting to $317,765, on which $109,290 in duty is paid, a decrease of $4000 from 1907 receipts.

Stamp sales at Worcester post office for December amount to $43,508.43, a gain of $2,362.79 over corresponding month one year ago.

Winthrop G. Hall elected member of Executive Committee of State No-license League, succeeding Lucius R. Paige, resigned.

Jan. 5. Citizens No-license League adds nine vice-presidents to its list of fourteen, and re-elects O. W. Norcross president, R. D. Murphy secretary, and H. H. Merriam treasurer. Permanent headquarters established, and Secretary Murphy's salary made $1800.

Deacon Henry H. Merriam presented with silver loving cup after forty years' service as deacon at Old South Church.

Jan. 6. Representative James H. Mellen of Worcester presides at opening exercises of the General Court in Boston, and Rt. Rev. Mgr. Thomas Griffin offers inaugural prayer.

Judge Arthur P. Rugg selected as orator at Lincoln centenary exercises Feb. 12.

Rev. Dr. Frank Crane, pastor of Union Congregational Church, resigns, to take effect in September at close of seventh year of his pastorate.

Herbert Knox Smith, commissioner of corporations, speaks at Adams Square Congregational Church on "Regulation of Trusts."

Rev. Samuel C. Beane, Jr., installed as pastor of the South Unitarian Memorial Church, succeeding Rev. Arthur L. Weatherly, resigned.

Jan. 7. Attorney Frank L. Dean named as Governor Draper's private secretary.

8. Worcester Lodge, Independent Order of Galilean Fishermen, formed: Irving C. Geary president, Mrs. Julia Harris secretary, Mrs. Elizabeth Parker treasurer. Planned to establish a home near Worcester at cost of $25,000.

Jan. 8. Edwin T. Marble re-elected President of the Home for Aged Men; Edward T. Esty treasurer, Roger F. Upham secretary. Receipts for year from all sources, $8,509.57; disbursements, $7,428.74; balance on hand, $1,080.83. Total funds invested, $96,605.86.

Jan. 9. Hebrew Political Club organized with 234 members. Max Feiga president, Michael Goldstein vice-president, Jacob L. Goding treasurer, Maurice Mandel Israel secretary, Attorney Maurice L. Katz, Dr. Elias H. Pofcher, Selig Goldman, David B. Isenberg and Attorney Simon G. Friedman, directors.

Jan. 9. Auditor James A. Steele holds up $13,000 worth of accounts in the Worcester grade crossing expenditures.

Strawberries make their appearance in Worcester markets.

12. Massachusetts Association Sealers of Weights and Measures in annual session in Horticultural Hall elect Daniel C. Palmer of Malden State Commissioner of Weights and Measures, president; A. S. K. Clark, Cambridge, secretary and treasurer; John B. McCarthy, Lynn, first vice-president; John H. Duseault, Somerville, second vice-president; Charles B. Wooley, Boston, third vice-president; Executive Committee, the above and George T. Hosmer, Woburn, and Joseph D. Goddard, Holyoke.

14. Dr. Melvin G. Overlock elected President of the Worcester Social Settlement; Prof. Charles D. Randolph vice-president, E. L. Pierce secretary, Rev. Robert J. Floody treasurer, George D. Webb, Thomas Hamilton, D. A. Scott, Atty. Louis E. Feingold directors.

Jan. 18. Worcester Congregational Club elects Rev. Andrew Burns Chalmers president, Milton P. Higgins first vice-president, Rev. Edward Payson Drew second vice-president, Elmer G. Tucker secretary, Dana M. Dustan treasurer, George W. Mackintire auditor, Rev. Shepard Knapp, Edward R. Goodwin and Rev. Peter McMillan executive committee; Charles E. Marble, George E. Copeland and W. Virgil Spaulding nominating committee. George M. Wright, Fred A. Ricker, William H. Balcom, Edward E. Pease, Robert T. Elliot and Ralph W. Hawkes elected to membership, bringing it up to 225.

19. Third convention of Franco-American Brigade of New England opens after electing the following officers: President, William H. Mellen, Marlboro; First Vice-president, Noe Caouette, New Bedford; Secretary, Aime J. Martineau, Willimantic, Conn.; Assistant Secretary, Wilfred Lussier, Newburyport; Financial Secretary and Correspondent, Sylvio G. Gagnon, Salem; Treasurer, Albert Bergeron, Lowell; Auditor, George Labrie, Lowell; Master of Ceremonies, Z. Gregoire, Lowell; First Sentinel, Hilaire Provost, Brockton; Second Sentinel, J. B. Goulet, Webster; General, J. B. Lariviere, Fitchburg; Brigadier-general, J. B. Paulhus, Willimantic, Conn.; Adjutant-general, G. G. Gagnon, Salem; Quartermaster-general, A. J. Maudeville, Brockton; Surgeon Major, Dr. A. H. Quessy, Fitchburg; Orderly, Philip M. Rioux, Fall River.

Complimentary dinner to Alderman-at-large Arthur B. Brunell.

Worcester Heptasophs welcome Supreme Archon Samuel G. Cohen, Pittsburg, and Supreme Treasurer Charles Ranney, Boston.

Public School Art League elects Edward H. Thornhill president, Frank J. Darrah vice-president, Samuel S. Green treasurer, Miss Grace M. Sawyer secretary.

Jan. 20. Memorial Hospital lavatory damaged $300 by flames.

Alexander Muir elected President Central Labor Union; Thomas Higgins first vice-president, John Murphy second vice-president, T. J. Moriarty secretary, J. H. Martel assistant recording and financial secretary, J. J. Rogers treasurer, E. J. Corbett, William J. Brady, F. J. Counihan trustees, Richard Bruninghaus, W. H. Thornton and Louis Greenfield auditors.

Jan. 20. Edward L. Davis elected President of the Episcopal Board of Trustees of the Diocese of Western Massachusetts, and Matthew J. Whittall and Henry L. Parker members of the Board of Managers.

21. Dr. John T. Duggan re-elected head of the staff of St. Vincent Hospital.

Jan. 23. Miss Frances Morse has narrow escape from drowning on the steamer Republic, which is rammed in the fog off Nantucket, Mass., by the Italian liner, Florida. She and her sister, Alice Morse Earle, the authoress, were bound for Egypt, and the latter fell into the ocean and sank twice while they were being transferred to the Baltic.

Business and Building News.

Jan. 1. The Royal Worcester Corset Company announces its intention of building an addition 75 by 50 feet on the Wyman Street side of its factory. Addition will be five stories high, with shop dining-hall and office suite on the ground floor and upper floors for shop extension. Improvement will cost about $125,000.

J. T. Winn, manager for Blake-Sampson & Co., grain dealers at 3 Mill Street, buys out the business and establishes himself as Winn & Company, at 1087 Main Street.

Louis E. Bragg succeeds G. Bertram Shepard in charge of sub station 12, of Worcester post-office, located at 255 Lincoln Street, purchasing Mr. Shepard's interest in the drug store there.

Arthur E. Nye made partner of J. Russel Marble & Company, 440 Main Street. This concern, which deals in chemicals and oils, dates back to 1783.

Mary, wife of Abraham I. Ashen, buys a four-tenement modern block and 11,618 square feet of land at 159 Green Street, from the John Moore heirs.

8. Harrington & Richardson Arms Company discharges 184 men, reducing working force to 175 men.

9. J. Orton Buck transferred from Worcester to Boston office of R. G. Dun & Company, and is succeeded by Edmund J. Hinsley in Worcester office.

12. Merchant tailors elect Charles M. Padula, president; W. T. Brown, secretary and treasurer, and the above with W. W. Johnson, Herbert S. Parker and W. A. Lytle, executive committee.

Royal Worcester Corset Company re-elects David H. Fanning, president; Walter F. Brooks, treasurer; and the above with Ernest P. Bennett, Eugene Fanning and Frank Roe Batchelder, directors.

Worcester National Bank re-elects James P. Hamilton president and these directors: A. George Bullock, Charles A. Chase, James P. Hamilton, Lincoln N. Kinnicutt, Edward L. Davis, George F. Brooks, Paul B. Morgan, Reginald Washburn and Matthew M. Whittall.

Merchants National Bank elects Frank A. Drury president and Charles L. Allen, Chandler Bullock, Richard C. Cleveland, Frank A. Drury, Homer Gage, Richard Healy, J. Lovell Johnson, Col. T. S. Johnson, Lucius J. Knowles, D. D. Muir, Henry E. Whitcomb, Henry T. Whitin, George C. Whitney and Oliver B. Wood, directors.

Mechanics National Bank elects Francis H. Dewey president and Charles A. Hill, Francis H. Dewey, Thomas B. Eaton, Benjamin N. Childs, George M. Bassett, Walter M. Spaulding, Milton P. Higgins, Harry W. Goddard, Arthur M. Stone, Albert H. Stone, Fred H. Daniels and Eben S. Stevens, directors.

William D. Luey re-elected president of the Worcester Safe Deposit Vaults, Inc.

15. Corset H Company agrees to pay the expenses of its employees for four months at the Rutland Sanatorium, if any of them fall ill of tuberculosis.

18. Heywood Boot & Shoe Company re-elects Samuel R. Heywood, president; Albert S. Heywood, vice-president and treasurer; Bertram S. Newell, assistant treasurer.

19. E. J. Sartelle retires as actuary of the State Mutual Life Assurance Association after twenty-five years' continuous service and is succeeded by C. R. Fitzgerald, former assistant actuary. These officers are elected for 1909: President, A. G. Bullock; Vice-presidents, Thomas H. Gage, H. M. Witter and George F. Blake; Directors for four years, A. G. Bullock, Worcester; Charles A. Denny, Leicester; Burton H. Wright, Worcester; Moses Williams, Boston; Secretary, Burton H. Wright; Treasurer, G. W. Mackintire; Actuary, C. R. Fitzgerald; Medical Director, Albert Wood, M.D.; General Counsel, Chandler Bullock; Superintendent of Agencies, Edgar E. Fowler; Assistant Secretary, D. W. Carter; Assistant Medical Director, Homer Gage, M.D.

25. Eastern Bridge & Structural Company elects John S. Stewart, president; James C. Stewart, vice-president; A. S. Miller, Jr., treasurer; Charles T. Tatman, clerk; R. H. Inman, chief engineer, and the above with Albert H. Inman and A. L. D. Buxton, directors. The company has a surplus of $38,946.29 and contracts on hand of value of $158,000.

City Affairs.

Dec. 27. Miss Helen G. McDermott appointed police clerk by Chief David A. Matthews.

28. Eric W. Hjelm named by Mayor Logan caretaker of the Shrewsbury rifle range.

Judge Frederick H. Chamberlain and Rev. Bernard S. Conaty elected directors of the city library.

Frederick H. Lucke elected member Overseers of the Poor, succeeding Charles H. Ellsworth.

A. George Bullock elected Commissioner of Sinking Funds.

City Council appropriates $4909.06 for Greendale schoolhouse and $6500 for Tatnuck.

Jan. 1. Major Edward T. Raymond, clerk of Central District Court, receives $30,943.51 from defendants during 1908, a falling off of $1,019.49 from 1907 receipts.

George E. Boice and William H. Ford made ambulance attendants at Station 1, and Michael H. Gaffney appointed driver.

Total rainfall in Worcester for 1908, 35.96 inches; average rainfall for last twenty-two years, 45.15; deficiency for 1908, 9.19 inches.

Charles M. Harrington appointed assistant city engineer, succeeding Samuel H. Pitcher.

Arrests for December: 289 men, 36 women and 47 children; total, 372.

City Clerk W. Henry Towne issues thirty-two hunters' licenses under new hunting law.

2540 deaths in Worcester during 1908, 272 less than during 1907.

Jan. 4. Hon. James Logan inaugurated Mayor of Worcester for the second time. George N. Jeppson elected President of the Board of Aldermen. Louis N. Buckley elected President of the Common Council.

5. Prof. Levi L. Conant elected Chairman of School Committee; Andrew W. Ekstrom, vice-chairman; Joseph Beals, clerk; Michael J. English and Henry E. Fayerweather, truant officers; Charles R. Johnson, Charles F. Marble and Nicholas Skerrett, trustees of proposed industrial school.

8. City Solicitor Ernest L. Vaughan asks for an increase of salary from $3600 to $4800 a year, for $2000 for his assistant, Clifford S. Anderson, against $1500 at present, and for $1600 for a second assistant.

One hundred and fifty owners of Hyatt lights on Main Street notified that they are dangerous to travel and sidewalks containing them must be repaired.

12. Robert K. Shaw elected city librarian, succeeding Samuel S. Green, who retires after forty-two years' continuous service, and is made librarian emeritus.

15. G. Milton Fisher of Westboro, principal of the Cambridge Street school, recommended as principal of the Millbury Street school, succeeding the late Francis P. McKeon.

29. Industrial school trustees elect Milton P. Higgins president, George F. Brooks vice-president, Charles F. Marble secretary, Prof. Levi L. Conant, Charles R. Johnson and Charles F. Marble committee on rules. The other trustees are Cornelius J. Carmody, George I. Alden, John M. Buckley, John R. Back, John P. Casey, Nicholas J. Skerrett, George N. Jeppson and Louis H. Buckley.

Worcester Necrology.

Dec. 30. Francis P. McKeon, supervising principal of Millbury Street school district, dies at his home from heart failure.

Jan. 9. Charles Taylor, the veteran horseman, who drove in the races at the New England Agricultural Fair last summer at Greendale, dies at his home, White River Junction, Vt., aged 103 years.

14. Walter N. Gleason, president and treasurer of the Walter N. Gleason Company, fruit and produce dealers, dies after nine days' illness of pneumonia, aged 34 years, 11 months and 12 days.

15. Amos E. Bigelow, a retired carpenter, dies at the home of his son, Irving E. Bigelow, 7 Mt. Pleasant Street, of bronchial tuberculosis, aged 78 years, 8 months and 5 days. He had lived in Worcester since 1852 and, with his brother, under the firm name of G. C. & A. E. Bigelow Company, built Piedmont Congregational, St. John's Episcopal, and other churches, and many private residences.

Death of Thomas Shales at Leicester, aged 72 years, 5 months and 19 days. For twenty-five years he had been in the employ of the Torrey Razor Company.

Charles H. Burke, draftsman, 93 Austin Street, dies of stomach trouble, aged 34. He had been employed by the Worcester Consolidated Street Railway Company, coming there from the south works of the American Steel & Wire Company.

George Newton, prominent resident of Tatnuck, dies at his home, 1125 Pleasant Street, of old age, aged 88 years, 4 months and 29 days.

Charles D. Costello, former Worcester business man, dies at the home of his daughter, Mrs. O. B. Rideout, 81 Moreland Street, Roxbury, of heart disease, aged 62 years.

19. William Coley, a retired color mixer, dies at his home, 24 Malvern Road, aged 81 years, 5 months and 20 days.

26. George Frohsinn Zaeder dies in City Hospital of chronic nephritis and uræmia, aged 39 years and 7 days.

Charles A. Hill

CHARLES A. HILL

The death, Jan. 20, at his home, 39 Queen Street, of Charles A. Hill, treasurer of the Phenix Plate Company, Park Avenue, manufacturers of ferrotype plates and japanning supplies, at the age of seventy-four years, has removed from the activities of business life one of the most conservative and reliable of Worcester manufacturers.

Mr. Hill has not been in good health for two years, but he was not confined to his home until about ten weeks before the end came.

In 1861, when he was twenty-seven years of age, he came to Worcester, entering the employ of Jerome Marble as a bookkeeper, rising to the position of partner.

In 1870 Mr. Hill and Mr. H. M. Hidden organized the Phenix Plate Works, the copartnership continuing until 1888, when Mr. Hidden retired and a stock company took over the plant, Mr. Hill being made treasurer of the concern, a position which he held until the day of his death.

He was a director in the Mechanics National Bank and a trustee in the Mechanics Savings Bank.

He leaves a widow and one son, Charles G. Hill. Of a retiring and modest disposition, Mr. Hill had never taken a conspicuous place in Worcester business life, but among his business associates and intimate friends he was universally regarded as a man of the highest integrity. His death will be deplored in the banks that he had served so faithfully for so many years, as well as among the business men of Worcester, who appreciate the record for industry and worth that he had achieved during his successful business career.

There are many matters of interest and importance in the activities of our organization as it is seen from the Secretary's Corner in these opening days of the new year; but one thing stands out with largest significance: "What is being done to promote the business interests of Worcester?" "Are you people in the Board of Trade doing anything to help increase the prosperity of concerns now here?" "Why does not Worcester get some of these enterprises that are locating themselves in surrounding places?" These questions are coming with increasing frequency; this may be a good place in which to answer them.

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First of all, the Secretary has been giving much time and attention to the representatives of perhaps two score projects and enterprises which have asked through him the sympathy and help of this Board of Trade. While each one is respectfully and patiently considered, the larger number of these have to be placed on file as failing for various reasons to be suitable for immediate action by the Board. The business men in our city are properly cautious and conservative about enlisting in enterprises of doubtful character, whose present and future management is largely unknown to them, or outside their controlling influence. In this work of discrimination and adverse judgment the Secretary has found much to do during these last few months; and where he has been in doubt he has gone to the Committee on New Enterprises, and has been aided by their careful and conscientious work.

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This process of elimination of certain offered projects, however, has resulted in leaving a few enterprises standing out conspicuous for their merit and their promise of adding materially to our industrial life, if they can have the attention and receive the support they deserve from Worcester capitalists. The Secretary has in mind, for example, one which clearly comes within this category. It calls for the capitalization and manufacture of an article which owes its origin to the inventive skill and trained expert knowledge of one of Worcester's representative young business men. During the last few months it has been thoroughly tried out, and has met with perfect success the severest tests. It is based on patents which are a strong safeguard against any successful competition. A detailed plan for the production and distribution of this article has been worked out, commending itself to men of excellent business judgment. The inventor has found a surprising response to his first announcement by circular; he has ample assurance that outside capital is ready to be enlisted, and eager to secure the location of the business elsewhere. In the course of the next few weeks it will be "up to" Worcester men of means to do one of two things: invest a few thousands to hold the business here, or see a Worcester man compelled to leave his home and his home city with all its associations, and move elsewhere to start a business which fills a distinct need in the industrial field, and for which there is even now a tremendous demand throughout the entire country.

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The Secretary gives this as a concrete example of a great and absorbing problem which is continually pressing upon his time and thought. As a result of his visit to Williamsport and other places, the Joint Committee on Manufactures and New Enterprises has worked out a new plan for assisting projects needing temporary help. Its final report was unanimously and hopefully adopted. It has been given to each director of the Board for the benefit of their individual and collective judgment.

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The best of plans, however, will amount to no more than a factory without power, unless Worcester capitalists do their part. At a Board of Trade reception on the evening of Jan. 1, Mr. Harry W. Goddard, a former president of this organization, uttered a message which ought to be heard and heeded by a much larger audience. In clear and strong statement he described the folly of sending thousands of dollars out of Worcester for investment in remote and dubious enterprises; and urged the wisdom of putting some of our money in sound and well-managed concerns at home, whose growth would mean an increased prosperity for the entire city. Was he right or wrong in such counsels?

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The Secretary was talking, not long since, with a man doing business in this city, but living a few miles outside on one of our suburban lines. He has recently come here from Cleveland, and in making comparisons he was frank to mention one not at all in our favor. "Why is there no provision for the comfort and convenience of the thousands of trolley passengers who enter and leave the city every day? In Cleveland the city has planned and built public comfort stations in different places, especially where waiting passengers may be sheltered when trolley cars are delayed. The expense for such station is nothing when compared with the relief they offer. It looks strange enough to one accustomed to such shelters to see the crowds always waiting on the sidewalks around the City Hall for the coming of their cars." The Secretary desires to pass this question over to our city fathers and to the Consolidated Street Railway Company for their joint consideration.

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In listening to a masterly speech at the annual banquet of the Life Underwriters' Association in the Bay State House on Jan. 21, by Mr. C. W. Pickell of Detroit, the Secretary noted a passage which strikes the true note, not alone for the line of business under discussion, but for all commercial undertakings. In emphasizing what he termed "straightforward promulgation," he said, "The word 'straightforward' I have used advisedly Honesty is the best policy—yet! The truth is what we want, and let's have it all. The public is not slow to grasp the rationale of any proposition or publication. The slightest deception, excuse or extenuation gives rise to doubt, then ridicule, then contempt. Let's have the truth in history of our business, the truth in the modus operandi—all the truth about every phase of it."

WORCESTER BOARD OF TRADE
11 FOSTER STREET
WORCESTER MASSACHUSETTS
EACH FOR ALL ALL FOR EACH
U.S.A.

Officers.

President, GEORGE I. BROOKS. *Vice President*, J. RUSSEL MARBLE.
Secretary, JOHN F. SEWALL. *Treasurer*, SAMUEL D. SPURR.

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IRVING E. COMINS, WINTHROP HAMMOND, DR. THOMAS HOWELL,
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THOMAS L. BOOTH, VICTOR E. EDWARDS, CHARLES L. GATES,
FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
HERBERT H. FAIRBANKS, WILLIAM WOODWARD.

Chairman Executive Committee, WILLIAM H. SANFORD. *Editor*, H. WARD BATES

The Coming Banquet

The annual banquet of the Worcester Board of Trade is rightly reckoned as one of the chief social events of the year. One of our newly added members when asked by a friend his reason for joining the Board, mentioned among other things this: "Because every year this organization brings to Worcester some man of national reputation whom we could not hear in any other way." The sub-committee in charge of securing speakers this year have certainly made good our reputation by announcing as the chief guest of the evening Albert B. Cummings of Iowa, for several years the popular and brilliant Governor of that State, and now the successor of Allison in the United States Senate. Perhaps there is no representative of the newer Republicanism of the West who will be more heartily welcomed than Mr. Cummings. He is famous for his oratorical powers, and for his advocacy of ideals which seem radical in the extreme to the majority of New Englanders.

In addition to Senator Cummings speeches will also be expected from our Congressman, Hon. Charles G. Washburn, and from Mayor Logan, who was unable to attend the last banquet. We are greatly indebted to these two friends for their kindness in personally extending the invitation to Senator Cummings. The date for the banquet is Thursday, April 22.

A Competitor's Latest Move

Some of Worcester's manufacturers need no argument to convince them that Cincinnati is to-day a formidable competitor to this city, and likely to become more dangerous in the future. It is, therefore, important to keep an eye on all movements started by this Western centre of machine and tool industries.

On January 26, the Cincinnati Business Men's Club gave a banquet for members of the Chamber of Commerce, Merchants and Manufacturers' Association, Industrial League, Advertisers' Club and other local bodies. This was attended by over five hundred men, drawn together by a common desire and purpose to perfect one commanding organization of all the different business interests of the city. The speaker of the evening was Mr. Ryerson Ritchie of Boston, who is a past master in the science and art of the subject which he discussed, "Organization." Among other things Mr. Ritchie said:

Changes have been coming fast. In the world of trade and industry of late years, there has been a transformation. Not long ago competition was the life of trade, but combination is fast squeezing the life out of competition. This swift drift of events calls for a new economic geography. Organization is taking the place of the individual. Make that drift and that organization conscious, deliberate, intelligent.

A city that is organized, conscious of its purpose as a city, can attract business. It need not wait for industries to come. It can go and get them to come. Community organization is essential. What the city needs is an organism that serves as a brain—one that can grasp the situation and develop it in every particular.

As in private, so in public business, combination must take the place of the individual. Cities have competitors and rivals. If you intend to pass your rivals and competitors, get together. Be a united corporation, a city with a mind.

Now, chambers of commerce, boards of trade and business men's associations are civic societies, and if they are not civic societies they have little or no public influence. And they don't deserve any. A commercial body that is not devoted to the interests of the city, as a city, is not even a good commercial body.

In these days of business intelligence the inefficient commercial body is a misfit. A great business demands great men. There is a fitness, an adjustment of talents in the business world. Why not in the business of city building, the great constructive work of the community? Here men and brains are needed.

Mr. Ritchie added some remarks about the development of home interests which are worthy of attention, and gave an interesting report of Boston's progress up to date:

Not infrequently local organizations give more attention to national issues than to home matters. Curiously enough, some men will attend meetings to discuss the tariff or reciprocity, the currency question or postal reform, the Panama canal or our territorial possessions, and be indifferent to problems and enterprises that touch the communal life of the city.

But, like charity, good government begins at home, and it would seem proper that our associations of business men should first master the local situation before going far afield.

Boston is now engaged in federating about forty different associations, each of which is devoted to some trade, manufacturing, professional or public interest. The city has learned that its differences, and some of its traditions, must be subordinated to unity and forethought.

The success of this movement was realized after a half year of formative work by a group of its leading men. The Board of Trade, which associated some twenty commercial organizations; the Merchants' Association, composed principally of business men, and the Chamber of Commerce, representing the grain and shipping interests, have united as one central body and will be incorporated as the Boston Chamber of Commerce. And, finally, various trade associations will be affiliated with the chamber. The business men are making a trust of Boston, a public trust. They are merging all the allied organizations into—the trust of the city.

A problem: If without this strong and effective form of organization Cincinnati has accomplished in recent years what she has done, how much may she be expected to achieve, as a competitor of Worcester, when she perfects this new form of united effort?

What Others Say of Us

We have been receiving of late some exceedingly interesting letters from various parts of the country, and even from other lands, showing how widely the knowledge of our city and this Board of Trade is being extended by the circulation of this Magazine. One in particular is so complimentary to Worcester men, and breathes such a hearty and cordial spirit, that we are moved to quote it entire. It comes from one of the consuls of the United States, who is stationed in a prominent city in England.

"I have two reasons—or supposed reasons—for breaking into your busy sanctum. First, to express to your committee my deepest pleasure at receiving the Worcester Magazine at this consulate, where it has always been found filed with the best of American magazine literature. Its cleanly, superbly printed pages have always told of a splendid prosperity, and of an enlightened energetic business community. To an American thus expatriated its pages have continually reminded him of the great throbbing host of fellow citizens at home, doing so nobly for the development of our common land. For that pleasure, thanks, and yet again thanks!

"My second reason is this: I was showing the December number of the Magazine to an English titled lady, who has always taken an interest in things American generally; after looking over the faces and checking more than a dozen, she naïvely remarked: 'Why, my dear consul, these all look like gentlemen, and not tradesmen!' You must have the right English definition of what this distinguished lady said, and under that definition it means much. I will not create jealousies by naming the twelve or fourteen gentlemen duly checked; but the fact that their faces made such an impression on a very wise woman speaks for the intelligence and character speaking so plainly in all of them."

With this should be read the following extract from the manager of a large concern in London that deals in all kinds of labor-saving machinery and tools: "We have just received a copy of the Worcester Magazine, illustrated; and as we do not know to whom we are indebted for sending this to us, we are writing you to say how much we have appreciated the same, and how interested we were in reading it from cover to cover. I know, of course, a number of the engineering firms in Worcester, and buy a fair amount of goods from your city."

It is also in order to quote the following pleasant communication from the Betterment Association of one of our nearest neighbors, West Boylston: "At our annual meeting our Association voted to extend thanks and appreciation for the monthly Magazine issued by your organization and the mailing of the same each month to us. The quality and detail surely indicate a prosperous organization in a fertile field."

It is well for us to feel the stimulus from such letters, arousing us to timely efforts to live up to our growing reputation.

Our Steady Gain in Membership

The energetic efforts of the Membership Committee during December, together with the work of their helpers in the Auxiliary Committee, have continued to bear fruit during the month of January, with the result of the following additions to our roll of members, making our present total 724:

MAURICE BARSKY, Leather Merchant, 113 Park
EDWARD B. CLAPP, Secretary, Worcester Merchants Association, 11 Foster
JOSEPH H. CROCKER, Restaurant, 563 Main
BERTRAM C. CUTLER, Druggist, 814 Main
DANA M. DUSTAN, Insurance, 340 Main
ALBERT J. GIFFORD, W. H. Leland Co., 1025 Southbridge
CHANDLER G. GILMAN, Wagon Manufacturer, 104 Thomas
JAMES W. GRADY, President, J. W. Grady & Co., 16 Austin
JOHN GUSTAFSON, Plumber, 71 Thomas
FRANK C. HARRINGTON, Insurance, 518 Main
JOHN P. JOHNSON, Jewelry and Stationery, 315 Main
GEORGE A. KEELER, Manager, Bay State House
FREDERICK H. KENDALL, Warren Leather Goods Co., 80 Austin
REV. SHEPHERD KNAPP, Pastor Central Cong. Church, 8 Institute Rd.
EDWIN B. LITTLE, Restaurant, 410 Main
ALBERT C. LORION, Purchasing Agent, Wright Wire Co., 69 Hammond
SIDNEY R. MASON, Brush Manufacturer, 553 Main
JAMES A. MCDERMOTT, Builder and Contractor, Rear 162 Washington
WILLIAM S. METCALFE, Draughtsman, 35 Water
RICHARD D. MURPHY, Secretary, No-license League, 340 Main
W. L. PURINGTON, Libby, McNeill & Libby, 49 Austin
FRANCIS REED, Francis Reed Co., 43 Hammond
SANSOM M. RODGERS, Superintendent North Works, American Steel & Wire Co., 94 Grove
GEORGE A. SARGENT, Hill Dryer Co., 340 Park Ave.
WEBSTER THAYER, Lawyer, 340 Main
THEODORE C. WOHLBRUCK, Photographer, 311 Main
HERBERT N. WRIGHT, Wright Wire Co., 69 Hammond

SPLINTERS

Our columns for the last two months have been so filled to overflowing that no room could be found even for "splinters."

The directors of the Boston Merchants' Association have unanimously voted in favor of a downward revision of the tariff. Where are Colonel Clarke and his Home Market Club?

The Springfield Republican is not generally rated as a special authority on technical metal trade manufactures, but it has boldly staked its reputation on the assertion that "at least one thing is better made in Germany—muzzles for overlords." Is this an "infant industry," which should be cherished in our midst by a high protective tariff?

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We are glad to see signs of new life in the Providence Board of Trade, which seem to imply that in addition to the devout motto, "Providence provides," they have added another to the effect that "Providence helps those who help themselves," or as they put it out West, "All things come to those who wait—and hustle while they wait." We would remind our esteemed contemporary that the Worcester Board of Trade has one or two other mottoes besides "Become a booster and boom Worcester." What do you say, Brother Webb, to "Worcester-Made Invites Trade"? or to this as embodying the true spirit of a commercial organization, "Each for all, and all for each"?

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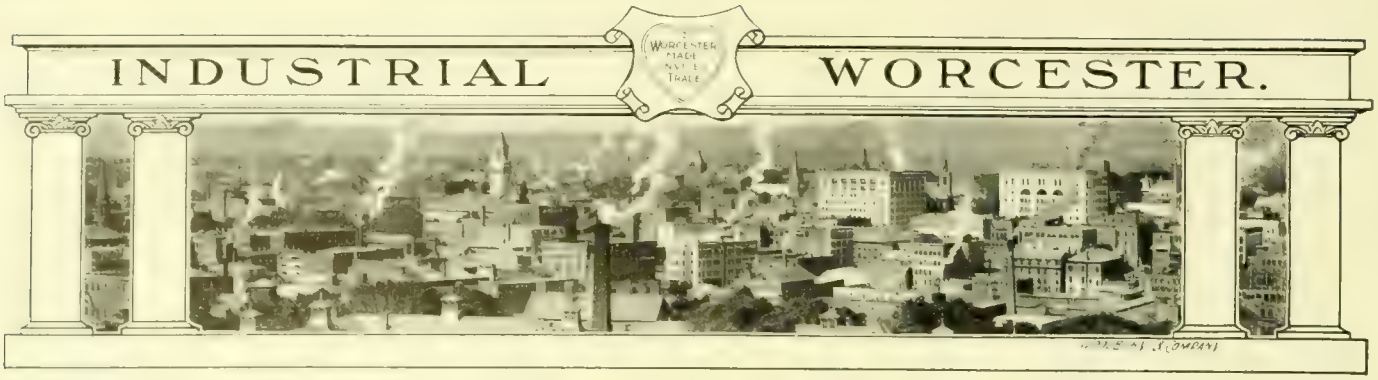
We observe that room for E. H. Harriman has been made upon the directorate of the N. Y. C. & H. R. R. The practical question at once arises in the minds of all patrons of the Boston & Albany, does Mr. Harriman intend to deal with this New England line as he did with the Union Pacific, or treat it as he did the Chicago & Alton?



WORCESTER AS THE IRON AGE SEES US

The Iron Age, speaking of the industrial situation in New England, says, "The great Worcester works of the American Steel & Wire Company are now running at about 70 per cent. capacity, manufacturing specialties almost exclusively, and the other works of Worcester, which is the centre of this line of manufacturing in New England, are correspondingly busy, and some cases are running at much nearer full production. In the wire trade, manufacturers believe that the pending tariff legislation is having an important influence.

"The year has been a dull one," the Iron Age remarks, "with the builders of power equipment, excepting certain of the manufacturers of gasoline engines of small capacity, who have prospered surprisingly, as compared to most industrial lines, though not doing a full business. The early part of the year saw the boiler makers fairly busy, but the business has not revived much up to the present time. The engine-builders have some work in their shops, but are running fewer hours and with reduced forces. The foundries have had a very poor year indeed, but there has been some improvement in the last quarter.

"Dealers report that December's business was only slightly less than that of November, which was the best month of 1908. The totals of the holiday month were rather a surprise, for a sharp falling off had been expected. The first few days of the new year have shown a healthy condition of the market, though no great accession of orders has been noted, and inquiries for small lots have been unusually numerous, and from now on the larger buyers are expected to become more active in replenishing and increasing their equipment.

"Among the machine tool manufacturers no radical change has been experienced, nor is it expected immediately. But taken as a whole, the business is better, and markedly so with machinery of more or less special character. Grinding machines, for example, are in much better demand, particularly those machines which are somewhat special. An excellent illustration of this is the Heald Machine Company, which is running full time in an increased equipment, with full force working on orders. Shipments for the last five months of the year amounted to three-quarters of total shipments for the full year from September, 1907, to September, 1908. A better illustration still is that during these five months, as compared with those of the boom year, constitute the basis of a year's gain of close to 50 per cent. The company is finding a large field for its new cylinder grinder among the automobile manufacturers.

"The Norton Grinding Company reports a marked increase in orders for its heavy cylindrical grinders. Manufacturers of plain and universal grinders of the ordinary type are noting some improvement, though not as yet radical in character.

"The Parker Wire Goods Company has again extended its plant by taking more space in the building, the larger part of which it now occupies. The business of the company has grown steadily since it was established more than six years ago, and the additional increase has become necessary for a general extension of manufacturing facilities.

"The Whitin Machine Works, Whitinsville, Mass., manufacturers of textile machinery, are planning the erection of a new forge shop, which will probably be completed this season. No decision has been reached as to details, but it will be modern in every respect, and will require some new equipment, though it is too early to tell just what will be needed."

THE BUILDERS' EXCHANGE

Edward D. Ward has been elected President of the Builders' Exchange, Alanson P. Robbins vice-president, H. W. Sweetser secretary, and George W. Carr treasurer. Elwood Adams, O. S. Kendall, E. F. Marsh, J. J. Higgins, Edward J. Cross and Geo. E. Brigham were elected trustees for the ensuing year. The organization is considering the subject of increasing the number of trustees to nine, and this matter will be acted on at the April meeting.

The organization is in excellent condition, the best, in fact, it has been for years, and there is much interest being taken in its operations. There has been more or less agitation for some time for a "'Change hour," during which the builders might meet the material men at the Exchange and exchange information and obtain necessary instructions and advice. This plan has been worked out very satisfactorily in other cities, and has proved an immense convenience not only to the builders themselves, but to all the industries allied with and dependent on that trade. This matter will also be acted on at the April meeting.

The annual banquet of the organization, always an important event in Worcester, will be held this month, and the arrangements for the same have been placed in the hands of a committee consisting of the officers and trustees and R. C. Cleveland and H. C. Wilson.

THE MECHANICS FAIR

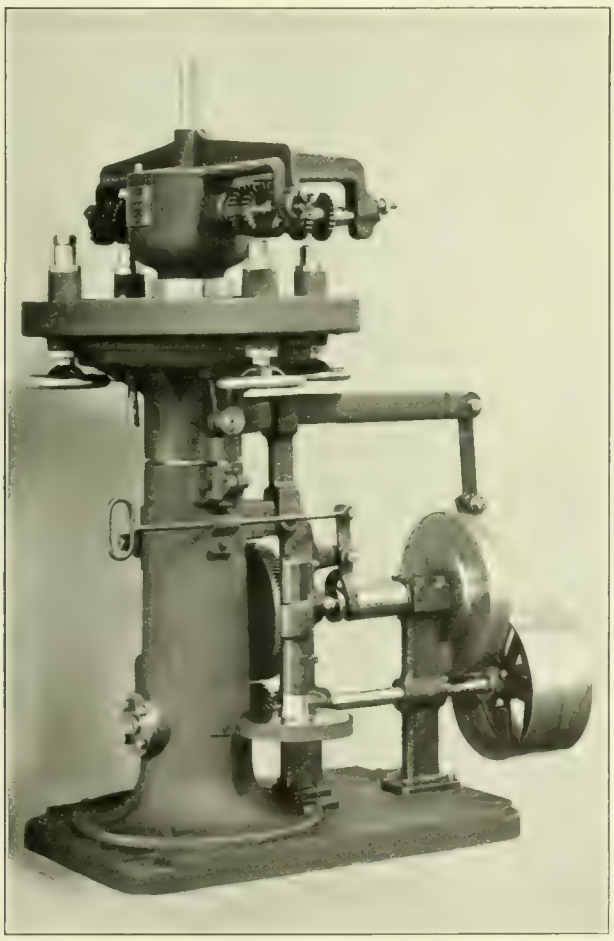
Excellent progress has been made by the Worcester County Mechanics Association in making arrangements for their Mechanical and Electrical Exposition at Mechanics Hall next month. A large number of exhibitors are already assured, and many of them have taken space and concluded all the details for their display. The exposition will be notable for the large amount of moving machinery that it will contain, much of it of large size, weighing a ton or more, and it will also be unique in the diversity of the interests and industries represented. The exhibition promises to attract to Worcester a large number of persons from all over the country who have heard of what is being undertaken here, and the exhibitors, however numerous they may be, will find that their markets have been widely extended as a result of the display that they have made. Judging by the interest already aroused, no fair ever held in Worcester will attract more general interest, be of greater educational value to its patrons, and more pronounced economic value to its exhibitors than this.

Among those who have already signified an intention of

being represented are: U. S. Envelope Co., Sherman Envelope Co., Norton Co., Norton Grinding Co., the White & Bagley Co., R. E. Kidder, Prentice Bros., Washburn Shops, W. H. DeLong, Globe Dental Co., Wm. H. Brown & Co., J. E. Snyder & Son, Young Machine Tool Co., E. B. Luce, J. J. Adams, Francis Reed & Co., Walden Mfg. Co., Coates Clipper Mfg. Co., O. S. Walker & Co., Walker Grinding Co., L. R. Paige, Allen Higgins Wall Paper Co., W. D. Kendall Co., Wells Chemical Bronze Works, Worcester Electric Light Co., Duncan & Goodell Co., Multiple Woven Hose Co., W. H. Leland & Co., Stockbridge Machine Co., Hill Dryer Co., L. Hardy Co.

THE BEMIS HEXAGONAL MILLING MACHINE

Edgar W. Bemis, who has invented several machines in the past, has just completed his Bemis hexagonal milling machine, which he claims has many points of superiority over any other milling machine now on the market. There is a demand now for a milling machine to do just the work that this machine does, and Mr. Bemis feels confident that his invention will



THE BEMIS HEXAGONAL MILLING MACHINE

meet the requirements for a machine to mill the hexagonal ends of valves, stuffing-box nuts and finished nuts of all descriptions up to three-inch mill. The machine has a capacity of 240 three-fourths-inch nuts per hour, or the equivalent in other sizes.

The spindles are of crucible steel, carefully ground and run in bronze bearings. Planed steel driving gears are employed in the head.

The adjustment of the head is such that it can be raised or lowered a distance of eight inches to take in different lengths of valve bodies. The work table rests on ball bearings running in the lower table, and is easily movable to any desired position, where it is locked in place by a spring pin.

On each of the four work-holding sliding spindles is a gear meshing with a gear fast on the live table, which indexes the work as it is moved from one cutter to another. Each of these spindles has a handwheel, which is used to draw the work down and hold it in position while it is being milled.

The tables are raised and lowered to and from the work by a cam, operated by spiral and worm-gear driven by the bottom shaft. The weight of the machine is 1500 pounds. It has excited the attention and interest of all machinists who have seen it, and it seems to do admirably the work for which it was designed.

The machine was made at the factory of J. E. Snyder & Son, and Mr. Bemis can be communicated with there by those interested in or in want of a milling machine of this type.

GIGANTIC GRANITE PILLARS

The Webb Construction Company is engaged on a contract of unusual magnitude for the government in the shape of thirty granite monoliths that it is getting out for the U. S. Treasury Building at Washington. They are to replace sandstone pillars in the Fifteenth Street front of the building, and when the 350 feet colonnade, of which they form the distinguishing feature, is completed, the entire Treasury Building will be of granite, the sandstone being completely eliminated.

The government experienced a good deal of difficulty with the sandstone, atmospheric changes affecting it materially, and it was felt that granite would be much less susceptible to the elements. The old sandstone pillars are accordingly being replaced by granite.

The pillars gotten out by the Webb Company are of Milford, N. H., granite, and are 31 feet and 7 inches long by 4 feet and 6 inches in diameter when they are quarried and shipped here in the rough.

The columns are fluted by the Webb Company by the use of air-compressor tools, and are reduced in weight from the 46 or 48 tons that they weigh when they come from the quarries to about 30 tons when they are shipped. In the process of removing this eighteen tons, the great oblong block loses none of its massiveness, but gains an artistic finish and attractiveness that causes the completed pillar to represent both strength and beauty. The monoliths, as they leave the shops of the company, comprise, it is said, the largest pillars ever gotten out in this country in one piece, and they have excited the interest and admiration of every builder and architect who has seen them.

Work upon this order was begun in the quarries at Milford last April, and shipments have gone forward steadily since last May. The Webb Company has never had an accident since it began shipping the pillars, and it has now practically completed the contract.

WORCESTER-MADE PLOWS IN SOUTH AFRICA

The Ames Plow Company has just shipped to Natal, South Africa, five carloads of plows. The consignment comprises 850 plows, and they will be forwarded to South Africa from St. John, N. B. The Ames Plow Company has a very large South African trade, not only with Natal, but with Johannesburg and other points. A very fine grade of goods is demanded by their African trade, and they hold it through the confessed superiority of their Worcester-made product. They regard their African trade as of marked value, and every effort is put forth to meet the demands of their customers there.

The reason for shipping their plows via St. John instead of New York is the fact that they get a better freight rate of $1 a ton. In the summer their shipments to Africa are usually via Montreal.

BOYS' CLUB PRINT THEIR OWN REPORT

The Worcester Boys' Club, organized in 1889 and incorporated in 1893, has issued an attractive printed report for the year ending June 13, 1908, all the work upon which was done by the printing plant maintained by the club. The report is gotten out in creditable shape, the half-tone illustrations being excellently produced. The club is entitled to much credit for such typographical achievement. An interesting feature of the report is a recommendation by Supt. David W. Armstrong that a senior department be organized of boys in the club who have reached the age of fifteen, and that two large rooms on the top floor be given up to them, and they be allowed to use these apartments until ten o'clock at night.

A NEW PRIVATE AMBULANCE

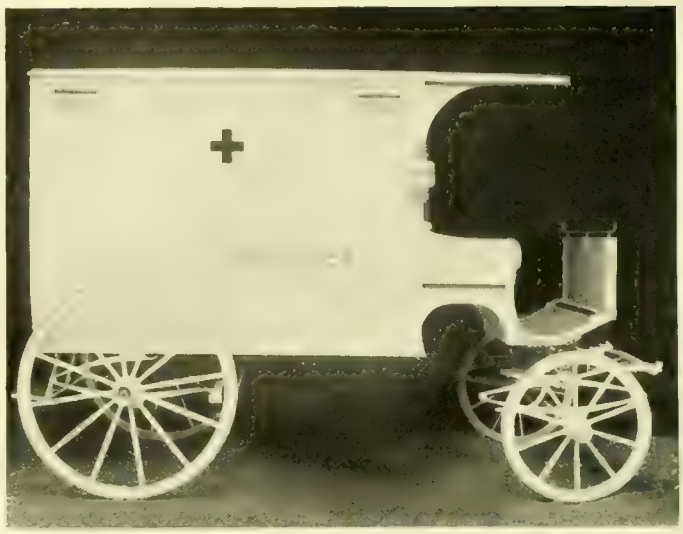
Beginning with the new year Hanson's private ambulance service was inaugurated in Worcester, with an office at 125 Eastern Avenue. The ambulance is a handsome pearl grey vehicle, and is fitted up with every possible convenience for the care of the sick. It will be greatly appreciated by the large number of people in Worcester who do not care to use an institutional ambulance themselves, or have their friends conveyed in one to a hospital.

THE MORGAN MOTOR TRUCK

Speaking of the evidences of the economy of the Morgan truck invented by Ralph L. Morgan of this city, which has created such a sensation in the industrial world, the Power Wagon says:

"Evidences of the economy of the Morgan truck are not lacking. In five days of the month of November, it hauled 333,226 pounds of steel and wire. Combining the retail cost of the oil with that of the gasoline consumed in doing this work, the fuel expense totaled $3.47. This figures out at 2 cents per ton for load carried, or 5 mills per ton mile. This is, of course, exclusive of driver's wages, etc. The distance traveled was 125 miles, or an average of 25 miles per day. It is quite evident that a larger tonnage and greater mileage could have been recorded if the machine had been more actively worked. Under normal operating conditions, running 40 miles a day, the daily cost of maintaining this machine is about $8.36. In this sum all charges, including depreciation at 20 per cent. per annum, are included. An allowance of $2.50 per day is made for driver's wages. Other items in the cost of daily service are as follows: Tires, $1.33; gasoline, 66 cents; interest at 5 per cent., 56 cents; insurance at 2 per cent., 25 cents; repairs, $1.

"Hauling 20 tons per day, the average total cost would amount to 4.18 cents per ton mile. On long hauls, with full loads, this figure could probably be lessened. The item of one dollar for repairs is generous.



NEW HANSON AMBULANCE

"Many years ago Mr. Morgan built steam trucks. They were good enough at the time to earn a gold medal in the first industrial motor vehicle competition held in this country. Having no faith in the future of heavy steam-driven machines, however, he abandoned that branch of engineering. Soon thereafter he became famous for his ability as a gasoline engine designer. The best of his work in this field is embodied in the machine just described. Mr. Morgan also enjoys celebrity as the designer of the automobile which won the New York to Paris race, an event which excited the interest of the whole civilized world."

TO BUILD BOSTON STOREHOUSE

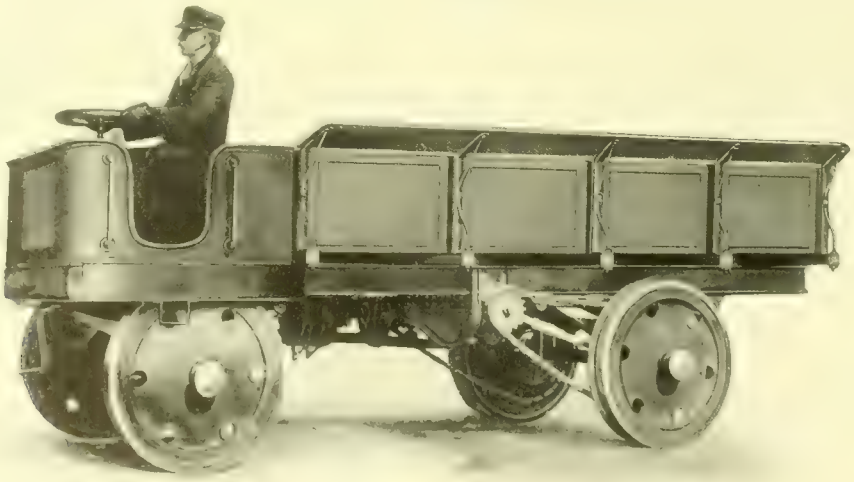
J. M. & C. J. Buckley are to build a storehouse for the Boston Wharf Company at Fiske Wharf, Boston. It will be of brick with a tar and gravel roof, five stories high, and 50 by 119 feet in size.

THE NEW UNION STATION

The new Union passenger station in Worcester will be built by Woodbury & Leighton of Boston and will cost $500,000. It is to be completed July 23, 1910.

TO FURNISH IRON AND STEEL

Richard French Iron Works, 84 Union Street, are to furnish the iron and steel for the stores in Israel Rome's building at 74-80 Water Street.



MORGAN MOTOR TRUCK

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MARCH, 1909

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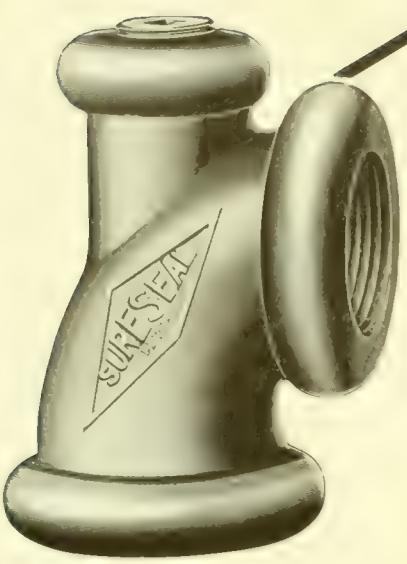

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DESCRIPTIVE CATALOG ON REQUEST

Worcester, Mass.

THE WORCESTER MAGAZINE

VOL. XII. MARCH, 1909 No. 3

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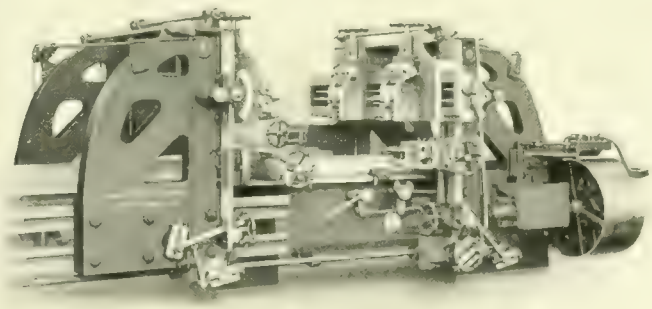
ESTABLISHED IN 1887



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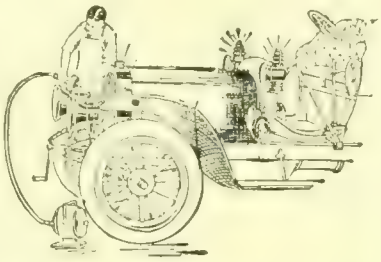

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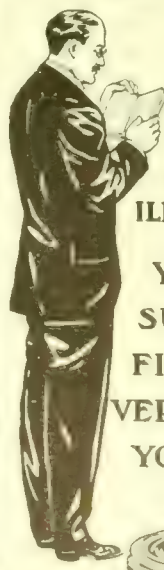

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Cyrus W. Field

The WORCESTER MAGAZINE

Editorial Comment

Our Exposition Number.

It is a pleasure to offer as the main feature of this number of the Magazine a somewhat extended notice of the Worcester County Mechanics Association, in the historical article by President Denny and in other matter. We are glad to anticipate the opening of its exposition, on the 27th of this month, by descriptions of the history and achievements of some of our most famous manufacturing establishments. The enlarged number of pages and the valuable materials which they contain seem to justify the additional cover pages with which we have sought to beautify and dignify this issue. That Worcester has fairly earned the adjective "progressive" by her achievements in the past is established beyond a doubt; we trust that her future development will enable her to retain that honorable title. We congratulate the Mechanics Association upon the efforts which have thus far been put forth in preparation for this coming exposition, even as we expect a month hence to offer our congratulations upon a completed success.

o o o

Worcester's Duty to the Exposition.

On the 27th of this month, for a space of one week, the historic halls of the Mechanics Association will open their doors to the general public of this city and county and of all New England for a display of the processes of manufacture which are at the foundation of this city's life. That it can include only a small fraction of what is daily to be seen in Worcester shops is of course apparent, owing to the exceedingly limited space at command. We believe, however, that this space will be utilized to best advantage, and that the specimens of machinery there in operation will comprehensively illustrate the great variety of industry to be found in this city and region. The manufacturers have responded generously to this opportunity. They will spend hundreds of dollars in this effort to show what is daily going on in their establishments, with no expectations of any immediate financial returns for their outlay. The Mechanics Association will return in dividends to the exhibitors any surplus that may exist after the large expenses have been met. It now remains for the general public to support this exposition generously by their patronage. The children and youth of Worcester especially should enjoy this rare educational opportunity of learning what is going on in the buildings where their fathers work day by day. We confidently hope that a great stimulus may be given to the movement for future larger displays, in more adequate space, of Worcester's industrial wealth.

The Outgoing Congress.

The most universally acceptable act of the Congress which has just expired was its vote for final adjournment. Its closing session has been peculiarly disappointing in neglect of measures imperatively needed for the interests of the nation, and in childish displays of temper against the President. It is fair to lay some of the blame for this inefficiency upon an absurd arrangement of the calendar, whereby its closing session is crowded into a few weeks, and even these interrupted by a holiday recess. A more serious difficulty is found in the fact that the election of last November retired a considerable proportion of its members from public life, leaving them released from that sense of responsibility to their constituents which is needful for good work. If President Taft could have been inaugurated on the first of last December and the new Congress begun its work at once, we should have been spared some disgraceful occurrences in the national Capitol; and we should be much further along toward that return of business prosperity which multitudes are still awaiting, though with a patience that is being sorely tried.

The Outgoing Administration—its Gains for Public Morals.

It is not within the scope of this Magazine to pass in review the seven years of the Roosevelt régime, save in its plain relations to the business welfare of this and similar cities. Whatever views our individual readers may hold upon the personality of the retiring chief magistrate, all will probably assent to Mr. Dooley's verdict that "there hasn't been a dull minnit in anny part of it." In two particulars the business men of this nation should recognize distinct gains for their interests from the work of Theodore Roosevelt. In a recent number of the Congregationalist, President Faunce of Brown University has said:

> No one who has at the same time the historical sense and a candid mind can fail to recognize that Mr. Roosevelt has been an efficient cause of a change in the moral climate of America. Abuses long current have been abolished, laxity in commerce and finance long tolerated has been exposed and repudiated, and an aspiration toward a finer and higher type of public service has permeated the whole country. It is not necessary to claim that the entire change is due to Mr. Roosevelt. No moral renovation is ever due to one man alone. But without him the change would have been long delayed. The country was weary of the old standards and ready for the new ones. But the reform needed to become incarnate in a personality. The general movement needed a cutting edge in some single individual, not too careful of his words, not so judicial in temper as to see all sides of a question at once, not so fond of etiquette as to fail in striking hard.

helm. But we have needed the strong hand, the breezy personality, the ruthless onset against evil; and goodness is easier for us all because he has lived and led.

The incidental disturbances which have come to men and corporations who needed no correction will pass away; the irritation caused by the manner in which some needed reforms have been brought about will disappear; but every business man in the country will be the permanent gainer from the uplift in moral standards which the last seven years have seen.

The Department of Commerce and Labor.

The second contribution of the Roosevelt administration to the welfare of the business world has been the establishment and successful development of this new department of the national government. While it is too early to determine fully the value of its work, it has done much and prepared the way for doing more to help the manufacturers and merchants of the United States. In a recent résumé of the work of this body, found in the columns of the Boston Transcript, Secretary Strauss has said:

> The Department of Commerce and Labor owes its origin to the initiative of President Roosevelt; his message to Congress, his public speeches, and his advocacy for the passage of laws, all evidence a wise, consistent and determined plan to safeguard the rights of capital on the one side and to redress the justified grievances of the masses on the other, and to use the full power of the Government, without fear and without favor, to prevent injustice on the one side as well as on the other. The work of the Department of Commerce and Labor has been conditioned upon this theory—a fair treatment alike for labor and for capital.

After dwelling with some detail upon the variety of activities assigned to this department, covering all the commercial interests of the country, Mr. Strauss adds the following facts, which are worthy of record in this connection:

> During my administration I have brought about the organization of the National Council of Commerce, which at present consists of more than fifty of the leading commercial organizations of the country, with a bureau in Washington, whereby the commercial interests can be in daily touch with the various departments of the Government having to do with commerce, and also with our legislators.
>
> Conflicts between the two great industrial forces, capital and labor, are more largely due to their separate distinct and narrow points of view, and to the misunderstandings that arise therefrom, than to any, and perhaps all, other causes. Until recently there seemed to be prevalent a spirit of distrust that a department charged with the administration of commercial interests could not at the same time view sympathetically the interests of labor. In my last annual report there were five separate recommendations specifically affecting the interests of labor, so I invited some thirty or more of the leading representatives of the wage earners of the country, including the American Federation of Labor, to confer with me upon the various subjects referred to. This invitation met with a hearty and appreciative response, and for two days a very satisfactory conference was held, which was and will be of great value to the department, and enabled it to dispel many misconceptions which the representatives of labor had formed in regard to the purposes and activities of the department.

We may grant that his great task is now done; we may feel henceforth safer and calmer with another temperament at the

The New Administration—an Era of Peace and Prosperity.

As this nation welcomes to the White House its new President, William H. Taft, it is with the confident and earnest hope that his administration is to be characterized in marked degree by tranquillity and a steady, healthy business prosperity. At one period in our nation's history a great man made an utterance which stirred all loyal hearts: "I propose to fight it out on this line if it takes all summer"; but after he had carried out that purpose he was able to state another ruling principle of action which met equal approval: "Let us have peace!" We sincerely trust that a big smile, rather than a big stick, may be the prominent feature of the new régime. We have no doubt that President Taft will strike hard blows of battle if it be needful; but we share the universal wish that it may not be necessary, and that the feelings expressed by the poet of the Boston News Bureau may be fully realized:

> We turn in hope and welcome now
> To our new captain at the prow.
> Sturdy we know him—strong, serene,
> Tested and true in various scene,
> Proved in far climes as surely skilled
> In task we need now—to upbuild.
> Not of the spirit militant,
> But judge, lawgiver, now our want;
> Calm where was storm, and peace, not war,
> Till of old wounds scarce stays a scar.
> So let each flag and trumpet blend
> Hail and farewell, to each a friend,—
> Hailing, we hope (long-chastened we),
> Prophet of Peace, Prosperity!

The Return of the Fleet.

The wonderfully successful voyage of our fleet around the globe, ending in an unparalleled welcome at Hampton Roads on February 22 last, will be variously estimated from different points of view. Its advantageous effect upon our international relations and upon the cause of a world-wide peace will be questioned, despite the cordial welcome it received in so many quarters. The wisdom of the expenditure of so much money is criticised by some. One thing, however, stands out clearly, beyond the possibility of dispute, and that is: the severe and successful test given to the work of American machinists. As a demonstration of the ingenuity and skill possessed by the artisans of the United States, whether employed in government yards or by private corporations, this voyage has been a great world-exposition, differing from all others in that the exhibits have been carried around the globe instead of being installed where foreigners might come to us, as at Chicago and St. Louis. Of course, the most conspicuous display of personal efficiency has been made by the crews and the engineering forces on the battle-ships; but their successful handling of these huge and costly mechanisms was made possible by the reliable work of individual toilers in such great plants as the Fore River ship-yard in this Commonwealth, and others of like standing.

A Tariff Commission—Pro and Con.

The recent gathering in Indianapolis of the believers in a permanent tariff commission has awakened much interest and discussion; but whether any definite action is likely to grow from it is doubtful. The idea in the minds of the advocates of this new deparature was clearly expressed in an address by Mr. Seymour C. Loomis of New Haven, in the course of which he said:

My principal thought is to have a body which will collect the facts and present them to the Ways and Means Committee in an orderly and scientific way, having the benefit at the time of competent counsel, so that the facts may be presented by a person who is accustomed and trained in that particular line of work, to wit: the presentation of facts. The counsel representing this body shall also have the right to cross-examine other witnesses who appear. Counsel representing others before the committee shall have the right to cross-examine the witnesses presented by the board or commission of the tariff. In this way the whole people of the country will be represented and the matter will be tried before the only tribunal competent under the Constitution to try it, to wit: the committee of Congress, or Congress itself, which it represents.

But the question at once arises: Will such a commission, created and therefore practically controlled by Congress, succeed in representing the common people any more thoroughly than Congress itself? Can such a commission be kept free from partisan or selfish entanglements? We confess to a strong sympathy with the position of the Wall Street Journal upon this matter:

The vice of government by commission is that popular control cannot readily be made effective, nor is the conduct of the commissioners open to that close and constant scrutiny which tends to keep politicians honest. This is not to say that our commissioners are not all honorable men. No doubt they are, but there is a moral duty incumbent upon us not to lead our fellows into temptation.

It is the essence of free and popular government that a nation should make its own mistakes. It is better that it should make mistakes than that it should receive the most perfect government at the hands of an irresponsible autocrat.

No doubt there is a good deal to be said for a permanent commission on the tariff, but after all we might at least try what can be done by the public consideration of the question in the old-fashioned constitutional manner of our fathers.

The wisdom of adding another high-salaried commission, involving an expenditure annually of from $50,000 to $75,000, becomes still more questionable when we consider the availability of an agency all ready for this work and fully competent to do it. We refer to the Department of Commerce and Labor. We observe that such papers as the New York Journal of Commerce and Fibre and Fabric strongly advocate this disposition of the matter. No one questions the value of many of the detailed efforts which are suggested for such a commission. The establishment of the exact facts about costs of foreign and domestic production is basal to such a revision of the tariff as the Republican platform demands, and as President Taft is evidently determined to insist upon. The recent hearings before the Ways and Means Committee have raised the question of accuracy and even of veracity on the part of some interests who are opposing any reduction in rates. But what body is better fitted for getting at these facts than the Department of Commerce, that is even now engaged making such minute investigations of all conditions of manufacture in other countries? By all means let any valuable or practical suggestions of the Indianapolis convention be turned over to the new Secretary of this established department, rather than entrusted to any commission.

Conservation of Resources—a World-wide Movement.

The completion and publication of the inventory of our national resources by the National Conservation Commission has been followed by events which are broadening this undertaking from a national to a continental and even a world-wide movement. First has come the recent gathering in Washington of delegates from Canada and Mexico, in response to the invitation of President Roosevelt, to consider how plans already approved for the United States may be extended in their operation across our northern and southern borders. As the necessity for inter-state action in caring for the sources and head-waters of navigable rivers has impressed itself upon all thoughtful men, irrespective of party politics, so the international aspects of the matter are now becoming manifest. The following utterance of the President at the opening reception in the East Room of the White House must approve itself to all citizens of the United States, even as it did to the Mexican and Canadian delegations:

With nations whose boundaries march along a great extent of land frontier, as with Canada, the United States and Mexico, there are necessarily large tracts of land in which the welfare of the people depends upon the action not only of one country, but of the neighboring country. This, of course, is especially true where our streams are concerned. You cannot cut down the forests on the headwaters of an international stream without hurting both nations. I am anxious to do all that in me lies to help you gentlemen in getting our several peoples to come together with the idea of working in harmony for the common good instead of working each to get something at the expense of the other. Ultimately each of us will profit immeasurably if, instead of striving to advance by trampling down the other, each strives to advance by joining with the other for the common advancement.

The later sessions of these delegates in conference with our National Commission, held in the Diplomatic Room of the State Department, were harmonious and encouraging. A conception of continental unity was in all minds,—a unity constituted by the Creator when this portion of the globe came into its present form, which no edicts of human government can destroy, and which no men can afford to forget. Both our northern and our southern neighbors were able to report complete unanimity in their respective countries for procedure along the lines suggested. The outlook for wise action in behalf of the entire North American continent is distinctly cheering.

This advance step is being swiftly followed by another, which looks to a gathering of delegates from all nations in every continent, in connection with the sessions of the Peace Conference at The Hague next September. The general scope of such a conference has been outlined at the office of the Secretary of State as follows: "Such a conference might well consider a general plan for an inventory of the natural resources of the world and of devising a uniform scheme for the expression of the world results of such inventory, to the end that there may be a general understanding and appreciation of the world's supply of the material elements which underlie the development of civilization and the welfare of the people of the earth."

The appropriateness of The Hague for such a meeting, especially in connection with a peace conference, is apparent. The surest way to secure an end of war among the nations is to enlist them in some positive programme of this kind, whose progress will draw them together in ties of self-interest. Such a prospect should appeal strongly to all business men of every nation; its beneficial possibilities for international commerce are well-nigh boundless.

Carroll Davidson Wright

Social Pacificator, Harmonizer of Religion and Education

IN the days which have passed since the death of this honored and useful citizen of Worcester, on February 20 last, many voices have uttered appreciations of his worth and work; and periodicals in all parts of our land have touched upon his many-sided achievements as soldier, lawyer, investigator, statistician, sociologist and educator. It is our privilege to present as the frontispiece of this number of the Worcester Magazine a reproduction of one of the latest and best photographs of his strong and kindly face, and to allude briefly to two aspects of his service to humanity—his work as a social pacificator, and his power for good over young men in the closing years of his career, in showing them both by precept and example the true relation between education and religion.

A most fortunate adaptation of task to toiler led this Commonwealth, in advance of any similar action elsewhere, to make a new department in its conduct of public affairs and to set over it Dr. Wright. Statistics are sometimes considered dull and juiceless, and of doubtful worth to any but the man who laboriously compiles them. The task of maintaining a bureau of information does not appeal to the selfish seeker for a livelihood at the public crib. It was a manifestation of great political foresight which anticipated troublous days in the strife which has since arisen between organized labor and organized capital. A sound judgment sought for relief which should be basal and broadly fundamental, because constituted of carefully ascertained facts. A mediator, of course, gets no thanks from either of the two antagonists whose controversy calls for his activity. When the passion for battle intoxicates men, they can more readily become reconciled to either a victorious or a defeated foe than to the third party who constrains each fighter to stop before he is ready and to go without some spoils of war which he was bent upon winning. In so far as Dr. Wright ventured upon such service, he exposed himself to such failure of appreciation; but when it came to the investigation of the exact facts connected with our modern industrialism in behalf of unprejudiced parties, and to constructive service in accordance with logical deductions from those facts, he stood forth as an unchallenged master of the situation. It was a notable testimony to his fitness for such work that a chief executive of an opposite political faith should indicate him as the one man whom he would desire to appoint to a national office of this kind. In this position of National Commissioner of Labor its first incumbent showed that rare power of marshaling and interpreting facts which is the greatest lack of the present hour. In the intensity of the present feeling between labor and capital, it is almost impossible for any man to see and admit any but damaging facts concerning his opponent. The labor union leader sees clearly the needs and wrongs of his followers, but his knowledge of his opponents is gained chiefly from meeting their attacks upon his position; he is familiar with their blows, but blind to the interests they are defending—interests which if his own he would maintain with quite as much vigor and range of weapons and attack. The agent of organized capital is generally in the same situation. Possibly for a much larger salary than that of the labor leader he defends the proper interests of capital and devotes all his attention to the obnoxious methods of his foes. Neither man is making any lasting contribution to the solution of the labor problem because he temporarily accomplishes some coercive measure through his superior power, regardless of its justice. This is not the fault of either the capitalist or the labor man; it is a part of a deplorable situation. The capitalist sees the essential wrongs in boycotts and the physical violence of irresponsible groups of men, while it requires the viewpoint of a union man to discover the inhumanities of lockouts, blacklists and the use of spies among the unions.

In this midst of this condition of open warfare Dr. Wright was able to stand forth as a pacificator because of his grasp upon all kinds of facts, and because of a fair-mindedness which it was his noble distinction to maintain. Perhaps no one act in his life was more conspicuously and immediately useful than his work on the commission that settled the anthracite coal strike, in that hour when the conduct of both antagonists had become so heartlessly hostile to the interests of the general public. That night which he spent driving about the streets of New York city in a cab with Mr. Mitchell, partly to escape the pertinacity of reporters, was one of the most fruitful opportunities of his life in its chance to get fully acquainted with the positions and personality of one of our greatest labor leaders. The deep humanity and broad culture of the one peculiarly fitted him to enter into the experiences and burdens of the other, and to give due weight to them in the preparation of the final report which brought peace with honor to both contestants, and gave relief to the nation from an intolerable situation.

For one such act of service to humanity a man deserves lasting remembrance; but Dr. Wright's best work was less spectacular. The reports and monographs which came from his pen are to abide with power as a part of the standard literature upon the subjects treated; and the exhibition of his spirit of fairness and impartiality, combined with deep grasp of all facts, has had an influence upon others which is greatly needed, never more than at the present hour. We are not likely to overestimate this service; we are even in danger of forgetting it. The voyager off the coast of Massachusetts lifts a grateful eye to the beacon light on Minot's Ledge, and readily thinks of the men who are confined in its narrow quarters, guarding the flashing gleams which sweep a storm-swept horizon; but the sailor may never once remember the men who heroically battled with the waves during dreary and perilous months in laying the first courses of the masonry which support that light. When the end comes to the present bitter warfare which divides class from class and sets at enmity men whose success depends upon coöperation, the name of Carroll D. Wright will stand out in honorable conspicuousness as one who laid deep and broad foundations on which later generations may safely build in the interests of righteousness and lasting social contentment and tranquillity.

The citizens of Worcester, however, have another cause for gratefully recalling and honoring this man. In this they are at one with a much wider circle in the educational world. The years since Mr. Wright was inaugurated President of Clark College have been all too few to enable him to reveal all the power that was in him to take his place among the foremost educators of the land; but they have been ample to endear him personally to both the faculty and the students with whom he was associated, and to illustrate his grasp upon the principles

underlying the two realms of education and religion. One of the chief tasks of the opening years of the twentieth century is to relate these two realms to each other in such a way as to deliver education from the benumbing influence of antagonism or indifference to religion, and to give to the progress and expression of a religious life the breadth and depth of the soundest learning. In this task the new leader found great joy. He brought to it the fullness of his manhood, the matured capacities of a long experience, and above all the sincere, open-hearted manifestation of a great and generous soul. The young men who gathered around him in the opening days of the new institution knew before they arrived something of what their President had done; they soon came to discover what he was.

In the first baccalaureate address, which its author with too great modesty refused to term a sermon, a line of thought was developed which seems to us worthy of some extended reproduction here and now, in an endeavor to leave with our readers a reminder of one of the hidden sources of the power of this life. "Education and Religion," the earliest theme which he chose for such an address, must be reckoned as primary in his conception of the work which he came to this city to accomplish. The opening words strike a lofty keynote:

It is impossible in the light of modern intelligence to separate the growth of true religion from the power of true education. The wise man, Solomon, who wrote or collected that great body of precepts known as Proverbs, explains in the opening phrases that the Proverbs were put together to instruct the young and inexperienced in wisdom, to sharpen the intelligence, to widen the sympathies and fortify the character of such as love wisdom.

We here find the fundamental basis of all education and of religion, for without a love of wisdom and a sharpened intellect and widened sympathies our religion falls short of that power of righteousness which we have given it, and our education becomes merely erudition."

After discussing at some length the universal wish to use knowledge as an instrument of power for attaining one's ambition, the speaker clearly presents the necessity for self-knowledge as the foundation for any satisfactory scheme of education:

If our knowledge or our education does not lead us to know ourselves, it cannot help us to power, which can be secured only by the knowledge of ourselves and of the methods by which that knowledge can be exercised for the highest good, not of ourselves alone, but of all with whom we come in contact, with the community, in fact.

If we do not know ourselves, we are not educated in the highest sense, however erudite we may be. Knowledge of science, of all that is acquired by study, cannot make a man,—cannot alone make his life successful, or alone help him to realize his highest and dearest ambitions. Nor is there any sadder sight than that of a man who has ambition, lofty conception even of what life is or should be, and a desire to succeed, yet lacks the training to enable him to shape his purposes to some good end.

In developing his full concept of what education is and should do for one, Mr. Wright makes a fourfold analysis of the ends sought, and in a practical manner illustrates the first of the four:

Education is the great ally of religion, and, therefore, should be directed to four grand purposes, the training of the body, the mind, the heart, the soul. It is only in this broadest way that the truest value of education can be acquired.

To the body it means temperance, or, as a very old teacher—Socrates—announced it: "There is no difference between knowledge and temperance, for he who knows what is good and embraces it, who knows what is bad and avoids it, is learned and temperate." Could this short and wise sermon sink into the minds of all men, how pure would be the body, how temperate the lives, how satisfactory the service which the body would render. It is intemperance not in one thing only, but in all things that knowledge condemns; it is temperance not in one thing, but in all things that leads to healthy physical existence and consequent human happiness.

In discussing the second division of his discourse, the speaker touches with illumination the safeguarding of the specialist from narrowness, and commends the breadth of which he himself was a true impersonation:

By the training of the mind we learn to know ourselves and what we owe to mankind, to ourselves and to our Maker. Knowledge is not culture, but it is essential to perfect culture. It is especially essential in these days of specialization to avoid narrowness. It is to the specialist, to the man engaged in some distinct research wherein he is using all the powers of his mind, that we owe our greatest discoveries. It is he who allies himself most closely to the Creator; but if he has not that broad culture which comes from educational work—from the training of the school, of the college and of the university—he becomes narrow, cannot appreciate the other things in life outside his own work, and thus loses not only the happiness and joy which come from breadth of mental grasp, but in a large sense the power to become useful to his community.

In the following passage Dr. Wright reaches the climax of his thought:

"Religion is education. We cannot separate them. It is some kind of knowledge, crude or perfect, which gives man his religious nature. I do not mean knowledge acquired, but the knowledge intuitive, if you will, which convinces a man that he has a relationship with the Unknown. It is this knowledge which constitutes the very fountain of love and of purpose and of patriotism. It is the knowledge which quickens our consciences and leads us to right actions.

After finely discriminating between religion and theology—theologies which are many, while religion is but one—he rises to this striking characterization of a life where religion and education come to their complete and harmonious blending; and in presenting in words this ideal, the speaker was but phrasing the utterance of his living personality as men met him daily:

The educated, religious soul means social efficiency; it means that attitude toward the affairs of the community which makes a man's power felt in every direction. The man who understands himself, whose education helps his conscience and his soul, whose mind and body are pure, has the greatest power in any community. He is the man loved and respected. He is the man whose influence means always the best for his neighbors. He reaches out from his home and makes the world his family. He understands the guiding influence of the knowledge he has gained through his education and the power which comes of intelligent action.

We find a fitting close to this tribute, offered in full accord, we believe, with the feelings and judgment of all classes of citizens in the community which was his last earthly home, in the last words of this baccalaureate discourse, another utterance of which he was, all unconsciously to himself, a worthy illustration:

> So the message I would leave with you, young gentlemen, is the injunction to know yourselves, to train your abilities and sweeten your hearts and souls, to love law, to acquire the habit of reverence, and thus become, as one result of the training which you have been enabled to receive, true citizens and true friends, whether in family or in community.

The Worcester County Mechanics Association

The Early Builders of a City's Industrial Greatness

By Daniel E. Denny

IN reviewing the history of this organization and the part it has played in the making of our city, one naturally seeks to recall what Worcester was in the early decades of the last century. In 1838 there was published by the State government a small volume of two hundred pages containing a complete summary of all the industries of Massachusetts, including domestic sheep raising. These facts were gathered in each town by careful personal inspection. The entire showing for Worcester, then numbering but a few more than seven thousand inhabitants, occupies but one page in that book, and is hereby reproduced entire:

Worcester

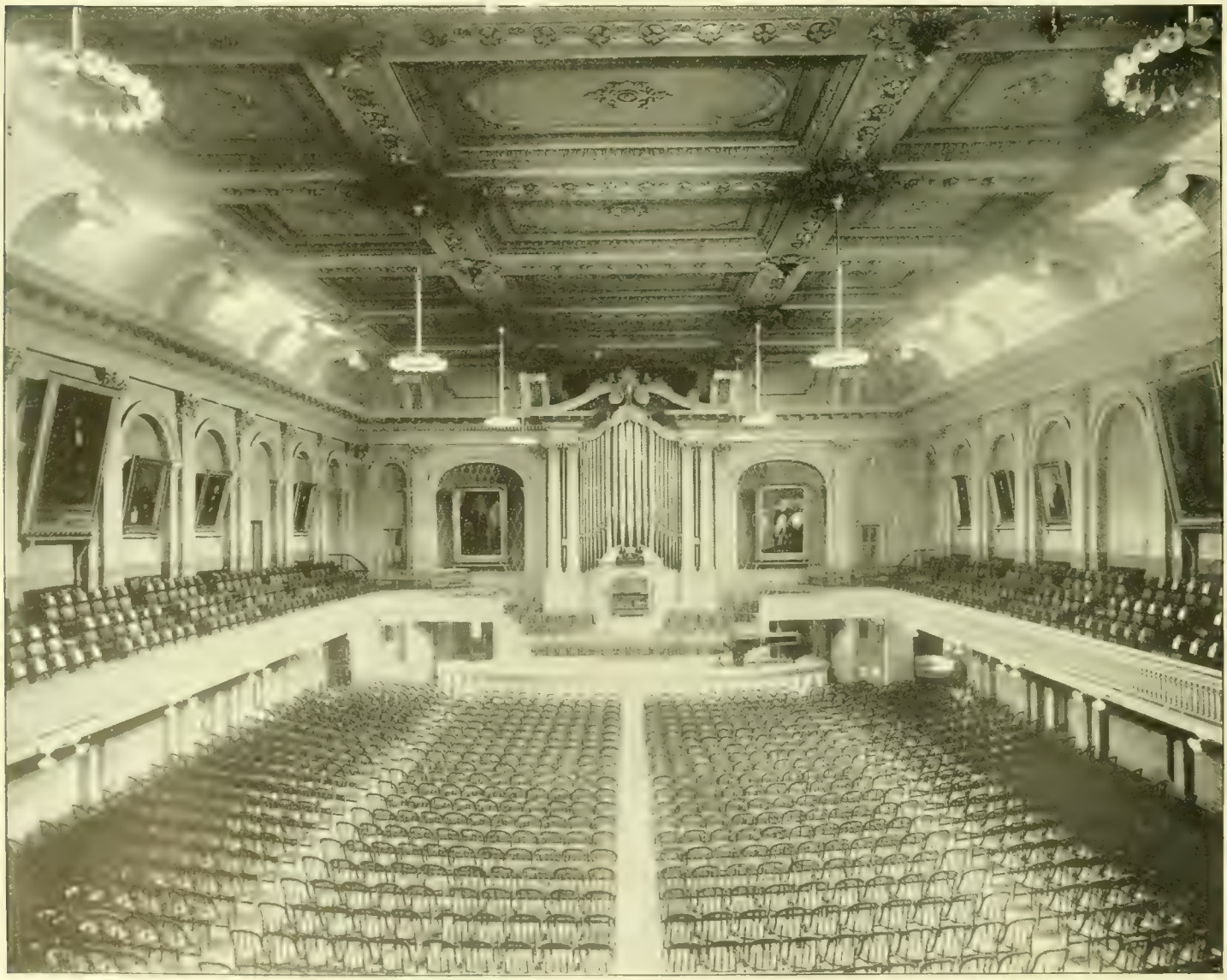
Cotton Mills, 3; cotton spindles, 3424; cotton consumed, 162,194 lbs.; cotton goods manufactured, 546,521 yards; value of same, $62,182; males employed, 34; females, 47; capital invested, $45,500.

Woolen Mills, 8; woolen machinery, 16 sets; wool consumed, 369,812 lbs.; cloth manufactured, 326,790 yards; value of same, $360,352; males employed, 112; females, 113; capital invested, $99,500; sperm oil used by manufacturers, 7800 gallons.

Saxony Sheep, 510; other kinds of sheep, 815; Saxony wool produced, 1275 lbs.; other kinds of wool, 2037 lbs.; average weight of fleece, 2½ lbs.; value of wool, $1337.50; capital invested, $2292.50.

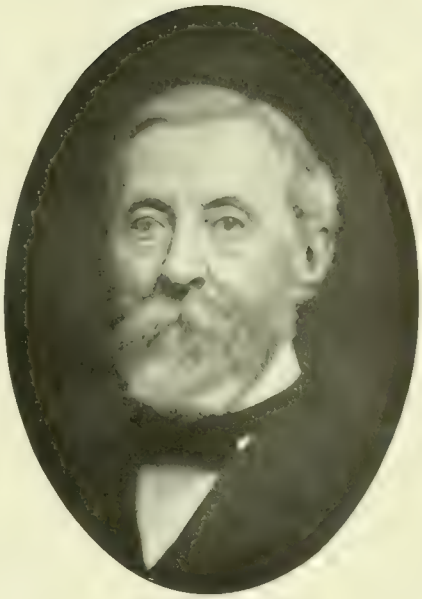
Boots manufactured, 18,697 pairs; shoes, 27,075 pairs; value of boots and shoes, $59,020.34; males employed, 89; females, 33.

Hat Manufactories, 4; hats manufactured,



MECHANICS HALL

DANIEL E. DENNY
President
1908-09.



WILLIAM A. SMITH.
Secretary and Treasurer
1871-1909.

OSGOOD PLUMMER
Vice President
1908-09.

8300; value of hats, $33,200; males employed, 20; females, 12.

Paper Mills, 2; stock manufactured, 287 tons; value of paper, $54,815; males employed, 11; capital invested, $23,000.

Air and Cupola Furnace, 1; iron castings made, 300 tons; value of same, $30,000; hands employed, 20; capital invested, $12,000.

Manufactory of Cutlery, 1; value of cutlery, $3500; hands employed, 6; capital invested, $2000.

Manufactories of Chairs and Cabinet Ware, 3; value of chairs and cabinet ware, $20,000; hands employed, 21.

Plough Manufactory, 1; ploughs manufactured, 900; value of ploughs, $9000; hands employed, 7.

Tin Ware Manufactories, 3; value of tin ware, $18,300; hands employed, 14.

Straw Bonnets manufactured, 12,500; value of same, $25,000.

WILLIAM A. WHEELER
1st President,
1842-44.

ICHABOD WASHBURN
1st Vice President
2d President
1844-46.

ALBERT TOLMAN
1st Secretary,
8th President
1864-5

FREEMAN UPHAM.
President, 1846-48.

SAMUEL DAVIS.
President 1848. (Resigned.)

EDWARD LAMB.
President, 1848-49.

Palm-leaf Hats manufactured, 3000; value of same, $1000.

Manufactories of Woolen Machinery, 9; hands employed, 160; value of machinery manufactured, $240,000; capital invested, $75,000.

Wire Machinery, 1; hands employed, 35; value of wire, $45,000; capital invested, $25,000.

Lead Pipe Manufactory, 1; hands employed, 5; value of lead pipe, $11,000; capital invested, $5000.

Manufactory of Paper Machinery, 1; hands employed, 10; value of machinery, $10,000; capital invested, $3000.

Coach and Chaise Manufactories, 2; hands employed, 40; value of coaches and chaises, $60,000; capital invested, $25,000.

If we look around us to-day, what do we see? Briefly stated, over a thousand industrial establishments, many of them comparatively small in size, but some of them employing hundreds of men. Then, the reported capital invested in all the establishments of the village of Worcester was $317,292; to-day, in this the third city of New England, we find a reported total investment of thirty million dollars. Over against an annual value of output in the early days of $1,063,706, the latest Massachusetts returns place the figure of $68,623,320, with a wage-expenditure of over fifteen million dollars. The workmen reported in 1838 were 582 males, 205 females, a total of 787, not including the makers of straw hats, bonnets and palm-leaf hats. The latest enumeration of wage-earners in our city shows 22,193 males, 5,438 females, totaling 27,631.

It is our present purpose to outline the story of organized efforts of those few early toilers to better their condition, increase their efficiency and enlarge the industrial importance of their community; efforts which took form in an organization which continues in strength to the present hour, in spite of changes in some of its activities.

As early as 1819 a movement was started here to organize an association of those engaged in mechanial pur-

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WILLIAM T. MERRIFIELD
President, 1850-51

HENRY S. WASHBURN.
President, 1851-57.

GEORGE M. RICE.
President, 1857-59

TIMOTHY K. EARLE
President, 1859-60.

RICHARD BALL
President, 1860-6[illegible]

suits, but it failed in consequence of differences in opinions of and in defects in the constitution.

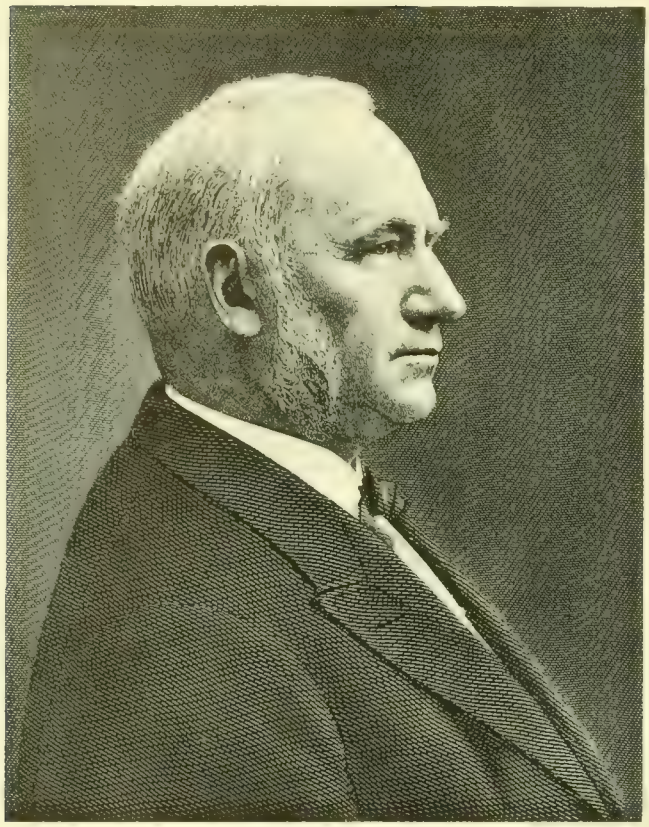
On the 27th of November, 1841, a public meeting assembled in the Town Hall for the purpose of forming a mechanics' association. The company was called to order by Anthony Chase, for many years County Treasurer, and father of Mr. Charles A. Chase, formerly President of the Worcester County Institution for Savings. Ichabod Washburn, the founder of the Washburn & Moen Wire Co., was chosen Chairman, and Albert Tolman was made Secretary. A committee was chosen to report a constitution for an association having for its objects "the moral, intellectual and social improvement of its members; the perfection of the mechanical arts, and the pecuniary assistance of the needy."

An adjourned meeting was held December 11th, 1841, and three different drafts of constitution were submitted by three members, and after a long and spirited discussion the one submitted by Anthony Chase was accepted with slight modifications. One clause read: "It shall not be binding upon the subscribers thereto until one hundred individuals have signed their names to it." On the 5th of February, 1842, the first meeting of the subscribers, 115 in number, was held. Wm. A. Wheeler was chosen President; Ichabod Washburn, Vice-President; Albert Tolman, Secretary; Elbridge Partridge, Treasurer, and the following as members of the Board of Trustees: John P. Kettell, Samuel Davis, Henry Goulding, Wm. T. Merrifield, Samuel D. Harding, Henry W. Miller, Albert Curtis, Wm. M. Bickford, James S. Woodworth, Leonard Poole, Rufus D. Dunbar, Isaac Goddard, Edward B. Rice, Albert Brown, Wm. Leggate. Any who are familiar with the history of Worcester of years ago will see that nearly all of these men were active in the affairs of the town and were leaders of the community. One in particular, Mr. Wm. T. Merrifield, did more, in the judgment of many, than any other in building his shops on Union Street and sub-letting them to small manufacturers, many of whom to-day own our largest individual plants. Immediately after the elec-

WILLIAM B. TABER.
President, 1863-64.

JAMES A. WHIPPLE
President, 1864-65

EDWIN MORSE
President, 18[illegible]-[illegible]



HON. JOSEPH H. WALKER.
President, 1866-67

tion of officers, steps were taken to establish a library, and to arrange for a course of lectures. Elihu Burritt, the learned blacksmith, then a resident of Worcester, delivered the first lecture in the course on the subject: "The importance and necessity of educating the mechanics and workingmen of our country, as by the Constitution all classes of men are equally eligible to high and responsible offices within the gift of the people, and therefore should be qualified for the discharge of such duties as might, from time to time, be imposed upon them."

September 26, 1848, the first fair under the auspices of the Association was held in Nashua Hall in Lincoln Square. Previous to this time the Worcester County Agricultural Society had a limited display of mechanical exhibits, but when a committee from the Mechanics Association asked them to relinquish that department the Agricultural Society complied with the request very cheerfully. The fair was a great success and exceeded the expectations of all, and immediately followed a demand for the product of Worcester mechanics. The following year a second fair was held in a hall on Union Street. The third fair was held on Exchange Street in 1851. In 1850 an act of the Legislature granted authority to hold real estate to the amount of $75,000 and personal estate to the amount of $25,000. At this time the project of building their own hall was agitated, and on August 16, 1854, a committee reported in favor of purchasing the Waldo lot on Main Street, once the site of the residence of Hon. Daniel Waldo, which has been moved back on Waldo Street and is known as the Waldo House. Several other sites had been considered, but this seemed the most desirable. The report of the committee was accepted and the lot purchased.

Ichabod Washburn contributed $10,000 toward the purchase of land and the building of a hall. A building committee consisting of Ichabod Washburn, Wm. A. Wheeler, Henry W. Miller, Elbridge Boyden, H. N. Tower, Benj. Walker and Wm. T. Merrifield was appointed. How well they did their duty is known to us all. The magnificent edifice they built, one of the finest in the country, has always been the pride of our citizens. It was a prodigious undertaking, requiring men of more than ordinary ability and judgment at that early period in the history of Worcester.

To Elbridge Boyden, who was one of the committee, and whose portrait adorns the walls of Mechanics Hall, is due the credit of making the plans for our beautiful halls, which are regarded by experts as models of grace and beauty.

The corner-stone was laid Sept. 3, 1855. Henry S. Washburn, President of the Association, had charge of the exercises. The dedication occurred March 19, 1857; distinguished citizens of city and State were present, among them ex-Governors Levi Lincoln, Emery Washburn and Hon. Alexander H. Bullock, afterwards Mayor of the city and Governor of the State. The principal address was made by Pres. H. S. Washburn.

The cost of hall and land at time of dedication was $140,129, which has increased up to the present time in value to $269,200. Almost as soon as the hall was dedicated there came the great depression in business all over the country, and the loss of revenue from the hall,

which with interest and taxes, almost bankrupted the Association. The detailed story of this struggle, recorded in an historical sketch published soon after that period, is worthy of liberal extracts, as illustrating the courage and persistency with which the Mechanics Association of that early day met its tasks and won its victories.

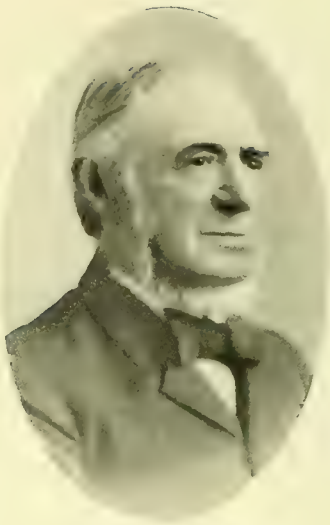
The stores and most of the offices had been readily rented for what were believed to be very remunerative rates; and it was at first confidently believed that if the floating debt were cancelled, the income would be amply sufficient to meet the interest on the large indebtedness. Early in the season of 1857 an effort was made to cancel this debt by procuring individual subscriptions thereto, but though many contributed liberally, not enough was obtained. In September the Association held its fourth exhibition of art and manufacture. The financial distress, at that time affecting all classes of the community, reduced largely the receipts, although the contributions to the fair were as varied, as large and as creditable to the contributors as those of any fair which the Association had ever held. The new halls had to be fitted with entire new fixtures for the fairs, items of expense which charged the income to such an extent that the proceeds did not cover the outlays and liabilities on the account of the same. This fact, coupled with an entirely empty treasury, compels the statement that entire justice was not done to the contributors thereto, in that means were never found to distribute the medals awarded. Under any ordinary circumstances this deficiency would have been readily made up by private contributions; but now commercial confidence was gone and none could be found who would predict with certainty whither the tide of business and trade was drifting. In October, 1857, some parties holding portions of the floating debt became restive, and in some cases attempted a legal enforcement of their claims. It becoming apparent under the circumstances what must be the result to the Association if these claims were all pressed in this manner, the holders of the third mortgage notes took legal possession of the entire property under their claim, and here ended for the time being the immediate control of the Association in the management of the property.

In the summer of 1858, an attempt was made to compromise the difficulty, but without success. By this effort the financial affairs were so far sifted, in a thorough examination of the income and expenditure, coupled with the effects produced upon all real property by the crisis of 1857, as to force the conclusion upon the minds of many of the friends of the Association that the entire permanent indebtedness should not exceed $50,000. To bring the debt to the sum named required the cancelling of $54,960. . . . On Nov. 1, 1858, the Hon. Stephen Salisbury com

Courtesy Hobbs Mfg. Co. THE DIPLOMA OF THE FIFTH EXHIBITION, 1856

PHILIP L. MOEN
President, 1867-69

ALZIRUS BROWN
President, 1869-70



PHINEHAS BALL
President, 1870-71

DOLEANCE S. GODDARD
President, 1871-73.

CHARLES H. FITCH.
President, 1873-75.

GEORGE S. BARTON
President, 1875-77

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SAMUEL D. NYE
President, 1879-81.

CHARLES G. REED.
President, 1881-82.

BENJAMIN J. DODGE.
President, 1882-84.

SAMUEL E. HILDRETH.
President, 1884-86.

SAMUEL WINSLOW.
President, 1886-87

municated to the Association through the Board of Trustees a proposition to donate to them in cash $5000 and $2000 of their bonds when the entire indebtedness of the Association could be reduced to $50,000. This gave a basis upon which to commence operations. In addition to this generous gift Deacon Washburn, who has been rightfully styled the father of the enterprise, came forward and generously assumed $10,000 of the third mortgage, leaving only the balance $15,000 and the floating debt to be adjusted. After a persistent and strenuous effort, the compromise was effected upon this basis. An arrangement was concluded with the Worcester County Institution for Savings, in the fall of 1859, whereby they were to make the entire loan of $50,000 to the Association, whenever a full discharge could be obtained from all its creditors. The arrangements thus made were successfully completed Dec. 10, 1860, and the possession of the property again passed into the hands of the Association. Of the result thus attained, it is but just to remark that it was accomplished in the main by the same generous liberality, and in the same spirit of enterprise that at first conceived the project and carried it to its first successful completion, and that, too, under all the altered circumstances and financial condition of our business community.

The fourth fair of the Association was held in the year of 1857, and was believed to have done its part to re-establish confidence. In 1866 the fifth and last fair of the Association was held. It was not a financial success, and because of that failure probably, none have been held since then, a period of forty-two years.

The walls of Mechanics Hall are adorned by the portraits of prominent citizens of the city, State and nation. Gen. George Washington, a copy of Stuart's in Faneuil Hall, Boston, was presented by Ichabod Washburn and Stephen Salisbury. The Lincoln portrait was a gift from the ladies of the Bay State Shoe & Leather Company, from which organization came also the pictures of William Lloyd Garrison and ex-Gov. John A. Andrew. The portraits of Ichabod Washburn, Wm. A. Wheeler, Henry W. Miller and Elbridge Boyden were furnished by the Mechanics Association; that of ex-Mayor James B. Blake, by citizens of Worcester; that of Gen. Geo. H. Ward, by the 15th Massachusetts Regiment, and that of Gen. A. B. R. Sprague, by the 51st

ROBERT H. CHAMBERLAIN.
President, 1887-90.

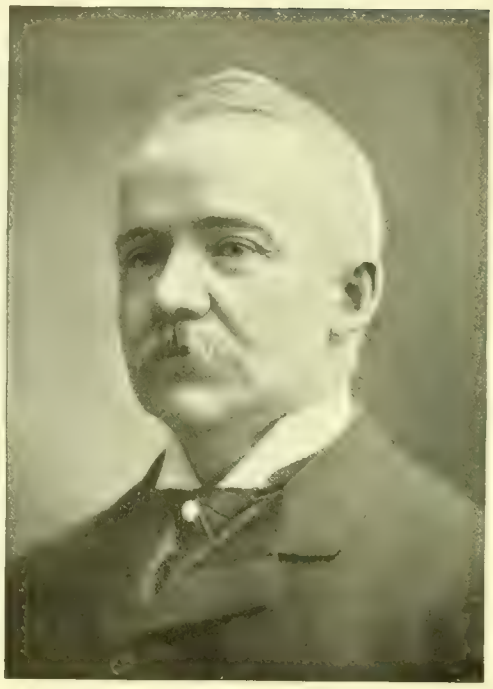
ELLERY B. CRANE.
President, 1890-92.

ROBERT S. GRIFFIN.
President, 1892-94.

EDWARD L. TOLMAN.
President, 1894-96.

EDWARD M. WOODWARD
President, 1902-05.

CHARLES H. BURLEIGH
President, 1896-98.



HON. JAMES LOGAN.
President, 1898-1900.

CHARLES S. CHAPIN.
President, 1905-06.

[illegible]

JOHN A. SHERMAN.
President, 1906-07.

Massachusetts. Francis Plunkett gave the portrait of Sergt. Thomas Plunkett, while Mr. E. A. Goodnow gave those of James A. Garfield and Henry Wilson. John B. Gough's picture was the donation of Mrs. Charles G. Reed and Misses F. Maud and M. G. Whitcomb. That of Jerome Wheelock, in the reading-room, was from the Association, and that of William A. Smith, secretary of the Association, came from the Worcester Harvard Club, and is now in the Treasurer's office.

This article would not be complete if it did not specially mention the services of Mr. Smith as Secretary and Treasurer for thirty-eight years, one who has proved a most faithful and conscientious officer, ever looking for the best interests of the Association.

In 1857 there was a desire among many that an organ be placed in Mechanics Hall in keeping with the beautiful structure which had been built, and the first fund for such was the result of an entertainment which netted $258.86. In April, 1863, a meeting of citizens was held to consider the subject of organ, and resulted in the appointment of an "Organ Committee," Mr. Bemis chairman. The condition was such that the Board of Trustees did not feel warranted in assuming a larger debt, and so the committee decided to appeal to the general public. "Choir" and "general concerts" and "dollar subscriptions" found favor as an aid. Hon. Stephen Salisbury contributed $2000, Ichabod Washburn $1200, ex-Gov. Alex. H. Bullock $500, F. W. Wellington $200. The genuine liberality and public spirit of our citizens were such that an amount of nearly $10,000 was raised, and the organ was dedicated on the 10th of November, 1864, and the committee having the matter in charge of raising funds transferred the organ to the Association free from debt. The "Worcester Organ" was the second largest at the time in the country, and was considered by experts to be an exceptionally fine-toned instrument. Its makers were Messrs. Hook & Company of Boston.

It might not be out of place to state that the liberality of our citizens, most of whom were members of our Association, has been such that nearly $120,000 has been contributed to the Association in the purchase of land and the building of hall and organ, and it is no wonder that our people of the city have a deep interest in Mechanics Hall, where many of our distinguished statesmen of the land have spoken, and where for many years the Worcester County Musical Association has held its festivals, which have contributed much to make Worcester a musical centre.

In view of the approaching exposition of mechanical and electrical products of the city and county of Worcester, it has seemed proper to review somewhat in detail the history of the Association, which has accomplished so much for the development and prosperity of this city during the period in which it has become one of the important industrial centres in the country. It was the intent of the promoters of the Association to have frequent if not annual exhibitions of the products of our factories. It is a well-known fact that we have here to-day the largest variety of manufactures in the country, and several of the largest plants of special industries. It is the aim of the Mechanics Association to stimulate these and to encourage others, both large and small, to come to our midst. Thousands of our inhabitants have a very vague idea of what is being manufactured in our vicinity; and it is the hope of the Association that the exposition may be the means of interesting and educating the people along these lines, as well as of bringing business to our city and county. It is forty-two years since the Association has held an exhibition, and we feel that Worcester should wake from her long sleep and keep her place among the enterprising manufacturing cities. She is an inland city deprived of seaboard facilities and so must strive to educate and keep within her borders her skilled mechanics, who have helped greatly to make Worcester what she is to-day.

The Mechanics Association has good reason to be proud of its past, with its high ideals; of the many honored names on its rolls and its cherished legacy to its fellow citizens; but it is also anxious that in this greatly growing city, with its manifold industries and widening scope for usefulness, this organization may not lose hold of the main thought of the founders. Accordingly it has planned this coming exposition to instruct an intelligent public, to give an opportunity to the manufacturer to display his machines and show his products, and most of all to advertise our city. In this enterprise of furthering public and private welfare, the Association hopes for the hearty co-operation of all its citizens.

UNIVERSITY PARK

A Worcester Apprentice of Sixty Years Ago

Personal Recollections of the Olden Days

By Hon. Edwin T. Marble.

IN the strenuous rush of our modern industrial campaigns, men age early and often drop suddenly from the ranks, sometimes to struggle back crippled in strength and vigor; sometimes never to return. Unless some concrete instance comes to our attention we are apt to forget that there was ever a day when the current of business life moved more evenly and bore men onward to success with less tumultuous sweep. In the retrospect which this number of the Magazine offers its readers, the changes are so profound and startling that one cannot realize the brief period of time in which they have taken place unless some man's life be applied as a measuring rod, to make personal the space between the olden times and the present hour.

At the head of one of our leading industrial establishments is a man whose business career in Worcester is almost as old as the Mechanics Association; and this means, according to the history found elsewhere in this number, almost as old as the community's self-consciousness of industrial purpose and achievement. This man has seen all the marvelous transformations of the last sixty years, in many of which he has had an active and an honored part. Born in the neighboring town of Sutton in 1827, and therefore now in his eighty-second year, Hon. Edwin T. Marble, president and treasurer of the Curtis & Marble Machine Company, may be found daily at their shops on Cambridge Street actively participating in the oversight of a business which crowds their various departments. It is a pleasure which must be experienced in order to be appreciated to sit down with him in his office, and "draw at sight" upon his rich funds of experience and knowledge and recollection.

"Yes, my work as a machinist began almost as long ago as the Mechanics Association," said Mr. Marble, as he turned from the accumulation of work upon his desk, and faced the inquiring visitor. "It was in the year 1845, four years after the Association was formed, that I began my apprenticeship with Mr. Albert Curtis. I was then eighteen years of age. There were four of us who boarded together; one was from Charlton, another from Athol, and a third from Pomfret, Connecticut. All of them, like myself, were from native American stock."

HON. EDWIN T. MARBLE.

"How many hands were then employed by Mr. Curtis?"

"Not more than twenty or thirty, not counting seven or eight apprentices, some of whom were in those days always to be found learning the trade. Eleven or twelve hours of labor was the daily rule, though sometimes we would work an hour or two in the evening. We had few holidays in that time; Christmas was not thought of in that way, and nobody had ever heard of Labor Day as we now have it. Of course, we always had Thanksgiving, and Fast Day as well; Fourth of

July and the annual fair of the Agricultural Society also let us out of work."

"Wages? Well, they were smaller than they are now, but a dollar would buy a good deal more then than to-day. The first year of my apprenticeship I received fifty dollars and my board, which I am afraid would not content many young men eighteen years old to-day. The next year I had seventy-five dollars, and the third year one hundred and twenty-five. On August 18, 1848, I began as a journeyman mechanic, and received perhaps a dollar and a half a day, which increased as I went along."

"What was your first connection with the Mechanics Association, Mr. Marble?"

"I think I joined it as soon as I became an apprentice, paying, if I remember, only fifty cents a year for an apprentice membership. This gave me all the privileges, including the library and the lectures. I recall the library as being in the north end of the Waldo block; the librarian was Mr. Simeon N. Story. The collection of books was then quite small, but it was choice; they were largely books of travel and biography. I do not recall any books on practical mechanics; and, of course, there was no reading-room as now, with daily and illustrated papers. I remember very well how my chum and I used to walk in to the library every Saturday evening to exchange our books. There was much interest in those days in the lectures, of which there were many; I suppose that I heard in those courses nearly all the famous lecturers of the country."

"What were some of your early experiences as a workman?"

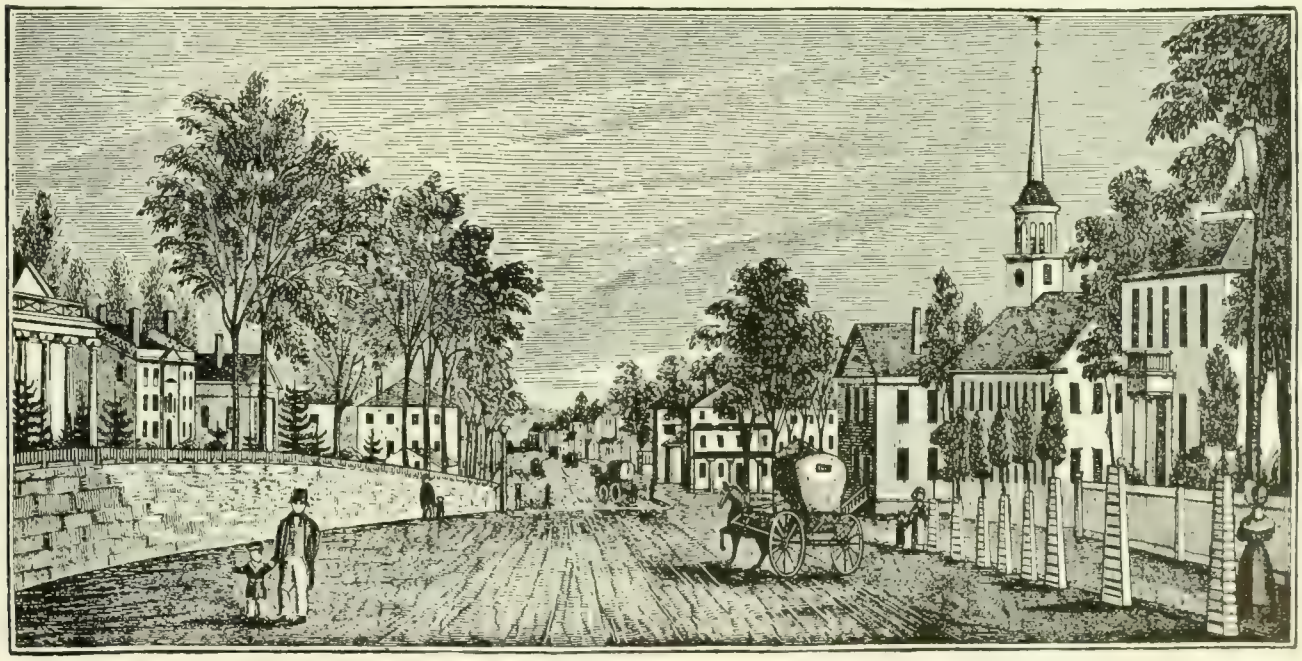
"I continued with Mr. Curtis only two months after my apprenticeship was over," said Mr. Marble; "and then I came from Webster Street to the centre of the city and engaged with the firm of A. & S. Thayer, afterwards Thayer, Houghton & Company, makers of machine tools on Union Street, located about where the Gates lumber yards now are. In 1850 I went to Shelburne Falls and worked upon cutlery for a year or two, but I soon came back to Worcester and to the shop of the Thayers. In 1859 I became superintendent of the E. C. Cleveland & Company's Machine Works on Central Street, and in 1863 I became a partner with Mr. Curtis and took full charge of the machine business, in which I was associated with him for over thirty years."

"What are some of your earliest recollections of Worcester?"

"Those go back to my eighth year, when I came here from Sutton to go to school in the primary grade; this was kept in a little square schoolhouse on the Common, near Salem Square. I well remember Mr. Stephen Salisbury, the senior, who was then one of the prominent citizens; also Samuel Burnside, who examined me for entrance to the school. I also recall distinctly Captain Lewis Bigelow, on whose farm up on Providence Hill they used to have the plowing-matches at the county fairs. In the years 1838 and 1839 I was living in Sutton, and used to drive cattle over from the farm for those fairs. There was then a hill opposite the Common, where the First Baptist Church then stood; I recall the 'drawing-matches,' as they were called, where teams of oxen were tested for the amount of load they could take up that hill, and the well-trained way in which they could work. I think it was when I was in the City Council that this hill was cut down, and a basement added under the church."

"Has most of the growth of the city come under your personal observation?"

"Yes, I remember when there were only seven houses between my home, which is opposite Freeland Street, and the present Post-office Square. In fact, there were only about a dozen houses in sight from that spot then. Mr. Curtis lived on Webster Street, near where the Messrs. Coes began at about that time the manufacture of wrenches. All that region was then, and continued for many years, to be genuine country, without any suggestion of the growths which have come since. The railroad was then here, running west over Charlton Hill, and beyond; but there were no stations anywhere near Webster Square, and street cars were not thought of."



MAIN STREET IN 1836.

Worcester—Then and Now

From 40 Industries to 1140 in 60 Years of Civic Growth

IT is a far cry from the Worcester of 1849 to the Worcester of 1909—from a little country town to the third city in point of population in New England; but many men now living, and some still actively engaged in business in this city, can say of this history—as said the old Roman, "All of which I saw and a part of which I was."

Much space has been given up in this issue of the Magazine to an epitome of what has been done by one great industrial and social organization to help bring about this transformation, and the faces of the men who have stood at the head of that body and wrought mightily to help bring the changes about will be looked upon with interest and pleasure by their descendants who are at this moment standing in their places and solving in their turn the perplexities and problems that confront them.

Worcester has just reason to be proud of her past. In war and peace she has borne her part in the civic life of Massachusetts well, and now as she faces the twentieth century she has equal reason to be proud of her present and future outlook.

Population.

In population Worcester has averaged a growth of 3000 a year for the past thirty years, and in comparison to the population no city approaches it from a manufacturing standpoint. The population of the city in 1850, two years after it was incorporated, was 17,046; its population in 1900 was 118,000; in 1905 it was 128,135. Its population at the close of 1908 was discovered by the Water Department, after a very careful census, to be 143,333. A very conservative estimate of the city's inhabitants, by the time the national census is taken in 1910, is 150,000.

At the time Worcester changed from town to city government the new officials took over a debt of $99,677 as the principal legacy left by the town to them. The amount of taxes assessed that year was $52,222. The total expenditures during the year by the infant city government amounted to $65,389.

At the close of the year 1908 the total valuation of Worcester had risen to $129,323,426; the funded debt was $8,830,625 and the sinking funds amounted to $3,604,754.69, leaving the net debt at $5,069,537.32.

The tax rate for 1908 was $17 on $1000. At the close of the year there was $346,794.75 in the city treasury.

Worcester has nearly $6,500,000 of exempt property and fully $15,000,000 of municipal property, of which over $2,500,000 is in school buildings.

PRESENT UNION STATION.

Borrowing Capacity $1,601,730.80.

One conspicuous attraction of Worcester as a centre for location of industrial establishments is the conservatism which characterizes its city government in its financial transactions. All cities of Massachusetts are limited in their debts to two and one-half per cent. of the average total valuation for the preceding three years. Water loans are exempt from this restriction, as the water revenue provides for them. The borrowing capacity of the city of Worcester December 1, 1908, inside the debt limit, was $1,601,730.80, a splendid showing for a city as progressive and as well equipped as this, and one that can be exceeded by few cities in the country of its size.

In 1899 the borrowing capacity of the city inside the debt limit was $787,349.98. It has almost doubled in ten years, and yet no worthy cause has suffered in this decade and no needed improvement has been turned down. New schoolhouses have been built; the park system has been greatly enlarged, and thousands of dollars have been spent on streets and sewers.

National Banks.

The city has three national banks and one trust company—the Worcester National Bank, the Mechanics National Bank, the Merchants National Bank, and the Worcester Trust Co. At the close of business February 5, 1909, the following was the showing made by these several institutions:

	Capital.	Deposits.	Surplus.
Worcester National Bank,	$250,000	$3,189,107.41	$250,000
Mechanics National Bank,	200,000	2,686,629.51	227,443
Merchants National Bank,	500,000	2,330,610.94	250,000
Worcester Trust Company,	500,000	8,864,224.83	862,299
Total,	$1,450,000	$17,070,572.69	$1,589,742

Savings Banks.

Perhaps no better insight into the habits and intelligence of a people can be obtained than by ascertaining the volume of their savings. Thrift, sobriety and character are all indicated in a passbook. Judged by this standard, Worcester breadwinners are among the most saving and industrious in the land. In 1906 Herbert M. Sawyer, then Secretary of the Board of Trade, prepared under the direction of a committee of the Board a valuable synopsis of the commercial and industrial life of Worcester, which was issued in booklet form. At that time he found that there were in the savings banks of Worcester 120,804 open accounts, and that these banks owed their depositors on February 1, 1906, $52,856,336. Investigations by the editors of the Worcester Magazine reveal the fact that in spite of the business depression, the savings banks of Worcester have not only held their own, but have made material gains in the last three years, the figures as compared with 1906 showing an increase of almost three millions of dollars.

The conditions of the savings banks of Worcester at the close of business March 2, 1906, are shown by the following exhibit:

	Deposits.	Depositors.
Worcester County Institution for Savings,	$20,272,739.00	44,271
People's Savings Bank,	11,985,379.19	25,641
Five Cents Savings Bank,	9,967,411.95	37,238
Mechanics Savings Bank,	11,975,447.84	19,981
Bay State Savings Bank,	1,275,000.00	5,000
Total,	$55,475,977.98	132,131

Splendid Shipping Facilities.

From a railroad standpoint Worcester occupies a commanding position. Three great lines converge here, and with the elimination of grade crossings now rapidly going forward, the construction of an elegant new Union Station—one of the most commodious in the land—the development of the Boston & Maine Railroad under its new administration, and the splendid permanent improvements already made or in contemplation by the Boston & Albany and New York, New Haven & Hartford Railroad, Worcester will possess passenger and freight facilities that will make her unique among manufacturing centres in this country.

Her situation is such that she has the advantages of a terminal freight station, together with an arrangement of tracks which permits a rapid transfer of freight from one line to another.

PROPOSED UNION STATION.

Worcester has direct connection with the west and south over no less than twenty-five fast freight lines. Nearly every great transportation company operates over one or the other or all of these systems.

By these connections Worcester is brought into close touch with the raw materials so necessary to her industrial progress. To the east she reaches the seaboard and Maritime Provinces through Boston, Portland and St. John, and large shipments to Africa and the Antipodes are made by the manufacturers through all these points as well as from Montreal, more favorable rates being obtained in some instances from the Canadian ports for foreign bottoms than can be obtained from New York itself.

Easy access is had to the New York boats at Providence, R. I., Stonington and New London, Ct., while steamers for Baltimore, Norfolk and all southern points are available at both Boston and Providence.

Worcester is served by the Boston & Albany division of the New York Central & Hudson River Railroad, the New York, New Haven & Hartford Railroad, and the Boston & Maine Railroad, with all their branches and leased lines that touch the city.

Trains being made up here for both east and westbound traffic, Worcester has all the advantages of a terminal freight station. All-rail freight service, without transfer between Worcester and New York, is sixteen hours, with proportionately good time to all intervening points.

The Boston & Albany furnishes direct connection for Worcester manufacturers, merchants and shippers generally, with the following lines: Merchants Despatch, the Red Line, the White Line, the Blue Line, the Nickel Plate, the West Shore, Pere Marquette, Milwaukee & Michigan, Western Express (rail and lake), and Rutland, Michigan Central (all rail differential).

The Boston & Albany makes these connections: Central Vermont Railroad at Palmer, with rates north to Canadian points, and boat service south to New York; Boston & Maine, Central New England, New York, New Haven & Hartford boat line to New York at Springfield; New York, New Haven & Hartford Railroad at Westfield, Pittsfield and State Line; Harlem River Division and Rutland Railroad at Chatham; New York Central, West Shore, Delaware & Hudson and day line and night line steamers between Albany and New York, at Albany.

Here is the gateway for all-rail coal from the mines via Boston & Albany Railroad, originating on New York Central, D., L. & W., D. & H. Co., C. R. R. of New Jersey, P. & R., Pennsylvania Railroad, Erie Railroad, Lehigh Valley and B. R. & P. R. R. Connections are made with the New York, New Haven & Hartford Railroad at South Framingham, while Boston freight terminal facilities are unsurpassed. Here are great docks, coastwise and European steamers, free and bonded storehouses, grain elevators and facilities for discharging coal.

The Boston & Maine connects Worcester with northern New England, Canada and the Provinces, and principal points in the United States. Connections are: Grand Trunk and Maine Central Railroads Liverpool, New York, St. John and Eastport steamers at Portland, Me.; Grand Trunk and Great Eastern Line at Groveton, N. H.; Canadian Pacific Railroad at Lennoxville, P. Q.; Grand Trunk and Quebec Central at Sherbrooke, P. Q.; Canadian Pacific and its transcontinental line, for China, Japan, Australia and Philippine Islands steamers, at Newport, Vt.; Central Vermont and the National Despatch Line at White River Junction;

OLD CITY HALL

Rutland Transit Company, a lake and rail line, at Bellows Falls, Vt.; New York, New Haven & Hartford and the Pennsylvania Railroad, Philadelphia & Reading Railroad, Lehigh Valley Railroad and Central Railroad of New Jersey, and connections, at Northampton; New York Central and West Shore at Rotterdam Junction, N. Y.; Delaware & Hudson, and all western points, at Mechanicsville, N. Y.; New York Central for New York city and intermediate points, at Troy, N. Y.; ocean-going steamers for eastern New England cities, and European steamers at Boston.

The advantages which Worcester enjoys as one of the branch terminals of the New York, New Haven & Hartford Railroad are very attractive, especially as regards rates in connection with the following fast freights: Star Line, Traders' Despatch, Nickel Plate, Interstate Despatch, Erie Despatch, Lehigh Valley Despatch, Reading Despatch, Commercial Express, Lehigh & Wabash Despatch, Hoosac Tunnel Line, Central States Despatch, Lake Shore-Lehigh Valley route. This road has daily service between Worcester and New York by way of the all-rail line, and also connects with the various lines of New York steamboats plying on the Sound, with connections at Providence, Stonington, Fall River, New Bedford and New London. It also controls the Central New England Line, known as the Poughkeepsie Bridge road, via Hartford.

The Fitchburg Railroad having its western terminus at Rotterdam connects there with the West Shore, Nickel Plate and the Southwest Despatch with the great West and Southwest. It also connects with the Delaware & Hudson Company at Mechanicsville, and the Central Vermont at Bellows Falls. The Fitchburg has exceptional advantages for handling shipments to the eastern part of the State by the terminus facilities at its command in Boston. Several lines of transAtlantic steamships dock there and the road bestows special attention on export freight.

These fast freight lines operate over the Fitchburg: West Shore & Boston, Hoosac Tunnel Line, Nickel Plate, Erie Despatch, Great Western, Interstate Despatch, Erie & Boston, Lackawanna & Boston, Fitchburg & Pennsylvania, Lehigh Valley & Boston, and the Philadelphia & Boston Line.

All roads out of here make the Boston rates to the west, also reach the south and west in connection with the following fast freight, all-rail lines: Atlantic Coast Despatch, Eastern & Southern Despatch, Seaboard Despatch, and Great Southern Despatch; via rail and ocean, over these lines: Cumberland Gap Despatch, Kanawha Despatch, Norfolk & Western Despatch, and Seaboard Air Line.

The various railroads centering in Worcester are now engaged in spending about $3,000,000 in eliminating grade crossings, erecting new passenger and freight stations, and making the necessary preparations to handle a tremendous volume of business into and out of this city. When completed Worcester will enjoy perhaps the finest freight and passenger facilities possessed by any city of its size in the United States.

The Passenger Service.

Passenger service consists of 81 trains each secular day that arrive and depart from the Union Station, or 162 in all. Of these 94 are over the Boston & Albany, 38 over the New York, New Haven & Hartford, and 30 over the Boston & Maine. The Sunday service gives 39 trains in each direction, a total of 78 in all—56 over the Boston & Albany, 14 over the New York & New Haven and 8 over the Boston & Maine. There are 25 trains daily to Boston and 4 to New York.

CITY HALL AND BOAR STATUE

Street Railway Service.

Worcester has an excellent street railway service for a city of its size. Its street railways were formerly owned by individual corporations, but as a result of the spirit of combination now so everywhere manifest, these corporations were all grouped into one company, known as the Worcester Consolidated Street Railway Company. This in turn was taken over by the Worcester Traction Company, which was succeeded by the Worcester Railway & Investment Company, and the latter was finally merged in the New England Investment & Securities Company, with headquarters in Springfield, which is the present operating company.

Francis H. Dewey is the president of the Worcester Consolidated Street Railway Company, L. S. Storrs is vice-president, L. Candee is treasurer, and E. G. Connette is the general manager. Under the term Worcester Consolidated are grouped both urban and suburban lines, reaching a territory within a radius of twenty miles having a population of over 400,000. The only line not controlled by the Consolidated is the Boston & Worcester Street Railway, which owns an independent system of street railway running from Worcester to Brookline, and is one of the finest equipped street railways in the country. The Boston & Worcester runs its cars into Worcester over the Consolidated iron and into Boston over the lines of the Boston Elevated.

The street railways included in the Consolidated system besides the main company, which operates in the city proper, are as follows: Worcester & Southbridge, Worcester & Webster, Webster & Dudley, Worcester & Blackstone Valley, Worcester & Holden, Marlboro & Westboro.

The business done on these various lines, including the Boston & Worcester, during the fiscal year ending September 30, 1908, the date of the last report, can be judged from the following table of passengers carried on the different divisions and in the city proper:

	Passengers Carried.
Boston & Worcester,	11,100,000
Marlboro & Westboro,	682,000
Uxbridge & Blackstone Valley,	1,100,000
Worcester & Blackstone,	1,775,000
Worcester & Holden,	825,000
Worcester & Southbridge,	4,997,000
Worcester Consolidated,	32,000,000
Total,	52,479,000

This is an increase of over 11,000,000 passengers carried in the last three years, the gross for 1906 being 41,436,615 on all lines. Perhaps no better light could be thrown on the stirring active nature of Worcester people than this increase affords. The several lines are equipped with 250 cars, 46 of this number being owned by the Boston & Worcester.

Express Companies.

The city is served by two principal express companies—the American and Adams. The American Express Company operates on the Boston & Albany and Boston & Maine Railroads. It also represents the National Express Company, which operates on the Fitchburg division of the Boston & Maine Railroad.

The Adams Express Company operates on the New York, New Haven & Hartford Railroad and its several leased lines.

The New York & Boston Despatch operates on the New York, New Haven & Hartford Railroad north to Fitchburg and south to New York. It also covers all the New Haven's leased lines. Thompson's Express operates between Worcester and Boston and points east and north.

Our 1100 Different Industries.

In another section of the Magazine a brief résumé is given of the various industries in Worcester three-quarters of a century ago. It covers part of a printed page in a volume issued about that time. To-day a

POST OFFICE

résumé of the business and industrial life of Worcester would make twenty-seven pages of closely printed type in a volume the same size as that issued in 1835.

To-day in 1100 different industries more than 3000 varied articles are manufactured in Worcester. Its wire mills are among the most celebrated in the world and have been for almost two generations. Its loom works and manufactures of textile machinery stand at the head of that industry in this country. It has corset factories that are without a rival in America either in artistic finish or volume of output, their goods selling to the most exclusive trade in Paris, Vienna and Berlin as readily as in New York or London.

Its carpet factory produces the finest carpets woven. It has a mohair mill that produces dress goods which cannot be equalled in either hemisphere. Its leather goods output, whether in belting or traveling-bags, places it ahead of all other American cities. Its grinding machinery is in a class by itself and commands a European trade as large, if not larger, than it has in the United States.

It numbers among its industries one of the finest wall-paper plants in this country; a plant that manufactures only the highest grade of papers, and enjoys an exclusive and uninterrupted business. Its envelope-making plants and envelope-making machinery constitute a great separate distinct business by itself.

In the automobile field it stands absolutely unrivaled. The finest and most expensive crank shafts in America are forged and ground in Worcester. Practically every crank shaft made for the high-class cars is drop-forged in this city, and the machinery not only on these but on many of the cheaper shafts as well is done here.

It has a valentine factory which does a business of tens of thousands of dollars yearly, while its metal trades are legion and acknowledge no superior.

Lathes, planers, drills, agricultural machinery, paper and pulp making machinery, calico printing machinery, skates, car fenders, continuous gas producers and other rolling mill accessories, steam boilers, organs, organ and piano players, shoes, boots and leggings, shoe trees, wrenches, yarns, wood-working machinery, guns and revolvers, wood alcohol, umbrellas, reeds, razors, lubricating oils, engravings, crackers, and bridges are a few industries selected at random out of hundreds that might be named.

In many instances, as is shown elsewhere, these businesses have descended from father to son through three generations. They were established before the city was incorporated, and their products enjoyed a high reputation before the Civil War broke out. It is customary in all articles of this sort to make extravagant and unsupportable claims for a city's industrial greatness. A careful, prolonged and searching scrutiny of the industrial prowess, financial resources, and unusual skill that are back of the success attained by Worcester manufacturers will show that this article is conservative rather than complimentary and that we have kept strictly within the bounds of truth in all that we have here set forth.

A rigid and impartial investigation will satisfy any intelligent manufacturer that he can make anything that is made better in Worcester than he can anywhere else on earth. Frequently he will find he can make it cheaper too.

For the year 1907, the latest statistics available, 270 different establishments reported to the State as paying out $15,207,356 in wages to 27,631 employees, who turned out a product valued at $68,623,320.

Growth in Postal Receipts.

One criterion of the growth of a city is a progressive annual statement by its postal authorities. Such a statement is made by Postmaster J. W. Hunt for Worcester. In 1890 the postal receipts at the Worcester office were $129,422. In 1900 they were $225,004. In 1905 they were $330,337. For the fiscal year ending June 30, 1908, the last complete year, they were $387,409.44. In addition to the central office located in the Federal Building on Main Street, there are seventeen sub-stations conveniently situated in different sections of the city.

City a Port of Entry.

In 1900 the city was made a port of entry, and in 1905, through the efforts of the Board of Trade, manufacturers and importers, a bonded warehouse was secured by the collector, Charles H. Pinkham. During 1908 the value of the entries received was $317,765, on which $109,290 in duty was paid.

Mercantile Trade.

The classified statement of mercantile trade in Worcester, according to the figures obtained by the State Census Bureau, shows that in 1905 it amounted to $39,092,330. At the present time it is estimated that this has risen to nearly $50,000,000 per annum.

Splendid Water Supply.

The city has a magnificent water supply, it proving ample for all purposes during the prolonged drought of 1908 when Springfield and many other New England cities were threatened with a water famine. As this Magazine goes to press, the water registrar reports that there are more than 800,000,000 gallons in storage, and this amount is frequently exceeded. Water is supplied to large manufacturers at a uniform flat rate of ten cents per 1000 gallons. It is also sold very cheaply to householders, hundreds of families enjoying the minimum rate of $4 per year. The city owns its own water works and they are as complete, as comprehensive and as dependable as those possessed by any city in the country. The water is of excellent character and purity.

Light and Power.

Electricity for power and light is furnished by the Worcester Electric Light Company at reasonable rates, and 80-cent gas is provided by the Worcester Gas Light Company to all consumers.

More Light and Power.

The city has three excellent daily newspapers. The Worcester Telegram, a morning newspaper, is one of the most widely circulated and powerful newspapers in New England, and the Gazette and Post, the two afternoon papers, both serve extensive and exacting clienteles with ability, fidelity and enterprise. It also has many weekly and monthly and school publications.

Amusement and Religious Side.

Worcester has three large and several small playhouses and enjoys in the theatrical season all the leading metropolitan attractions. The city possesses many beautiful church edifices, the Union Congregational, among others, being a model of the renowned cathedral of Notre Dame in Paris.

Unusual Educational Equipment.

She has a marked educational as well as industrial life. Her Clark University is known in both hemispheres. Its research work and its various profound publications have given it a reputation abroad as great as it enjoys in America. Dr. G. Stanley Hall, its President, is justly regarded not only in Worcester but by the world at large as one of the foremost thinkers of his time.

The city also includes in its intellectual equipment three other great schools—Clark College, Worcester Polytechnic Institute and Holy Cross College. Clark College was established as a separate collegiate department at Clark University in 1903, and has possessed from the start many attractions to men desiring to round out their education in a school with an ample curriculum where the tuitional charges are merely nominal. The Polytechnic Institute is admittedly one of the finest technical schools in this country, while hundreds of devoted sons scattered all over the world have carried the traditions and the learning and the glory of Holy Cross College from the land of the midnight sun to the barrenness of the Australian bush.

There are many fitting schools in Worcester and they are all excellent; and the city also maintains a splendid public school system of its own, to which is soon to be added an independent industrial school for teaching the trades to boys and the arts of the housewife to girls.

Superbly Endowed Art Museum.

The city has in the Salisbury Art Museum one of the most liberally endowed institutions of its kind in America. Hon. Stephen Salisbury left the bulk of his vast wealth to this museum, and when his real estate holdings are eventually liquidated, the museum trustees will have an income of $160,000 per annum at their disposal.

Reasons for Civic Pride.

The city has always been a great musical center and its musical festivals enjoy an international reputation. Her city library is renowned among public institutions of its kind. Her four great hospitals are modern in every particular. One of the four—the Hahnemann—is even now being re-erected on a larger and more elaborate basis, and the other three are constantly being brought to a point where they can handle and save a larger and larger number of lives.

Probably no city of its size in the Union maintains a more admirable city hospital than that maintained in Worcester. In equipment, investment and buildings, there is not less than $1,000,000 devoted to this one institution. It cared for 4,700 patients last year and had at its disposal $125,000 in funds. Dr. Thomas Howell, an officer of marked administrative ability, is at the head of this institution, and has made it a model of its kind in a section where fine hospitals abound.

The city has more than 1200 acres of parks, and has easy access to Lake Quinsigamond, a beautiful sheet of water seven miles long and nearly a mile wide, lying on her eastern borders. She has a splendid City Hall and Court House; she is the chosen site for a large number of state and county buildings of an institutional nature, and her monuments and cemeteries, her stores and residences, her streets and business blocks, are all kept up as behooves a New England community, as proud of its external appearance as it is of its wealth, its intellectual attainments and its industrial leadership.

INSTITUTE PARK.

The Story of the Exposition

The preliminary arrangements for the Mechanical and Electrical Exposition at Mechanics and Washburn Halls, which this number of the Worcester Magazine serves to exploit in a dignified and honorable manner, are practically completed. The Exposition will open March 27 and continue until April 3. Thanks to the enterprise of local manufacturers and the hard work of the executive committee, headed by President Daniel E. Denny and the manager of the Exposition, H. F. Campbell, the result promises to be one of the most interesting as it will be surely one of the most unique exhibitions ever given in New England.

Efforts have been made to secure exhibits of moving machinery, with the result that many lines of goods will be actually manufactured in Mechanics and Washburn Halls during the life of the Exposition. Firms who will not manufacture will show machinery in operation, allowing the visitors opportunity to inspect the method of manufacture and the quality of the machines offered for sale. There will be not only mechanical exhibits, but there will also be unique electrical displays.

Among the exhibits which will attract general attention will be those made by both the U. S. Envelope Company and the Sherman Envelope Company, showing by means of ancient and modern machines the advance that has been made in the last few years in envelope making.

Firms like the Prentice Bros. Company, J. E. Snyder & Son, Francis Reed Company, O. S. Walker & Company, Stockbridge Machine Company, Wire Goods Company, Norton Grinding Company, and many others will show the heavier machine tools, such as lathes, planers, shapers, drills and grinding machinery. The Worcester Cut Glass Works will have in operation a small factory showing their method of grinding, and will also have a display of cut glass as a separate exhibit. Mailing machines will be in operation by the Elliott Company.

An electric house in Washburn Hall will be completely furnished by the Coghlin Electric Company.

The Massachusetts Corset Company have secured the stage of Washburn Hall for a display of their goods. The company will show a superb oil painting of Queen Wilhelmina of Holland, 7 by 10 feet in size. It will be surrounded by electric lamps, with a background of crimson drapery.

The Crocker-Wheeler Company of Boston will install great motor generators and will transform the current now in the halls to a proper voltage for the use of the machines which will be in operation at the time of the Exposition. These generators are an exhibition of themselves.

The Worcester Electric Light Company, W. D. Kendall Company, Coghlin Electric Company, O. S. Kendall & Son are to make special displays of electrical machines and labor-saving devices. They will also show lamps used for illuminating and decorating purposes.

The White & Bagley Company will have a complete oil laboratory, in which they will demonstrate modern methods of determining the value of oils for different machinery and automobiles.

The display of the Worcester Polytechnic Institute will be scientific and educational in its nature and will include a large number of scientific machines. A dark room for electrical displays will be erected, and a large number of instruments used in the various branches of work covered by this institute will be exhibited.

The Coates Clipper Manufacturing Company will show the flexible shaft they make and its various applications.

The exhibitors are to have spaces allotted them of various sizes, to be separated by three-foot rails with upright pilasters surmounted by shaded electric lights. Down the centre of the hall will be a line of Venetian masts, each supporting an electric lamp. The facade

THIRD PRIZE PHOTOGRAPH, BY C. H. LANPHEAR, M. D.
"AUTUMN SHADOWS ON THE COMMON."

of the balcony will be decorated with set pieces and crowned by electric lights, while the decorative scheme on the organ front will be of a still more elaborate order, the fine old instrument being handsomely adorned with electric globes in an attractive design.

In Washburn Hall the decorations will also be distinctly electrical. The exhibitors will be railed in as in Mechanics Hall and each exhibit will also have electric lighted corner posts. There will be found in addition electrical devices on the walls and ceiling. In the centre of the room will be an electrical pyramid seven feet high.

The musical programme for the week will be by the Imperial Ladies' Orchestra of Boston, a widely known musical organization which includes Miss Nellie May Hoone, cornetist, and Miss Florence Conner, violinist.

At the time of going to press the following exhibitors have taken space:

U. S. Envelope Co.,
Stockbridge Machine Co.,
Sherman Envelope Co.,
Norton Company,
W. H. DeLong,
The White & Bagley Co.,
Norton Grinding Co.,
R. E. Kidder,
Allen-Higgins Wall Paper Co.,
Prentice Bros. Co.,
Washburn Shops,
Globe Dental Co.,
J. E. Snyder & Son,
Wm. H. Brown & Co.,
Richardson Mfg. Co.,
The Warnock Mfg. Co.,
Woodbury Engraving Co.,
Francis Reed Co.,
L. Hardy Company,
Walden Mfg. Co.,
Worcester Cut Glass Wks.,
Coates Clipper Mfg. Co.,
O. S. Walker & Co.,
L. R. Paige,
W. D. Kendall Co.
Walker Grinding Co.,
Wells Chemical Bronze Works,
Worcester Electric Light Co.,
Duncan & Goodell Co.,
Multiple Woven Hose Co.,
W. L. Leland Co.,
Lowell Wrench Co.,
Worcester Polytechnic Institute,
The Elliott Company,
J. J. Adams,
E. B. Luce,
Hill Dryer Co.,
Thomas F. Eagan,
Boynton & Plummer,
The Wire Goods Co.,
O. S. Kendall & Son,
E. F. Hodgson,
Lincoln Water-Proof Cloth Co., Bound Brook, N. J.,
H. A. Desper Mfg. Co.,
American Multigraph Sales Co.,
William F. Russell,
Tunstall, Biggar & Tunstall Co.,
Standard Rug Co.,
Crocker-Wheeler Co.,
Coghlin Electric Co.,
Massachusetts Corset Co.,
George E. Stimpson & Co.,
Charles Case Shoe Co.,
Carlton Engraving Co.,
William F. Carroll,
William J. Smith Co.,
Protectograph Company,
A. K. Gammon,
Rector Gas Light Co.,
Pratt & Inman,
Harrington & Richardson Arms Co.,
Worcester Pressed Steel Co.

Local February Trade Conditions for Worcester County

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

While there is a better feeling regarding the general outlook, industrial conditions respond very slowly and the month has developed but little activity in business. February, in retail lines, is usually quiet and the actual volume of business appears to have suffered in most instances by comparison with the same month of a year ago, the reason assigned, in many cases, being the very unseasonable weather.

Since the beginning of the year there has been a slowly increasing demand for textile machinery; plants are running on full time and gradually increasing their quota of help.

CLARK UNIVERSITY

Corset manufacturers still report practically a normal demand for their product. This industry has shown remarkable strength and despite the universal depression, some plants have increased the volume of business over that of previous years.

Wire specialties and metal stampings are in good demand, but there is no material improvement reported during the month in the machine tool and lathe business.

Woolen manufacturers are quiet, but textile mills making cotton and woolen worsteds report an active and increasing demand for this line.

January bank clearings amounted to $7,415,248 and in January, 1908, they amounted to $6,820,800, showing an increase of 8.7 per cent. Failures for the month totaled seven (7), with liabilities of $54,043 and assets of $8,847, compared with the same month of last year, when they showed a total of eight (8) with liabilities of $56,123, assets of $6,201 and in 1907, when they numbered six (6), with liabilities of $60,576 and assets of $16,978.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

G. I. Rockwood, Fusible Link, No. 911,162.

A fusible link for doors or shutters, comprising two plates having contact surfaces placed at an oblique angle to the line of tensile strain. These plates are enclosed in a shell filled with fusible material.

Eppa H. Ryan, Shuttle Motion for Looms, No. 911,334.

A loom in which the picking motion is operated at every revolution of the crank shaft on only one side of the loom.

F. C. Miller, Cylinder Relief and Drainage Device No. 911,603.

A drainage device for locomotives which is positively operated by a control rod from the cab, but which remains normally open when there is no pressure or only a light pressure in the cylinder.

M. Kaufman, Watch Protector, No. 911,652.

A projecting flange, preferably integral with one or both parts of the casing, to prevent the watch from being removed from the pocket.

T. Larsson, Elevator Controlling Mechanism, No. 911,-888.

The main valve is operated by pressure admitted through electrically controlled pilot valves. A valve restoring mechanism is provided by means of which the travel of the car itself will be utilized to close the main valve, which valve restoring connections are normally coupled together, so that the car cannot be started until the clutch has been thrown out of engagement.

T. P. Brown, Music Sheet Controlling Device, No. 912,-068.

A device for moving the music spool longitudinally which can be manipulated from the front of the key-bed, so that the music spool will at all times be under the control of the operator's hand which is used for manipulating the several levers along the key-bed.

COUNTY COURT HOUSE.

W. E. Hassam, Concrete Mixer, No. 912,125.

The mixer is provided with a square shaft having a pair of opposite extending parallel brackets at each end thereof which are readily removable, and curved blades connecting each bracket with the opposite extending bracket of the other pair.

Worcester Quotations

Reported by Kinsley & Adams.

BANKS.

	BID.	ASKED.
Worcester National Bank	198	.....
Mechanics National Bank	120	.....
Worcester Trust Co.	250	.....
Merchants National Bank	155	.....
Millbury National Bank	70	.....
First National Bank, Webster	120	.....
Fitchburg National Bank	150	.....

ELECTRIC ROADS.

	BID.	ASKED.
Boston & Worc. St. Ry. Co. 4½ p. c. bonds	96	.....
Worc. & Southbridge St. Ry. Co. 4½ p. c. bonds	.....	96
Worcester Consolidated 4½ per cent. bonds	93	.....
New England Invest. & Security Co. pref. stock	.....	80
Worcester Rys. & Investment Co. stock	50	.....
Worc. Consolidated St. Ry. Co. 5 p. c. bonds	98	103
Worcester & Marlboro St. Ry. 5 p. c. bonds	98	.....
Worc. & Webster St. Ry. Co. 5 per cent. bonds	96	.....

MISCELLANEOUS.

	BID.	ASKED.
Norwich & Worcester R. R. Co. pref. stock	205	215
Providence & Worcester R. R. Co. stock	260	275
Worcester, Nashua & Rochester R. R. Co. stock	140	143
Worcester Gas Light Co. stock	250	.....
Worcester Electric Light Co. stock	240	.....
Crompton & Knowles Loom Works pref. stock	140	.....
Graton & Knight Mfg. Co. common stock	125	.....
Graton & Knight Mfg. Co. preferred stock	110	117
Royal Worcester Corset Co. stock	150	.....
Wright Wire Co. common stock	95	.....
Wright Wire Co. preferred stock	.....	102
United States Envelope Co. common stock	.....	40
United States Envelope Co. preferred stock	.....	102
United States Envelope Co. 5 per cent. bonds	5 p. c. basis	
Norcross properties 6 per cent. bonds	.....	100

Current Events

Personal and General City Happenings.

Jan. 28. Ex-president William J. Grant of the Worcester Branch of the National Post Office Clerks' Association elected delegate to the National Convention at Atlantic City Sept. 6-10. Jeremiah F. Moriarty elected Mr. Grant's successor; Edward W. Keenan, vice-president; William J. Ryan, secretary; Roderick J. O'Donnell, treasurer; William F. Moynihan, Thomas D. Dowd, Harry W. Laduke, Daniel F. Killelea and Fred J. Harvey, directors.

Jan. 30. Harry L. Wissinger, secretary of Railroad Y. M. C. A., goes to New York to become assistant instructor of secretaries.

Jan. 30. Mrs. Anne W. Munger re-elected president of the Art Students' Club; Harriet B. Andrews, vice-president; Abbie C. Knight, secretary; Lafayette Hamill, treasurer; George Jeppson, auditor; Charles Lincoln and Florence Thayer, trustees.

Jan. 30. Worcester Polytechnic Institute deeded estate of late Mrs. A. M. Howe, 43 Harvard Street, comprising 9971 square feet of land, brick house and stable; valued at $14,500.

Jan. 31. Rev. Dr. Willard Scott, pastor of Piedmont Church, resigns, after ten years' pastorate, on account of poor health.

Feb. 2. Rev. Carl John Silverstein accepts pastorate of Swedish-Finnish Lutheran Church, Belmont Street.

ART MUSEUM.

Feb. 6. Rev. William H. Goggin has record of forty-eight marriages performed during 1908, the largest number of any minister in town. Total number of marriages for 1908, 1258.

Feb. 7. Ulick Clifford unanimously chosen chief marshal of this year's St. Patrick's day parade by the Ancient Order of Hibernians.

Feb. 9. Paderewski plays before a large audience in Mechanics Hall.

Feb. 10. Rev. Dr. Frank Crane's resignation as pastor of Union Church accepted at a meeting of the church.

Feb. 10. 147,000,000 gallons of water added to water system by heavy rain-storm.

Feb. 10. Rev. W. G. Taylor, A. M., installed pastor of All Souls' Universalist Church, a large audience in attendance.

Feb. 11. The Railroad Commissioners decide public necessity and convenience require a connection between the Norwich & Worcester division of the N. Y., N. H. & H. R. R. and the Providence & Worcester division.

Feb. 11. The Wright Wire Company, employing 900 hands, agrees to send any one of its employees afflicted with tuberculosis to the Rutland Sanatorium, free of charge, for three months.

Feb. 12. Worcester's 23,000 school children observe the one hundredth anniversary of the birth of Abraham Lincoln. The city officially observes the anniversary by holding a public meeting in Mechanics Hall, with Mayor James Logan and Associate Justice Arthur P. Rugg as speakers. The Worcester Continentals are addressed at their hall by Rev. W. S. Danker.

Feb. 15. Dr. Ellis Peterson, 4 Einhorn Road, appointed veterinarian by Worcester Medical Milk Commission.

Feb. 15. Net water system gain for past week 187,000,000 gallons, the largest since last spring.

Feb. 16. Worcester County Mechanics Association has sixty-seventh anniversary and banquet, with 340 present. Speakers: Hon. Joseph Walker, Mayor Logan, Rev. Dr. Archibald McCullagh, Hon. John N. Cole.

Feb. 17. Worcester Retail Grocers and Provision Dealers' Association fourth annual banquet in Association Hall, with 200 present. Mayor James Logan, President Jewell, John L. Sewall and William Jesup Sholar of Boston were the speakers.

Feb. 17. The Curtis & Marble Machine Company and the Bradley Car Works, two of the oldest and more conservative industries in Worcester, offer to pay the expenses of their tubercular patients for three months at a sanatorium.

Feb. 18. Men's Club of Episcopal churches in Worcester hold a banquet at the Worcester Automobile Club, with 254 present.

Feb. 18. Theodore W. Fowle, instructor in chemistry and physics at Worcester Academy, resigns to continue studying in science at Williams College.

Feb. 18. Fifth annual meeting of Worcester district of Universalist churches meets in the First Universalist Church.

Feb. 19. Worcester County Bar Association holds meeting, with 124 attorneys present, and reorganizes. Hon. John R. Thayer elected president; James A. Stiles, Gardner, vice-president; Frank C. Smith, Jr., secretary. Forty-nine new members were added.

Feb. 19. Worcester Builders' Exchange holds twenty-first annual banquet in State Mutual Restaurant, with 200 present. Mayor Logan, John L. Sewall, Walter Drew and J. B. Bird of New York were speakers.

Feb. 22. Monsignor Thomas Griffin, pastor of St. John's Church, for forty-two years a priest in Worcester, is honored by Alhambra Council, Knights of Columbus, with a banquet in the

ARMORY.

SOCIETY OF ANTIQUITY

State Mutual Restaurant, Mayor James Logan, Rev. Dr. John J. McCoy and Lieut. John F. J. Herbert as speakers.

Feb. 23. The rains of last week give city 272,000,000 gallons of water for its storage basins.

Business and Building News.

Jan. 29. F. E. Reed Mutual Relief Association elects John Wheaton, president; William T. Back, vice-president; William W. Wintersgill, treasurer; Arthur J. Back, clerk; J. E. Haddock, C. P. Hank, Richard Johnson, J. J. Hughes, directors; C. F. Lamb, G. R. Mason, A. Gaige, auditors.

Jan. 30. Arthur E. Newton sells out his produce business at 7 Green Lane to W. E. Dodge, Mr. Newton going to Redlands, Cal., to reside.

Feb. 2. New England Corset Company put in hands of Charles A. Hamilton as receiver.

Feb. 2. Boston & Albany Railroad acquires 35,132 feet of land, Norwich & Worcester 6,940 feet, city of Worcester 1,638 feet from Abbie Buckingham et als., being the Arcade Foundry Company at Washington Square.

Feb. 6. E. W. Lynch decides to give up his furniture business, which he has run for twenty-two years, and devote his time to the two theatres he owns.

Feb. 15. Webb Granite & Construction Company, whose plant was destroyed by fire a week ago, decides to rebuild in Worcester on the site of former plant. Edward J. Cross, contractor, starts on the work, the buildings to be approximately same size as the former ones.

Feb. 15. Wachusett Thread Company gets permit to build addition to its plant, T. F. Melican to be the contractor.

Feb. 16. In a table showing the building operations in forty-four American cities for January, 1908 and 1909, Worcester stands with an increase of 520 per cent. in January, 1909, over January, 1908.

Feb. 18. Woodbury & Leighton, Boston, contractors, begin work on an office building preliminary to constructing the new Union passenger station. The contract requires that the station be completed July 23, 1910. A force of 200 men will be employed; station to cost $500,000.

Feb. 21. Fiske-Carter Company, 11 Foster Street, gets contract to erect large shoe factory for the A. J. Bates Company of Webster, Mass., to be 216 x 43 feet, three stories, with tar and gravel roof.

Jan. 29. Wire Goods Company announces that it will pay for thirteen weeks' treatment at Rutland of any old employee who falls sick with tuberculosis.

City Affairs.

Jan. 29. Committee on Finance recommends purchase of land of Valentine Draniewicz for Grosvenor Street school, at cost of $5000.

Jan. 29. Double entry system of bookkeeping to be installed in Water Department, at cost of $1000.

Jan. 29. William A. Tierney, principal of Edgeworth Street school, recommended for promotion to the principalship of the Cambridge Street school.

Jan. 30. Miss Grace W. Wood to act as reference librarian and arts librarian at the Public Library. Library trustees decide to dispense with office of assistant librarian.

Jan. 30. Blanchard Press awarded contract for printing city document.

Feb. 1. Mayor James Logan recommends appropriations for 1909 for city of Worcester amounting to $2,192,495.06.

Feb. 1. Arrests for January are 268: 239 adult males, 18 adult females, 8 male minors, and 3 female minors.

Feb. 6. Trustees of Worcester Industrial School hold meeting and appoint as committee on sites and plans Louis H. Buckley, Nicholas J. Skerrett and John P. Casey.

Feb. 8. Mayor James Logan receives a letter from the Mayor of Worcester, England, extending greetings to the City Council and citizens for the reception accorded Col. Albert Webb during his stay here.

Feb. 10. The new 75-foot ladder truck, fully equipped and ready for action, arrives at fire headquarters.

Feb. 15. Mayor James Logan appoints nine new policeman. Dr. Merrick Lincoln appointed city physician by Mayor Logan, and George C. Hunt as member of Board of Health, both confirmed by Board of Aldermen. The City Council orders tax levy of $1,937,495.66; appropriates $2,162,495.66 for various departments of the city, and $30,000 additional for the Parks Commission.

Feb. 16. Dr. Merrick Lincoln resigns as medical inspector of the public schools and as assistant bacteriologist of the Board of Health, to take up his duties as city physician.

Worcester Necrology.

Jan. 30. Willie C. Young, vice-president of the Willie C. Young Company, dies after three days' illness of heart disease, aged 59 years 8 months and 2 days. For six years Mr. Young was a member of the School Committee, a part of the time chairman.

Jan. 30. Edward A. Rice, a clerk for the John Gates Lumber Company, and for twenty-five years quartermaster of George H. Ward Post, dies at his home, 74 West Street, aged 74 years.

Feb. 2. Dr. John Clarence Cutter dies at 7 Gates Street, aged 57 years. In 1887 the Mikado of Japan bestowed on him the order of the Meiji IV class.

Feb. 3. Jotham W. Taft, a pioneer in the valentine business, dies of accidental gas poisoning in his rooms, 5 Pleasant Street, aged 93 years.

Feb. 3. Thomas S. Sloan, a prominent horseman, dies at his home, 21 Curtis Street, of rheumatism, aged 76 years 10 months 10 days.

Feb. 7. Joseph J. O'Connor, for seven years a student at Holy Cross College, and manager of the 1909 basketball team, dies at his home in Newburyport of tuberculosis.

Feb. 7. John W. Hadley of 22 Coburn Avenue, a Civil War veteran, dies at his home of old age, aged 80 years and 11 months. He occupied the position of assistant city marshal for several years.

Feb. 8. George C. Belcher, 64 years, of 31 Chatham Street, superintendent of the Arcade Malleable Iron Works, drops dead of heart disease.

Feb. 11. Marshall P. Jenkins, armorer at the State Armory, and widely known among military men of the city, dies of typhoid pneumonia.

Feb. 14. Thure L. Flodquist dies at his home from a stroke of apoplexy. He had been connected with the Swedish Importing Company since 1900, and he belonged to several Swedish lodges.

Feb. 18. Sidney M. Berry dies at the City Hospital of locomotor-ataxia, aged 56 years. For twenty years he manufactured and installed awnings and was widely known as "Berry, the awning man."

Feb. 20. Col. Carroll Davidson Wright, president of Clark College and a member of the Board of Trade, dies at his home, 96 Woodland Street, aged 68 years 6 months and 26 days.

Feb. 21. George L. Kibby dies at his home, 200 Stafford Street, aged 67 years. He was one of the most active temperance men in Massachusetts, and a Civil War veteran.

Boston as a Manufacturing Centre

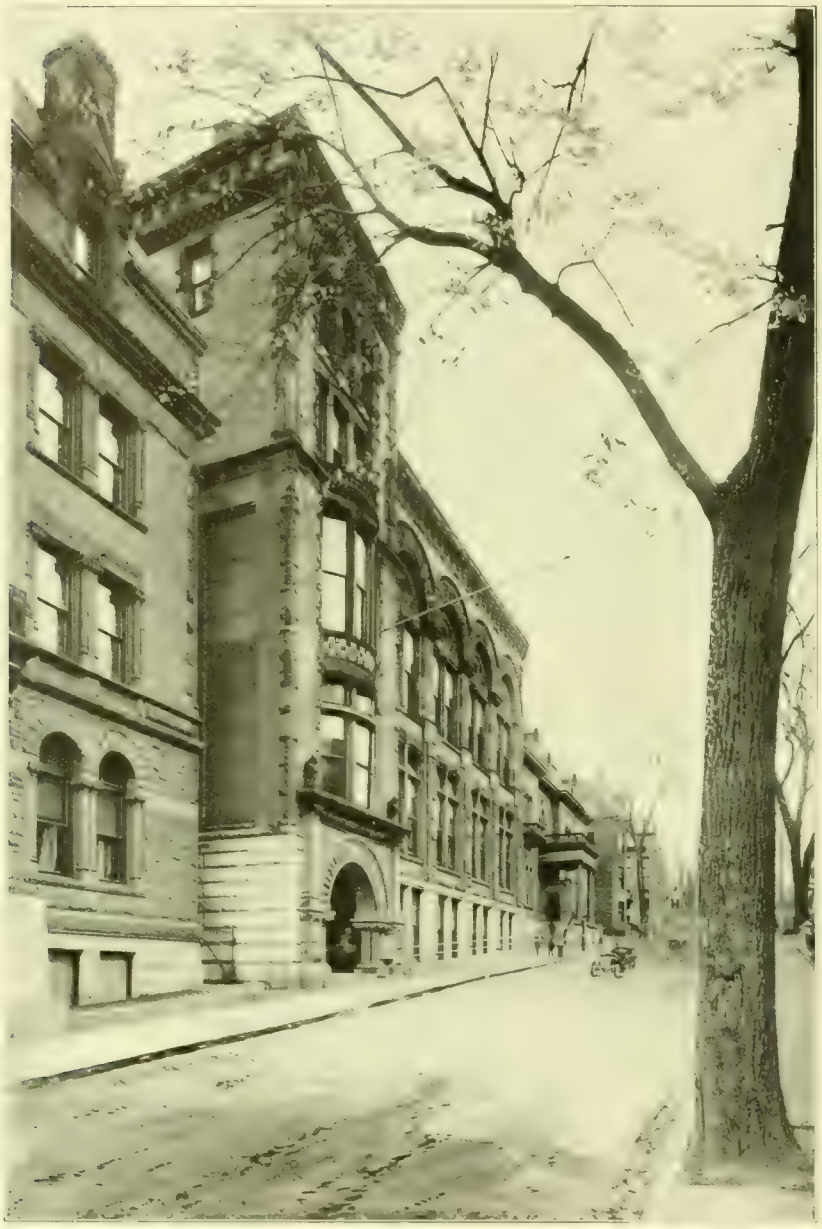
New England is watching with much interest the various movements of the citizens of Boston in the reorganization of their commercial associations, in connection with the new spirit of activity which seems to have taken full sway in their midst. Various matters have come under the notice of the different committees of the Merchants Association, now so soon to be merged into the Chamber of Commerce. There is finally action which supplements much that has gone before—a distinct effort to promote an increase in manufacturing in that city. As a commercial centre Boston's place is secure, because of her size and location. The new stand taken by one of her railroads, backed up by her united commercial bodies, as regards freight rates, is an assertion of a purpose to maintain her rightful place as an export centre which ought to have great influence and beneficial results. The last thing needed seems to be a development of industrialism within her borders; and it will be a matter of much interest to see how she proceeds in this undertaking.

CLASSICAL HIGH SCHOOL,
Maple, cor. Walnut St

STATE NORMAL SCHOOL,
Normal St., cor. Eastern Ave.

SOUTH HIGH SCHOOL,
Richards, cor. Freeland St.

ENGLISH HIGH SCHOOL,
Irving, cor. Chatham St



WORCESTER PUBLIC LIBRARY

"There is no city so great or renowned that it does not wear its library as the chief jewel in its crown."

—GEORGE FRISBIE HOAR.

Two Modern Office Buildings

THE SLATER BUILDING

THE STATE MUTUAL BUILDING

The occupants of the Secretary's Corner and of every other bit of space in the rooms of the Board of Trade have found their hands more than full during the last few weeks in preparing for this number of the Magazine, as may possibly occur to any reader who peruses all its pages. Nevertheless, the Secretary is glad to report that the last month has surpassed all others of recent date in the amount of time and effort given to various matters relating to other activities of the Board. While certain important steps which have been taken looking to the establishment of new enterprises cannot yet be made public, it is safe to state that the Corner has witnessed more conferences on this general subject in recent weeks than in as many months of the earlier portion of the year. There is at last a definite expression of purpose and willingness on the part of some to render tangible help to promising projects, which is a token of better days yet to come.

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The comprehensive plan for aiding cencerns which need temporary assistance has made progress. It has been referred by action of the Directors to a special committee for the perfection of its details and the nomination of suitable officers for setting the plan at work. This committee is proceeding with utmost care for legal details, and is being aided by information courteously given by representatives of other commercial organizations. The Secretary is obliged to counsel still further patience to some inquiring friends who desire an immediate benefit from its advantages; but he is confident that in the end a plan will be put forth by this special committee and referred by the Directors to the entire Board for their consideration, which will be worth waiting for. It should be remembered that such committees must be made up of busy men, if their final work is to be worthy of confidence. In the present instance the Secretary feels sure that the many who are eagerly awaiting this report will not be disappointed when it appears.

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A new claim upon some of the Secretary's time and effort has come in the last few weeks, in the shape of a request to assist some of our manufacturers in their battles at the State House in Boston for relief from trying conditions. He has devoted several days to this work, and is likely to find yet more demands for such service before the present session is over. A single example will illustrate how it is possible for our Board of Trade to make itself of practical help to its members:

After two boiler explosions in our State a few years ago, in spite of the fact that no proof ever appeared that the construction of the boilers was at fault, a demand arose for more stringent legislative control in behalf of public safety. A bill was drafted and became law, largely through the efficient work of one of our own representatives at the State House, Senator E. C. Potter. The aim of this measure was admirable, a commission of five men being provided who should make rules for the construction and installation of boilers; these men to be appointed by the Governor, to represent the State inspection department, boiler users, boiler makers, boiler insurance interests and operating engineers. It was supposed that such a commission, properly selected and doing their work under correct principles, would relieve the Legislature of making detailed laws about the making and use of boilers.

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Unfortunately, this theory has failed to work out as it was intended. Possibly because of the unfortunate personnel of the committee, some of whose members are in no just sense fair representatives of the classes named, and plainly because of wrong conceptions of their duties, insufficiently defined in the enabling act, there has issued from this body a large and complicated mass of rules, formulæ and recommendations which have proved at variance with the judgment of some of the best engineering experts of New England, and have made the manufacture and installation of boilers a perplexity and almost an unprofitable undertaking. As a result, the clients of reputable engineers and the makers of boilers in the various cities of the Commonwealth are united in protest against the injustice and burdensomeness of present conditions.

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It was the Secretary's privilege to attend a meeting of manufacturers and users of boilers, to listen for an entire afternoon to their experiences, and to serve on a committee appointed by them to seek some relief from the Boiler Rules Committee and from the Legislature. He has heard some talk about "government by commission" in other connections, but has come up against the real thing here. Here are five men, apparently influenced by labor unions if not controlled by them; they meet secretly and put forth any rule or regulation they please about the making of boilers, regardless of whether or not it is demanded by public safety, or of the needless trouble and expense to which the users of boilers are put. They publish new editions of rules without warning, so that no boiler maker can be sure that the specifications with which he begins a boiler will be allowed by the time it is done. How would the manufacturers of looms or lathes enjoy being under such absolute dictation?

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Fortunately the different boards of trade in this State are united by a State organization, and are coming closer together for the safeguarding of business interests; and the Secretary of this Board counts it a privilege to combine his efforts with other secretaries of like organizations in practical efforts to get relief for the makers and users of boilers in our own city, some of whom have suffered what is practically the destruction of property without any recourse at law. In this and other instances he is being strongly impressed with the need of concerted action on the part of the manufacturers of Massachusetts to secure relief from unjust burdens which are seriously hampering the industrial prosperity and progress of the Commonwealth.

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

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Clerk of the Corporation, WILLIAM H. SANFORD — *Editor*, H. WARD BATES

The February Meeting of the Directors

Several important matters received attention and action at the regular meeting of the Directors, on February 11. The Committee on Manufactures reported the situation as regards the rulings of the Boiler Rules Commission, and action was taken supporting the interests of Worcester manufacturers and users of boilers, Mr. James C. Stewart being sent to represent them at a meeting in Boston. The Committee on New Enterprises reported on its investigations of the plans of the R. L. Morgan Motor Truck Company for going forward on a large scale with the production of this serviceable machine; and the following resolution was unanimously adopted by the Directors:

"Resolved, That we learn with pleasure of the progress of the motor-truck industry as developed by the R. L. Morgan Company, and express our interest and readiness to coöperate in all practical ways in the enlargement of this promising business in our city."

Action was also taken, in response to representations from the Boston Merchants Association and the State Board of Trade, earnestly endorsing the Weeks bill in Congress for forest preservation, and urging upon Massachusetts representatives their utmost efforts in its behalf. The Committee on Manufactures were also instructed to express to the Webb Granite Company an assurance of the desire of the Directors to do all in their power to aid in the continuance of this industry in our city.

Under the head of local matters inviting the special attention of the Board, there was a free discussion of certain matters connected with this city's protection against fire. It was felt that two such conflagrations as have recently visited Worcester, while happily relieved from the disastrous extent to which they would undoubtedly have gone under certain different conditions of wind and weather, are calculated to give an unfortunate impression to parties considering locating their business among us; and the Committee on Municipal Affairs was requested to investigate certain points connected with our present fire protection. The matter of the disfigurement of south Main Street by the erection of a three-story tenement utterly out of keeping with the locality was also discussed, and the subject also referred to the Committee on Municipal Affairs, with instructions to examine thoroughly what further protection such sections of our city should have in such cases.

How Providence is Providing

The Board of Trade in this our neighboring city across the Rhode Island line has thrown off that quiet dignity for which its past history has been noted, and has suddenly swung out into the limelight with a performance which compels admiring notice. The movement for coöperation and enthusiastic work in city-building, which has spread from the west to Springfield and Boston, seems to have taken a firm grip upon Providence, according to the tales with which her newspapers are full; for down in Providence it seems to be the pleasant custom for the newspapers to boom instead of ignore or "knock" the men who are doing their best to build up the city's interests. Our banquet committee are working hard to plan how they can seat eight hundred at the coming annual dinner of this organization, but in our sister city twenty-five hundred men sat down to an invitation banquet, the food for which was all given by the business men of the city. Various musical organizations, both vocal and instrumental, were on hand to help entertain; and a long list of speakers, the most representative men in the State, vied with each other in arousing enthusiasm. In fulfillment of their slogan, "Providence Provides," everything that was needed to start a genuine western boom seems to have been at hand.

The enthusiasm of the hour seems to have been but the beginning of a definite plan which abounds in original and daring features; and if a small fraction of these features materialize, something certainly ought to happen down in the Rhode Island plantations. Here are a few suggestive quotations from the plan, which in the shape of an elaborate pamphlet was distributed to every guest:

The first step in the creation of enthusiasm, or the development of civic pride, has been taken by the assembling of 2500 or more active business men for the consideration of plans for the development of trade and commerce in Providence; and what benefits Providence benefits all of Rhode Island.

* * * * * * *

An appropriation of at least $6000 for a publicity fund is recommended for the ensuing year. This could be in part taken from the regular revenue of the Board of Trade and in part raised by subscription. The fund would be used for—

A bureau of information, to gather, systematize and make available the mass of scattered, ill-digested facts—economic industrial, commercial, etc.—regarding Providence and Rhode Island, which must be brought together for any proper and business-like civic promotion, and a publicity campaign, based on the known facts as to the many advantages and needs of Rhode Island; following tried, practical publicity methods.

* * * * *

The raising of funds necessary to carry on the work outlined involves the arousing of enthusiasm, and the carrying out of the plan at the same time.

Sell 100,000 buttons at ten cents each with the inscription "Providence Provides" on the face of the button under the star of industry, and "Rhode Island the Mecca of Industry" as the inscription above the star of industry.

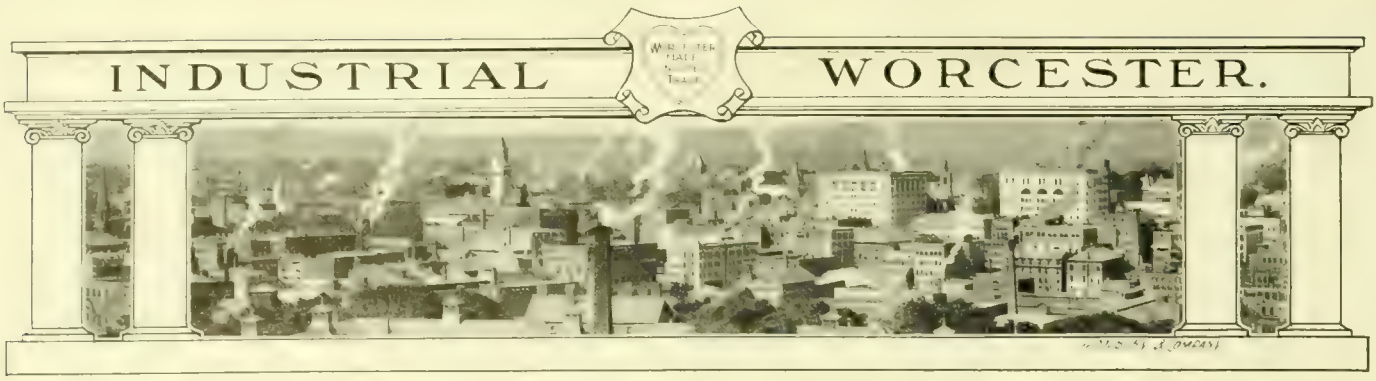
Fifty thousand buttons have been given by the manufacturing jewelers of Providence and preparations for their sale are under way. The $10,000 derived from the sale of buttons should be devoted exclusively to development work.

* * * * * * *

Sell 1,000,000 stickers to be used on all public and private mail which goes out of the city. These stickers are to sell for once cent each to citizens, and give a return of $10,000 and an advertisement for Providence.

Secure 500 annual guarantees of $10 each from merchants, manufacturers and professional men, a possible way of securing $5000 to be used in securing new industries.

The photograph of Hon. Edwin T. Marble, on page 70, is from the studio of Louis Fabian Bachrach.



A Card Clothing Centennial

The fact that the original machine for setting card clothing was patented in the year 1797, and the patent was re-issued in 1809, just one hundred years ago, makes an address on this subject, delivered by Albert H. Howard, president and treasurer of the Howard Bros. Mfg. Company of this city, before the Men's Club of Old South Church, of historic value and permanent interest. Mr. Howard has been engaged for almost half a century in making card clothing, and he literally speaks by the "card" in what he says on this subject.

"Card clothing," Mr. Howard told his hearers, "is the outside covering for the cylinders of a cotton or woolen carding machine. It is made of short pieces of wire, cut and bent into the proper shape, and called teeth, which are set through a foundation, either of leather or cloth, the ends of the wire projecting through on one side to form the carding points. When the card clothing is properly adjusted to the different cylinders and rolls of the carding machine, it is used to straighten the fibres of cotton and wool preparatory to spinning and weaving into cloth.

"The machines for setting or making card clothing are among the most complicated and interesting in use. The machine is, in fact, a combination of machines, and every movement is focused toward one point, and all must work in perfect harmony. To explain, the wire is fed in, clamped, cut off, bent, and while certain parts of the machine are bending the wire, other parts of the machine are putting the foundation into the proper position by feeding it up and sideways. In the meantime, the two needles are getting into position to prick the holes for the wire, which, after being cut to proper length, is held by the doubler and crowner, while two wing-like pieces of the machine form it into a staple or tooth, and put it through the holes in the foundation which the needles have pricked. Then the two ends of the tooth or staple pass over the rest into dies, which draw the points down over the rest to form the second bend. These, in brief, are the motions required to make and set a single tooth.

ALBERT H. HOWARD

"While the last operations are being performed, the first motions have fallen back to their original position ready to start again. This series of movements goes on at a rate to make and set several hundred teeth per minute. The variety of card clothing is legion. The length of the tooth projecting beyond the foundation may vary from a thirty-second of an inch to an inch and a half. The wire varies in size from No. 16, which is one-sixteenth of an inch in diameter, to No. 36, which is nine one thousandths of an inch in diameter.

Industry Born in Leicester

"Pliny Earl of Leicester, Mass., made the first card clothing for Samuel Slater, who started the first cotton mill in this country in the year 1790 (and a very interesting fact has just come to my knowledge, that this Samuel Slater also organized the first Sunday school in this country in his own house). This card clothing was made with a leather foundation, the teeth made on a hand machine, the holes pricked in the leather with two needles mounted in a handle, and the wire teeth were then set in the leather foundation by hand, a process exceedingly slow when compared with the speed of card setting machines of our own make that form the teeth, prick the holes, and set the teeth at the rate of 400 per minute. Hand cards were used at a much earlier date than card clothing. These were made in a similar way, the teeth or wires being set by hand in the foundation. This was then tacked on a board, and used to card wool by hand into rolls, which were spun on a hand spinning-wheel into yarn, either for weaving into cloth or knitting into stockings or mittens.

"Hand cards were, and are now, used for carding horses and cattle, and also to straighten out the flowing locks of the southern ladies and gentlemen of color. When so used for combs, they are called Jim Crow cards.

"The machine for setting card clothing is an American invention, being patented in the year 1797 by Amos Whittimore. The patent was re-issued in 1809, just a hundred years ago. When the petition for the renewal of the patent came before Congress, favorable action was taken, after some little deliberation, by a vote of fifty-five in the affirmative and eighteen in the negative. There are no records of any speeches delivered for or against the renewal of this patent, but it is stated that John Randolph of Roanoke thus expressed himself with his most emphatic eloquence, for which he was noted: 'Yes, I would renew it to all eternity, for it is the only machine that ever had a soul.'

Eleazer Smith Real Inventor

"While Mr. Whittimore obtained the patent, and profited thereby, it is understood that not he, but Eleazer Smith of Walpole, Mass., was the real inventor of the machine. They had been shopmates, and it is claimed that while Mr. Smith was building the machine, Mr. Whittimore, who was also a skilled mechanic, managed to keep himself informed of what Mr. Smith was doing. This was not difficult, as Mr. Smith was of a confiding nature. From Mr. Smith's ideas Mr. Whittimore built a machine, which he sent to the patent office before the completion of Mr. Smith's machine.

"At the expiration of the renewed patent in 1825 orders were received from England and France for machines, but their complexity was so imperfectly understood by foreign mechanics that it became necessary to send over American workmen to set up the machines and put them in running condition.

"Because of the patent on this machine, which compelled the payment of royalties to Mr. Whittimore, many firms in this country still manufactured card clothing by hand in the old manner of pricking holes in the foundation, making the teeth on a separate machine, and sending the pricked foundation into the homes in town and country, where the women and children set in the teeth one at a time. However, in this business, as in

all others, the slow hand product was gradually but completely superseded by machine made card clothing.

"Many changes in materials used, and in process of manufacture, have come since I first began to work in a card shop. Formerly leather was almost wholly used for the foundation of card clothing. At the present time cloth is extensively used, partly because of the scarcity and high price of leather. This cloth foundation is made of a number of layers of different kinds of cloth glued together with rubber cement. The cloth is never seen in a department store, not even on the bargain counter. We buy it in cuts which are two hundred yards long and sixty-eight inches wide. The woolen cloth, which is used for one of the layers, has a linen warp, and weighs from eighteen to twenty-four ounces to the square yard. Strong linen and cotton cloths also enter into the foundation. A few years ago card clothing made of iron wire was in common use. To-day hardened and tempered steel wire has entirely taken its place for making the teeth.

"Since I have been engaged in the business it has almost wholly changed in management and owners, for when I first became acquainted with the card clothing business forty years ago there were more than twenty different companies, and most of them in this State. There are but ten at this time.

The Change in Leicester

"Seven were located in the town of Leicester, which to-day contains but one, and that is owned not by a descendant of any of the former managers, but by men whose fathers were not connected with the business.

"The outlook for the future of the card clothing business is getting rather problematical, on account of the large amount that is imported from foreign countries, owing to the difference in cost of labor, cost of material, and cost of maintaining the plant and carrying on the business. It is shown by statistics that in 1890 less than five per cent. of the card clothing was imported, while to-day more than thirty-three per cent. of the card clothing used in the United States is made in foreign countries. I have stated that thirty-three per cent. of the card clothing used in this country at the present time is of foreign manufacture. This estimate is for both cotton and wool cards, but should we take into consideration only the card clothing used on new cotton cards, the percentage of imported clothing must be estimated at nearly seventy-five per cent. The reason for this situation is at times hard to understand, since it has been repeatedly demonstrated that the card clothing made in this country has proved as good as, and in some tests superior to, the foreign-made product."

WORCESTER'S AEROPLANE

The accompanying picture is a photograph looking straight in front of the latest type of aeroplane built in this country. It was constructed by Worcester enterprise and Worcester men in a Worcester shop, and is at this moment only awaiting favorable opportunity to be launched in the air on its initial trip. Appropriately enough, the first picture of this new flying machine ever published is given to the world in this issue of the Worcester Magazine.

The machine is unique in several respects as compared with the well-known types of aeroplane built by the Wright brothers, Farnum, De Lagrange and others. These latter all require to be propelled swiftly along the ground in order to gain sufficient velocity against the wind to provide lifting force, whereas this new type is expected by its constructor to rise directly off the ground by its own power, something which has not heretofore been accomplished.

THE WORCESTER AEROPLANE

The motive power is equally unique. It is a two-cylinder, two-cycle opposed motor in which one pair of propellers is attached directly to the cylinders and another pair directly to the crank shaft. The cylinders rotate at 600 R. P. M. in one direction and the crank shaft at the same speed in the opposite direction. Consequently both explode twice every revolution, thus giving an unusually constant torque. So evenly balanced is this remarkable little motor that although slenderly mounted in the hub of the propellers, it produces a scarcely perceptible vibration while giving off twenty-five horsepower. It is expected that this great power in proportion to the weight, which is only about 700 pounds, including passenger and all equipment, will propel the aeroplane forward at about fifty miles per hour; the motor itself weighs only fifty pounds.

"The inventor and designer is a Swedish engineer, whose brilliant record in the field of high speed motor and torpedo boats augurs well for this enterprise.

ALLEN-HIGGINS WALL PAPER COMPANY

Few Worcester people know that among their many thriving industries is one of the representative wall paper factories of the world. So rapid has been the progress of this company during the past three years that it has distanced many of its older competitors. New ideas—new expressions—*new individuality*—have won substantial recognition from that great public ever quick to respond to a new note that rings true. It is but another illustration of the relations of progress and success. In these days, when the new becomes old over night—when few have time to remember even yesterday's good deeds—when improvements put out of commission more machinery than wear and tear—the man who is not alive in every fibre of his being, who does not add to his equipment new tools of thought and trade, gets quickly out of stride. He loses a step, another, then the pace, and is soon classed with the "also rans."

The "one man" business has been relegated to this class. It is an age of specializing, of organization, of perfect adjustment to the requirements of the times. That the Allen-Higgins Wall Paper Company recognizes this fact is well attested by its splendid organization. Each man occupies his position because of his ability to adjust himself to the requirements of that position, to furnish his share of the driving power that enables his company not only to hold its own with its competitors, but to *lead*.

The company has entered the world's markets, and the fact that it is able to compete successfully with the Old World manufacturers on their home territories is perhaps the best proof of its standing in the trade.

On another page is shown a condensed though comprehensive view of the plant, the different processes through which the paper passes, the men who have made the business a success, and the product itself, four papers forming an interesting background.

"Vogue Papers," as these papers are known to the trade, are fast becoming household words, and rightly—they are a guarantee of the *latest* and *best* values in wall papers.

This concern, one of the most unique and interesting in Worcester, will have a very fascinating exhibit at the Mechanics Exposition.

TAXICABS IN WORCESTER

On March 1, under the management of the Worcester Taxicab Service Company, a public automobile cab service was inaugurated in Worcester for the first time.

John T. Brierly is president of the new company, Charles E. Burnham treasurer, and Henry C. Wright superintendent. Oliver B. Wood, Henry L. Parker, John F. Kyes and several other gentlemen are also interested in the enterprise.

All the parts, except the bodies, for the new cab are made in France under license from the Societe Anonyme des Moteurs Thermiques, Paris, and are assembled by the Sultan Motor Car Company of Springfield. Two cars are now in operation and

A WORCESTER TAXICAB

four others will be added immediately. Additional cars will be installed as rapidly as the service demands. The charges, the company announce, will be very moderate. One passenger, for distance up to one-half mile, 30 cents; one mile, 40 cents; and 10 cents for each additional quarter mile, making a two-mile ride, 80 cents. Children over 7 years and each additional passenger, half rates. Hour service and long trips by arrangements. [illegible] Boston 150 and New York over 1000. They are attractive, comfortable and great time savers.

On the first day, one of the Worcester cabs took two gentlemen from Pearl Street to the works of the Norton Company, at Greendale, in 10 minutes, with careful running.

Worcester people seem to appreciate this new service and the company is sanguine of the future.

The company is capitalized at $50,000. A handsome engraving of one of the new cabs is shown.

WORCESTER POLYTECHNIC INSTITUTE

Representatives of the Westinghouse Electric & Manufacturing Company of Pittsburg, and the National Electric Lamp Association, have visited the institution with a view to securing the services of the men who will graduate in electrical engineering in June.

The use of a Venturi meter as a measuring instrument in boiler feed service has become of such importance that it is desirable to have more reliable data than are now available regarding the per cent. of error by this method of measuring water under various conditions of temperature, intermittent feed, check valves, etc. A complete series of tests is to be made in the engineering laboratory by George Y. Lancaster, Jr., S. B., W. P. I. '06, as a thesis for the degree of M. E. in June, 1909. The proposed experimental work will include the use of the meter for measuring the flow of water of temperatures varying from 60 degrees to that of the boiling point, or 212 degrees. The meter will also be tested for reliability, whether fed by an injector, single, duplex or rotary steam pump, and whether or not it changes the results, if any of the above means for moving the fluid are in poor working condition and intermittent in their action. The effect of placing an air chamber on the line will also be studied and observations of the action of the meter when check valves are in the line will be taken.

A new illustrated pamphlet descriptive of the institute has just been issued. Numerous views of the institute buildings, both exterior and interior, are given, and a large amount of descriptive matter accompanies them. Several of the views are new and have never appeared before. Among them are two of especial interest, one showing the institute as it existed thirty-eight years ago, and the other as it exists to-day. These two illustrations present in a forcible manner the progress which has been made by the institute in the intervening years.

HEALD MACHINE COMPANY NEW SALES MANAGER

The Heald Machine Company has secured the services of Mr. Arthur C. Hoefinghoff as sales manager for the company, beginning March 1st. Mr. Hoefinghoff comes from New Orleans, La., where he has been located for some time as manager of the machine tool department for the Fairbanks Company. He is a brother of the late Harry C. Hoefinghoff of Cincinnati, Ohio, who was at the head of the Bickford Radial Drill Company, and was associated with his brother in the management of that business. Since that time he has had extensive experience in the selling of machinery as a machine tool dealer, which gives the advantage of having been on both sides of the proposition. Mr. Hoefinghoff says he has had excellent reports in regard to Worcester as being a good place to live in, and anticipates with much pleasure making Worcester his home.

OFFICE SPECIALTIES

A corporation, to be known as Office Specialties de Luxe (Inc.), organized under the laws of Massachusetts, has leased, for a term of years, the entire second floor of the Austin Street wing of the Hart Renting & Power Company plant, corner of Austin and High Streets.

The new company have purchased all the patents and patent rights, special machinery, tools and stock in process, of the Shepherd Index & Ledger Company, of New York city, and will move to Worcester immediately.

The purpose of the company is to manufacture special accounting and filing systems; also loose-leaf specialties.

The organizers and officers of the new company are: President, W. A. Sweet, Worcester, senior partner of Bickford & Sweet, shoe manufacturers; Vice-president, G. C. Shepherd, Brooklyn, N. Y., former manager of the Shepherd Index & Ledger Company; Treasurer, E. A. Bickford, Worcester, junior member of Bickford & Sweet; Secretary and Manager, J. A. Farnum, Worcester, former vice-president of Frost Stamp & Stationery Company.

The American Steel & Wire Company

Enormous is the output of steel rails, yet, at the present rate of increase, the nation's annual rail tonnage bids fair to be exceeded by the weight of wire products. Of the millions of tons of steel annually produced in the United States, fully a tenth is manufactured into wire. The greater part of the large wire product of America is the output of one company. In wire manufacturing no other concern can approach the achievements of the colossal organization known as the American Steel & Wire Co.

In size, capacity and efficiency of operation, the manufacturing establishments of the American Steel & Wire Company surpass everything the world has seen previously in the form of facilities and appliances for wire production. The names and locations of the company's principal works are as follows:

North works, Worcester, Mass.
Central works, Worcester, Mass.
South works, Worcester, Mass.
Waukegan works, Waukegan, Ill.
De Kalb works, De Kalb, Ill.
Bluff Street works, Joliet, Ill.
Scott Street works, Joliet, Ill.
Anderson works, Anderson, Ind.
American works, Cleveland, Ohio.
Consolidated works, Cleveland, Ohio.
Newburg works, Cleveland, Ohio.
Cuyahoga works, Cleveland, Ohio.
Emma furnace, Cleveland, Ohio.
Central furnaces, Cleveland, Ohio.
H. P. works, Cleveland, Ohio.
Salem works, Salem, Ohio.
Neville furnace, Neville Island, Pa.
Allegheny Furnace, Allegheny, Pa.
Shoenberger works, Pittsburg, Pa.
Rankin works, Rankin, Pa.
Sharon works, South Sharon, Pa.
Donora works, Donora, Pa.
Braddock works, Braddock, Pa.
Allentown works, Allentown, Pa.
Troy works, Breaker Island, N. Y.
Hamilton works, Hamilton, Ont.
Pacific works, San Francisco, Cal.
Cherryvale works, Cherryvale, Kan.
Carondelet works, Carondelet, Mo.
New Haven works, New Haven, Conn.

The company has 12 blast furnaces, 2 Bessemer steel works with 4 converters; 3 open hearth steel works with a total of 17 furnaces; 5 blooming, slabbing, billet and sheet bar mills; 3 plate mills, 6 merchant bar, hoop and cotton tie mills; 11 works with a total of 17 mills; 20 wire mills; 12 nail factories; 11 barbed wire and fence factories; 17 galvanizing departments; 7 tinning departments and 6 foundries.

The above list does not include the cold rolling departments at the American, Newburg and North works; the shafting department at Newburg; the horse-shoe works at Shoenberger; the spring works at South, Waukegan and Pacific; the rope works at South, New Haven and Pacific; the electrical cable works at South, and the zinc smelters at Cherryvale and Carondelet, the former having 4,800, and the latter 2,000 retorts.

In Egypt, in the dawn of ancient civilization, began the history of wire manufacturing. In early times the ductile metals were brought into the filamentous form, first by hammering them into thin plates and then cutting the plates into narrow strips, which afterward were rounded somewhat and roughed off by being rubbed with sand. For perhaps 3000 years the crude methods of the prehistoric smiths were but little improved upon; no other way of making wire was practiced or known. Near the close of the fourteenth century, in Nuremberg, Germany, was devised a rude machine, driven by water power, which made, after a fashion, drawn wire. But no great amount of machine-drawn wire was produced until after 1865. In England in that year commenced the development, on a larger scale, of wire manufacturing. From Great Britain, however, supremacy in wire production has departed. On this side of the Atlantic is firmly established the sovereignty over the world's wire trade. The one acknowledged leader of the industry is the widely known American Steel & Wire Company.

Time was when both wire and nails were manufactured almost entirely from wrought iron. To secure the toughness and high tensile strength required, great care had to be used in the preparation of the iron. The cost of the product was proportionately high. But when steel became the standard material, not only was the expense of production decreased, but a considerable gain was made in tensile strength. While good black iron wire will show an ultimate tensile strength of about 25 tons to the square inch, and bright hard drawn iron wire a strength of 35 tons to the square inch, Bessemer steel wire will stand a strain of 40 tons and open-hearth steel wire of 60 tons to the inch. Of the special grades of wire, high-carbon open-hearth steel will sustain about 80 tons, crucible cast steel wire about 100 tons, and the best cast steel, sometimes called "plow" steel wire, is equal to a strain of 120 tons. Yet in the attainment of this tremendous strength, the limit is not reached. Certain qualities of cast steel wire, "made under specifications calling for a particular composition and requiring a very elaborate working," have been produced, showing an ultimate breaking strength of 170 tons to the square inch. Tests of "plow" steel wire have repeatedly demonstrated a tensile strength that withstood a strain equal to 350,000 pounds to the square inch.

A platinum wire so fine as .00003 of an inch in diameter has been obtained; 1,060 yards of this wire weighed only three-fourths of a grain. A wire a mile in length would be a trifle heavier than one grain of wheat. While a wire of this description illustrates one of the possibilities of wire production, it is with the ordinary wire of commerce that the American Steel & Wire Company is chiefly concerned.

Having at various places advantageously located its own blast furnaces, its Bessemer and its open-hearth steel works—establishments that rank well among the largest and best managed steel plants in the country—the company provides itself with every assurance of exactness, with all the kinds of steel it requires from which to fabricate its great variety of wire products.

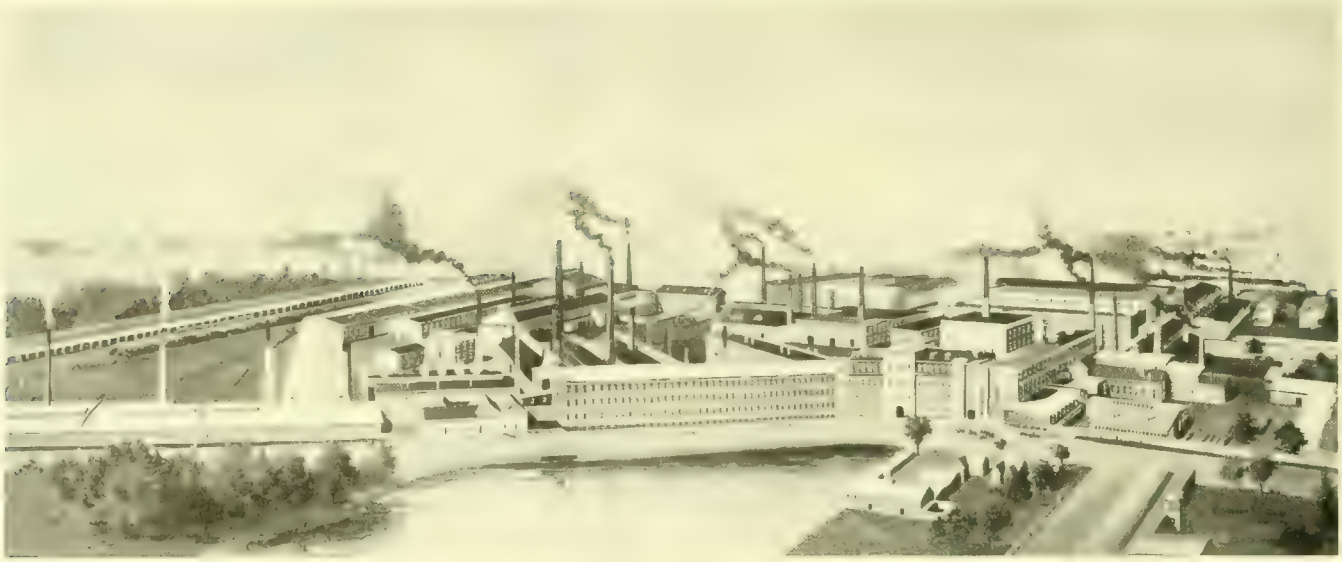
Following steel productions comes the conversion of the billets into rods, which is a hot rolled proposition and the last process before being delivered to the wire-making processes. The billet measures 4 by 4 by 36 inches, and so rapidly is this rolled into a rod about a quarter of a mile long, that it is accomplished in one heat. Emerging from the finished rolls this rod is wound into coils of convenient size that are ready for the mill.

There is a great fascination in being near a blast furnace in operation, but no less interesting is a visit to a rod mill at night. The fiery serpent-like rods are guided from one set of rolls to another by men quick of eye, strong of arm and stout of heart, until at last they have reached the desired size and are coiled upon rapidly revolving reels, still glaring red, and seemingly defiant at those who started and then rushed them through the different passes so speedily.

The men who are trained to catch the rods as they dart at them are so quick and so sure in their every motion that an observer might confidently expect them to handle live snakes in just such fashion.

The American Steel & Wire Company has never been lacking in shrewdness, and a lasting tribute to that fact is its by-product, sulphate of iron.

The first process in the wire mill is to dip the bundle into a bath of sulphuric acid, which takes off the rolling mill scale. The bundle is then dipped into a bath of lime water, which neutralizes the acid. This is called the cleaning process. When the immersions weaken the acid, it is drawn off into vats and converted into sulphate of iron, which is extensively used as a germicide, also for the eradication of farm weeds. Sulphate of iron is used for the purification of water at St. Louis, Cincinnati, Chicago (stock yards) and sixty other cities, while as an eradicator of farm weeds it has been tested at quite a number of agricultural experimental stations throughout the country and approved. As evidence of what sulphate of iron may accomplish in the way of eradicating farm weeds, we cannot do better than to reproduce the words of Henry L. Bolley, botanist. Referring to extensive experiments conducted at the North Dakota agricultural experimental stations, he writes: "Each year of our experiments has resulted in success of such marked nature that the writer feels safe in asserting that when the farming public have accepted the



NORTH WORKS

CENTRAL WORKS

SOUTH WORKS

Worcester Magazine Advertiser

method of attacking weeds as a regular farm operation, the gain to the country at large will be much greater in monetary consideration than that which has been afforded by any other single piece of investigation applied to field work in agriculture, not excepting even the now generally used formaldehyde method of seed disinfection, which has saved the State of North Dakota annually cereals to the value of several millions of dollars.''

The sulphate of iron produced by the American Steel & Wire Company is manufactured by a process patented June 25, 1907, and other patents are pending. It is put up in barrels, bags or in bulk, and can be quickly shipped in either small quantities or in carloads direct from the company's mills. It is used in solution and is applied by a machine or hand sprayer. The company invites inquiries from any one interested, and stands ready to give all the information it can about this useful product.

But to revert to the process of wire drawing. Cleaned of scale by being immersed in an acid bath and then de-acidized in a bath of lime water, the coils are made ready to be pulled through the draw plates. This is an oblong piece of hard steel pierced with conical holes, gradually diminishing in diameter; the smaller end of each aperture is carefully prepared to the desired size. The end of the rod, being drawn through the hole, is secured to a drum. By the revolving drum the wire is continuously pulled through the hole in the draw plate. From the first drum the wire is passed through a smaller hole and again drawn by drum number two, and so on the process is repeated until the wire has been reduced to the required diameter. Fine wire may require from 20 to 30 drawings. In drawing out and winding up a thick wire, the drum revolves slowly, but the speed of the successive drums is quickened as the size of the wire diminishes. Passed through the draw plate a certain number of times, the metal becomes brittle and needs must have its ductility restored by annealing.

From the annealing furnace the wire again passes to the acid bath to remove the scale and then again to the lime water to eliminate the acid. Through the draw plate it goes again. The process of drawing, annealing and cleaning is continued until, drawn down to the desired diameter, the wire, unless it is to be galvanized, tinned or further fabricated, is ready for the market.

For some very accurate purposes, such as chronometer springs, wire is drawn through holes perforated in diamonds and other hard gems.

One of the many things in which this company stands preëminent is the excellence of its galvanizing, and especially that upon telegraph wire. Its product of this material is recognized as the standard in this country and abroad. In this process the wire is drawn through a specially constructed furnace, after which it is allowed to cool. It is then drawn through an acid bath, the strength of the acid depending on the grade of wire to be galvanized. After leaving this bath it is passed through another one of a different solution and carried a distance of 15 feet to a kettle containing molten zinc of a high temperature.

From this third bath the wire is drawn through a coating of pulverized charcoal directly onto the coiling frame.

The coating thus applied withstands the corrosive action of the elements better than any other known process.

In bulk, at least two of the more important wire products are wire nails and wire fencing. By the American Steel & Wire Co. wire fencing is made in world-supplying quantities by machines that approximate automatic perfection. In wire nails, also, wonderful cheapness and efficiency of production have been obtained. In the nail mills each separate machine is capable of turning out from 150 to 500 nails a minute. The nail-making capacity of the company is upward of 12,000,000 kegs (600,000 tons) a year. The wire nail first began to be manufactured in the United States in 1872. A German Catholic priest, Father Goebels, and Michael Baackes, from the same town in Germany, operated the first machines that were in that year brought over from Dusseldorf and set up in Covington, Ky. Later on this small beginning with four machines developed into greater propositions, and the American Wire Nail Company was organized. In 1878 Michael Baackes, Stuart Chisholm and Frank Baackes continued the manufacture under the new company formed, the H. P. Nail Company of Cleveland. In 1884 Frank Baackes established the manufacture at Beaver Falls, when just one year later a great strike shut off the manufacture of cut nails. This left the wire nail as the only available nail, and with the extensive introduction it then received, the wire nail rapidly superseded the cut nail and became the standard nail for general use. All these plants and others later organized, such as the Washburn & Moen Manufacturing Company, Consolidated Steel & Wire Company, I. L. Ellwood Company, Newcastle Wire Nail Co., Oliver Wire Company, Pittsburg Wire Company, Salem Wire & Nail Company, Cincinnati Company, Continental Wire Company, Indiana Wire Fence Company and the American Wire Company, afterward became absorbed in the present American Steel & Wire Company.

From the hairspring of a watch to the steel wire cables which support the greatest suspension bridge, the variations in size, cost and utilization of wire products are numerous and remarkable. A list of these different varieties and uses of wire manufactured by the American Steel & Wire Company is as follows: Wire of every description, round, flat, square, triangular and odd shaped. Music wire, mattress, broom, weaving and market wires in all finishes. Special wires adapted to all purposes. Wire hoops for use on lime barrels, sugar, salt, produce, apple, cracker, cement and flour barrels and other slack cooperage. Electrical wires and cables of all kinds, bare and insulated. Telegraph and telephone wire, pole steps. Rail bonds for electrical railroads. Wire rope, heavy cables and hawsers; elevator, tramway, dredging and derrick ropes, ships' rigging, extra flexible rope, sash cord and clothes lines. Bale ties for baling hay, straw, flax and all kinds of fibrous materials; also for bundling lumber, mouldings, staves and heading. Nails, staples, spikes and tacks of all kinds, standard wire nails in all sizes and shapes. Miscellaneous fine nails, wire brads, tacks in count and weight packages. Dowel pins, railroad spikes, barbed wire, both two and four point; Glidden, Baker, Perfect, Ellwood, Waukegan, Lyman and Iowa brands. Woven wire fencing, ''American,'' ''Ellwood'' and ''Royal'' fences. Concrete reinforcement for buildings, bridges, sewers, water-mains, columns, walls, stacks, power plants and other concrete work requiring steel reinforcement. Springs: clock, motor, car, furniture, agricultural and all kinds of fine and heavy springs. Sulphate of iron for water purification; for fertilizing; for chemicals, disinfectant, dyeing, purification of gas, for plate glass polishing and for wood preservative. Poultry netting, galvanized before weaving—all meshes and sizes. Wire rods of open hearth and Bessemer steel. Horseshoes, ''Juniata'' brand, iron and steel, in all sizes and patterns. Also toe calks, shafting, cold drawn steel, free cutting screw steel pump rods. Roller bearing rods, rounds, squares, hexagons, flats and special shapes.

The latest addition to be made to the company's long list of wire products is concrete reinforcement. This great material is rapidly becoming the foundation of the country's concrete construction, and consists of a woven wire fence, but ungalvanized, and made of wire of considerably harder nature and greater tensile strength. This fabric is known as the triangle or triangular mesh reinforcement.

The wire in the Steinway and other great pianos is the company's perfected brand; the rope in the elevators of the Washington Monument and other great structures of the country is American wire rope; the springs in the finest upholstery, the wire in the telegraph and telephone lines, the hoops that hold flour and other barrels safely together; the woven wire in mattresses, that in brooms and brushes, the shafting in mills and the shoes upon the horses' feet, represent the great scope of the company's manufacture.

Of the great plants that represent the companies that were merged in the American Steel & Wire Company, it may be said that in their achievements past and present is the best part of the history of wire manufacturing in America. Established in 1824, the Shoenberger Works of Pittsburg, started when the iron industry of the United States was in its infancy, have changed and developed with time, but the sturdy pioneer spirit of progress and growth is yet there. Besides the time-honored Shoenberger, there are great works of the old Washburn & Moen Manufacturing Company, at Worcester, Waukegan and San Francisco, with all their ancient prestige in the manufacture of wire rope, electrical wires and piano wire; the Consolidated Steel & Wire Company's famous works that developed among other things, the woven wire fence; the works at Cleveland with the celebrated tack mill—all contributed splendid fame in special and exclusive lines of wire manufacture. And all round up complete with the great works at Donora and Sharon, Pa., finished since the company was organized.

ALLEN-HIGGINS WALL PAPER COMPANY, WORCESTER, MASS.

1 [illegible]
4 [illegible]
7 Albert L. [illegible] Vice-President
10 Albert H. Anderson, Secretary

2 Rolling Department
5 Printing Machine (16-Color) largest in the country
8 Frederick Staib, 2d Vice-President

3 Grounding Machines
6 John C. MacInnes, President
9 William Woodward, Treasurer
11 Walter L. Chandler, Clerk of Corporation

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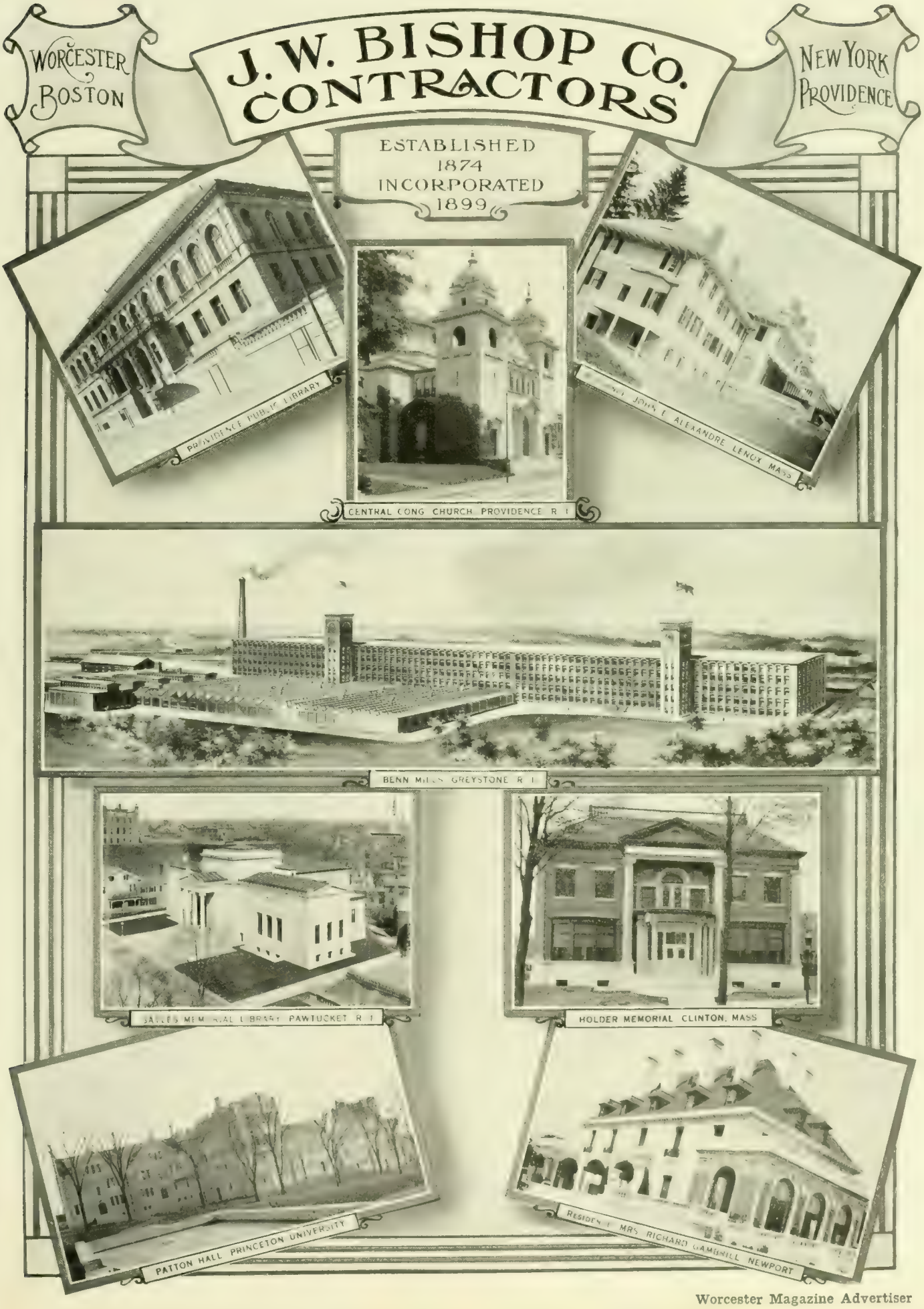


Worcester Magazine Advertiser

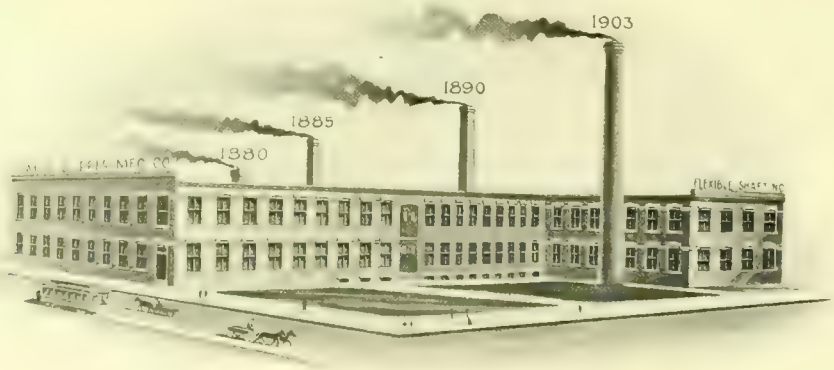
Coates Clipper Manufacturing Company

The Coates Clipper Manufacturing Company was started in a very small way by Mr. George H. Coates in Worcester in 1876. Mr. Coates was graduated from Windsor Academy and served his apprenticeship there in the manufacture of firearms.

Upon coming to Worcester he was employed as assistant superintendent of the Ethan Allen Company and was in their employ until the panic of 1875 made business conditions in that line so uncertain he decided to take up a specialty of his own.

At that time very few clippers were used in the United States and what few were used were imported from England.

B. AUSTIN COATES



SHOWING GROWTH OF PLANT

These of course were very expensive and the cost of repair parts and re-sharpening prohibitive. Seeing a future for this industry Mr. Coates started in by designing special machinery for sharpening these foreign-made clippers. The same ideas are involved in the company's grinding machines to-day. His venture met with such success that he designed several improvements on clippers and started shortly to manufacture them.

[illegible] one thousandth of an inch and a pair of plates must be subjected to at least 30 pounds pressure to resist the hair; the plate being very thin makes the question of grinding vital.

The Coates clippers are to-day made in nearly a hundred styles for human or animal hair, covered by sixty patents, and are sold all over the world. Few people think when glancing at woolen garments that the wool is removed from the sheep almost universally to-day by sheep shearers. This is but one of the manifold uses to which their output is devoted.

Last year this company milled 12,000,000 teeth for hair cutting. In the manufacture of horse clipping and sheep shearing machinery a flexible shaft is necessary, and this being an exclusive patent of Mr. Coates' he decided about four years ago to specialize on flexible transmission, with the result that to-day the company makes this shafting in sizes transmitting from one-tenth horse power in speedometer and dental engines to one hundred and fifty horse power used for heavy unit transmission work. They also make flexible shaft specialties, such as massage machines, electric drills, multipliers, varnish rubbing outfits, etc. Associated with Mr. G. H. Coates, president and treasurer of the company, is his son, B. Austin Coates, as general manager.

The Crompton & Knowles Loom Works

Worcester witnessed the beginning of the power loom industry. In 1851 George Crompton, under a renewal of the original patent, granted his father fourteen years previously, built the first power loom in this city.

Closely followed him Lucius J. Knowles, having been granted a loom patent in 1856, removed from Warren, Mass., and in company with his brother, Francis B. Knowles, formed a partnership for the building of looms, occupying first the building in Allen Court, which still bears on its east wall the then firm name, L. J. Knowles & Brother.

In 1879, having outgrown their quarters in Allen Court, L. J. Knowles & Brother removed to the junction shop, as it was called, in South Worcester, where for a decade the volume and scope of their business increased to such an extent that they found it again necessary to seek enlarged facilities. Consequently in 1890 the Knowles Loom Works, as they were then called, built and occupied the works at Grand and Tainter Streets.

The broad policy of the management soon became evident in many ways, among them being the purchase of the George W. Stafford Manufacturing Company of Providence, R. I., builders of cotton looms, dobbies and jacquards, this plant, to-day enlarged and nicely equipped, being known as the Providence branch of the corporation.

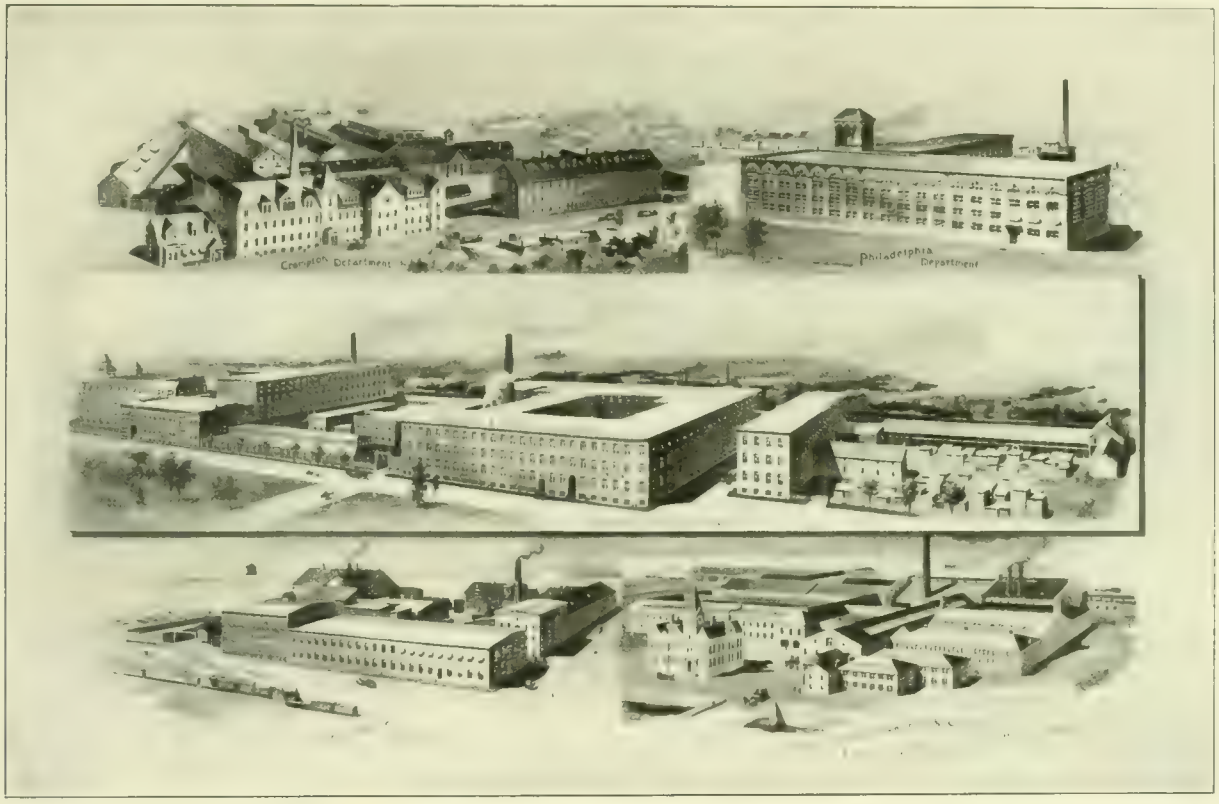
In 1897, owing to the Crompton and the Knowles Loom Works being united under a single management, the present name of Crompton & Knowles Loom Works was adopted, and soon after this came the purchase of the Gilbert Loom Company, formerly located on Union Street.

A little later, recognizing the advantages of a branch works in closer touch with the carpet and upholstery trade, another branch was established in Philadelphia, Pa.

To-day the looms built by the Crompton & Knowles Loom Works may be found in nearly every mill in the country, and through their English representatives, Messrs. Hutchinson, Hollingworth & Company, their looms have been introduced into many of the mills in foreign countries.

During the past year work has been going forward on new buildings and additions to the Grand Street plant, which now extends from Gardner Street to Gates Street, along the line of the Boston & Albany Railroad. New offices, accommodating the necessarily increased force, spacious factory building, and a new foundry, all thoroughly modern and comprising in all about fourteen acres, probably marks the beginning of another epoch in the growth of this corporation.

To let the imagination picture the widest variety of woven fabrics is to gather some idea of the great scope of weaving machinery made necessary to produce them all, for practically every type of woven goods comes from a loom especially designed and constructed for that one particular type of fabric.



Plants of Crompton & Knowles Prior to Improvements.

Elaborately embroidered silks and intricately patterned rugs are produced on these looms, and millions of yards of duck and khaki, used by the government for the housing and clothing of its army and navy, come from Worcester-built looms. There is no fabric that it is possible to weave that cannot be made on some one of the many types of looms built by this company.

The modern loom, to one unaccustomed to its possibilities and achievements, is one of the really remarkable pieces of machinery. Interweaving the almost countless threads of the warp and filling so rapidly that the eye can hardly follow the shuttle as it flies from end to end, unerringly producing the design from start to finish, and yet so delicate in operation, so safeguarded in its movement, that the breaking of a single one of the threads instantly stops the loom and prevents the damage that might ensue if left unnoticed, this wonderful development of weaving machinery, to which Worcester brains have so largely contributed, has helped make possible the great and prosperous mills in which the country takes such pride.

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Curtis & Marble Machine Company

The history of the Curtis & Marble Machine Company dates back more than three-quarters of a century, its founder, Albert Curtis, with John Simmons and Abel Kimball, having begun the manufacture of cloth-finishing machinery in Worcester in 1831. Hon. Edwin T. Marble, its present president and treasurer, entered the employ of Albert Curtis in 1845, and in 1863 was admitted to partnership, which connection lasted until 1895, when Mr. Curtis retired and the Curtis & Marble Machine Company was formed to take over the business.

A tour of its stock-room is almost like visiting a textile exposition. Here one may find, in their season, all kinds of wool-preparing machinery, including wool dusters, Fearnaught pickers, mixing pickers, Goddard & Parkhurst burr pickers, picker feeders, steel-ring burr cylinders, steel-ring feed rolls for woolen and worsted cards.

Shearing machines for all kinds of cotton, woolen, worsted and felt goods, velvets, plushes, carpets, etc., teasel gigs, wire nappers, single and double-acting brushing machines, cotton

The plant was originally on Webster Street, next to the old engine-house near the bridge, and the company began in 1863 with eight men. No less than six additions to the plant were made there in order to care for its ever-increasing business, and on Sept. 1, 1897, the company moved into its present quarters, 72-88 Cambridge Street.

The company makes a standard line of cloth-finishing machinery to be used in the manufacture of all kinds of cotton and woolen goods, worsteds, felts, carpets, rugs, velvets, plushes and corduroys. They make finishing machinery, in fact, for everything from a handkerchief to sailcloth, from the costliest and most delicate material to the coarsest and heaviest product.

In addition to that, they enjoy a well-deserved reputation for the superiority of their wool-burring, picking and mixing machinery, the manufacture of which was begun in 1875. Up to 1905 the Atlas Foundry & Machine Company, New Jersey, made burr pickers, mixing pickers, burr cylinders and burring machinery generally of a rather high order. In that year the Curtis & Marble Machine Company took over the Atlas Company and since then it has added this to its already large line of textile machinery. In addition the company has incorporated into its business the Miller Press & Machine Company of Woonsocket, Rhode Island.

brushing machines, gas-singeing machines and steam-finishing machines, doubling and tacking machines, dewing or spraying machines, worsteds, sanding and pumicing machines, Gessner and Miller rotary cloth presses, reversible flock cutters, rag cutters, cloth winders and measurers, folding machines, railway sewing machines, shear grinders.

The concern has always enjoyed the highest reputation in the textile industry because of the first-class nature of its output. Mr. Marble, the founder of the company, is a thorough mechanic himself, and he has always prided himself on putting out a machine that would bear the closest scrutiny of mechanics and manufacturers alike. The company's business is not confined to the United States, although it is very large in this country, particularly in the textile centers in New England and the South, but it also markets its product in Canada, Mexico, Russia, India and Japan. The company is capitalized at $75,000, and employs 120 men. Hon. Edwin T. Marble is president and treasurer; Edwin H. Marble, vice-president; William C. Marble, secretary; Charles F. Marble, cashier, and Albert C. Marble, superintendent. A picture of its plant, which is a model of its kind, of brick, comprising 66,000 square feet, accompanies this article.

The Heald Machine Company

The Heald Machine Company succeeded to the business of L. S. Heald & Son of Barre, Mass., established as far back as 1830 by Stephen Heald.

The concern originally manufactured wood-working and agricultural machinery and later wire drawing machinery. Their foundry, when established back in the '50's, was the only one

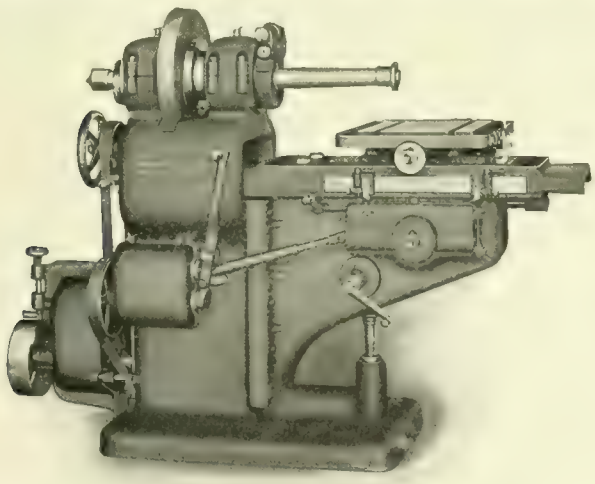
within a radius of twenty five miles, and all the iron and coal had to be teamed about that distance from the nearest railroad.

About 1860 two sons of Stephen Heald were taken into partnership under the firm name of S. Heald & Sons.

In 1890, after the death of Stephen Heald, Leander S. Heald and his son, James N. Heald, the present general manager of the Heald Machine Co., carried on the business under the firm name of L. S. Heald & Son until 1903, when James N. Heald bought out the business, removed it to Worcester and formed the Heald Machine Company.

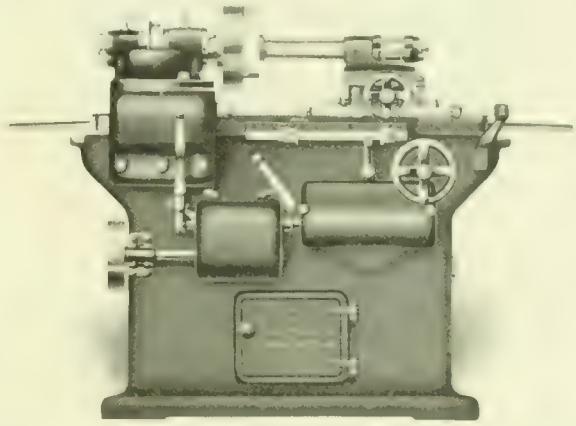
For a few years previous to the removal to Worcester, the firm engaged quite extensively in the manufacture of grinding machinery. The American twist drill grinder was one of the first machines to be developed and these have been sold all over the world in large numbers. A wide variety of styles has been designed so that machines can be furnished either belt-driven or motor-driven, and for grinding wet or dry, as may be most desirable, in any particular case.

After removing to Worcester, this line was increased by the manufacture of the Heald ring and surface grinder, which was designed especially for grinding piston rings for automobile and gas engines, and also for such work as grinding discs,



dies, thrust collars, saws and similar work, and this machine has been adopted as the standard by the leading manufacturers. The success of this machine led the company to manufacture a machine for grinding automobile and gas engine cylinders for which there was an equally great demand. The production of a successful machine for this work proved to be an extremely difficult problem, and involved a great deal of study and experimental work to achieve success. This machine has proved to be ideal, however, for the work, as attested by the fact that almost all the leading automobile and gas engine builders have adopted it, and there are scarcely any machines of any other make in use in this country for handling this work.

The salient feature of this machine is that its construction does not require rotation of the work while the hole is being ground, in which it is distinguished from the ordinary type of universal and other internal grinders. In this machine the grinding wheel is made to travel in a perfect circle, as well as rotate at a high speed, and the work remains stationary, which is a great advantage, especially in grinding cylinders, which are cast in pairs or have three or four holes in a single



casting, as is very frequently the case, because it is very evident that it would be extremely difficult, if not impossible, to rotate such a casting and produce perfect results.

Within the last year or so the company has brought out an internal grinder for grinding holes, either straight or taper, in work which is sufficiently symmetrical so that it can be rotated to advantage, and this machine marks a great advance in the art of internal grinding, because it is made very heavy and rigid, and on a plan radically different from what has heretofore been used in such machines, and by virtue of this change and the novel construction employed, work can be turned off much more rapidly than is possible with the older types.

The plant is located at Greendale near the Norton Company, and occupies over 28,000 square feet of floor space. It is served by a spur track from the B. & M. R. R. so that cars can be loaded at the door for shipment to any point.

The management is always glad to welcome visitors who are interested in the work being done, and is pleased to show its methods, equipment and product at all times.

As grinding machinery requires above all to be accurate to the highest degree, great care is taken in regard to the construction and finishing of all parts entering into the construction of the different machines, and the company's system of inspection extends to such a point that it not only covers the "running in" and "testing out" of the completed machines, but it also follows the individual parts through the factory from the time work is begun on them and through every operation until they are complete and ready to be assembled into the finished machines.

The plant is a model one in many respects, and Mr. Heald's hobby, if he has one besides the scientific accuracy of his machines, is to make every grinder that he turns out a little better than its predecessor.

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Heywood Boot & Shoe Company

The business now known as the Heywood Boot & Shoe Company was commenced in 1864 in Lincoln Square by Mr. S. R. Heywood of the firm of Houghton & Heywood, composed of C. C. Houghton and S. R. Heywood. After two years Mr. Heywood purchased the whole business, and from that time to this

has been a dominant figure in the boot and shoe industry in Worcester. From 1867 to 1873 the business was carried on by Mr. S. R. Heywood alone. The firm was known as S. R. Heywood & Company from 1873 to 1883, Oscar Phillips being associated with Mr. Heywood. In 1883 Mr. Frank E. Heywood, who graduated from Harvard in 1882, was taken into partnership, and he continued in the concern until 1899, when he died at age of thirty-nine, having done a great deal to establish and develop the business.

In 1884 the business was incorporated as the Heywood Boot & Shoe Company, with S. R. Heywood, president; Frank E. Heywood, vice-president, and Oscar Phillips, treasurer. These officers continued until 1889, when Mr. Phillips withdrew and Mr. Frank E. Heywood was made treasurer as well as vice-president.

In 1899, when Mr. Frank E. Heywood died, Albert S. Heywood, his brother and another son, was made vice-president and treasurer in his place, B. S. Newell being assistant treasurer. These with Mr. S. R. Heywood are still the officers.

Mr. Albert S. Heywood is a gradute of the Massachusetts Institute of Technology in the class of 1892, and was connected with the General Electric Company for eight years. Mr. Newell, who acts as superintendent of the company, has been connected with it for twenty-two years.

At the beginning Mr. Heywood, senior, made boots, but for many years the principal product of the concern has been a high grade of men's shoes, with the Heywood special shoe for women forming an important part of the output.

The concern was originally located in Lincoln Square, but in 1867 it was removed to 562 Main Street, Franklin Square, where it stayed until 1880, when the growth of the business rendered it imperative that larger and more modern quarters should be secured. The present plant on Winter Street was erected in answer to this demand, but in 1905 this was outgrown and a large addition erected, followed in 1907 by a still larger extension. The building now occupied by the company is 360 feet frontage on Winter and Harding Streets, five stories high, of brick, and embraces about 60,000 feet of floor space. The output at the beginning was about 300 pairs of boots a day; at the present time the concern makes over 1500 pairs of shoes a day, and it not only has a large trade in America, but the Heywood shoe is also known in Cuba, Great Britain, the Argentine, Australia and the Hawaiian Islands. Mr. S. R. Heywood, the president of this company, is still, after more than fifty years' active connection with the boot and shoe industry, as keenly alive to its development and growth as any of his competitors. He is one of the oldest shoe manufacturers, both in point of years and continuous service, in the United States.

Mr. Albert S. Heywood, his son, who is the general manager of the concern, takes a pardonable pride in producing a shoe which, after forty-five years of continuous marketing, has not depreciated a particle, and, on the contrary, reaches and satisfies and pleases a larger, more intelligent and more fastidious constituency to-day than ever before in almost half a century of its business existence.

HEYWOOD BOOT & SHOE COMPANY PLANT

Hill Dryer Company

Joseph Phillips Hill, founder of the Hill Dryer Company, began manufacturing clothes dryers in the summer of 1867, in Barre, Vermont, and until 1874 he made what was known as the Houghton Patent Dryer. In 1874 the first Hill Dryer was

HILL'S CHAMPION LAWN CLOTHES DRYER

made and put on the market. The first patent was issued to Mr. Hill July 20, 1873. He has taken out many clothes dryer patents since that date and has others now pending.

In 1876 Mr. Hill came to Worcester and commenced the manufacture of clothes dryers at 22 Cypress Street in the fall of that year. Three years later he removed to the shop vacated by Norcross Brothers at 26 North Foster Street. He stayed there eight years and in 1887 removed to Hermon Street, where he was located for two years. By this time his business had increased to a point where it became necessary for him to

PRESENT PLANT OF HILL DRYER COMPANY

secure larger quarters and he removed to his present location on Park Avenue, and in the spring of 1889 he leased one-half of the original shop, built by George Pearce, manufacturers of builders' finish. The next year, in 1890, he purchased the mill property, which then consisted of only one building. In 1897 he built the rear brick building and since that date has taken in the entire corner at Park Avenue, Tufts and Abbott Streets, making many improvements. In 1904 he put in a new and complete power plant and built an addition on the north end of the Park Avenue factory building. In 1907 he built an addition on the south end of the rear brick building and he now occupies 36,348 square feet of floor space.

HILL'S BALCONY CLOTHES DRYER

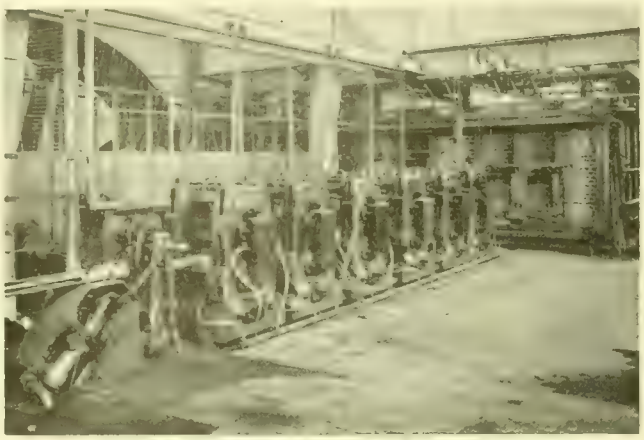
For many years after moving into his present location the Hill Dryer Company manufactured a line of wooden ware, but this was dropped some three years ago, as was the manufacture of hardwood flooring. The company probably made more hardwood flooring than all the other manufacturers of Worcester while engaged in this business.

JOSEPH P. HILL.

At the present time the company's energies are concentrated on the manufacture of Hill's famous clothes dryer, Hill's hustler ash sifter and Hill's improved automobile specialties. The company makes an improved auto drip can, a self-closing oily waste-can, gasoline measures and gasoline funnels and combined measure and funnel.

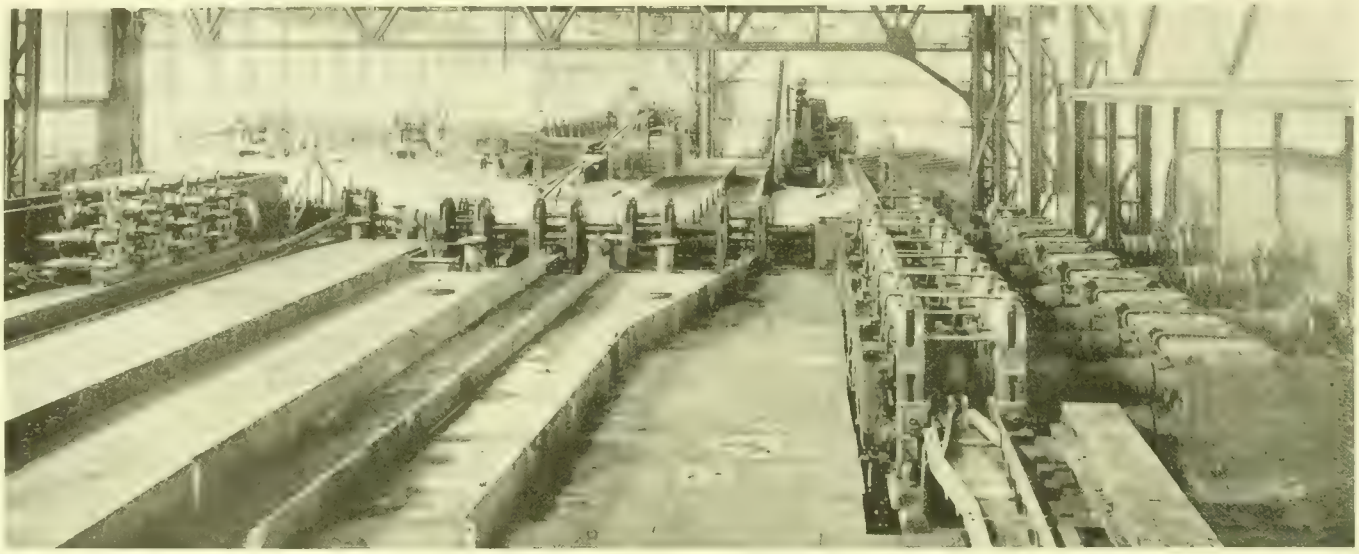
There are now upwards of 1,000,000 Hill's clothes dryers in use and the demand each year shows an increase over its predecessor. The company is now putting on the market a laundry clothes dryer, which can be heated by either stove, steam or gas. The heating and ventilation of this laundry dryer are such that the clothes can be dried in a strictly sanitary manner in from 20 to 30 minutes. These dryers are adapted to private residences, hospitals, hotels, apartment houses, schools, fire engine houses, and any institution that requires laundry facilities. The company's New York offices are at Broadway and Twenty-sixth Street.

HILL'S HUSTLER SHIFTER

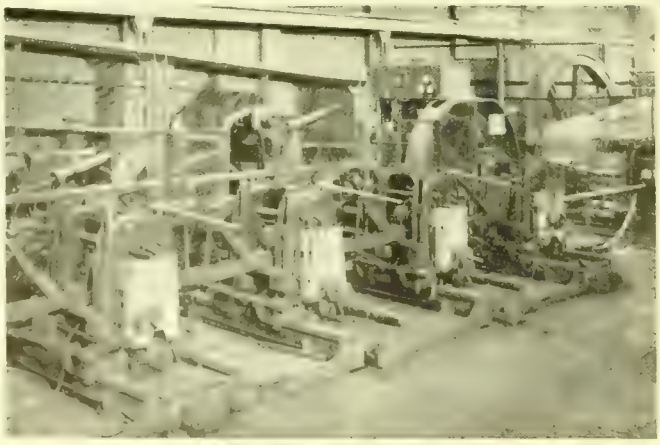


ROD MILL IN PARIS, FRANCE

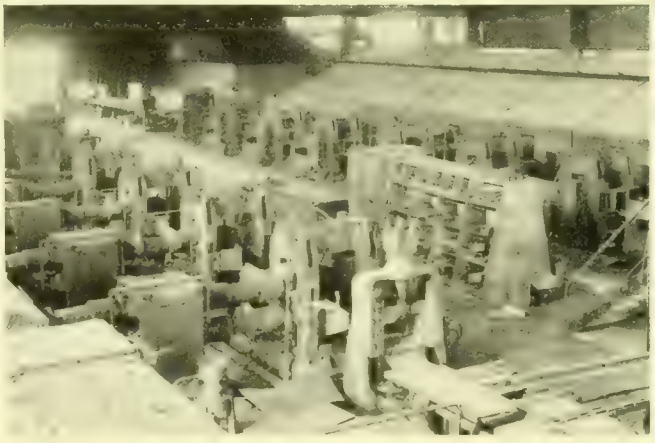
BAR MILL IN PITTSBURG, PA.



BAR MILL IN MEIDERICH, GERMANY.



HOOP MILL IN GERMANY.



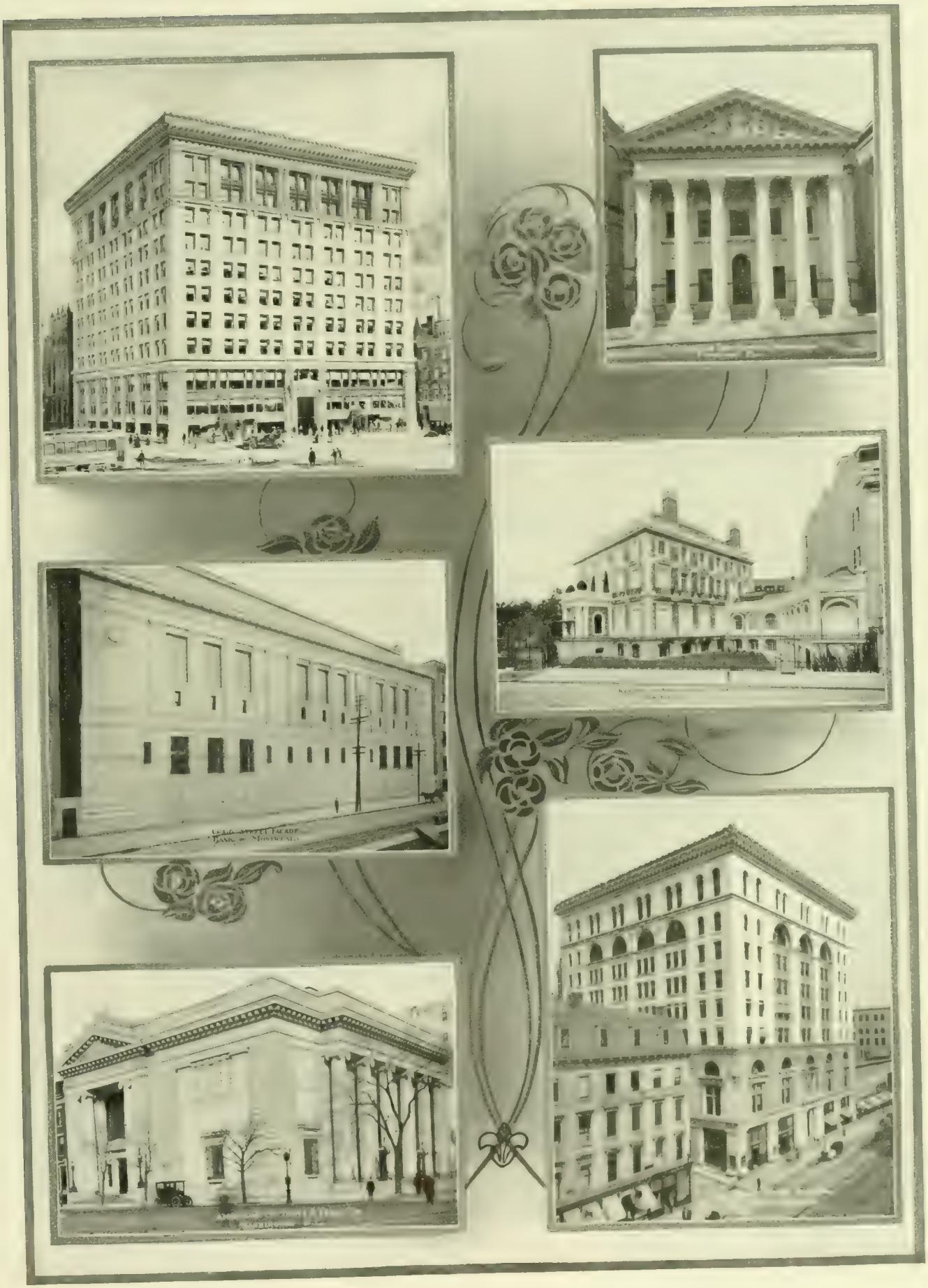
BILLET AND SHEET BAR MILLS IN YOUNGSTOWN, O.

A FEW EXAMPLES OF MORGAN MILL INSTALLATIONS AT HOME AND ABROAD

MORGAN CONSTRUCTION CO.,

EUROPEAN OFFICE,
12 RUE DU CONGRES,
BRUSSELS, BELGIUM.

WORCESTER, MASS.



THE NORCROSS BROTHERS COMPANY
GENERAL CONTRACTORS AND BUILDERS
WORCESTER, MASSACHUSETTS

TRADEMARK
NORTON
REGISTERED

Alundum is produced in Electric Furnaces at Niagara Falls and is made into Grinding Wheels at the Worcester plant

Norton Alundum Plant
Niagara Falls, N. Y.

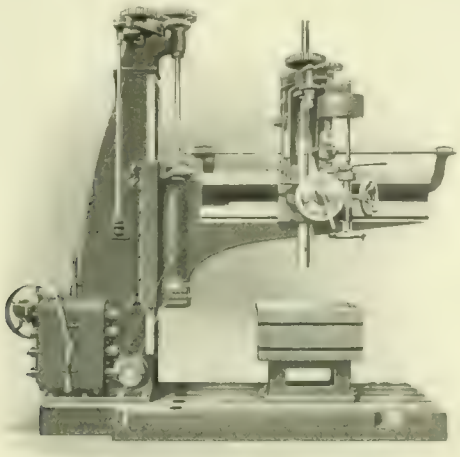
Works of Norton Co. and Norton Grinding Co.
Worcester, Mass.

Norton Grinding Wheels made of Alundum

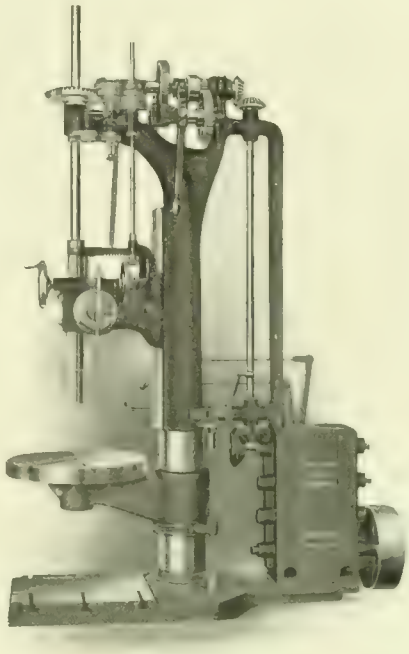
Washing and
Grading Alundum

Prentice Brothers Company

Prentice Brothers Company, incorporated in 1898, is one of the old established machine tool concerns of Worcester, having been founded prior to 1870 by V. F. Prentice. Lathes and drills have been their specialty from the start. Mr. Prentice made blacksmiths' drills, but he disposed of that business



RADIAL DRILL GEAR SPEED CHANGE DEVICE.

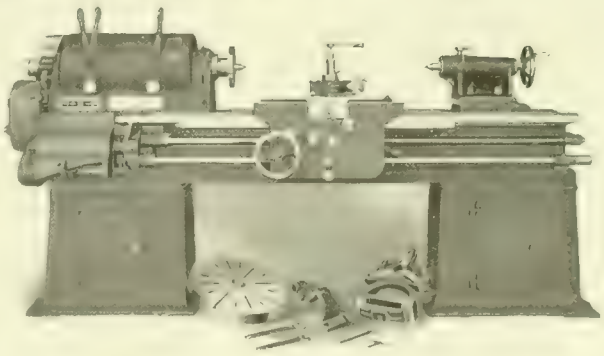


30" GEAR SPEED CHANGE WRIGHT DRILL.

to Boynton & Plummer. The Prentice Brothers Company make the highest price lathe in the market and they also manufacture the only complete line of high speed friction geared head

lathes in the market. In addition they build the only line of friction-geared speed change, upright drills. Another of their specialties is their friction-geared head turret lathe for cast iron and steel work that has the special feature of a turret with power cross-feed in both directions, with automatic knock off in either direction. They build a complete line of sensitive drills and upright drills from 20-inch to 50-inch swing and a full line of geared speed-change radial drills with from 3 to 10-foot arms. These radial drills are all of the same general design and the change of speed is obtained instantly by the shifting of levers through friction clutches. These radials have means of tapping holes at a certain speed and a quick return to spindle when reversed, at a speed of five to one.

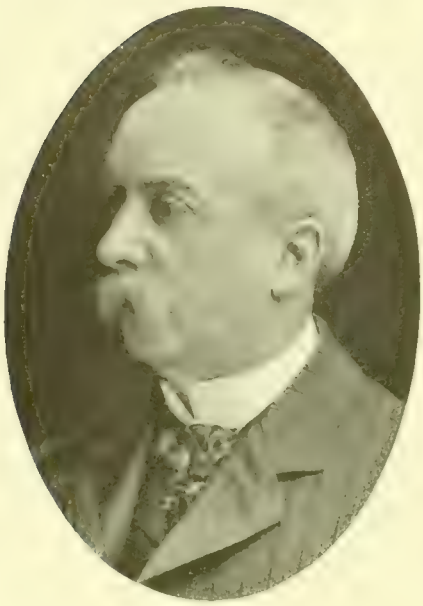
They are represented abroad by agencies in Cologne, Brussels, Milan, Bilbao, Barcelona, Berlin, St. Petersburg, Stockholm, Vienna, London and Japan, and also in this hemisphere by houses in Montreal, Mexico and South America. They have had for many years a very large export trade as well as a fine business in the United States among those who desired high grade tools. They manufacture no other and base their



16" GEARED HEAD HIGH SPEED LATHE

reputation on that fact. Cuts of some of their best known tools, as well as a picture of their plant, accompany this article.

The Queensbury Mills



H. HODGSON

Among the very many unique industries that Worcester boasts, none has perhaps achieved a larger and more substantial success in a short time than the Queensbury Mills, founded in 1900 by H. Hodgson. This statement is made advisedly, with full knowledge of facts that are common property in the textile world, where Mr. Hodgson's reputation as a spinner stands absolutely unrivaled in this country.

Coming to Worcester nine years ago unknown to her financial magnates, Mr. Hodgson, without local assistance and without the slightest aid from public or private enterprise, entered quietly upon the manufacture of mohair yarns, one of the most difficult processes known to the textile world. In the nine years that have elapsed Mr. Hodgson has enlarged his plant seven fold, and is now increasing the capitalization of his company from $85,000 to $250,000 to take care of his increasing business. From 2000 pounds a week he has seen his product grow to 20,000 pounds a week, and in the market created by him he now disposes of a product reaching a gross of $900,000 per annum.

Mr. Hodgson was the first man in the United States to manufacture successfully mohair yarn for making plushes and dress goods, and the first mohair yarn that was ever spun commercially in this country was made by Mr. Hodgson. There are but five or six concerns in America even now that spin mohair yarns and none of them enjoy a higher reputation or can turn out a finer product.

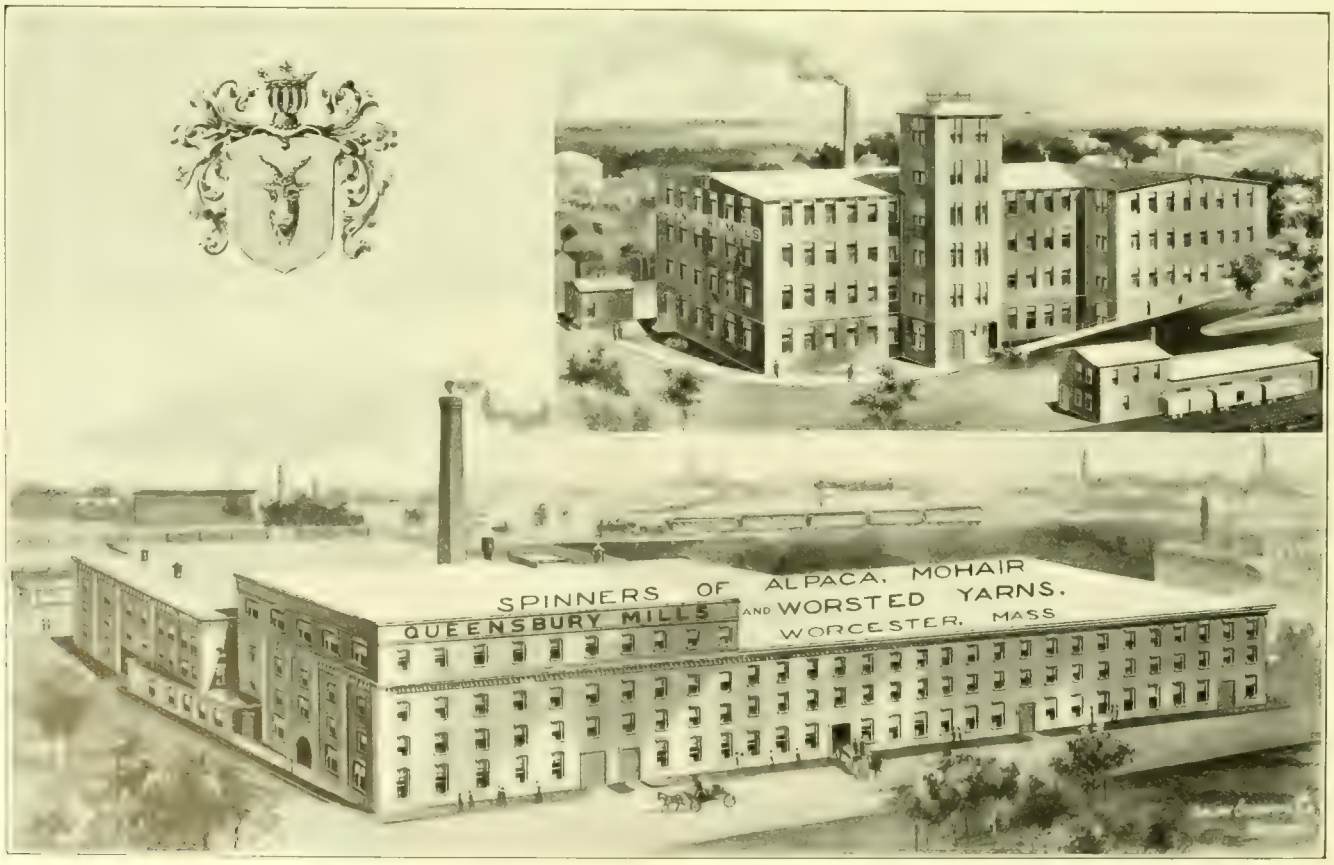
Mr. Hodgson is not only a pioneer in the mohair industry, but his processes enable him to turn out an absolutely perfect mohair yarn. Mohair suffers from the presence of "kemp"—dead hair—which will not take the dye and no other manufacturer has ever been able to eliminate it—either in this country or abroad. Mr. Hodgson has discovered a method by which every particle of kemp can be removed from mohair, leaving it with that beautiful lustre which makes it so attractive to the trade and which has hitherto been marred by this defect. The Queensbury yarns cannot be duplicated for lustre and texture and their market is limited only by inability to supply the demand.

In Worcester they now have 80,000 feet of floor space and in Somersworth 40,000 more. They manufacture in these two plants mohair and worsted yarns and tops of all varieties, making a specialty of mohair yarns for serge linings. Their product goes to the leading mills of the country engaged in the manufacture of mohair plush, dress goods and nearly all forms of high-grade textiles.

The company in its re-incorporated form will be capitalized at $250,000, only $100,000 of which, in the form of 7 per cent. preferred cumulative stock, will be offered for sale.

Mr. Hodgson is an extremely modest man, attends religiously to his business, as does his son, and there is probably not a concern in Worcester about which so little is generally known as the Queensbury Mills. Its product is heavily protected and there is no attempt made to compete in the foreign market. Until Mr. Hodgson began to make mohairs in America this country's market was dominated by England. He displaced the English product almost entirely. In the spinning of mohair yarns, he has produced for the benefit of the American manufacturer and consumer a mohair that for the first time in the history of the industry is perfection itself. What this means to the future of the Queensbury Mills and the mohair industry of this country is apparent.

H. Hodgson is Treasurer and his son, Fred Hodgson, is Assistant Treasurer and Superintendent of the company.



QUEENSBURY MILLS, WORCESTER

QUEENSBURY MILLS, SOMERSWORTH, N. H.

Rice, Barton & Fales Machine & Iron Company

Probably no concern in the United States in the paper and pulp trade is better known than the Rice, Barton & Fales Machine & Iron Company. It is one of the oldest concerns of its kind in the country, getting its origin in 1836, when it was started in the celebrated Howe & Goddard machine shop, and it has grown and developed with the growth and development of the print paper industry until it has come to be recognized as an integral part of it.

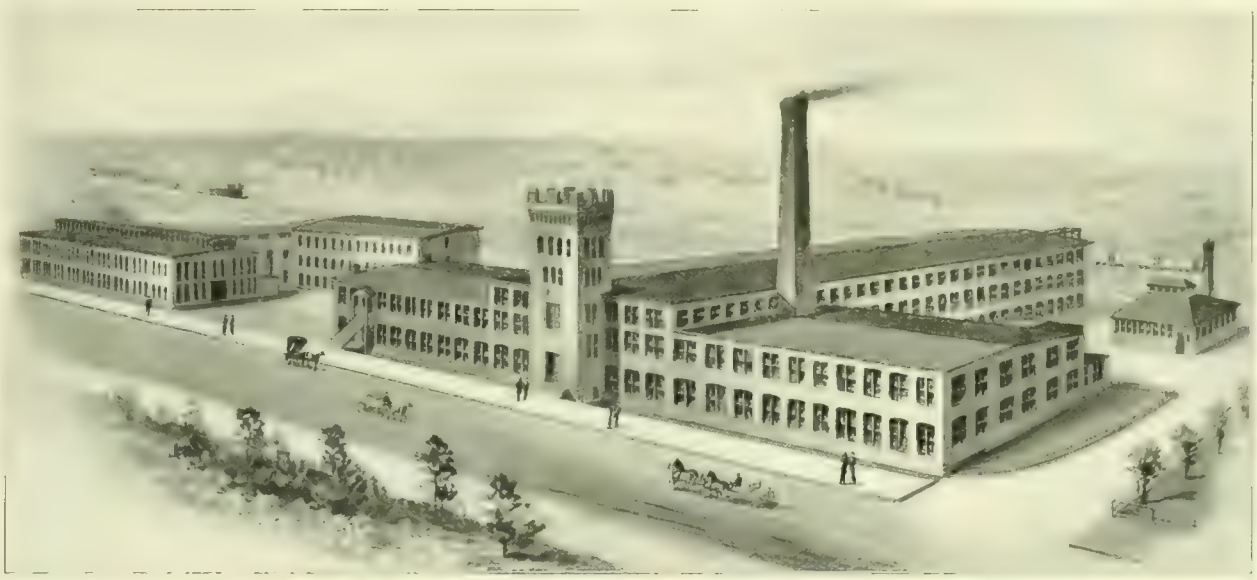
In those days, 75 years ago, machinery manufacturers did not specialize as they do now, and a faded poster that still hangs in the Rice, Barton & Fales office shows that their predecessors, among other machinery, made steam boilers, calico printing and fourdrinier machines as well as paper-making machinery.

The manufacture of calico-printing machines, as well as paper-making machines, has been continued to this day, and the company is now about the only manufacturer of printing machines for calicoes in America. These machines are of large size and very costly, the copper rolls they contain alone being of great value. They will print from one to fourteen colors, and the perfection and accuracy of their work, as well as the beauty of the colorings after the printing has taken place, are marvelous.

It so happens, however, that the reputation of Rice, Barton & Fales as manufacturers of paper machinery is quite as widely extended in the paper trade as their prestige in the matter of calico-printing machinery is in the textile industry, and with equally good reason.

The paper mills of this country are filled with their product and they are generally regarded in the trade as the standards for excellence and efficiency. They make machines capable of producing from 610 to 615 feet of print paper per minute and they can make them up to 180-inch if desired. Indeed they are looking forward to a time when an even larger machine will be required, and if the demand comes will be prepared to meet it.

For many years after it was founded, the plant was at Union and Foster Streets, and photographs of the old premises are still among the treasured mementoes of the company in its offices on Tainter Street. In 1892 the company removed to its present location, where it has 207,984 square feet of land lying alongside the railroad tracks and covered with buildings suitable for its purpose.



RICE, BARTON & FALES MACHINE & IRON COMPANY.

The concern took on its present nomenclature in 1867, when George M. Rice, George S. Barton and Joseph E. Fales united to form the Rice, Barton & Fales Machine & Iron Company. The original incorporators are all dead and the company is now officered by Mr. Charles S. Barton as president and treasurer, Mr. George S. Barton acting as secretary.

The concern has recently taken up founding on a large scale and in its finely equipped plant it does general brass, lead and zinc founding for the trade. It has always had a complete and finely equipped brass foundry in connection with the plant, but it has never until recently attempted to develop a trade in that line among other manufacturers not so fortunately situated. The concern employs in its various departments 250 to 300 men. A cut of the works accompanies this article.

DAVID H. FANNING

A MODERN CORSET PLANT OF INTERNATIONAL FAME

THE question of corsets has been agitated from time immemorial, but never until recently has this subject been considered of such vital importance. There are a number of things directly responsible for the present activity in the corset trade. A great wave of fashion sentiment has swept over the country, and has been universally influential in changing the ideas of modern dress. Not many years ago women looked upon the corset as merely a part of the wardrobe, giving it no special thought or attention. To-day, with the revival of the charming styles characteristic of the Directoire and Empire periods, the correct corset is an absolute necessity.

Worcester bears the unique distinction of being the home of the "creators of corset fashion," in that the Royal Worcester Corset Co. originate and perfect the models that are accepted in all the leading fashion centres as authoritative and standard. The accompanying illustrations will convey to the reader three factors intimately connected with the remarkable success achieved by one of the many industries which Worcester looks upon with particular pride.

Nearly fifty years ago, in 1861, David H. Fanning organized the Royal Worcester Corset Co., of which he is now, as he was then, its president and active head. From a humble beginning in one small room, this concern, through strict integrity and broad business policy, has grown steadily each year. It is one of the few industries unaffected by the recent financial disturbances, having been in full operation continually. Even the capacity of its present spacious quarters has been found inadequate, and the management has decided upon the erection of an addition that when completed will make a large increase in production. This ideal plant occupies an entire block, surrounded on three sides by thoroughfares, while on the fourth side is a large garden and park of wondrous beauty, especially during the warm months, when one may look upon wide stretches of velvety green lawn, and the foliage of hundreds of different shrubs and flowers.

ONE OF THE NEW MODELS

Upwards of twelve hundred workers find employment in this model factory, which is noted for its perfect sanitary conditions throughout. It is one of the largest manufactories in the world, enjoying an enormous and ever-growing domestic trade, and the largest foreign business of any corset concern in America. Its principal products are the Bon Ton Corsets, retailing from $3.00 to $12.00 per pair; the Royal Worcester Corsets, from $1.00 to $3.00 per pair; Adjusto Corsets, designed especially for stout women, at $3.00 and $5.00 per pair; Royal Worcester Waists, for misses and children, and a complete line of corset accessories, such as clasps, side steels, laces, etc. They are sold all over America, and in over forty foreign countries, including Great Britain, Australia, South Africa, China, Hawaii, Chile, Mexico and Cuba.

For many years this company has issued annually a catalogue known as the Royal Blue Book, illustrating and describing the various Bon Ton and Royal Worcester models. The 1909 edition, just issued, excels all previous efforts, being profusely illustrated and containing information invaluable to the prospective purchaser. A copy will be mailed free to any address.

Sherman Envelope Company

When the Whitcomb Envelope Company was included in the United States Envelope Company in 1898, Mr. John A. Sherman, who had been its superintendent for many years, withdrew and on Feb. 1, 1899, formed the now widely known Sherman Envelope Company, one of the largest independent envelope manufacturing concerns in the country. He had already invented an envelope-making machine and when he began turning out envelopes in the April following, it was on his own machinery that he made them. Since then these machines have been thought to be good enough to install in other up-to-date envelope factories, and to-day he has a nice little business making them. Mr. Sherman says of this machine that it will make more envelopes in a given square foot of floor space than any other envelope machine now in use.

But Mr. Sherman's life work primarily has been the making

SHERMAN ENVELOPE CO. PLANT.

of envelopes, and in ten years he has seen his product grow from nothing to a little over 2,000,000 envelopes a day.

When Mr. Sherman began nine years ago he was in the factory at the corner of Nebraska and Winona Streets, where the New England Biscuit Company is now located. He had two-thirds of the upper floor and he started with seven men building machines. After six months he took the entire floor, and at the end of the year his increasing business rendered it necessary to secure larger quarters and he removed to 75 School Street, where the George C. Whitney factory is now located, where he secured four floors with an option on the fifth. Inside of a year his business had outgrown the four floors and he took advantage of his option.

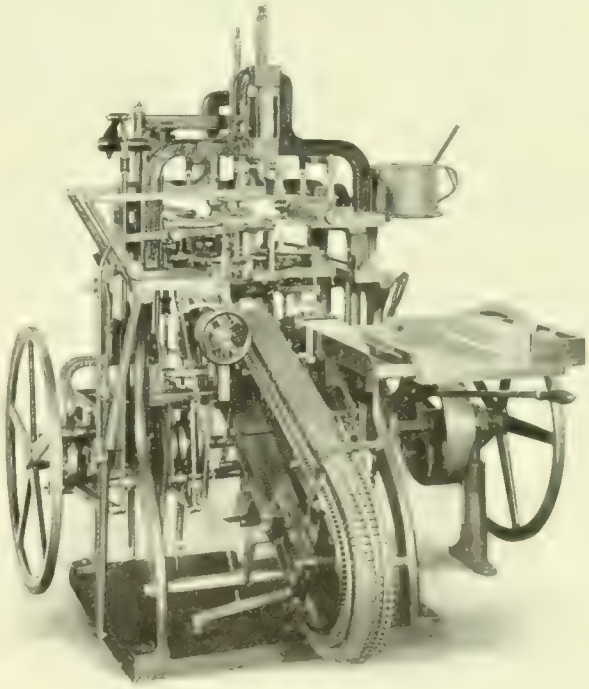
He remained there five years, but by 1906 his expanding business compelled him again to move. This time he determined to erect a model envelope factory of his own—to secure for himself from the start a building designed to facilitate the industry in which he is engaged. The factory building at 60 Prescott Street he erected rests on a lot with a frontage of 75 feet on Prescott, 210 on Otis and running back 75 feet on the railroad. The building is of brick, three stories with a basement, and is as perfect a building for the manufacture of envelopes as Mr. Sherman's life-long experience could suggest.

Here he not only manufactures all the standard styles of commercial and correspondence envelopes, but he also produces box papers and a line of dainty and exquisite papeteries for exclusive trade. He has also long enjoyed a well-deserved reputation for the manufacture of three envelope specialties, his stamp saver, sinegraphic and clasp envelope, for each of which there is a permanent demand in the commercial world. He

JOHN A. SHERMAN.

also builds here his envelope machines, a cut of which accompanies this article, as well as a picture of the plant.

The Sherman envelope goes to every civilized country on the globe, and its high character has not only given it an ever-increasing market, but has also helped establish the fact that a Worcester-made envelope is as superior to its competitors as every other product that issues from the Heart of the Commonwealth. The Sherman Envelope Company is incorporated for $75,000, and Mr. John A. Sherman, the founder, is its president and treasurer. Walter H. Davis is the vice-president, and J. Edward Sherman is the secretary of the company.



SHERMAN ENVELOPE MACHINE.

Spencer Wire Company

The first wire drawing in this country was about 1812 in the neighboring town of Spencer and was by Windsor Hatch and Charles Watson. In 1820 the business had grown to such proportions that a mill devoted to the industry was erected by Russell and Elliott Prouty. This was eleven years before Deacon Washburn started making wire in Worcester, and marks the first attempt in America to make the business of wire drawing commercially profitable.

The Spencer Wire Company of Worcester and Spencer is the legitimate successor of this pioneer industry. The business at Spencer was conducted in a very crude way until 1845, the product in that year amounting only to ten tons, valued at $8000.

At that time Richard Sugden and Nathaniel Myrick went to Wire Village and began drawing wire on a much more elaborate scale. The business prospered in their hands and by 1888 their output had reached 1200 tons, valued at $160,000. Mr. Sugden was a man of marked executive ability and striking personality and continued to be actively interested until his death in 1895, a period of fifty years.

In the meantime in 1876 the concern had been incorporated as the Spencer Wire Company. It was not until 1900 that the headquarters were removed to Worcester, the Spencer plant [illegible] a material part of the works and controlling the name of the company.

When Sugden and Myrick started with three or four men, one trip of a team to Leicester would take care of a week's product, and for forty years thereafter the plant was four miles from their railroad shipping point.

Harry W. Goddard, president and treasurer of the company, entered its employ twenty-eight years ago, Mr. Myrick having dropped out as an active force some years previously. That Mr. Goddard had a natural aptitude for the business is shown by the fact that in 1885, when he was but twenty-one years old, [illegible] president and superintendent of the works. In 1895, ten years later, upon the death of Mr. Sugden he secured a controlling interest in the company.

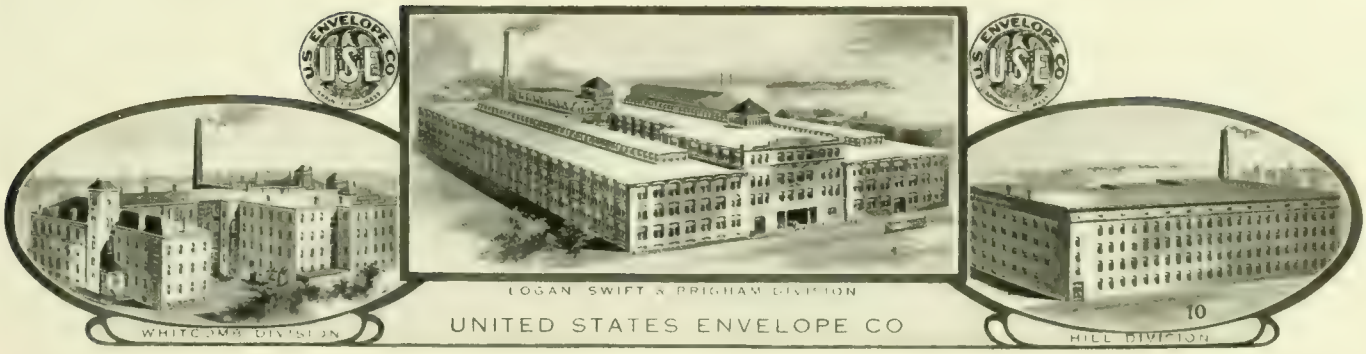
He saw at the start that the future of the business depended on railroad facilities, and as soon as he was in a position to do so removed the main office to Worcester and secured four and one-half acres of land on both sides of Webster Street in immediate proximity to the railroad and with spurs leading directly into the plant. Here he erected a complete modern wire-drawing mill, equipped with every possible device necessary to the successful and economical conduct of the business, which has now reached a gross of $1,000,000 a year.

Furthermore he has twenty acres adjoining on the main line of the railroad awaiting development and allowing for future growths.

In 1908 Mr. Goddard's company took over the Taunton Steel Company, makers of high-speed steel, and this now forms an important part of the business, the works having been removed to this city.

SPENCER WIRE COMPANY'S PLANTS

Material changes and improvements are going forward in order to provide for an increased output. A new mill, 50 by 240, four stories, is being erected and a part of this building will be devoted to the manufacture of drill rods, high-speed steel, etc., by the Taunton Company's processes. A tempering building, 120 by 150, one story, is also being erected and a power plant, 50 by 60, in which will be installed two Westinghouse gas engines of 150 horse power each, direct connected to electric generators. These are supplementary to the 600 horse power the works now utilize, and will give the company an aggregate of 900 horse power when the enlarged plant is in complete operation. The office of the company is at 80 Webster Street. Its officers are: Harry W. Goddard, president and treasurer; E. Bruce Dunn, secretary; George M. Thompson, superintendent; W. G. Hall, assistant superintendent. It is capitalized at $500,000. A picture of the works accompanies this article.



United States Envelope Company

The first successful envelope folding machine in the United States was invented in 1853 by a Worcester physician, Dr. Russell L. Hawes, who lived on Salisbury Street in the house now owned by Mrs. Charles Baker. He was the founder of the present W. H. Hill Envelope Company Division of the United States Envelope Company. His machine was a crude affair and did not attempt to gum the sealing flap of the envelope, this operation being done by hand before the envelopes were fed into the machine. The important point of this invention was the self-feeding device; the blanks having been sealed were fed into the machine in bunches of about 500. Gum was applied on the under side of the picker, which descended on the pile of blanks; the top blank, adhering to the picker, was lifted from the pile and was taken by a carriage to a point over the folding box, where a plunger the size of the envelope forced the blank down to the bottom of the folding blank; here two wings folded over the side flaps; the gum which had adhered to the blank now served a second purpose of sticking the envelopes. This same principle is used on the modern high-speed envelope machines. Doctor Hawes' machine made about 13,000 envelopes in a day of ten hours and three girls operated two machines. The product of one girl to-day is frequently as high as 70,000 per day on one machine.

The next Worcester man to effect a valuable improvement in envelope making was James G. Arnold, when in 1858 he devised a machine for cutting the envelope blanks from a roll of paper and gumming and folding the blanks at one operation. The important feature of this machine was the drying chain. The gum on the seal flaps had been applied by hand previously. By Arnold's device, after the envelopes had been folded they were deposited in a drying chain or endless belt, which was fitted with fingers to keep the envelopes apart until the gum on the sealed flaps was dry.

David Whitcomb financed this machine and in this way the Whitcombs became interested in the envelope industry. The mechanical genius of Mr. Henry D. Swift had been recognized by Mr. Arnold, and he made overtures to him to enter the employ of the Bay State Envelope Company established in 1864 by Mr. G. Henry Whitcomb. Mr. Swift could not see his way clear at that time to make a change in his trade as a cabinetmaker, and his brother, Mr. D. Wheeler Swift, who was then working in South Dedham, was secured in his place. About a year was spent in trying to make the Arnold machine run satisfactorily, but without success. Trade was developing and other inventors were making progress with other machines, among them George H. Reay of New York. The Bay State Envelope Company bought some of these machines and Abram A. Rheutan, who was for many years connected with the W. H. Hill Envelope Company as the general superintendent, came to Worcester for the purpose of installing these Reay machines.

The Bay State Envelope Company was reorganized as G. Henry Whitcomb & Company, with a factory in Bigelow Court, in 1866, and five years later the Swift brothers, who are both now in the employ of the company, invented their first envelope folding machine. This machine was known as the Swift round-table machine and had a product of about 35,000 envelopes per day. It simply folded the envelope, but at the same time they invented another machine to gum the sealed flaps, and these two machines together could at that time produce envelopes probably as cheaply as any in the world.

In 1876 the Swifts invented their first self-gumming machine. This machine by one operation turned out a completed product of 35,000 envelopes per day of ten hours. One girl could run two of these machines, making 70,000 a day, the product being registered by means of a clock. These machines were the only ones then in existence having a registry device.

In 1884 Messrs. D. Wheeler Swift, Henry D. Swift, John S. Brigham and James Logan severed their connection with the W. H. Hill Envelope Company and formed the Logan, Swift & Brigham Envelope Company, which was incorporated in February of that year and which constitutes that division of the United States Envelope Company to-day. Practically all the envelope-folding machines in use in the present factory, the largest given up solely to the manufacture of envelopes in the world, are the product of the inventive minds of D. Wheeler and Henry D. Swift. These two brothers, with their record of five distinct and separate envelope-folding machines, have probably done more than any two men in the world in the development of this industry. There are now six envelope factories in Worcester, producing from ten to fifteen million envelopes daily. Cuts of the plants of the Logan, Swift & Brigham Envelope Company Division of the United States Envelope Company accompany this article.

Worcester Magazine Advertiser

The Whitcomb-Blaisdell Machine Tool Company

The Whitcomb-Blaisdell Machine Tool Company at 134 Gold Street is officered by A. W. Whitcomb, president; Charles E. Hildreth, vice-president and treasurer, and Charles E. Thwing, sales manager. Capitalized at $200,000; it is indissolubly linked with the early history of Worcester as a metal trade centre.

The company traces its ancestry back to the Draper Machine Tool Company, founded in Worcester in 1845; to the Whitcomb Manufacturing Company, founded in 1849; to the concern known as P. Blaisdell & Company, started in 1865, and to the Whitcomb Foundry Company, which succeeded the Kabley Foundry Company, which was founded in 1885.

Alonzo Whitcomb, one of the founders of the company, came to Worcester in 1845 and entered the machine shops of S. C. Coombs & Company, pioneers in the metal trades in this city. He stayed with them until 1849, when, with his brother, Carter, he purchased the copying press business of George C. Taft on Union Street, in the famous old Howe & Goddard shop. The concern was known as C. Whitcomb & Company. In addition to making copying presses the Whitcombs took up the manufacture of metal-working machine tools, including planers, shears, drills, etc., which soon became the main branch of the business.

After many removes, owing to the continued growth of this business, in 1892 Mr. Whitcomb finally built the present shop at the corner of Sargent and Gold Streets.

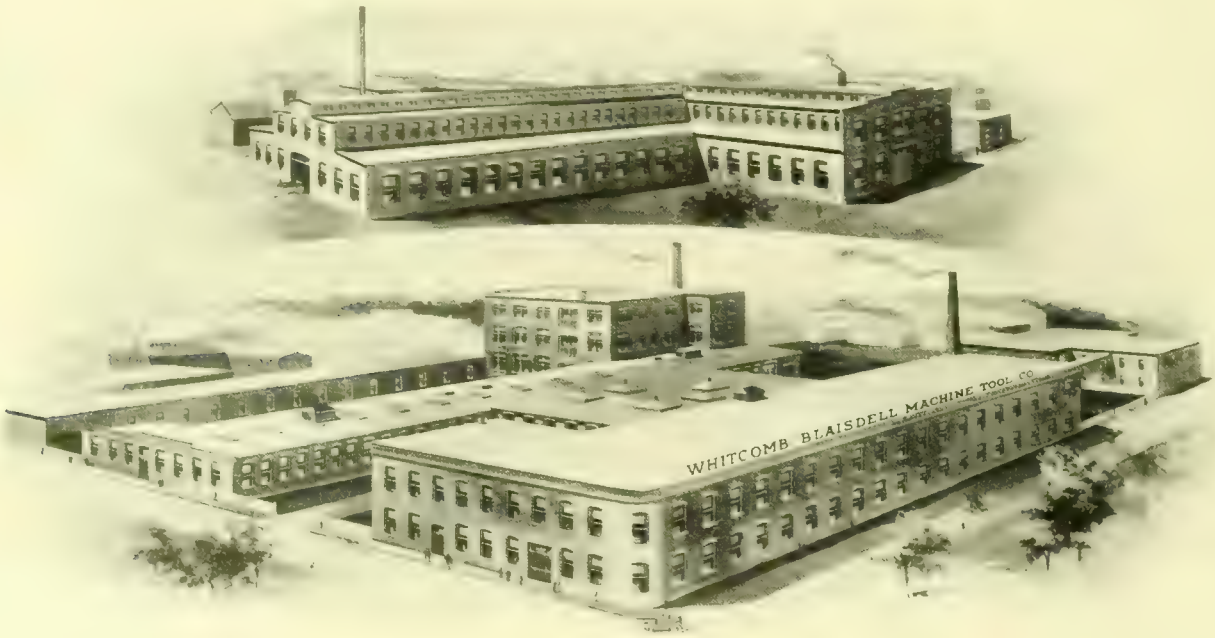
The Draper Machine Tool Company, another of the ancestors of this concern, was the pioneer lathe-making industry in Worcester, and one of the earliest manufacturers of lathes in this country. This concern actually antedated the incorporation of the city, having been started in 1845 by Shepherd, Lathe & Company, and was known as the Lathe & Morse Tool Company prior to its being merged in the Draper concern.

The Draper Company was organized in 1892, succeeding the Lathe & Morse Tool Company, with Hon. William F. Draper of Hopedale as president, and C. E. Thwing treasurer. It made a specialty of engine lathes, crank planers, screw machinery, etc., and built up a splendid business, not only at home but abroad. Its plant was located on Gold Street also.

W. A. Blaisdell came into the Whitcomb-Blaisdell Company from the concern known as P. Blaisdell & Company, which was established by Parritt Blaisdell in 1855. Parritt Blaisdell had worked for Wood, Light & Company prior to this date. The latter concern was a contemporary of S. C. Coombs & Company. These two concerns, with Daniel Wheeler, builder of woolen machinery; Samuel Flagg & Company, makers of engine lathes; Sumner Pratt & Company, manufacturers of reeds, harnesses and heddles; William A. Wheeler, brass founder and steam engine builder, and Henry S. Washburn, Ichabod Washburn and Philip L. Moen, wire manufacturers, were among the pioneers in the Worcester metal trade.

Parritt Blaisdell died in 1874, and his business was taken over by J. P. Jones, Samuel E. Hildreth and Enoch Earle. Mr. Hildreth was the father of the present treasurer of the Whitcomb-Blaisdell Company, and on his death his son succeeded to his interest.

The Draper Machine Tool Company and P. Blaisdell Company had achieved marked success in the manufacture of engine lathes, and P. Blaisdell & Company had had similar success in the construction of upright drills. Samuel E. Hildreth had had issued him the ground patents on a quick return upright drill. The success in their respective fields, achieved by all their predecessors, has been duplicated and continued by the present concern. Particularly is this true of their specialties—their second belt-drive planer and their new type of lathe, a three-step cone, double-back gear lathe, and their patent cushioned-clutch, single-pulley drive lathe.



WHITCOMB-BLAISDELL MACHINE TOOL COMPANY PLANTS

They have done a very large business from the formation of the company up to the time of the recent business depression. They enjoy a good export trade, shipping to England, France, Sweden, Holland, Belgium, Russia, Germany, Australia, the Philippines and Japan, besides all parts of the United States and its possessions, Canada, Mexico and South America.

Their plant, lying between Gold and Sargent Streets, covers an area of 44,377 square feet, and in addition they have a most desirable building site on Cambridge and Camp Streets, comprising 129,817 square feet, and having 401 feet frontage on the New York, New Haven & Hartford Railroad, awaiting the future development of the business.

The Whitcomb-Blaisdell Company, in spite of its long and most honorable history, dating back in its various ramifications more than sixty years, is not resting on its past reputation to sell its goods. There is not a more up-to-date concern in Worcester, nor one with more modern ideas in its management and machines. The present corporation dates from 1905.

The Woodward & Powell Planer Company

The Woodward & Powell Planer Company was formed in 1887 as the Powell Planer Company, Mr. E. M. Woodward, who is still at the head of the concern, being elected its treasurer and principal owner. Mr. Woodward unites with his executive ability a thorough knowledge of his business. As a boy he learned the trade of the pattern-maker and the machinist and he had practical experience as a foundry man as well. When he left the shop it was to enter upon the duties of a machinery salesman, and that was his business for several years before coming to Worcester. His experience in actual shop conditions plus his knowledge of salesmanship fitted him admirably for the management of a plant devoted to the manufacture and marketing of heavy machinery.

He began on Hermon Street in a small factory and in a small way to make planers, but with the underlying purpose to make a superior machine—a policy to which he has steadfastly adhered. "I could not make a cheap planer," said Mr. Woodward. "It was not in me. I had sold all kinds of metal-working machinery except the cheap kind, and when I came to make planers I had to make the best planer possible—nothing else would satisfy me." In this brief sentence lies the secret of Mr. Woodward's success. Back of every one of his planers lies his own character, his own integrity. He has built into every one of them his own thoroughness, his own reliability.

The first planers he made were small affairs, 24, 26 and 30-inch machines, but they sold, and sold so rapidly that the concern was eventually forced to remove to larger quarters on Cambridge Street in the shop where the Prentice Bros. are now located. Industrial conditions called for larger and heavier and more complicated machinery and the Woodward & Powell planer kept ahead of the times. By 1895 the question of increased speed without sacrificing power or strength had become so insistent that it was necessary to revolutionize the type of planers then on the market and to build new models which should have all the superior qualities of the old machines and should add to them a considerably higher rate of speed in operation. To make these planers of the size and in the quantities demanded required larger and more modern quarters than the company then possessed, and in 1899 Mr. Woodward caused to be erected on Webster Street the plant which he now occupies and which has been pronounced by expert authority a model of its kind. It is 87 feet front on Webster Street and 200 feet long, running back directly alongside the Boston & Albany Railroad. A power plant and blacksmith shop are attached outside. A spur track runs right into the building from the Boston & Albany Railroad.

The building was constructed in accordance with the most modern methods of machine shop designing and has in addition to the large erecting room on the ground floor the usual galleries under the monitor roof. In the erecting room immense foundations 3 to 6 feet thick and 50 by 30 in size have been laid, upon which to erect and test planers after they are completed. All the large operating machines in the shop are installed on heavy concrete foundations.

To-day in the shop Mr. Woodward makes planers from 24 inches to 96 inches wide and makes in all 22 different types of planers of any length. The growth of this business has been steady, continuous, uninterrupted. The first year the concern was making patterns and getting ready. There were 20 men employed that year, and the gross business was $31,644. In 1907 the total output amounted to about $200,000.

Among the special machines made by this concern is a railroad frog and crossing planer and railroad-switch point planer, said to be the most powerful planers of this type built. The concern also makes a locomotive connection-rod planer. The latter machine will receive two locomotive rods and plane the head at one end of each at the same time. Another extremely powerful planer that is made by this company is one designed for printing-press manufacturing. Several of these machines are in the works of R. Hoe & Company. Mr. Woodward has just perfected a new high-speed planer, in which he has eliminated all of the complicated machinery characteristic of most high-speed planers and secures the same results by means of an ingenious belt drive which can be altered instantly by the mechanic in charge, so as to give a variety of speeds as the nature of the work demands. This variable speed planer is the simplest machine on the market possessing that quality. No element of strength has been sacrificed and the change in speed is accomplished in the simplest possible manner. Furthermore the attachment, instead of being extremely expensive, adds almost nothing to the cost.

The Woodward & Powell planer goes to France, Belgium, Spain, Portugal, Italy, Germany, Austria, England, Japan, China and to all of the United States and its possessions. Some of the planers made by Mr. Woodward 22 years ago are still in use. Those planers were abreast of the market of their day precisely as the planer of 1909 is abreast of the market of its day. He has never sacrificed quality to workmanship and has never rested on his laurels. Mr. Woodward is a thorough believer in Worcester and in the superiority of its workmen. "A large measure of my success is due," he declares, "to the intelligent co-operation and loyal enthusiasm of my employees. They are as interested as much as I am in making the Woodward & Powell planer just as near perfection as money and skill and profound interest can make it." A picture of the Woodward & Powell plant accompanies this article.

The Worcester Machine Screw Company

The Worcester Machine Screw Company, Standard Screw Company, successors, was founded in 1866, by A. W. Gifford and E. A. Bagley under the firm name of Gifford & Bagley. In 1868

Mr. Gifford purchased the interest of Mr. Bagley and took in as partners S. B. Dolliver and George Fisher, Jr., and adopted the firm name of A. W. Gifford & Company, under which title the business was conducted until 1873, when Mr. J. P. Hale of New York purchased the interest of Mr. Dolliver, and the name of the Worcester Machine Screw Company was adopted. Three years later in 1876, Mr. Edward B. Dolliver, the present manager, joined the company and has been identified with it ever since. Mr. Gifford remained in the concern until 1900, from 1878 to that date, he being the sole proprietor.

The company when it was founded in 1866 was located in a small shop on Central Street. Up to that time screws had been fashioned on a lathe—a long slow process. Mr. Gifford invented a machine purposely designed for the manufacture of screws and revolutionized the business. Thanks to this machine and the improvements which he subsequently devised and patented, screws were not only turned out with far greater rapidity, but at much less cost and of a much higher grade.

The firm of Gifford & Bagley, the predecessors of the Worcester Machine Screw Company, began manufacturing screws according to Mr. Gifford's improved processes in 1866, and the present management takes pardonable pride in the fact that these screws were the first milled machine screws ever placed upon the American market. This concern is the pioneer in this vast industry in this country.

Mr. Gifford, after a short time on Central Street, removed to Church Street and then to 72 School Street. In 1874 Mr. Gifford removed to 57 Jackson Street and stayed there until the fall of 1879, when the company moved into its present quarters on Beacon Street.

In 1900 the Standard Screw Company secured Mr. Gifford's interest and have since carried on the business under the name of the Worcester Machine Screw Company, Standard Screw Company, successor. This concern, capitalized at $4,500,000, is perhaps the largest screw manufacturing industry in this country, the properties of which it consists embracing the Chicago Screw Company, the Worcester Machine Screw Company, the Detroit Screw Works, the Pearson Machine Company of Chicago, the Illinois Screw Company of Chicago, the Hartford Machine Screw Co., the Western Automatic Machine Screw Company of Elyria, Ohio, and the Walker & Ehrman Manufacturing Company of Chicago.

The president of the company is W. B. Pearson, of Chicago; first vice-president, E. B. Cadwell, New York city; second vice-president, A. W. Gifford, Worcester; treasurer, E. B. Dolliver, Worcester; secretary, George Thrall, Detroit.

The company's business is confined practically to the United States, and among its plants are concerns like the one at Hartford, which manufactures everything from the tiniest gold and silver screw for watches to screws up to three and four inches in diameter.

The Worcester Machine Screw Company not only makes a full stock of standard square and hexagon head cap screws, case-hardened set screws and round, flat and fillister head machine screws, but it also manufactures special parts which enter into the construction of electrical appliances, surgical instruments, optical work, guns, sewing machines, locks, shears, bicycles, automobiles, etc.

Mr. Dolliver, who is the manager of the company, is assisted by W. W. Dadmun as assistant.

The company presents herewith a copy of the diploma issued A. W. Gifford, its founder, in 1866, by the Worcester County Mechanics Association for excellence in the manufacture of screws. A cut of its plant is also shown.

Worcester Polytechnic Institute

The Worcester Polytechnic Institute received its first entering class in 1868, forty one years ago. It was at first an almost purely local institution; but it has now grown to be one of the leading engineering colleges of the United States, with an enrollment during the present year of five hundred students. In the increase of its number of buildings, its material equipment, and the enlargement of its facilities for instruction, it has fully kept pace with the tremendous progress that has taken place within the last thirty years in everything pertaining to a professional and technical education. In some respects it has been and is a recognized leader and its methods have been widely copied by other institutions. Its facilities are equal to those of any other engineering college, and in some departments they are superior to those of any other institution whether in this country or Europe.

The Institute owes its origin and the individuality of its character to a conviction on the part of its founders and those who have since directed its course, that the then little-thought-of but now universally adopted "laboratory" methods of instruction are likely to produce far better results than those previously in use. The underlying principle which controls the work of the Institute is that courses of study and laboratory exercises may be arranged which will furnish all the intellectual training that is of real use in the so-called "liberal" education, and which will at the same time equip the young man with a good knowledge of the sciences specially relating to his chosen profession, together with a considerable amount of actual practice in that profession; this practical training must necessarily be, hour for hour, much more productive and valuable than professional experience acquired under the old method.

After an experience of more than a quarter of a century, the validity of this general principle is attested by the professional standing and recognized skill of nearly 1300 graduates.

The location of the Institute, which is exceptionally beautiful, is in the northern part of the city on a tract of about fifteen acres overlooking Institute Park. The buildings of the Institute, eight in number, are as follows:

Boynton Hall, devoted to the offices of administration, the library of general reference recitation rooms, and the rooms of the Department of Civil Engineering.

The Washburn Shops, including pattern, machine and forge shops and the foundry. Each student is, during his course, given thorough instruction in these different branches of work. All the courses are laid out in such a way that the greatest amount of educational training shall be derived from them by the student. At the same time, the shops are, as they always have been, run on a commercial basis; so that the student is brought into contact with actual business conditions. The equipment is varied and ample, and during the past two years, the entire arrangement of the interior of the shops has been changed and new equipment added. A special room has been fitted up which is devoted to class work with seniors in the subject of shop management, a unique feature and one which cannot be duplicated in any other school.

The foundry, erected in 1902, a brick and granite building with structural work of steel, is connected with the shop by means of a tunnel. It is complete in every respect, and is believed to be the most modern foundry equipment possessed by any educational institution in the country.

The Salisbury Laboratories are devoted to the departments of chemistry and physics. The rooms, equipment and facilities are unusually ample and provide in the best manner for the needs of the rapidly increasing number of students.

The Mechanical Engineering Laboratories contain the hydraulic laboratory, erecting and testing laboratory, cement-testing laboratory, a laboratory for testing materials of construction, a laboratory for testing properties of small samples of metals and other materials, a gas engineering laboratory, and a general laboratory for experiment and research in connection with power transmissions. Besides these, the building contains a mechanical drawing room, a freehand drawing room, a room for machine design, recitation rooms, a large lecture hall, department library and the headquarters of the department.

The Magnetic Laboratory is designed for conducting electrical experiments which require freedom from magnetic or electrical disturbance. It is under the general charge of the Department of Physics.

The Power Laboratory, centrally situated, contains a boiler room, an engine room, with experimental steam engines and direct connected units for electric light and power, and a sub-basement for receivers, condensers and steam pipes.

The Electrical Engineering Building, beautifully located at the northerly end of the Institute grounds, is the largest building devoted wholly to electrical engineering to be found in any college in the world. It offers unexcelled facilities in the study of electrical engineering in its various branches. The electric railway equipment, a feature quite new in electrical engineering laboratories, provides facilities for research and experiments in this rapidly growing branch of electrical engineering. A portion of the equipment is a double-truck four-motor inter-urban car designed specially for experimental and testing work, placed upon tracks which are directly connected with the tracks of the Worcester Consolidated Street Railway Company. In the other departments the electrical engineering laboratory provides facilities which are complete and are fully up-to-date; and they are in some respects superior to those now to be found anywhere else in the world.

In addition to these, the buildings include the hydraulic laboratory, situated at Chaffins, about five miles distant, containing an 80-horse power turbine, meters, weirs, and other apparatus used in conducting hydraulic tests and experiments.

Worcester Slipper Company

J. PRESCOTT GROSVENOR.

J. Prescott Grosvenor, proprietor of the Worcester Slipper Company, is a son of Charles W. Grosvenor and was born at Paxton, April 24, 1853. After completing his education at Leicester Academy, he entered the establishment of Childs & Manning, Worcester, jobbers of boots and shoes, as a salesman covering the state of New York. In 1884 he established the Worcester Slipper Company at 13 Mechanic Street. In August, 1898, the business had grown so that it necessitated removal to 370 Park Avenue, where a modern building, four stories high and 300 feet long, was secured. In November, 1906, this building having been outgrown there was erected alongside of it another building, 120 by 45 feet, four stories, of brick, and both structures are now utilized to capacity in turning out the highest grade of felt slippers known to the trade. In addition a new line of ladies' shoes, known as the Firfelt, is also manufactured and promises to rival in acceptance the slipper industry.

Mr. Grosvenor manufactures barefoot sandals for outdoor wear and felt for house wear in men's, women's, misses' and children's sizes.

The Worcester Slipper Company now has a gross product of $300,000 per annum. Their slippers are sent from Alaska to New Zealand. Mr. Grosvenor gives constant employment to 250 hands, and the workmanship displayed in his product gives it a ready sale in the most exclusive establishments. A consumer's style book, giving copious illustrations of the ease-producing footwear he manufactures, will be sent to any address. Mr. Grosvenor is a profound believer in the Golden Rule and carries it absolutely into his business relations with his employees and the public. Pictures of his present plant, of himself and of a sample slipper accompany this article.

Worcester Magazine Advertiser

Wright Wire Company

GEORGE M. WRIGHT,
President.

HERBERT N. WRIGHT,
Vice-President and Treasurer.

The Wright Wire Company was founded and business begun at Palmer, Mass., by George F., George M. and Herbert N. Wright, in 1883. In 1889 the plant was moved to Worcester, and in 1894 a plant for the manufacture of wire was again started at Palmer, followed in 1904 by one there for the manufacture of wire rope.

The concern has warehouses where it carries an immense stock of goods for local consumption in Boston, New York, Philadelphia, Pittsburg, Chicago and San Francisco. It began the establishment of these warehouses in 1903, and at each of the six it has individual selling forces.

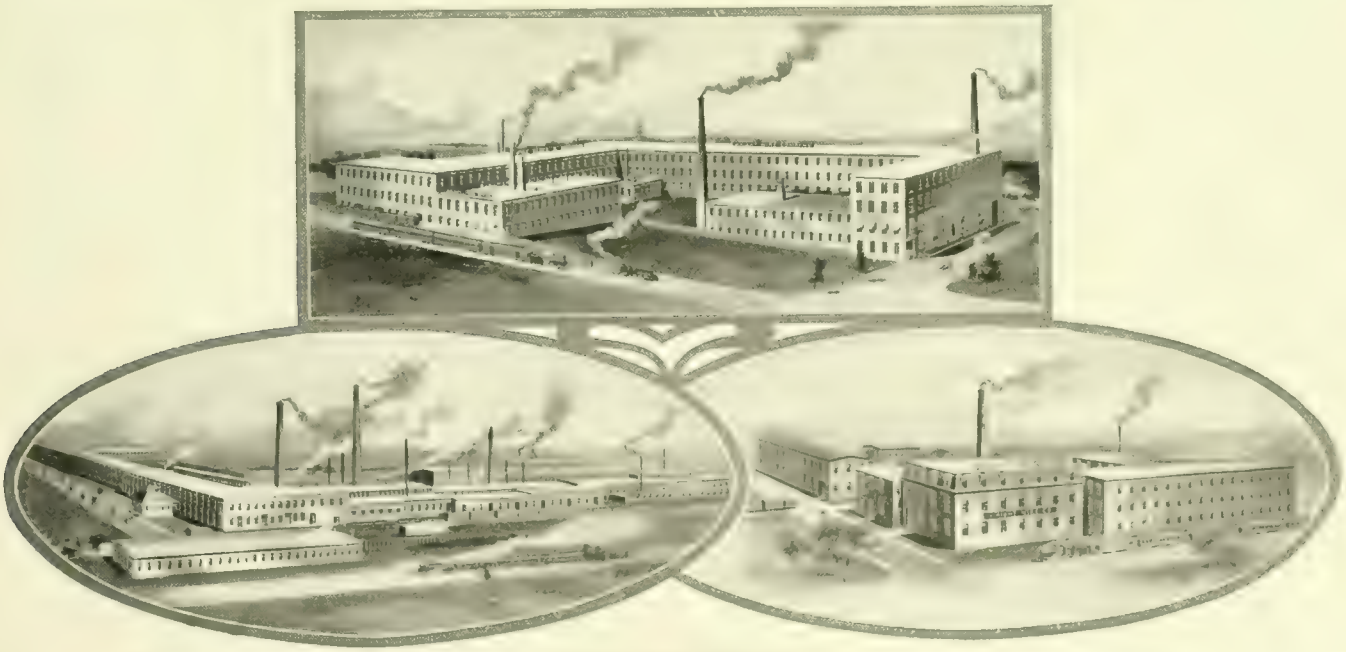
The floor space of the various warehouses embraces nearly two acres, while the noor space of the three factories in Worcester and Palmer is over eight acres. Its steam plants have a total horse power capacity of over 1600, and its output amounts to between $1,000,000 and $2,000,000 per annum.

The Worcester plant is located on Hammond Street on the lines of the New York, New Haven & Hartford and Boston & Albany railways, and are directly connected by railroad sidings with both lines. At the Palmer plant it is connected with the Boston & Albany and Central Vermont, and here alone it has about one-half mile of tracks in its yards.

It has two parcels of land in Worcester and two in Palmer, with a total area of over 47 acres, and it employs 600 hands.

The present officers are: President and General Manager, Geo. M. Wright; Vice-president and Treasurer, Herbert N. Wright; Assistant Treasurer, John A. Denholm.

The company manufactures wire, wire cloth, poultry netting, wire fencing, wire rope, patent wire clothes line, picture cord, staples, wire lath, coal and sand screens, foundry riddles, special wire goods, tree guards, flower bed guards and trellis, elevator cabs and enclosures, concrete re-inforcement fabric and patented copper lightning rods, fire escapes, coat hangers, lockers for shop, gymnasium, office and counter railing, etc.



WRIGHT WIRE COMPANY

The Hart Renting & Power Company

The Hart Renting & Power Company, which has taken over the property at the corner of Austin and High Streets, known for so many years as the Bay State Shoe Company plant, has completely revolutionized the main buildings and six out-buildings of which it was composed and has now one of the finest equipped plants for manufacturing purposes in the city. Not only have extensive repairs, alterations and improvements been made in the building, but a complete independent electric light plant has been installed for the benefit of the tenant. New closets and sinks have been placed in position, the building has been re-floored and the steam heating has been overhauled, granolithic walks laid down, and two stores have been built, corner of Houchin Avenue and Austin Streets. The property covers 28,000 square feet of land. James W. Grady is president and general manager of the Hart Renting & Power Company, and James W. Harrigan is treasurer.

Both Mr. Grady and Mr. Harrigan are among the occupants of the building. Mr. Grady is the head of probably the largest house in this country in marketing bicycles and bicycle sundries. All his competitors are in automobile sundries to a great extent. He keeps 1000 bicycles constantly on hand and he ships to Canada, Mexico and all the other North and South American countries. He also has a good trade in Japan. He does a business of $200,000 per annum, all of which has grown up in the last six years.

Harrigan Bros., who also occupy the building, started in business in 1894 at 540 Main Street, and removed from there to 48 Southbridge Street, whence they came to their present quarters. They publish the Holy Cross Purple, and also issue many other publications and catalogues for that college, for Clark College, for Emerson College of Boston and for many other schools and colleges. They make a specialty of magazine, catalogue and job printing and have one of the finest equipped printing plants in the city in their new location. The concern consists of John F. Harrigan and Benjamin E. Harrigan.

The other tenants of the building are American Publicity Company, Office Specialties de Luxe, Inc.; Worcester Paper Box Company; Eureka Oil Company; Austin Street Bowling Alleys; Massachusetts School of Engineering; M. J. Morrisey, tailor; Coombs & Fish, motorcycles; Warren Leather Goods Company, storage; Shales Bros., nickel platers, and the Century Pool Room.

A BEEHIVE OF INDUSTRY—HART RENTING & POWER CO. BUILDINGS, AUSTIN AND HIGH STREETS

Union Laundry Company

The Union Laundry, founded in 1886 at 8 Smith Court by David A. Scott, is a potent example of what one man can accomplish when he has competent help, a love of his business and a genius for leadership. Mr. Scott began in the most meagre fashion, collecting his laundry on foot and delivering it in the same way. By 1892 he had outgrown his first primitive surroundings and was forced to remove to 109 Chandler Street to secure room in which to transact his business. He stayed there but two years and in 1894 was forced to remove to 15 Prescott Street. When he went there, one floor sufficed, but before he left in September, 1907, he was obliged to take 7, 9, 11 and 13 Prescott Street as well, and his business had grown from one floor to three. At his present quarters, corner of Union and Exchange Streets, he has a brick building four stories high and 65 by 100 feet in size, giving him 26,000 feet of floor space, every inch of which is utilized. Today he keeps sixteen wagons and twenty-one horses employed in collection and distribution, he has a weekly pay-roll of $630, and does a gross business of $66,000 per annum.

DAVID A. SCOTT.

Mr. Scott originated the wet-wash business in this country, delivering an address before the Laundrymen's National Association at Buffalo in 1902, at which he outlined his views in that respect. He also conducts a mechanics laundry for laundering overalls and jumpers, and a clean towel supply. He is President of the company, and Miss Janet A. Carrus, who has been with him practically from the start, as indeed have many of his employees, is treasurer. No history of the company would be complete without mention of Mrs. Scott, who has been a loyal helpmeet and active contributing force in the splendid business Mr. Scott has built up in the past twenty-three years.

The La Zacualpa Rubber Plantations

Only a very few years ago the cultivation of rubber was practically unknown.

At the present time there are more than sixteen thousand acres planted to millions of thriftily growing rubber trees on the La Zacualpa properties, in the state of Chiapas, Mexico.

These great Plantations, the largest in the world under one management, are fully equipped with everything necessary in the way of buildings, machinery and the appliances of civilized life, and employ approximately one thousand men in the development and upkeep of the plantations and the production of rubber.

Rubber is produced and marketed from the oldest of the above plantations, comprising eight thousand five hundred acres, at a total cost of fifteen cents per pound (average selling price of good rubber is much over one dollar), the output increasing rapidly each year.

The vast extent of the plantings, covering over twenty-five square miles, and the original and up-to-date methods and machinery for extracting the latex and curing and preparing the rubber for shipment are the marvel of the many people from all parts of the world who are constantly visiting the plantations.

The view shown herewith is of planted rubber trees on La Zacualpa Rubber Plantations six to seven years old, and is but a sample of miles upon miles of roadway through this gigantic forest of cultivated rubber.

Owing to the fact that many Worcester people are interested in these plantations and that several from this city have visited them, it might be well to mention that there are first-class accommodations for visitors on La Zacualpa Rubber Plantation, and all travelers in Southern Mexico are cordially invited to stop and inspect the properties.

Worcester Magazine Advertiser

The
WARREN·HOTEL
WORCESTER
MASS.
THE WARREN
THE WARREN
CARLTON ENGRAVING CO

DANIEL WALDO
ORIGINAL BUILDING
WORCESTER BANK
1804
BUILDING AT RIGHT
PRESENT SITE of
MECHANICS HALL
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1845 1884
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WALDO, Jr.
STEPHEN
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WORCESTER, NATIONAL - BANK

PEOPLE'S SAVINGS BANK

Incorporated May 13, 1864.

452 Main Street, Worcester, Mass.

SAMUEL R. HEYWOOD
President

STATEMENT CLOSE OF BUSINESS, FEBRUARY 1, 1909.

ASSETS

Public Funds	$1,684,990.00
Railroad Bonds	2,910,278.25
Street Railway Bonds	198,492.50
Bank Stocks	223,924.00
Loans to Counties, Cities and Towns	118,765.00
Loans to Railroad Companies	34,000.00
Loans on Bank Stocks	2,551.00
Loans on Depositors' Books	2,500.00
Loans on Real Estate	5,208,064.65
Loans on Personal Security	1,758,900.00
Bank Building	135,000.00
Real Estate by Foreclosure	17,687.79
Taxes and Insurance paid on Mortgaged Properties	216.54
Stocks and Bonds to Secure Indebtedness	85,850.00
Deposits in Banks on interest	347,062.49
Cash on hand	50,328.59
	$12,778,610.81

LIABILITIES

Deposits	$12,126,590.34
Guaranty Fund	605,000.00
Profit and Loss	26,930.10
Suspense	72.16
Incomplete Loans on Real Estate	17,438.85
Interest, Partial Payments	2,579.06
	$12,778,610.81

Officers for 1909

President

SAMUEL R. HEYWOOD

Vice-Presidents

FRANCIS A. GASKILL
EDWIN T. MARBLE
WILLIAM T. FORBES
MATTHEW J. WHITTALL
WILLIAM W. JOHNSON
GEORGE I. ALDEN

Trustees

SAMUEL R. HEYWOOD
FRANCIS A. GASKILL
EDWIN T. MARBLE
WILLIAM T. FORBES
MATTHEW J. WHITTALL
WILLIAM W. JOHNSON
GEORGE I. ALDEN
HENRY A. MARSH
JAMES P. HAMILTON
HORACE WYMAN
THEODORE C. BATES
ALEXANDER DEWITT
ALBERT W. GIFFORD
CHARLES. H. HUTCHINS
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WILLIAM H. INMAN
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RUFUS B. DODGE
HENRY F. HARRIS
HARRY W. GODDARD
ALEXANDER H. BULLOCK
PAUL B. MORGAN
GEORGE CROMPTON
GEORGE A. GASKILL

FREDERICK J. BARNARD, *Clerk*
CHARLES M. BENT, *Treasurer*

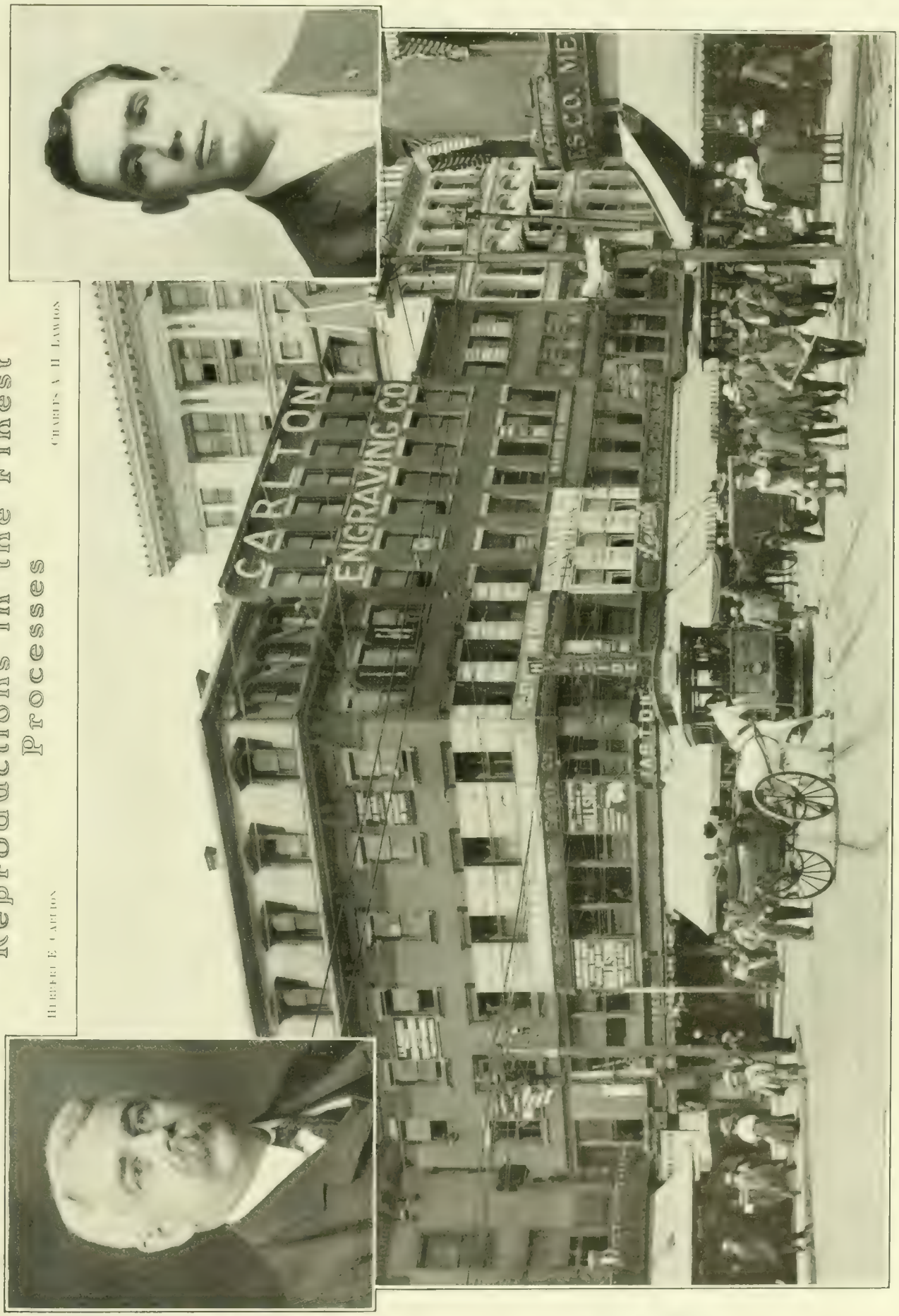
CHARLES M. BENT
Treasurer

Carlton Engraving Company, 418 Main Street

THE BEST ENGRAVERS IN MASSACHUSETTS

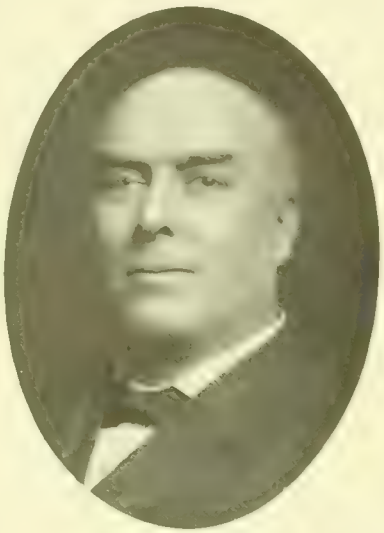
All kinds of Illustrative Work. Bird's-eye View Drawings

Reproductions in the Finest Processes



On the Busiest Corner in Worcester

NO ARCH SUPPORTERS NEEDED



Yours for Comfort,
CHARLES CASE

CASE FINE SHOES

All Case Shoes have an individuality and excellence of their own

THE ROYAL WORCESTER ARCH-SUPPORTING SHOE
FOR BOTH WOMEN AND MEN

is a sure preventive for fallen insteps, or so-called rheumatism of the feet

Arch Support a Part of the Shoe

YOU CAN NOW BE FITTED IN OUR RETAIL DEPARTMENT BY EXPERT FITTERS

CHARLES CASE SHOE CO., WORCESTER
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SEE OUR EXHIBIT AT EXPOSITION

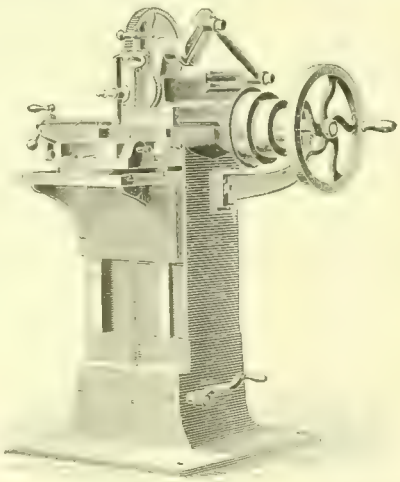
ROYAL WORCESTER CASE ARCH-PROP SHOES ARE ALSO FOR SALE AT STORE OF THE D. H. EAMES CO. SHOE DEPARTMENT, CHARLES H. GROSVENOR, MANAGER

BOYNTON & PLUMMER, Inc.

Manufacturers of

Upright and Horizontal Hand and Power Self-feeding

DRILLING MACHINES



Hand and Power Shaping Machines | Portable Forges, etc. | Hand and Power Bolt Cutters

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Worcester, Mass.

Made in Worcester.

PORTABLE BUNGALOWS

COTTAGES
AND GARAGES

MANUFACTURED BY

E. F. HODGSON CO.
BOSTON AND DOVER, MASS.

See Exhibit at Exposition

Established 1829

THE STEEL WAREHOUSE GOOD STEEL OF NEW ENGLAND

PRATT & INMAN

Worcester, Mass.

Our stock comprises the largest assortment of sizes and qualities of steel carried by any one in the United States.

Specialties:

Best Machinery Steel, Lead Screw Steel, Viking Crucible Steel.

Made in Worcester.

Hand Stripping Cards

German and Domestic Heddles for Cotton and Woolen Mills

Revolving Top Flats remounted Fillets redrawn.

Quality sells our Goods

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See our Exhibit at Exposition

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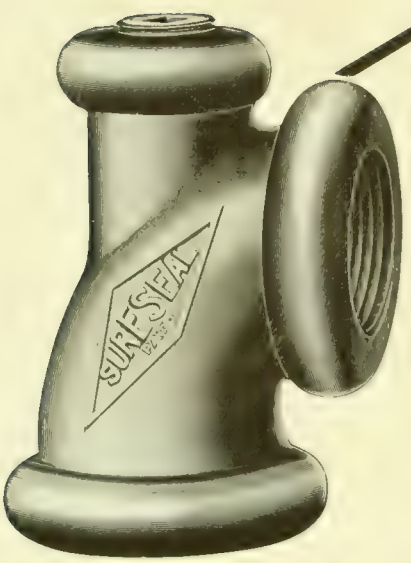

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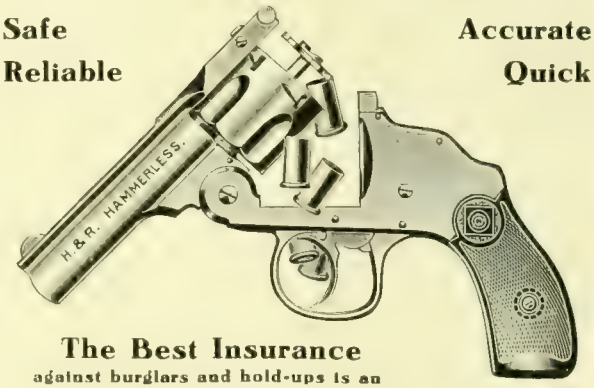

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Worcester, Mass.

THE WORCESTER MAGAZINE

VOL. XII. APRIL, 1909 No. 4

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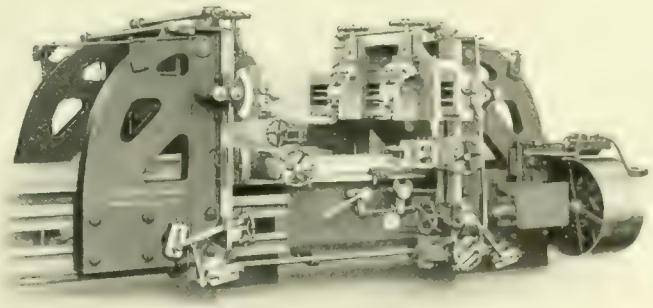

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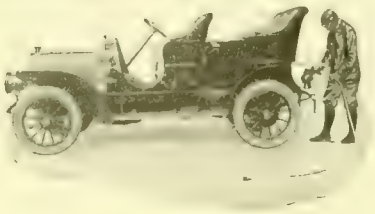

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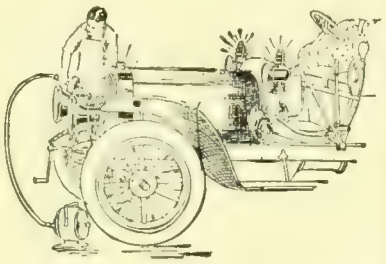

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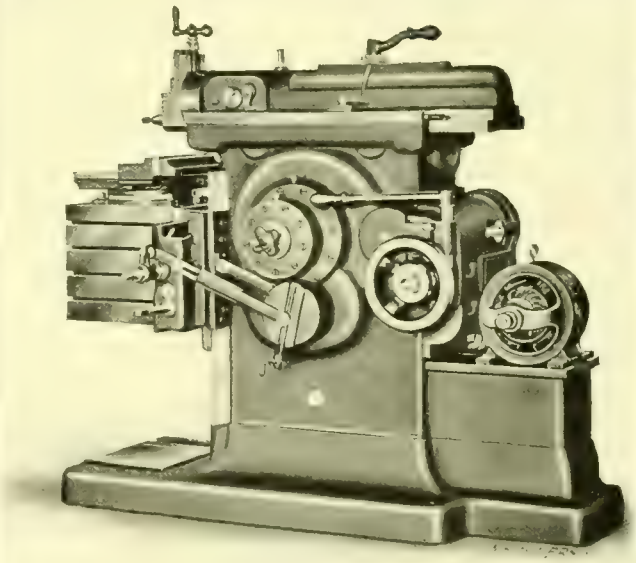

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The WORCESTER MAGAZINE

Editorial Comment

Our March Magazine and its Reception.

In the February Magazine we promised our readers that the next number would be in some respects without precedent in the history of the periodical, and predicted for it a large demand. If we may accept the many enthusiastic appreciations which have come to us through the mails and by word of mouth, there has been placed to the credit of the Worcester Board of Trade a publication which fittingly sets forth some of the sources and progress of our industrial greatness as a community. The demand for the Magazine so far exceeded our expectations that an edition of four thousand available copies was quickly exhausted. In addition to these increased sales at the news-stands there have been added a large number of individual subscriptions. We have been obliged to disappoint some of our friends who, in addition to investing liberal sums in advertising, wished also to buy extra copies by fifties and hundreds. These facts show that there is a demand and a fruitful field for a trade journal of this character in our city, both for giving extensive publicity to Worcester, and for impressing upon our own residents the riches of its history and the promise of its prospective development.

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Special Features of this Number.

"My only criticism on your March Magazine is that you can never surpass it," said one of our members a few days since. We do not hesitate to assure our friends that there are better things yet to come. We cannot expect often to exceed that magazine in size and richness of illustrations, but we have in mind two special numbers to appear before the end of 1909 which we believe will give at least equal pleasure to our readers. Meanwhile we hope to maintain in every number the quality if not the quantity of the last issue. In this Magazine we take pleasure in presenting as our leading feature an account of the work and aims of the Merchants Association. This organization is closely allied to the Board of Trade in its purpose and aims, and in having so largely a membership in common. We also offer our readers an illuminating account of the details of the exposition of the Mechanics Association, and reproductions of a few of its interesting spectacles. In our next number will appear reports presented at the annual meeting of the Board, also an account of the annual banquet.

Boston's Merchants Association and its Broadening Field.

The new consolidated organization of Boston's commercial interests is manifestly something more than local or even metropolitan. "To advance the commerce, industry and public interests of Boston and New England," is the object clearly defined in its constitution. There are many signs that it hopes to strengthen the spokes and outermost rim as well as the hub of New England. A personal acquaintance with some of its officers and leaders, among whom Mr. Ryerson Ritchie, the executive director, is the leading spirit, gives us the fullest warrant for assuring all of Worcester's business men that Boston does not propose to overlook the many interests which we and all other New England cities have in common with her. As a convincing proof of this we have given some space elsewhere to an account of the new official who begins his work in Boston next month. A traffic agent or manager for Boston cannot do his work at all without also working in the interests of this and other New England cities. The solution of some of the problems which have been brought to this office during the last month is to be found only in the broad-minded efforts of such an official. We earnestly urge upon all our citizens an expectant study of the workings of this new agency.

o o o

Give the Railroads a Square Deal.

We note with heartiest satisfaction the attitude of a large and representative group of Boston's most substantial business men at a recent hearing before the Railroad Committee of the Legislature. The petition, largely signed and most ably argued, is worth quoting as illustrating the coming of a saner and more sensible attitude toward corporations that are indeed the creatures of the Commonwealth and its servants, but whose service is indispensable to the common welfare.

The undersigned, citizens of Massachusetts, being greatly concerned at the prolonged agitation in the railroad situation in this State, respectfully ask that nothing be done to cripple the New York, New Haven & Hartford Railroad Company by a forfeiture of its charter, or by any legislation that will diminish the opportunity and inducement which it should have to enlarge and develop its business in Massachusetts.

We respectfully submit that respect for the law and the law-making power cannot be promoted by inflicting penalties which will impair the efficiency or restrict the development of the railroad, especially as the dignity of the State has already, in this case, been fully asserted by recent proceedings in court and in the Legislature.

Being convinced that the Commonwealth needs all the initiative that its railroads can supply, we respectfully ask that further legislation be directed towards increasing rather than curtailing the opportunity and inducement for the profitable extension of railroad enterprise in New England, so far as is consistent with necessary control.

We regret that Worcester was not represented by some of her leaders in business circles in the support of these positions; for there is no city or locality in Massachusetts which has more to lose from an unjust treatment of railroad, or more to hope from a fair and liberal attitude toward these public service corporations.

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The First Real Test of Our New President.

The progress of tariff discussion at Washington since the opening of the special session of Congress has brought little light upon the probable issue or upon the date when uncertainty shall give way to assured knowledge on which to base constructive enterprise. Meanwhile some of our Worcester business men report stagnation during the last month exceeding that for many months previous. The appearance of the new tariff measure was eagerly awaited by the country in general; the extra copies which through the courtesy of Congressman Washburn came to our rooms were in great demand. There is comparatively little interest in the initial discussion of this measure by the House of Representatives; but every one is anxious to see what treatment the Senate will give to this measure. Here will come the first real test of the power of President Taft to direct the progress of his administration according to his promises and evident intentions. At this writing it appears as if the only thing which would secure a comprehensive revision in the interests of the consumers of the country would be the leadership and skill of the President, as he holds the representatives of special interests in the Senate firmly to action in accord with the party platform and promises.

A Significant Utterance.

When a man like Judge Gary, chairman of the Board of Directors of the United States Steel Corporation, discusses the relative rights of corporations and individuals, he will find a large and interested audience. His recent address before the Illinois Society in New York city, where he was the principal speaker, deserves a far wider hearing than it could there receive. We quote with great pleasure the following extract:

> We snarl at legislation or at the Chief Executive if any action is taken or word spoken which we think is calculated to injure vested rights; but we are apt to overlook the fundamental principle that even vested rights, so called, must yield whenever they become antagonistic to the public welfare and safety.
>
> Rights of the individual are subordinate and must submit to those of the public. The opportunities for the acquisition of wealth have been and are so great that large and increasing fortunes of individuals and corporations compel the most thoughtful men to dread the results of the future unless the influence and power of money can be controlled by governmental authority.

We desire to add to this quotation another, which comes as a comment upon Judge Gary's position, from the editorial columns of the World's Work:

> This is not the speech of a "radical" nor of a politician of any kind, but of a man of judicial training and clear thinking, who holds one of the most responsible and important posts in the business world. It is an obvious and self-evident doctrine, but the significance of it is that it comes from the business world itself. It means the "open corporation," which shall co-operate with the government for the enforcement of law, and assume its responsibility for business conditions, and which shall stand against privilege and not seek it either by open or occult ways.

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Possible Improvements in Worcester's System of Protection from Fire.

Recent events in our city have brought this subject prominently to the front in the minds of many owners of property. We are peculiarly favored with an ample supply of water for the use of our Fire Department. We have excellent apparatus and well-trained firefighters. Nevertheless, it is a regrettable fact that three times within the last few months this city has been the scene of disastrous fires. These gained a headway and inflicted losses which under certain circumstances might have been prevented. In the first instance two alarm boxes in the very centre of the city, one of them located in the City Hall, were found out of commission. In another instance the water mains to which hose was attached were quickly exhausted. In the third instance an auxiliary alarm, tested a few days before, proved worthless, and the lack of automatic sprinklers which the owner had sought to install but could not because of the low pressure system, was responsible for great loss. In two cases nothing but the most favorable conditions of wind and weather saved this city from widespread conflagrations. Without attempting to censure any who tried to do their best under the conditions in which they were placed, the business men of Worcester have a right to more light as to whether the Water and Fire Departments of the city are individually and unitedly meeting their full responsibilities. It is a lamentable advertisement for a city to have its newspapers send over the land three such stories of fires and attending circumstances as have gone abroad from Worcester in recent months.

o o o

Uncle Sam Must Practice Economy.

It is evident that the time-worn demand for retrenchment and reform in national finances means something more than an idle phrase to Franklin MacVeagh, President Taft's new Secretary of the Treasury. He has already announced that all estimates must be rigidly scrutinized in every department of the government; the Senate is on record as being of the same mind, and all the information that comes from Wash-

ington is corroborative of a similar feeling in every branch of the National Legislature.

This is as it should be. The American people, particularly in the East, have felt the pinch of the last sixteen months severely. The cost of living has remained at former high levels or advanced, while wages have either remained stationary or been reduced. During this time many American families have kept their heads above water only by practicing rigid economies. What the country has done individually it must now be prepared to do collectively. There must be a determined effort made by Uncle Sam, and made at once, to keep his expenditures inside of his income.

It is worse than foolish—it is little short of criminal—for the American people to refuse to take into consideration the actual condition of the national treasury. For months the balance has been steadily nearing the vanishing point. It is now estimated that the deficit for the remaining three months of the fiscal year will be $30,000,000. There is now an available cash balance of $132,500,000 in the United States treasury, of which $59,500,000 are special deposits in the banks; and $60,500,000, including about $3,500,000 in the Philippine treasury, constitutes the working balance. The question whether this $60,000,000 will stand a further drain of $30,000,000 in safety will hardly be answered in the affirmative. Uncomfortable as this outlook is, it is tempered by the fact that the excess of expenditures over receipts is not so great as it was one year ago. In March, 1908, the excess of expenditures over income was $8,615,034, while in March, 1909, the excess was only $3,114,988. For several days at the very close of last month the government's income actually exceeded its outgo.

The available cash balance in the treasury March 31, 1909, was $133,230,051, against $138,750,162 at the close of February, a shrinkage of only $5,500,000, against a frequent shrinkage during the close of the last administration of nearly twice that sum per month.

During the last year of the recent administration the available cash balance in the treasury fell from $260,414,852 to $138,750,162. It is now proposed, unless the shrinkage ceases, to issue either $45,000,000 of Panama bonds or else one-year certificates, for which the Secretary of the Treasury has authority to emit $100,000,000. These latter carry three per cent. interest, and it is thought under existing conditions would meet with ready sale.

In any event, whatever plan is adopted to escape from the present dangerous situation, it is evident that rigid economy, smaller appropriations and a less extravagant atmosphere generally must characterize the nation for the next few months if not for this entire administration.

A Trolley Waiting-Room.

The agitation which has recently begun in business circles and in the communications and editorials in one of our daily papers is none too soon in appearing, and should not be allowed to cease until definite results are secured. The situation is the result of a gradual development of the electric railroad, which has come to its present dimensions almost unawares. When we are told that thousands of trolley passengers leave Worcester's centre every day where only hundreds depart from our railway station, we are surprised, and our thought goes back not many years to the time when a trolley-car was as great a curiosity as an airship is to-day. When our trolley lines began it was under grave financial uncertainties; and the terms under which franchises were granted did not, because they could not, make any account of the immense and immensely profitable business which was to arise in a decade or two. If for the first time it were proposed to inaugurate in its entirety our present trolley business, neither promoters nor patrons would for an instant think of doing without some waiting-room accommodations; but since the necessity has arisen so gradually its importance has escaped any large and insistent public notice.

There seems no question, however, that the city is at last thoroughly awake to the situation and that relief is on the way. Leaving out of account, for the present, the humanitarian side of this demand, we are interested to note the business aspects of the matter. These have been so well set forth in a recent communication in the Gazette that we quote somewhat at length, as follows:

"Let us take a sordid business view of the situation. Directly or indirectly tributary to Worcester by electric car service, is a population far greater than our own. Not a few of these people believe that they secure in Worcester better values than in Boston. Many there are of these, however, living in towns accessible to the steam roads, who go to Boston partly because of the inconveniences associated with the conduct of the electric railway system in Worcester. Many others prudently purchase their supplies in their own towns, for if they come to Worcester they know not what misfortune may befall them ere they return. And yet with a Board of Trade and a Merchants Association, both of which are organized on the basis of furthering the business interests of their members in particular and of Worcester in general, and both of which presumably are still alive if not alert, this condition of affairs does not seem to appeal to the business judgment of their members as requiring action."

As far as our own organization is concerned, the subject of a trolley waiting-room is not a new one. Some months ago it was raised in a meeting of the directors, and referred to a committee which has by no means forgotten or ignored the matter, although it is unable as yet to report the attainment of desired results. In view of the petition which has just been presented by a representative body of citizens to our directors for some immediate action, either in concert with other commercial bodies and with our city government or independently, there is no reason to doubt that more rapid progress will be made toward the desired end.

In thus earnestly agitating for what appeals so strongly to so many, we should bear in mind that our street railway company is by no means omnipotent or without embarrassments in this matter. It is true that technically we are in the hands of "absentee landlords," for whoever may be the present owners of our street railways, it is quite certain that their control lies outside any group of Worcester's citizens. The local management, however, has given many substantial proofs of a desire to satisfy its patrons. While at certain hours some cars are overcrowded, this condition is, in our judgment, less marked than in any city

of like size with which we have any familiarity. We have a most liberal system of transfers and an exceptionally competent and courteous body of employees. We have no doubt that the managers of the road are sympathetic with the unsheltered crowds, and we know that they are not indifferent to the business prosperity of a city, which is of necessity one of their chief assets. It is easy to demand the immediate construction of a trolley waiting-room; but if the management announced their purpose of beginning on the work as soon as our citizens could agree upon location and plans, what would happen? It seems hardly needful to formulate the answer to such a question.

The largeness of the question, and its perplexities to all concerned, must be recognized. The matter is now before the Board of Railroad Commissioners, who can be expected to take wise action and make suitable recommendations. If the discussion now going on serves to crystallize public sentiment in favor of some one plan and location, it will certainly accomplish a most useful purpose.

o o o

The Lesson of a Successful Exposition.

The Mechanical and Electrical Exposition which closed a few days ago in Mechanics Hall reached a degree of success which has surpassed the most sanguine expectations. From the opening night, when dripping skies were unable to dampen enthusiasm, down to the closing moment of the last day, with its record-breaking attendance, everything moved harmoniously and without an unpleasant incident. We have elsewhere told the story in its details, with a summarized view of the leading features of this display of Worcester's industries; we propose to set forth what seems to us to be the main lesson to be clearly impressed upon all who have shared the pleasure and profit derivable from these revelations of inventive and mechanical skill.

It is needless to remark that such displays have a permanent power to attract the multitudes. There is something about a piece of moving machinery which holds as well as draws the attention; and in proportion as a bit of mechanism shows intricacy and bewildering achievements, its seemingly human intelligence fascinates even those who have no comprehension of how the results are gained. Especially was this marked during the hours when the school children thronged the narrow aisles. When the overcrowded spaces on the main floor became too dense for comfort there was manifest satisfaction in taking seats in the gallery, listening to the delightful music by the ladies' orchestra, and enjoying a broad perspective of the varied scene below.

It was also evident to any one who conversed with the exhibitors near the close of the exposition, that it has for them amounted to something more than a self-sacrificing outlay of time and money for the mere entertainment of the multitudes. There were not lacking instances where exhibitors whose sections were almost side by side learned for the first time of each other's products, and found that there were being "made in Worcester" some things for which they had been sending to distant points. The assumption with which some sought to discourage the enterprise, in the days when it was merely a possibility, that no exhibitor would reap a dollar's worth of sales from any display made here in his home city, was happily disproved again and again.

It is also worthy of mention that the success of this exposition is a fresh proof of the power of courageous persistence. The credit for the final success must be widely distributed among the exhibitors and the numerous patrons, the efficient manager, Mr. Campbell, and the officials and committees of the Association; but no one will deny to the President, Mr. Denny, a large share of praise and congratulation because of his unflinching purpose from the beginning of his administration, that there should be such an exposition, and that it should be a success.

All these lessons combine to give us the supreme teaching of this event, which is that Worcester needs and can have, if she chooses, a permanent place where such an exhibition, suitably housed, with ample space upon the ground floor and provision for enlargement during a series of years, could become a regular event in our civic calendar. Without in any way belittling the variety, value and representative character of the exhibits which filled to overflowing Mechanics Hall and Washburn Hall, it must be admitted that this display was an insignificant fraction of what might be set forth if sufficient space were provided. This fact was suggested by the few scattered exhibits of machinery which were interspersed among dry goods, groceries and millinery at the Fair Grounds last September. The fact was demonstrated beyond dispute in the Mechanics building, where the display, if crowded and inadequate, was nevertheless carefully chosen, finely arranged, and made into a consistent whole. "A permanent exposition building!" should be Worcester's slogan from now on. It should be so planned as to include a convention hall, large enough to save the annual musical festival from its present financial deficits, which are due wholly to insufficient room to seat would-be attendants. This convention hall would attract from all parts of New England various gatherings, located, as we are, so near to its geographical centre. It would provide a suitable place for athletic sports of various kinds. It could easily be arranged to accommodate the largest banquet which might wish opportunity to assemble. There is probably no city of its size in the United States that is so greatly in need of such an auditorium as Worcester; and we doubt if there is one which would allow many months to pass before supplying a need so deeply felt.

We believe there is no one civic enterprise which could so readily unite so many of our citizens as an immediate and concerted effort on the part of the Board of Trade, the Merchants Association, the metal trades and the builders' organizations and any others who may be willing to join, to begin planning with the Mechanics Association for a suitable location, and at least the beginnings of a permanent structure which shall by degrees be enlarged until the demands of the city are met.

We sincerely trust that instead of continuing to murmur gently the impotent and self-condemnatory platitude, "Worcester ought to have a new auditorium," we shall hear instead the utterance of resolute will, "Do it—for Worcester!" In order to do what we can to further this project, we offer our columns in the May issue to brief communications as to where this building should be placed; what shall be its character; how great its cost, and how the means shall be provided. Let us strike while the iron is hot, and have plans for this greatly needed part of our city life and progress under way before the summer months come.

The Merchants Association

What Five Years of Co-operation Have Accomplished for Worcester's Business Interests

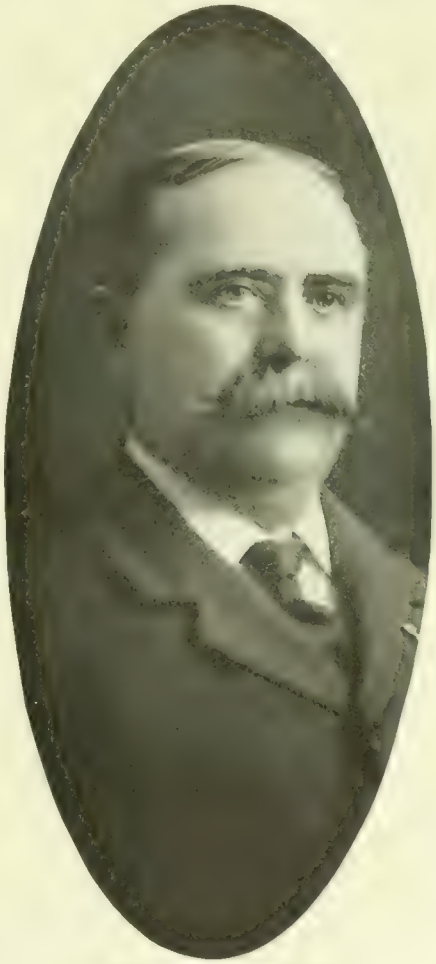
APRIL 7, 1909, marks the fifth birthday anniversary of the Worcester Merchants Association, and it is eminently proper that this number of the Worcester Magazine should body forth some of the achievements of this virile and practical body during that time. They have been stressful years, but their close finds the merchants of Worcester more closely united and more harmonious in their relationships than ever before in their history.

The Worcester Merchants Association owes its existence to two great contributing causes, the trading-stamp agitation and the presence in the community of a large and constantly increasing number of independent advertising schemes. These two causes combined served to reduce materially the earning capacity of every mercantile establishment in Worcester, and not only constituted a constant and ever-growing drain upon their receipts but also introduced an element of uncertainty into the retail trade that finally became unbearable.

By the year 1904 competition had grown so keen and the presence of gift enterprises such a menace that the merchants felt compelled to band together to resist any further encroachments on their legitimate profits.

The furniture men were the first to move in the matter of combining, and early in January of that year Charles H. Pinkham, of the Pinkham & Willis Furniture Company, and several other men in that trade began agitating the subject of forming a merchants' association for the mutual protection and benefit of the retail trade.

It was not until April, however, that sentiment crystallized into organization. Following several conferences a call was finally issued for a meeting to be held in Continental Hall, April 7, 1904, and on that date the Association was formally launched with the following Board of Directors: H. A. Johnson, Charles H. Flint, A. R. Haven, Mark F. Cosgrove, P. B. Moriarty, for one year; R. J. Healey, Joseph O'Keefe, J. P. Coghlin, F. A. Amidon, A. O. Young, for two years; I. Swan Brown, C. H. Pinkham, W. W. Johnson, Edward Moulton, J. E. Patten, for three years.



CHARLES H. PINKHAM
Collector of the Port
First President

On Monday, May 9, these gentlemen met and organized with Charles H. Pinkham as president; Richard J. Healey, vice-president; James E. Patten, treasurer, and Charles E. Squier, secretary; W. W. Johnson, J. P. Coghlin, H. Schervee, John H. Edstrand and E. E. Dodge, advisory committee. At this time the organization had about twenty-five members.

The trading-stamp matter was at once taken up and as a result of a conference with the local managers of the press and thorough co-operation by the merchants themselves, measures were adopted which eliminated that drawback to profitable merchandising. Independent advertising schemes were also checked, and by stopping these two leaks thousands of dollars were saved not only to the merchants but to the purchasing public.

The exact stand taken by the Association with reference to advertising propositions is of interest to merchants' association everywhere, for they are all confronted by similar conditions. It was announced at the annual meeting, October 11, 1904, in the form of a report from the Committee on Advertising, which was unanimously adopted and read as follows:

> The Committee on Advertising, after two meetings and careful consideration of the proper methods or mediums that we believe legitimate and proper to be used in advertising our business without oppression to the merchant and with justice to the public, recommend to the President, Directors and members of the Merchants Association the following publications as the only ones we should consider as beneficial to ourselves as a body, viz.: street car service, street billboards, city or county daily or weekly newspaper; magazines, church or society papers that are issued as often as ten months in the year; theatre programmes, or any other entertainment notices that are printed as frequently as nine months in twelve.
>
> On the matter of donations for the matter of advertising our business by personal calls made continually for societies, fairs, tournaments, regattas, etc., we stand as a man for their discontinuation, making this single exception: in case of destitution, for humanity's or charity's sake, if any merchant desires to relieve distress for worthy objects, the matter is left to his own individual judgment and discretion, this being a subject with which we, as a committee, think we have no right to meddle.
>
> As to the purchase of tickets for entertainments, balls, fairs, lectures, etc., we believe this matter of too small importance to be agitated by us, but would be left to the merchant's personal feelings, he to do as he thinks best in the matter.
>
> We are well aware this radical drawing the line on many publications that have only one or more issues will not please the projectors or parties most interested, yet we feel that it is only just that these methods that benefit only those that present them should be passed.

WILLIAM W. JOHNSON.
President Ware-Pratt Co.
Second President.

This policy has been rigidly adhered to in the five years that have elapsed, and it can be recommended to merchants everywhere as salutary and efficacious in dealing with one of the most uncomfortable evils that the retailer has to encounter.

Other matters of almost as great importance to the merchants of Worcester were taken up and successfully adjusted. The licensing board were asked to refuse a license to a circus on Saturday and the itinerant venders act was secured, resulting in the discontinuance of sales by the big city houses at the local hotels. Legislation by the city councils and the State Legislature calculated to restrict the successful operation of the stores was also prevented.

On October 23, 1905, W. W. Johnson was elected President of the Association, and he proved a most worthy successor to Mr. Pinkham, raising the membership from twenty-five to more than seventy during his term of office. During his administration the Worcester newspapers very kindly consented to eliminate foreign advertising, so called, of merchandise that could be procured in Worcester.

The first steps were also taken at this time to secure the benefits of a trolley express for Worcester merchants, and the Association, although it has not yet reaped the benefits of this agitation, is still hard at work on the plan and is hopeful of its consummation at an early date.

The social side of the organization was not neglected. Interesting smoke talks were given by Hon. R. B. Dodge, J. E. Patten and W. J. H. Nourse, and the annual banquet at the State Mutual Restaurant proved one of the notable successes of that year.

November 5, 1906, Edwin E. Dodge, the present President, came to the chair, and his administration has been marked by an ever-increasing degree of interest and enthusiasm.

President Dodge and his Board of Directors decided early in 1907 to give the city a four-day Old Home Week and Carnival the week of June 17th, and the result was one of the most delightful and gratifying successes ever achieved by a Worcester organization.

Back of the social side of this affair was the practical determination to give the people of Worcester County an object lesson in the desirability of coming to Worcester to trade, and the merchants, manufacturers and newspapers combined to make the carnival a red-letter event in the history of the city.

The celebration lasted four days, June 17, 18, 19 and 20, 1907, and a side-light on the success attained can be gained from the fact that during several of the parades which were held, 250,000 people were banked from Lincoln Square to May Street to witness the processions pass. The Merchants Association collected and spent $18,000 for free entertainment for those who desired to come to Worcester at this time.

One of the notable features of the carnival was the electrical display by arches across the main streets, and this innovation proved so popular that the Association is now seriously considering the subject of making it a permanent attraction of the city.

The great work of carrying on this carnival fell on the shoulders of Mr. Dodge, who was splendidly assisted by the chairmen and members of twenty committees, all of whom worked like Trojans in consummating the enterprise. The amount of free advertising that Worcester received as a direct result of this carnival can hardly

EDWIN E. DODGE
President and Treasurer Dodge Furniture Co.
Present President.

be estimated, and it was of lasting benefit to every trading interest in the city.

During 1907 the membership increased from 70 to 142.

At the annual dinner Thomas E. Byrnes gave a most valuable talk on the New York, New Haven & Hartford Railway interests in Massachusetts and the New England states.

FREDERICK A. HAWES,
Treasurer and General Manager Barnard, Sumner & Putnam Co.
Vice-President.

At the beginning of 1908 Mr. Dodge, who had been chosen to succeed himself, took up with the members of the Association the matter of securing permanent quarters and of still further perfecting the organization along the most modern lines.

The membership had increased to 166 and it was felt that the time was ripe to do more effective work. Accordingly a committee was appointed to visit the different merchants' associations in Springfield, Hartford, New Haven, Providence and Boston and to communicate with other associations who are interested in matters pertaining to the welfare of the retail trade, for the purpose of obtaining ideas. As a result of these conferences it was decided to change wholly the by-laws of the association and to form several new committees to further the work and enlarge the scope of the organization. It was also decided to incorporate under the Massachusetts laws.

Mr. Dodge having been re-elected in 1908, these matters were at once taken up by the officers of the Association. Edward B. Clapp was elected secretary and permanent headquarters established in Board of Trade rooms, 11 Foster Street.

The following new departments were at this time inaugurated:

Employment and Registration Department, to procure and keep a list of names of clerks, salesmen, bookkeepers and all those seeking employment, so that the merchant can secure men and women of good character for positions of trust.

Charities Endorsement Committee, to make inquiries into and investigate the charities for which the merchant is solicited to contribute funds or their equivalent, and to file information as to the recognized standards of efficiency in each line of charitable work.

The establishment of a Credit and Collection Department that will warn members of persons whose accounts have been found by experience to be undesirable, and to

WILLIAM J. WOODS,
President W. J. Woods Co.
Vice-President.

protect members from loss in their future dealings with such persons. The introduction of a collection system that will be under the regulation or endorsement of the Merchants Association.

Another innovation at this time was changing the fiscal year from October 1 to January 1, and still another most important change was the re-classification of the members. The annual dues were formerly $3. At present the Association is divided into five classes of members, the dues being assessed as follows:

Class A. Employing five people or less, $5 per year.

Class B. Employing six people and not more than fifteen people, $10 per year.

Class C. Employing sixteen people and not more than thirty people, $15 per year.

Class D. Employing thirty people and not more than one hundred people, $25 per year.

Class E. Department stores employing one hundred people or more, $50 per year.

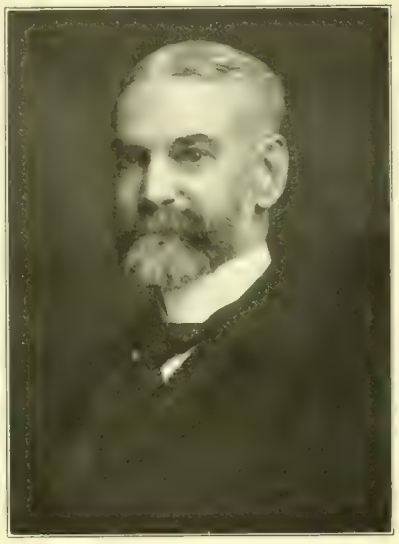
Section 2. Annual dues are payable January 1st.

Members admitted between July 1 and December 31 pay one-half the annual dues for the current year.

The new system is regarded as much more equitable by all classes of merchants than the level system which formerly prevailed.

The following is a list of the members of the Worcester Merchants Association to date:

Joseph S. Anderson.
Elwood Adams.
B. F. Arnold & Co.
Atherton Furniture Co.
American Supply Co.
F. S. Blanchard & Co.
W. H. Blodget Co.
A. H. Bloss.
M. C. Boyd & Son.
George S. Boutelle.
Braman, Dow & Co.
Brewer & Co.
Barnard Brothers.
Barnard, Sumner & Putnam Co.
Bemis & Co.
Besse, Bryant & Co.
B. J. Bertels.
Louis Fabian Bachrach.
Arthur A. Brigham.
Mark F. Cosgrove.
F. J. Charbonneau Co.
Edward B. Clapp.
E. A. Cowee.
Callahan Brothers.
Frank A. Caswell.
Central Supply Co.
Clark & Sands Co.
R. C. Cleveland.
G. A. Coburn.
Collins & Southworth.
L. E. Coolidge Co.
Cook Laundry Co.
William H. Coughlin.
Coghlin Electric Co.
C. N. Chapin & Co.
A. P. Crawford.
F. A. Chamberlin.
Denholm & McKay Co.
H. L. Dakin.
Gilbert G. Davis.
Daniels, Cornell Co.
Dadmun & Heywood.
Davis & Banister.
DeLand Brothers.
William L. Davis Co.
Dodge Furniture Co.
Darling & Rhodes.
Fred L. Drury.
Duncan & Goodell.
Edstrand & Peterson.
D. H. Eames Co.
Saul Elias.
F. A. Easton Co.
Estabrook & Eaton.
Frank M. Ensworth.
Ferdinand Furniture Co.
Flint & Barker.
J. C. Freeman & Co.
Fiske Bill Posting Co.
William S. Flint.
Fuller Regalia & Costume Co.
F. E. Frost.
A. K. Gammon.
Globe Credit Co.
Grodberg & Hirsch.



EDWARD B. CLAPP
Secretary.

ELWOOD ADAMS
Elwood Adams & Son
Treasurer.

Gilman & Moffett.
Gross & Strauss Co.
Grand Union Tea Co.
Guy Furniture Co.
Thomas D. Gard Co.
James E. Grogan.
R. J. Healey Shoe Co.
Charles F. Hanson Co.
Hall & Lyon Co.
T. J. Hurley.
W. A. Hinckel.
Hammond Clothing Co.
L. A. Hastings Co.
E. G. Higgins Co.
Herrick Shoe Co.
Heywood Shoe Co.
B. J. Heslor Co.
J. F. Healy.
W. E. Higgins.
Hovey Laundry Co.
D. A. Howe.
Harrigan Brothers.
N. A. Harrington.
Sven E. Hanson.
John H. C. Hadley.
Joseph W. Hannon.
Iver Johnson Sporting Goods Co.
Moritz Jackson.
Albert E. Jewell.
O. A. Kelley.
A. B. F. Kinney & Co.
O. S. Kendall & Son.
W. A. Lytle Co.
R. A. Lohnes.
A. S. Lowell Co.
S. R. Leland & Son.
Joseph W. Lajoie.
H. F. Littlefield.
C. C. Lowell.
Layng & Morse.
E. B. Little.
E. W. Lynch Furniture Co.
John C. MacInnes Co.
Edward Moulton.
James McDermott.
Samuel Marcus.
J. A. Mansfield.
Charles D. Mackie.
P. B. Moriarty.
John W. Mitchell.
B. F. Northridge.
Protective Union Co.
Charles M. Padula.
John B. Pion.
H. R. Phelps.
O. F. Rawson.
Rocheleau, Granger & Co.
Rice & Claflin.
Harry T. B. Richardson.
A. S. Ritchie.
Marcellus Roper Co.
Ross Bros. Co.
F. T. Russell.
George G. Rodgers.
S. H. Shooshan.
Schervee & Bushong.
W. W. Sargent.
Sanford-Putnam Co.

M. Steinert & Sons Co.
George Sessions & Sons.
D. E. Sherin Co.
S. R. Small.
E. T. Smith Co.
G. E. Stimpson & Co.
C. T. Sherer Co.
Scranton Coal Co.
David A. Scott.
George T. Scott.
H. E. Shaw.
James F. Smith.
H. B. Stone & Co.
Stone & Foster Lumber Co.
H. E. Smith & Son.
Samuel Slobin.
Sumner Coal Co.
G. A. Spongberg.
John B. N. Soullière.
John L. Sewall.
R. J. Torpey.
William E. Turple.
Thompson & Nelson.
Ware Pratt Co.
Washburn & Garfield Mfg. Co.
J. T. Wheeler.
D. B. Williams.
J. G. Williams.
Oliver B. Wood.
F. W. Woolworth & Co.
W. J. Woods Co.
H. M. Waite Hardware Co.
Worcester Market.

That the Association has had other than selfish aims its splendid co-operation in every movement to build up Worcester since its organization amply demonstrates, but nothing that it has ever done in this line exceeds perhaps, its action with reference to stamping out the great white plague, otherwise known as tuberculosis.

March 12, 1909, Secretary Clapp sent out to the membership this question: "Would you be willing, should an employee who had been in your employ a reasonable length of time develop tuberculosis, to pay for a treatment of three months in the State Sanitorium at Rutland, at $4 per week for the benefit of such employee?"

With hardly an exception the reply came back "We would." So far as known this is the first concerted action of this kind ever taken in the country by a merchants' association and is probably the first such action taken anywhere in the world by a commercial body of this kind.

The work outlined for 1909 by the different committees is along progressive, modern and up-to-date lines and will serve to make retailing in Worcester more desirable and profitable than ever before in its history.

Worcester possesses as honorable, as capable and as enterprising a body of merchants as any city of its size in the United States. Their stores are as well stocked with goods and they are handled at as small a margin of profit as characterize the retail trade anywhere. They pay heavy taxes, are under large and constant advertising expense, spend tens of thousands of dollars annually for salaries, contribute materially to the revenues of all our public utility corporations and in a thousand and one ways spend money which passes directly into the pockets of Worcester people. They are entitled for this outgo to receive the support and the endorsement and the entire patronage of Worcester people.

They have eliminated through their association many of the difficulties that confronted them five years ago. By coming more closely together they have learned each other's good points and have found that their common welfare lay in combination rather than in destruction.

Contact, communion and concerted effort have taught the members of the association the profound truth underlying the adages, "United we stand and divided we fall" and in "Union there is strength" and to-day as never before, the retail trade in this city realizes the benefit of co-operation, combination and concord.

The resultant benefit from the unison and sympathy that now pervade every branch of trade in this city cannot but have a beneficial effect upon the trading public The patrons of Worcester stores are buying their goods cheaper to-day than ever before because the retail merchants have been able to eliminate all the unnecessary wastes and leaks in their business through this organization. Having arrived at this state of efficiency through combination and mutual co-operation and harmony, the officers and members are more than ever satisfied that the formation of the Association was a wise move and its continuance an absolute necessity.

They are in hopes to enroll every merchant and business man in Worcester among their numbers, as they believe that such a course will not only make the Association strong, but will make every individual merchant better off than he could possibly be if he continued outside their ranks.

Inasmuch as the purchasing public has directly or indirectly benefited from every move they have made during the past five years, the officers and members of the Merchants Association feel that they are entitled to the benefit of that local loyalty which is so characteristic of Worcester and they urge the public as a whole to testify their appreciation of their efforts by trading in their home city and supporting Worcester stores. When this is done much money that is now earned in Worcester, but is spent in Boston and New York, will go into the channels of legitimate trade in this city and will assist materially in developing the business life of this community.

The officers at the present time are: President, Edwin E. Dodge; First Vice-president, William J. Woods; Second Vice-president, Frederick A. Hawes; Treasurer, Elwood Adams; Secretary, Edward B. Clapp.

DIRECTORS.

Elwood Adams,
Luther C. Brown,
John P. Coghlin,
Edwin E. Dodge,
Moses D. Gilman,
Charles F. Hanson,
Winthrop Hammond,
Frederick A. Hawes,
Richard J. Healey,
Walter D. Ross,
Albert A. Spaulding,
Joseph F. Sherer,
William J. Woods,
Arthur O. Young,
William S. Flint,
William W. Johnson,
William A. Lytle,
Albert E. Jewell,
Fayette A. Amidon.

Worcester is Solvent

She Has Public Property Valued at $12,000,000 More Than Her Liabilities

State Tax Commissioner Wm. D. T. Trefry of Marblehead in his report to the Legislature finds Worcester's financial condition the best of any city in the State, its assets as a municipality amounting to $21,803,490 and its liabilities to $9,782,260. The following is the schedule: assets—schoolhouses, $2,683,930; Public Library, $300,935; other public buildings, $2,097,189; public grounds, $1,321,691; cemeteries, $75,000; other real estate, $5,934,936; water works, $4,572,760; fire apparatus, $180,782; trust funds, $711,635; water sinking fund, $1,665,797; other sinking funds, $1,809,274; other assets, $449,561; total, $21,803,490.

Liabilities: trust funds, $711,635; other debts, $9,070,625; total, $9,782,260.

Worcester's Building Boom

Out of the Shadow into the Sunlight of Prosperity for All Worcester Contractors is the Glowing Prospect

HORACE GREELEY, in one of his lightning flashes of homely wisdom, once declared that the way to resume specie currency is to resume, and after the same fashion it might well be declared that the best way to resume prosperity is to resume. In other words, stop talking and go to work. And that is precisely what the Worcester building trades propose doing.

Not in many years, if ever, has the outlook for the building industry in Worcester and by Worcester workmen been as good as it is to-day.

It is going to be a big year in Worcester for Worcester building trades—for both employer and employee—and it is going to be an even bigger year outside. The big contract for the cut granite for a twenty-one-story office building in Chicago awarded the Webb Granite Company would tend to improve materially the business situation in the city; but after all it is only one among a large number of contracts of the very first magnitude that are going to be consummated in Worcester in 1909.

Coming at the close of a period of sixteen months of profound business depression, it hardly seems possible that Worcester is about to step right out into the sunlight of prosperity, but if the condition of the building industry is any criterion—and next to the railroads it is perhaps our best barometer of commercial conditions—Worcester stands at the very portal of a new era of growth and material development.

Although in this latitude the first three months of the year are distinctly adverse to all outdoor operations in the mechanic arts, the permits issued at City Hall for new buildings alone, from January 1 up to and including March 31, amounted to $878,370. This against $384,428 for the corresponding period one year ago.

The additions to this sum in the way of alterations and repairs for which permits have been issued, bring the grand total up to almost one million dollars, the exact figures being $995,588. The figures by months are as follows:

For New Buildings.

	Permits	Estimated Cost
January	18	$139,050
February	14	541,988
March	54	197,340
Total,	86	$878,378

For Alterations and Repairs.

	Permits	Estimated Cost
January	14	$5,885
February	34	23,425
March	57	87,900
Total,	105	$117,210

The figures for the corresponding period one year ago are:

New Buildings.

	Permits	Estimated Cost
January	50	$162,395
February	17	69,052
March	41	152,981
Total,	88	$384,428

Alterations and Repairs.

	Permits	Estimated Cost
January	29	$19,085
February	19	6,895
March	40	19,540
Total.	88	$45,520

Recapitulation.

	Alterations and Repairs.	New Buildings.	Total.
1909	$117,210	$878,378	$995,588
1908	45,520	384,428	429,948

This showing, gratifying as it is, does not measure the full extent of the activity in this one industry that promises to engage the services of every Worcester artisan this year. In addition to the half-million dollar Union Station, work upon which has already been inaugurated, there are an unusual number of other big pieces of construction work outlined and only waiting warmer weather for their initiation.

The city is contemplating building a new schoolhouse at Tatnuck this year to cost over $43,000; work upon the new Hahnemann Hospital will undoubtedly be carried to completion in 1909, and the new industrial school at Armory Square will also be built without a doubt this fall. These three contracts alone will amount well up towards $200,000.

Then there are the burned Webb Granite and Wright Wire Company plants which are to be reconstructed at once, and among the possibilities for the year are magnificent new homes for the Art Museum and the Antiquarian Society.

A New Summer Theatre.

One of the most interesting incidents in the building line in this city this spring will be the construction of a new summer theatre at Lake Quinsigamond for the Worcester Consolidated Street Railway, by the firm of Burnham & Ives, Bloomington, Ill., a picture of which accompanies this article.

Burnham & Ives are contracting agents for the Decatur Bridge Company, Decatur, Ill., and they have had marked success in the erection of umbrella style pavilions for Chautauqua assemblies, summer theatres and parks. The West is dotted with these cool, airy steel structures, and they have proven extremely satisfactory wherever erected. The one in this city is an exact copy of the one in Dellwood Park, the great summer park of the Chicago & Joliet Electric Railway located near Joliet, Ill.

The building is of a type that has come rapidly into favor as a safe and durable pavilion for a summer the-

atre audience. It was designed especially to meet the wishes of a multitude of people who enjoy the recreation of the theatre, and who desire full and ample protection from the rain and storm and at the same time do not wish to be compelled to endure the discomfort of an enclosed building during the out-of-door season.

The building is fifteen-sided, which makes it practically circular, and is one hundred and thirty feet in diameter, giving a floor area of about thirteen thousand square feet, and allowing for a seating capacity of three thousand people.

The roof is supported by one substantial steel centre-post and fifteen outside posts, one under each "rib" or roof truss.

The resemblance of this style to an open umbrella has given it the name "umbrella style," a name which seems peculiarly applicable and descriptive, as the steel trusses supporting the roof radiate from the centre-post as the ribs of an open umbrella radiate from the handle.

The centre-post could be eliminated as far as support is concerned, but as the wind strain on a roof of so large an area is very heavy, this post serves to make the structure more rigid and acts as a ballasting post as well as a supporting post.

The centre-post is securely anchored on a heavy concrete pedestal, built into the ground with its top surface about level with the floor. The outer end of each roof truss is supported on a steel post, varying in height from twelve feet in the rear to twenty-eight feet at the stage. This variation in lengths of posts allows for a slope in the floor from the rear to front, sufficient to arrange seats for a clear view from any part of the auditorium. These posts, like the centre-post, are secured to concrete pedestals by substantial anchor bolts attached to holding-down plates embedded in the concrete, designed to withstand both pressure and strain.

The roof is carried by steel trusses designed so that the wooden roof rafters and sheathing carried directly upon them have a pitch of three inches to one foot. The rafters are made of two by ten spruce, supporting one inch sheathing, which is in turn covered by a composition roof covering. Around the centre of the roof and on top is a steel frame-work supporting the ventilator which is about forty feet in diameter and contains forty windows, each thirty-six inches by forty-two inches, set to swing on pivots, to be opened and closed for the purpose of permitting the movement of air through the dome, thus providing for an air circulation which reduces the temperature when the nights are warm.

The floor will be of one and one-quarter-inch flooring on substantial floor joist, which will be supported directly on top of concrete pedestals.

The building will be entirely open on all sides, excepting around the stage. The stage will be approximately forty feet wide and will accommodate the largest theatre companies and will have ample equipment of scenery to permit of the most elaborate performances.

At the rear of the stage will be a series of dressing-rooms and other accessories which will add to the comfort and convenience of the people. The entire building has been designed for permanence and efficiency. The principal idea in working out this building was to provide an auditorium for accommodating large summer audiences in safety and comfort.

A picture of the new theatre accompanies this article. The one at Joliet which it resembles cost $17,000 to erect. It is expected the one in this city will be completed before the first of June.

Norcross Bros. Co. Contracts.

The Norcross Brothers Company are preparing for a

THE NEW SUMMER THEATRE AT LINCOLN PARK

busy season, and report the following list of works under construction:

International Bureau of American Republics, Washington, D. C.,	$590,000
Agricultural National Bank, Pittsfield, Mass.,	150,000
Boston Safe Deposit & Trust Co. Building, Boston,	770,000
Harvard Dental School, Boston,	140,000
John Hay Memorial Library, Brown University, Providence,	250,000
Lincoln Memorial, Hodgenville, Ky.,	100,000
Memorial Continental Hall, Daughters of the American Revolution, Washington,	285,000
New York Public Library approaches,	550,000
Pennsylvania Station Concourse, New York,	300,000
Royal Worcester Corset Co. factory, Worcester,	50,000

Of the above-named buildings the company is furnishing the exterior marble work from its Vermont quarries for the Boston Safe Deposit & Trust building, Agricultural National Bank, John Hay Library, Memorial Continental Hall.

The Bureau of Republics building is being constructed of marble from the Georgia quarries of the company. The principal parts of the stone work of the New York Library approaches is being quarried and worked at the plants of the company in Milford, Worcester and Port Morris, N. Y. The Milford branch of the company is nearing the completion of the shipment of the granite under the $1,500,000 contract for the granite work of the Pennsylvania Terminal Station in New York, there remaining about 80,000 cubic feet unshipped.

Webb Pink Granite Co. Contracts.

A superb picture of the new $3,000,000 office building in Chicago from the architects' study, made by Daniel H. Burnham & Company, the architects in charge, and for which the Webb Pink Granite Company of this city are to furnish the cut granite, graces the advertising pages of this number of the Worcester Magazine.

The building is to be erected for the People's Gas Light & Coke Company of Chicago, and will comprise, when completed, the most modern office building in America. The architects of this building were called by the city of San Francisco immediately after the fire to devise a scheme for the reconstruction of the burned district. Mr. Daniel H. Burnham of the firm of D. H. Burnham & Company, together with Mr. John M. Carrere of Carrere & Hastings, New York city, and Mr. Arnold W. Brunner, New York city, form the National Architectural Committee for the beautifying of American cities. The fact that he has designed the new building affords sufficient evidence of its superlative character.

The Webb Pink Granite Company furnished in 1907 the cut granite for the Commercial National Bank Building, Chicago, Ill., for the same architects. This new building is located at the corner of Michigan Avenue and Adams Street, Chicago, and has a frontage on Michigan Avenue of 197 feet and a frontage on Adams Street of 192 feet. It is to be twenty-one stories high, the total height of the building from the pavement to the top of the cornice being 280 feet. The exterior from the pavement to the fourth story architraves is to be of polished Milford (Mass.) pink granite.

The design and detail of the work to be executed in granite are of the most elaborate character. One of the features of the design is the eighteen monolithic columns, which will be gotten out of sea-green granite, all highly polished, making a very pleasing and beautiful contrast with the polished Milford (Mass.) granite, of which the main building is to be constructed. These columns are particularly interesting inasmuch as they are to be gotten out in one solid stone, 26½ feet long and 4¼ feet in diameter, and will weigh when finished approximately twenty-five tons each. The caps and bases of these columns will be of Milford (Mass.) granite, the bases being polished and the caps beautifully carved.

There will be four main entrances to the building, details of which are very richly ornamented and carved, and the architraves and belt courses all around the building are also richly ornamented.

Another interesting feature is the novel lighting scheme on the exterior of the building. This will consist of an ornamental grill containing incandescent electric lights set into the granite panels between the third-story windows, which will produce a very beautiful effect at night. The same thoroughness and good taste in design have been carried out throughout the entire interior.

In all, the Webb Company will furnish about 250,000 cubic feet of cut granite on this building alone.

The work on this contract, together with the contracts which this company has already under way, will insure a very busy season, and give employment to a large force of men, both at the Milford plant and the Worcester plant. The stone for this job will be quarried at Milford, Mass., and a good portion of it will be cut and polished at the Worcester plant, which is now being rushed to completion after the disastrous fire of February 5th.

Besides this contract, the company are at work upon one of only slightly less magnitude at Cleveland, Ohio, where they are constructing the beautiful Cuyahoga County Court House. This structure is rectangular in shape, 386 x 204 feet, and 90 feet high, and is also built of Milford, Mass., pink granite. This edifice has taken about twenty months to complete, and in its construction there will be utilized about a million dollars worth of cut granite. A somewhat remarkable evidence of the superiority of the native and finished product of this concern is found in the fact that they were sixth from the lowest bidder on this contract, and that the building commission decided to use the granite from their quarry after they had visited the quarries of every other bidder.

J. W. Bishop Co. Contracts.

The J. W. Bishop Company are at work upon an important series of contracts in several different cities. They are building a spinning and weaving mill at New Bedford for the Dartmouth Manufacturing Company. The main building will be 110 x 409, four stories high. The weaving mill will be 100 x 350, two and a half stories high. The structures will all be of brick and granite, mill construction with tar and gravel roofs, and will cost about $300,000. The company will also build a weave shed for the Pierce Manufacturing Corporation of New Bedford to cost about $30,000.

At Ashton, R. I., they are to build a mill addition for the Lonsdale Company to cost $40,000, and at New Bedford they will also erect a factory for the manu-

facture of soap, costing $25,000. This they are putting up for Thomas Hershom & Company of that city. In addition to all these they are building a store-house, to cost $10,000, for Samuel Waldeman, Providence, R. I.

Fiske-Carter Construction Co. Contracts.

Fiske-Carter Construction Company have been awarded several important building contracts. They will erect two new brick buildings for the West End Thread Company, Millbury: one a machine shop, 30 x 40 feet, one story high and basement, and the other a bleachery, 30 x 40 feet, one story high, with wing 30 x 30. The West End Thread Company manufactures flax and line yarns. It was incorporated in 1903 and employs 70 hands.

A. J. Bates Company are to erect a shoe factory at Webster, 216 by 40 feet, three stories high, of wood. The Fiske-Carter Construction Company have the contract to do the work.

They will also build a new mill at Greenville, S. C., for the Woodside Cotton Mills of that place. It will be 283 by 130 feet in size, four stories, of brick. They will also build for this concern 80 story-and-a-half Southern cottages.

At Spartansburg, S. C., they have a contract to build a storehouse for the Spartan Mills, 80 by 130, three stories high of brick, mill construction, tar and gravel roof. They will also build a handsome, modern brick residence for W. S. Montgomery of the same place.

New Wright Wire Factory.

The Wright Wire Company's new factory on Hammond Street, which was destroyed by fire March 20, will be rebuilt by E. D. Ward, 82 Foster Street. The new building will be 153 by 60, four stories high with a brick tower in the center on the Hammond Street side. The structure will be of mill construction with a tar and gravel roof, steam heat, electric light, the latest improved factory plumbing, new freight elevators and an automatic sprinkling system.

Addition to Wire Goods Factory.

The new brick addition to the Wire Goods Company factory, 28 Union Street, is to be erected by John J. Power, 1 Granite Street. It will be of mill construction, 60 by 80 feet, five stories high, with tar and gravel roof, and will enable this concern to meet the demand more readily for the innumerable specialties they put out when business resumes normal levels.

Spencer Wire Company Addition.

The Spencer Wire Company is to erect an additional building at the plant on Webster Street, 120 by 150 feet in size, giving that concern 50,000 square feet more floor space. The building will be three stories high, of brick, mill construction, with a monitor roof and will be built by E. J. Cross. In order to give room for the new building the old Albert Curtis mansion on Webster Street, near Curtis Pond, will be razed to the ground.

New Lagrange Street Apartment House.

Edwin Hawes, president and treasurer of the Edwin Hawes Company, steam and hot water heating, 17 Vine Street, is to erect an elegant twelve-flat house on Lagrange Street. The structure will be of brick, six stories high and will be equipped with both gas and electric light fixtures, modern plumbing, including continuous hot water, tiled bathrooms and halls, elevator, hardwood floors and all other accessories. The building will be 40 by 82 feet, and the house now standing on the lot will be removed to the rear and remodelled.

Other Building Notes.

Miss Lizzie A. McCann is to build a modern brick flat house with eight apartments at 32 Trumbull Street. It will be four stories high with tar and gravel roof, steam heat, modern plumbing, gas and electric lights and provision for passenger elevator.

George E. Hubbard is to erect a residence for himself on Midland Street. It will be of wood, 27 by 33 feet, two stories high with shingled roof, modern plumbing, gas and electric light and steam heat.

At 42 Agate Avenue Anton Stevenson of 14 Bancroft Street will erect a new house 27 by 33 feet, two stories high of wood. It will have a shingled roof, gas-light and modern plumbing and will be steam heated.

Gaudette Bros., 4 Bradley Street, will erect the new three-decker at 132 Maywood Street for Hormidas Picard of 69 South Harding Street. It will be 27 by 58 feet, three stories high of wood with a hip roof. It will be equipped with gas-light and modern plumbing.

On Euclid Avenue there is a new three-decker to go up for Jeremiah Hennessey, 130 Vernon Street. It will be built of wood, 30 by 60 feet, with steam heat on the first and second floors.

On Upsala Street Olof F. Ohlson of 3 Windham Street will erect a three-apartment house for Charles O. Israelson, 2 Rodney Street. It will be 27 by 55, three stories high with slate roof, gas-light and modern plumbing.

James A. Gallagher, 104 Union Avenue, is to build a three-story house in the rear of Cambridge Street for David Portle of 240 Cambridge Street. It will be 32 by 43 feet, of wood, with gas and plumbing.

Herman G. Hadley, 33 Russell Street, is to build an automobile garage and stable for C. C. Milton on Massachusetts Avenue. It will be one and one-half stories high, of wood.

Edwin Carlson, 34 Jefferson Street, is drawing plans for a three-story house on Townsend Street, to be erected for Frank F. Burbank, 11 Pleasant Terrace. The house will be 30 by 56 feet and will be equipped with gas-light, modern plumbing, and steam heat on the first floor.

H. C. Fisher has had plans drawn for a two-story cottage on Hackfeld Road, 41 by 21, two stories high with steam heat, modern plumbing, and gas and electric light.

C. Brigham & Company are contemplating making an addition to their milk depot on Howard Street. It will be 43 by 23, of wood, one story with basement.

The residence of O. A. Kelley, 500 Lincoln Street, damaged by fire, will be rebuilt by E. J. Cross. New plumbing and heating apparatus will be installed.

Welfare Work at the Union Laundry

Practical Altruism by a Hard-headed Business Man

THE question of the open or closed shop is one that is provocative of endless contention between the advocates of the two systems, but a large share of the heat displayed by both sides would disappear if all employers and all employees met on the common level that has always characterized the business relations of David A. Scott, president of the Union Laundry Company, with his help.

Mr. Scott is a firm believer in the theory that you should treat a machine as a machine and a human being as a human being. As a result the Union Laundry Company force has always resembled a big harmonious family more than it has a business institution. Many of his employees have been with him from the beginning, a period of twenty-three years, and they take just as keen an interest in his business success as he does himself.

Nearly all of them own one or more shares of stock in the concern, and for many years Mr. Scott has made it a point to reward any particularly bright employee who has made a suggestion that was of financial value to the concern.

Realizing that the work of a laundry, while not particularly arduous, has more or less of monotony about it, Mr. Scott determined early in his business career to inject as much social life as possible into the weekly experiences of his employees. He has therefore for years made it a practice to encourage the holding of social parties among the help and whenever possible they have been held at the plant itself, Mr. Scott contributing the light and heat as well as his share of the social gayety.

In winter dances and card parties are held at the laundry repeatedly, and every summer Mr. Scott takes all his employees once or twice to his summer home at Winthrop or to Nantasket, its neighboring shore resort. On these jaunts he hires a car on the Boston & Albany Railroad and has it attached to the 8 o'clock train out of Worcester, Sunday morning. He provides a lunch to be served on the train, and dinner and supper at the beach, and he pays all the bills from the time his people leave Worcester until they return tired and happy after nightfall.

Mr. Scott believes that investments of this kind pay solid dividends in the shape of increased efficiency and developed loyalty.

Not content with this contribution to the social side of his working force, Mr. Scott determined about four years ago to take still another step forward in welfare work through the establishment of a dining-hall at the plant.

In his former location on Prescott Street he had not adequate facilities for carrying the idea into execution, but when he moved into his present shop, corner of Union and Exchange Streets, he fitted up a room on the ground floor with all the paraphernalia necessary for comfortable dining. The room is equipped with a gas range, the windows are hung with draperies, tables are provided seating four persons and the entire apartment is as attractive as the better class of boarding-houses.

The help are all given three rest periods daily, once at 8.30, again at noon, and finally at 4 o'clock in the afternoon. The employees begin the day's work at 7 o'clock and an hour and a half later a recess is declared for ten minutes, during which hot coffee that had previously been prepared by an employee especially designated for that purpose, is served every employee. Mr.

NION LAUNDRY DINING HALL AT NOON HOUR

Scott inaugurated this custom because he found that many of his girls living at a distance had to come to the works on a cold breakfast and he believed a good cup of fragrant hot coffee with a ten-minute rest would hearten them up for the forenoon's work. He acknowledges that although he believed in the plan before he started it, he was surprised by the increased efficiency and added enthusiasm that the rest and refreshment brought about.

At 11 o'clock an employee of the concern, with marked ability as a cook, leaves her work and begins her rounds securing material for the mid-day meal. The employees are privileged to cook anything they desire, whether meat or vegetables and in any style, whether baked, boiled or fried. Each employee puts her own private mark on her vegetables and in this way they can be identified after they are cooked. Track is also kept of the meats, so that every employee is sure of getting her own food.

Five minutes before the noon hour every work day, the whistle blows and the help adjourn to the wash rooms and after they have thoroughly laved they troop to the dining-room for the pleasantest hour of the day. They gather about the tables, three, four or five in a group, as the case may be, and having clubbed together to buy their milk and sugar they are prepared to enjoy the piping hot food and drinks that are presently placed before them. Antiseptic paper cups are provided by Mr. Scott, so that their drinking-water reaches them as pure as possible and there is no such thing known in the establishment as two employees using the same drinking receptacle. By this means Mr. Scott reduces the possibility of any infection, whether tuberculous or otherwise, to the vanishing point.

At four o'clock in the afternoon all work is again suspended for ten minutes and a cup of hot tea is served every employee. This routine is followed every day in the week except Saturday. On Saturday the help leave the plant at noon at the latest. If they finish their work at an earlier hour they leave then.

They pay five cents apiece for the service and this is the only charge involved. Mr. Scott provides the best of coffee and tea for both morning and afternoon refreshment.

Every winter three or four card parties are held in the plant, the big ironing-room being cleared away for that purpose. A portable bowling-alley has also furnished much amusement to the bowlers among the help.

Mr. Scott would be the last man to claim that there was anything altruistic in what he has done for his employees. On the contrary he believes that the policy he pursues, with reference to his business, can be pursued with like financial advantage by every other business man at the head of a similar industry.

Confirming this view labor difficulties are by him unknown, his help regard him more as a father than an employer, many of them have a personal interest in the business, and all of them feel that it is not a question with them of working in an open shop nor a closed shop, but in an ideal shop and they work for his interest accordingly.

Mr. Scott believes not only in treating his help in the most liberal possible manner, but in inspiring them by personal admonition and appeal to make his business their business. He believes a good way to secure loyalty, co-operation, efficiency, is to ask for it. Nothing that he has ever done has exemplified this trait in his character more than this letter he has just sent his employees:

WORCESTER, MASS., March 25, 1909

To the Employees of the Union Laundry Company.

I have taken the liberty of writing you a letter, a letter I want you to read and think over, and if you appreciate what I say, demonstrate it by your actions.

Nothing succeeds permanently except honesty. The dishonest seem to get along and flourish for a while, but it only lasts a short time. It is like the plated ring, or any other glittering imitation- it does not wear.

You do not have to steal money or goods to be dishonest; you commit quite as great a wrong if you steal the time of the company by idling it away when you should be at work, or by wasting the goods, or destroying the machinery, or allowing it to be done by others. You might say, "It's none of my business what others do," but that is a wrong way of looking at it. There is an old saying that "the receiver is as bad as the thief." Now, if you stand by and allow any one to do wrong and not try to prevent it, you commit quite as great a wrong as he. If you see anything that you do not think is right you should report it to the foreman or anyone who is in charge.

Make your business my business, and I will make your interest my interest. All I ask of you is to be fair in all your dealings and to give me a square deal, which I am confident most of you will do, and if we are all spared until 1910, we shall be better off.

The following rules are good ones to adopt: Do your work well; do it promptly; do it to the best of your ability; put no work out of your hands until it is as perfect as you can make it; wherever you may be speak a good word for the Union Laundry; never knock it—always boost it.

As I have always said, I think that I have as good and as conscientious a lot of workers as any establishment in this or any other country in the world. We have just passed through one of the worst years the country has had for a long time and I have tried not to do any cutting of wages and have kept as many people employed as I possibly could, standing the loss myself.

However, I think things look better for the coming year and if we all do our duty, which I trust we will, we shall be better off at the end of the year. I am

Sincerely yours,

D. A. SCOTT,

President Union Laundry Company.

Heart-to-heart talks like this Mr. Scott believes in. He says they pay big dividends in the course of a year.

We show a picture of the dining-hall at the noon hour crowded with his help—healthy, happy humanity—taken especially for the Worcester Magazine.

Finer Quarters for Eddy Leggins.

Mrs. E. H. Eddy, whose establishment for the manufacture of spats and leggins has been for many years at 86 Mechanic Street, has removed to 69 Mechanic Street up one flight. The Worcester stamp always indicates superiority, and never more so than in the Eddy leggins. It is a matter of satisfaction that there is such a demand for the exclusive line she makes that she has been compelled to move into larger and more commodious quarters for their manufacture.

Surprise Banquet to O. B. Wood.

On the evening of April 1, the employees of Oliver B. Wood, of the Commonwealth Press, gave him a surprise banquet at the Auto Club. It was the twenty-fifth anniversary of his starting in the printing business. A handsome brochure containing, among other artistic features, a vignette of Mr. Wood was one of the features of the occasion.

Seattle's Welcome to Worcester

By James A. Wood, Director of Exploitation, Seattle Exposition

IT will be a great day, the day that Worcester comes to our fair; and everything that the Northwest has to show will be brought out, that our guests from the "Heart of the Commonwealth" may look it over. There are scores of excursions being planned to the Alaska-Yukon-Pacific Exposition, but Worcester is first on the transcontinental list, and the Exposition authorities plan to make Worcester Day one of the most notable of the special celebrations of the fair.

On March 1st the Exposition was ninety-five per cent. complete. This means that by the opening day, June 1st, it will be a finished product, with every exhibit installed and no evidences of construction anywhere on the grounds. All of the handsome structures erected by the Exposition corporation have been complete for several weeks. A few remaining touches remain to be put upon the government buildings and upon some of the State buildings, but at the present rate of progress it would be possible to open the fair thirty days ahead of the time announced, should it become necessary to do so.

Not only will the Worcester excursionists see the "most beautiful exposition ever held," but they will see at the same time such scenery as is nowhere else, not even in Yellowstone Park, which is to be one of the side trips of the excursion.

The Puget Sound Basin, in which Seattle lies, is surrounded, almost landlocked, by perpetually snow-clad mountains; the Cascades on the east, with Mount Rainier, the highest peak in the United States, rising 15,000 feet above the fair grounds, and Mount Baker, a heaven-aspiring spindle of snow rising almost as high, to the northward. On the west are the famous Olympics, with Mount Constance as the third sentinel on the Washington rampart. The Exposition itself is builded upon Lake Washington and Union, two forest-girt bodies of water which divide the city of Seattle.

The centre of the Exposition grounds is marked by the Alaska Shaft, a towering Corinthian column, covered with gold leaf, hammered from native Alaskan nuggets. From its base descend the Cascades, down which 40,000 gallons of water plunge every minute, every drop of it made brilliant by night by submerged lights, showing every shade of the solar prism. At the foot of the Cascades is the Geyser Basin, with a reproduction of "Old Faithful," the famous spouter of Yellowstone Park, throwing illuminated water 100 feet into the air.

These form the fair's central court and chief decorative feature. Around them are the splendid government buildings, housing the exhibits of Hawaii, the Philippines, Alaska and the fisheries, and also there are here the chief buildings of the Exposition.

Of the finest buildings of the Exposition, five are of permanent fire-proof construction, which at the end of the fair will revert to the State University. That they are handsome piles of brick and stone is evident from the fact that $610,000 was expended in their construction alone.

Surrounding all of the buildings, and everywhere an uncovered space could be found, are gardens, which will lend a riot of color to the scene and greatly enhance the natural beauty of the forest of fir, in which the Exposition is located.

There will be still more color on the "Pay Streak," which is to be the amusement street of the fair, for 100,000 geranium plants have been used in its floral decoration alone. Although the Streak is three-quarters of a mile long, there have been five applications for every site upon it, and the Exposition authorities have thus been enabled to select only the very finest amusement features the world has to offer. It will eclipse the Midway of Chicago, the Pike of St. Louis, and the War Path of Jamestown in many of its features.

Canada, Japan, China, all of the countries of Europe, and many of the Pan-American republics, have either buildings of their own or have claimed large exhibit space, and Alaska will fairly outdo the rest of the world in the scope of its display, it being the first time that the wonderful northland has taken advantage of an opportunity for exploitation. The buildings of Canada, China and Japan will be particularly notable.

The Worcester Excursion is expected here on the morning of Wednesday, August 11, and it will find not only the Exposition, but the city awaiting it, for the Chamber of Commerce proposes to have a large hand in its entertainment.

Worcester Quotations

(Reported by Kinsley & Adams.)

BANKS.

	Bid	Asked
Worcester National Bank	197	.....
Mechanics National Bank	120	.....
Worcester Trust Co.	250	.....
Merchants National Bank	155	.....
Millbury National Bank	70	.....
First National Bank, Webster	120	.....
Fitchburg National Bank	150	.....

ELECTRIC ROADS.

Boston & Worc. St. Ry. Co. 4½ per cent. bonds.	96½	.....
Worc. & Southbridge St. Ry. Co. 4½ p. c. bonds	.....	96
Worcester Consolidated 4½ per cent. bonds	93	.....
New England Invest. & Security Co. pref. stock	....	80
Worcester Rys. & Investment Co. stock	55	65
Worc. Consolidated St. Ry. Co. 5 per cent. bonds	98	.....
Worcester & Marlboro St. Ry. 5 per cent. bonds	98	.....
Worc. & Webster St. Ry. Co. 5 per cent. bonds	95	.....

MISCELLANEOUS.

Norwich & Worcester R. R. Co. preferred stock.	205	.....
Providence & Worcester R. R. Co. stock	270	.....
Worc., Nashua & Rochester R. R. Co. stock	140	145
Worcester Gas Light Co. stock	255	.....
Worcester Electric Light Co. stock	240	.....
Crompton & Knowles Loom Works pref. stock	.....	145
Graton & Knight Mfg. Co. common stock	120	.....
Graton & Knight Mfg. Co. preferred stock	110	.....
Royal Worcester Corset Co. stock	150	.....
Wright Wire Co. common stock	.....	.....
Wright Wire Co. preferred stock	....	100
United States Envelope Co. common stock	35	40
United States Envelope Co. preferred stock	98	101
United States Envelope Co. 5 per cent. bonds	99	101
Norcross properties 6 per cent. bonds	.....	100

Dr. Charles A. Drew

Sketch of the Interesting Career of the New Head of the Worcester City Hospital

The Trustees of the Worcester City Hospital have selected as the successor of Dr. Thomas Howell, as superintendent of that institution, Dr. Charles A. Drew, now medical director of the State Asylum for the Insane Criminals at Bridgewater, Mass., and he will take charge May 1.

Dr. Drew is a native of Vermont and 50 years old. He was educated in the common schools of that State and at Derby Academy and Poughkeepsie, N. Y., business college.

As a young man he taught schools in the winter-time and ran a sawmill summers for five years.

Determining to study medicine he graduated from the medical department of the University of Vermont in 1884, and accepted a position as assistant physician in the Taunton, Mass., Hospital for the Insane directly after he matriculated.

He stayed there for three years, resigning in the fall of 1887 to spend six months in post-graduate work in the medical schools and general hospitals of New York City. The spring of 1888 found him back at Taunton, where he stayed until 1890, when he accepted the position of assistant physician at the Government Hospital for the Insane, at Washington, D. C. On his arrival there he was given charge of the general hospital department of that institution, which position he held until the spring of 1893, when he resigned to go to Clarinda, Iowa. The State Hospital of Iowa is located at that point and for a little over two years he filled the responsible position of its assistant superintendent.

In the fall of 1895 he went to Chicago and took a six weeks' course in the Chicago Polytechnic Medical School, after which he went to Des Moines, Iowa, and located there for private practice.

He was not allowed to remain long out of the institutional field, however, for in the spring of 1896 he was summoned to the Hatfield, Mass., Asylum for the Insane to take the position of first assistant physician. This hospital was just about opening and was modern in every particular. The position was one of much responsibility and opportunity for development, and so successful was Dr. Drew in his work here as elsewhere that he was soon called to the great State institution at Bridgewater.

He entered upon his work at Bridgewater September 1, 1898, being appointed Medical Director and Resident Physician of the State Asylum for Insane Criminals, one of the most important institutions of its kind in this country.

The ten years that he has spent at Bridgewater have been among the most fruitful of his entire medical career, and he comes to Worcester with an experience in institutional work and a reputation for administrative ability excelled by few men in his profession.

In the fall of 1907 Doctor Drew passed two months in England and Scotland, most of which time was spent in visiting asylums and general hospitals in Great Britain.

The trustees of the hospital feel that in Doctor Drew they have secured a most competent successor to Dr. Thomas Howell, the very able administrative head of the institution, who is laying down his work here to enter on a wider field of influence in New York city.

Local Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Tariff discussions are still assigned as a predominating cause in the slow revival of trade, and with other factors, buyers are disposed to hold off until more definite plans for the future are announced. The distribution in retail lines does not show any material increase. Spring openings, however, are reported to be largely attended.

More activity has developed during the month in wire specialties, manufacturers being well supplied with orders. Machine tool manufacturers are still working under heavy curtailment and there is still a good deal of idle machinery.

Local bank clearings are as follows:

	1909.	1908.		1906.
Jan.	$7,415,248	$6,820,800	+8.7%	$7,075,983
Feb.	5,970,095	5,213,048	+14.5%	5,569,739
	$13,385,343	$12,033,848		$12,645,722

Failures for March numbered eleven, with liabilities of $46,741 and assets of $15,656, compared with the corresponding month of last year, when they showed a total of nine, with liabilities of $52,999 and assets of $15,485.

The failures for the first quarter of the past four years are as follows:

	Number.	Liabilities.	Assets.
1909	30	$137,986	$31,773
1908	34	195,628	53,653
1907	28	224,568	59,955
1906	27	204,189	40,713

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

George I. Rockwood, Dry Pipe Valve, No. 914,883.

A valve to be inserted in the water supply pipe in an automatic sprinkler system, by which the pressure of water is resisted by an air pressure in the pipe between the dry pipe valve and the sprinkler.

Randolph Crompton, Shuttle, No. 914,703.

An automatic filling thread cutting device, combined with a shuttle, and adapted to operate to cut the filling on the filling carrier or bobbin, when the filling is substantially exhausted, and prior to the insertion of a new filling carrier or bobbin in the shuttle.

Ellis F. Stenman, Sad Iron, No. 915,242.

A sad iron to contain water and provided with a steam escapement and a hand shield extending over the edge of the iron for deflecting steam downwardly.

Harold B. Smith, Molded Receptacle, No. 915,048.

A concrete inclosing tank or box for electrical apparatus, having a sectional fluid resisting lining, provided with interlocked projections embedded in the concrete to prevent the lining from separating from the concrete.

Fred H. Daniels, Rail Bond, No. 914,808.

A rail bond comprising two telescopic sleeve members engaging the rail from opposite sides, and having each a flanged head whose inner face is soldered to the rail.

F. H. Daniels, Shearing Machine, No. 915,020.

A shear for cutting metal stock which can be changed to cut this stock in any required length by a simple change of one of the driving gears for the cam wheel.

Current Events

City Affairs.

Feb. 23. John A. Dean appointed assistant elevator inspector by Superintendent George C. Halcott.

25. City Council Joint Standing Committee on Public Buildings recommend an addition, costing $500 and an automobile patrol wagon, costing between $1200 and $1500 for Lamartine Street police station. New bath house recommended at Regatta Point.

27. Worcester Independent Industrial School Trustees vote to buy Armory Square lot for industrial school and prepare a petition to City Council for an appropriation of $125,000 to cover cost of building, etc.

March 1. Total expenditures for past quarter in School Department $187,629.95.

City Council confirms these appointments by the Mayor: Sealer of Weights and Measures, Paul E. Holmberg; Inspector of Petroleum, Julius Beauregard; Inspector Animals, Dr. C. H. Perry; Fence Viewers, A. C. Buttrick, M. L. Katz and J. A. Gallagher; Registrar of Voters, Chas. J. O'Hara; Field Driver, Chas. H. Hildreth.

2. Police drill squad drills in the Armory with 50 men on hand in charge of Sergt. W. A. Condy.

At March meeting of School Committee voted to keep Lee Street and Malvern Road kindergartens open until October and open new ones at East Kendall Street and Dartmouth Street schools.

March 8. Dr. Thomas Howell, superintendent of Worcester City Hospital, resigns to take charge of New York Hospital on Fifteenth Street and the Hudson Street House of Relief connected with it. Resignation takes effect April 30 and is accepted with regrets. Dr. Howell is director of the Worcester Board of Trade.

11. Complimentary dinner given Librarian Emeritus Samuel Swett Green by city officials at Worcester Club.

13. February city draft amounts to $214,785.75.

15. Three new motorcycles received for use of Police Department.

City Treasurer DeWitt Clinton pays out $26,065.15 of $35,000 necessary to acquire the Beaver Brook playground.

17. Bids opened for sewer supplies for year ending May 15, 1910; lowest bidders being Rockland & Rockport Lime Company, Boston, lime, $5.90 per ton; the Warner Miller Company, New Haven, Conn., vitrified sewer pipe at 79 3-8 off list-price for two-feet lengths, and 77 3-8 off for three-feet lengths; Spiers-Fish Brick Company, Boston, $9.75 for water-struck brick and $9.60 for stiff mud; Clinton Foundry Company, $7.50 for man-hole fixtures and 1½ cents a pound for catch-basins.

18. Worcester night high school graduates 47 pupils.

22. Dr. Charles A. Drew, medical director of the Bridgewater State Farm, elected Superintendent of Worcester City Hospital, vice Dr. Thomas Howell, resigned.

[illegible] Dr. Peter O. Shea resigns as member of School Committee from Ward 5, having removed to Fall River; Dr. P. J. Carney and Dr. E. H. Potter announced as candidates to be his successor.

30. Art Museum Trustees agree to remove restrictions in Armory Square site for industrial school, with provision that school shall be erected inside three years.

Personal and General City Happenings.

Feb. 23. Swedish-American City League formed, with Geo. W. Forsberg, President; A. E. Hanson, Vice-President; Martin Swanson, Secretary, and Peter Swenson, Treasurer.

24. Funeral services of Carroll D. Wright in Church of the Unity. Rev. Dr. Samuel A. Eliot of Cambridge delivers eulogy.

Worcester Merchants Association annual banquet in State Mutual Building; 130 present. Speakers: President E. E. Dodge, Mayor James Logan, President George F. Brooks of the Board of Trade, Professor Williston of Harvard College, and Chas. A. [illegible] President of the Hartford Business Men's Association.

Rev. Willard Scott's resignation as pastor of Piedmont Congregational Church accepted.

25. Rev. Walter S. Danker, pastor of St. John's Episcopal Church, appointed chaplain of Second Infantry by Col. F. E. Pierce.

26. American Antiquarian Council fixes new site for museum, corner of Salisbury Street and Park Avenue.

27. John R. Back resigns as Superintendent of the F. E. Reed Company, 122 Gold Street, after thirty years.

28. John J. Bruso, master-at-arms of the battleship New Jersey arrives home from trip around the world with American fleet.

March 2. Edward J. Martin appointed State Armorer of the Worcester Armory by Major Phineas L. Rider.

4. Worcester County Pharmacists' Association annual banquet at the Worcester Automobile Club, and election of officers: President, F. H. Fenwick; Vice-President, Walter S. Doane; Secretary, B. C. Cutler; Treasurer, F. W. Ring; Executive Committee: H. E. Davis, W. F. Goggin, A. W. Andrews, F. W. Lavoine and M. G. Hirshon.

5. Conference on "Moral Education" at Assembly Hall, English High School. Prof. Earl Barnes of Philadelphia and Dr. J. Lovejoy Elliott of New York, speakers at afternoon session; Dr. Wm. H. P. Faunce, president of Brown University, Rev. Thos. E. Murphy, S. J., president of Holy Cross College, and Dr. G. Stanley Hall, president of Clark University, at evening session.

9. Annual banquet of Natives of Maine at Bay State House, with one hundred present. Gov. Bert M. Fernald speaks.

Worcester branch of the National Metal Trades Association annual banquet at the State Mutual Restaurant, with Rev. John S. Lyon of Holyoke principal speaker. These officers elected: President, John R. Back; Vice-president, George I. Alden; Secretary, Donald Tulloch; Treasurer, Chas. F. Marble.

9. Corp. Herbert L. Searles of the Worcester Light Infantry presented gold medal by Mayor James Logan for efficiency in attendance, care of equipment, military discipline, and a written examination of one hundred questions.

11. Hon. Rosecrans W. Pillsbury of Londonderry, N. H., addresses Sons and Daughters of that State.

12. Worcester Merchants Association members agree to pay expenses at Rutland for three months of any employee stricken with tuberculosis. First mercantile body in the world to take such step.

14. 124th anniversary of the establishment of First Unitarian Church.

15. Holy Cross College to establish a seismic observatory.

15. Door of Hope Society reëlects Mrs. Mary Gaines matron, Mrs. Mary F. Cole secretary, Mrs. H. L. McClusky treasurer, Mrs. William T. Wardwell auditor.

16. Charles L. Thayer, motorman on Providence and June Street line of Worcester Consolidated Street Railway, commits suicide by shooting, age 52 years.

17. St. Patrick's Day observed with parade, and address in the evening at Mechanics Hall by Hon. Thomas H. Dowd of Boston.

18. The 50th anniversary of Union 5, Worcester International Moulders' Union of America, celebrated by a banquet at A. O. H. Hall, at which 450 men are present. Addresses delivered by Representative James H. Mellen; James Duncan, first vice-president of the American Federation of Labor; John P. Frey, editor of the Moulders' International Journal, and others.

19. Worcester tuberculosis exhibit opens at A. S. Lowell building and continues until March 28. Addresses by prominent physicians, clergymen and laity during entire ten days. Thousands visit the exhibition.

20. Wright Wire Company plant on Hammond Street damaged by fire to extent of $100,000.

21. Wright Wire Company three-story brick mill at Palmer destroyed by fire, entailing loss of $40,000. This is an aggregate loss of $140,000 in twenty-five hours in the two plants owned by the company in Worcester and Palmer.

22. Richard Watson Gilder, editor Century Magazine, addresses Congregational Club.

22. T. Stuart & Son Company start work on the south retaining wall along the New Haven tracks with a force of eighty men.

25. Hahnemann Hospital secures W. S. Williamson of New York to make sixty-day campaign to raise $20,000 for that institution.

25. Judge William T. Forbes addresses Board of Trade at monthly smoke talk on "The Recent Revolution in Turkey."

25. Employees of Warren Leather Goods Company entertain the members of the firm at banquet at the State Mutual.

25. Vacant Lot Cultivation Society announces it has $1052 subscribed for the summer work and provides gardens for fifty poor people.

25. Mrs. E. A. Duryea of the National Red Cross Society comes to Worcester to consult with Dr. M. G. Overlock with reference to extending the "manufacturers' agreement" for caring for incipient tuberculosis employees to New Hampshire.

25. Worcester Polytechnic Institute has annual banquet at Automobile Club. Pres. E. A. Engler announces that gymnasium and auditorium are to be erected by alumni on Alumni Field.

26. Will of Horace A. Young bequeaths $2000 each to Worcester Children's Friend Society, Home for Aged Men, Home for Aged Women, Worcester Missionary Society, Young Men's Christian Association and Young Women's Christian Association, and $1000 to Plymouth Congregational Church.

27. Worcester County Mechanics Association Mechanical and Electrical Exposition opens in Mechanics and Washburn Halls.

29. Worcester tuberculosis exhibit comes to an end.

Business and Building News.

Feb. 24. The Kenney-Kennedy Company of Worcester organizes under laws to engage in clothing business at 412 Main Street; capital, $30,000; Frank J. Kenney of Worcester, president; Frederick J. Kennedy of Hyde Park, treasurer and clerk.

26. Worcester Dairy Company, at its annual meeting, votes to dispose of its wholesale business to C. Brigham Company.

March 2. Rev. Thomas F. Davies, rector of All Saints' Church, buys land at the corner of Pleasant and Flagg Streets with a frontage of 176 feet on Pleasant Street, on which St. Luke's Church will be built.

5. New York, New Haven & Hartford Railroad purchases 10,946 feet of land at about $12,500 from Michael E. McCabe, on which it is proposed to build the connecting track between the Providence and New London divisions.

11. Worcester Horse Sale Company organized. Capital stock $10,000. James H. Irwin, president and treasurer; Joseph M. Quinn, clerk.

26. Worcester County Institution for Savings elects following members of the corporation: Charles A. Harrington, Albert W. Rice, Sidney R. Mason, Dr. W. Irving Clark, Jr., Philip N. Curtis, Theophilus Brown, Robert G. Pratt, Francis H. Staples, and M. P. Whittall, Worcester; George W. Knowlton from Upton and Paul Whitin, Northbridge. A. George Bullock succeeds Waldo Lincoln on the board of investment and Frederick S. Pratt succeeds George F. Blake as auditor. The other officers are reelected.

26. Frank J. Tansey and John T. Flanagan form partnership as undertakers.

Worcester Necrology.

Feb. 26. Dr. Alice Gertrude Troy, member of the Massachusetts Medical Society and lecturer in gynecology, dies at her home, 15 Dean Street, of heart failure.

Mar. 22. Patrick J. Lavin, a member of the firm of Lavin Bros., contracting plumbers, dies at St. Vincent Hospital following an operation for gallstones, aged 42 years.

24. Joseph A. Connolly, for twenty-four years an employee of Denholm & McKay, dies at his home, 90 Prospect Street, of kidney disease, aged 36 years.

25. Francis L. King, 8 Downing Street, a retired lawyer and inventor, dies of hemorrhage, aged 74 years, 10 months.

26. Dr. Charles W. Harwood, retired physician, dies at his home, 35 Queen Street, of enlargement of the heart, aged 52 years, 5 months and 10 days.

28. Charles A. Hoppin, a veteran of the Fifty-first Massachusetts Regiment in the Civil War, dies at the home of his son, 43 June Street, of cystitis, aged 76 years, 7 months, 18 days.

Receipts at this Port.

Reported by Deputy Collector Charles H. Pinkham.

The following imports were received at the Port of Worcester for the month of March, 1909.

From Yokohama, 75 rolls matting.
Colombo, 25 chests tea.
Hamburg, 3 cases hosiery.
Hamburg, 2 cases toys.
Hamburg, 56 cases preserves, berries, etc.
Hamburg, 29 cases machinery.
Hamburg, 50 cases sardines.
Hamburg, 3 casks raspberry juice.
Hamburg, 2 cases toilet preparation.
Hamburg, 6 cases crockery.
Hamburg, 1 case corsets.
Antwerp, 1 case books.
Antwerp, 3 cases heddles.
Antwerp, 7 cases heddles.
Antwerp, 15 cases trees.
Bremen, 2 cases fancy bottles.
Bremen, 1 case hosiery.
Liverpool, 1 package leather belting.
Liverpool, 2 cases card cloth.
Liverpool, 1 case wire.
Liverpool, 1 case books.
Liverpool, 1 package military equipment.
Liverpool, 3 cases wall paper.
Liverpool, 6 casks oil.
Naples, 5 bales wool.
Glasgow, 7 cases machinery.
Glasgow, 1 case trees.
Glasgow, 5 cases cotton yarn.
Rotterdam, 6 casks madder.
Havre, 2 cases religious articles.
Havre, 1 case wall paper.
Havre, 1 case machinery.
Havre, 3 cases books.

A Larger Ice Plant

The Worcester Cold Storage Company have found it necessary to enlarge their plant materially in order to meet the demands for their sanitary product and have installed machinery capable of enlarging their present output 40 per cent. The property is also being enlarged by the addition of a new ice house that will practically double the capacity of the plant, and will enable the company to care for a very much larger number of customers. The concern is in a flourishing condition and there has never been such a demand for their pure ice as at the present time. The construction work in the plant was done by L. J. Cross, and the ice house [illegible] is regarded as a model of its kind.

At the date of this writing the occupant of the Secretary's Corner finds his time somewhat occupied by receiving callers who are in search of extra copies of the March Magazine. By way of contrast his thoughts go back to the quiet months of last summer when such callers were a minus quantity, and when, in meeting more than one representative business man of Worcester, he found, somewhat to his dismay, that the very existence of the Magazine was unknown. He recalls another contrast in the way in which the earliest poster announcements of each month's Magazine were received by some of our news-dealers last autumn, and the way in which their windows have displayed this latest production. The most pleasantly significant thing about this change is the fact that the increasing knowledge and appreciation of the Magazine means a similar change of attitude toward the Board of Trade, and gives promise of a continuance of accessions to its membership.

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One of the objects of this organization, as stated in the preamble to its by-laws, is to provide a place for social meeting and mutual acquaintance for the business men of this city. With the present inadequate quarters at our disposal, and the almost total lack of any possibility of club features such as many boards of trade possess, it was something of a surprise to the Secretary to hear from one of our new members this testimony as he was departing from our last smoke-talk, "I have been in this city in business four years; but since I joined this organization I have made more acquaintances than during all the previous time." Here is a hint for the further development of our work in coming months which seems to the Secretary worthy of much thought and some special effort.

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The appreciation of our rooms as a social centre was well shown by the fact that nearly a hundred came together at the last smoke-talk, in spite of the pouring rain that was falling. A powerfully attractive force was the presence of Judge William T. Forbes, and his promised talk upon the new political conditions in the Turkish empire. "One could not listen long to that man without knowing that he had been there," was the way in which one delighted listener expressed it to the Secretary. In view of the fact that in recent years constantly larger numbers from the Ottoman empire are coming to mingle in the business life of this city, this address was peculiarly timely and valuable.

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Just too late for mention in the March Magazine came the annual meeting and banquet of the Metal Trades Association. No commercial organization stands in closer touch with our own, as regards industrial interests, than this. Privileged to be a guest on this occasion the Secretary was much impressed by the figures of service done to manufacturers and workingmen by the employment bureau, under the charge of Mr. Tulloch. This report, which was presented by Mr. Brooks, the President of this organization, throws an interesting light upon the comparatively easy times in Worcester during the last winter, as compared with the same period last year, when special appeals had to be made for charitable relief to men out of work and unable to find any.

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One of the recent welcome visitors in this Corner was Mr. E. J. Lander of Grand Forks, N. D., the President of the Board of Trade in that vigorous western city. He has been making his first visit to New England, and it was a privilege to introduce him to so good a representation of its life and character as this city offers by way of a sample. Incidentally, he is on the war-path for capturing a secretary for his own organization; which illustrates a fact which has frequently been impressed upon the writer—the widespread awakening to the value of the work of such an official for any city, and the scarcity of men for such work. Mr. Lander was assured that among other things "made in Worcester" were effective and hustling business men who were all right for such positions; and it need not surprise our readers if one of our brightest traveling men should be beguiled to follow this genial westerner back to his home city.

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Speaking of appreciation of the Magazine, the Secretary is minded to mention some comments made upon it by a recent lady visitor in our rooms. "I have been reading your Magazine for some months," she said; "I have learned to make my husband bring it home instead of leaving it at the office; and lately I have heard of several other ladies who are doing the same thing." This kindles in the Secretary's soul a new ambition and hope. If only the ladies of Worcester, with all the worthy causes and undertakings which burden their days, can become regular readers of our periodical and interested in the things for which it stands, what marvels of possibility are before us as a board of trade!

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The Secretary's Corner has been vacant for some of the time recently, and the crowds at the exposition in Mechanics Hall proportionately swelled. If only there could have been more room! As a matter of fact, all the space was needed for exhibits, and quite as much for the people who wanted to get near enough to see them. In spite of the fact that no moving machinery was to be seen in the section assigned to the Board of Trade and the Worcester Magazine, there was no lack of visitors; and they expressed their appreciation of the wares displayed, not alone in words, but in the more substantial way of buying during the week over one hundred copies of the Magazine and subscribing for fifty more. Four men who came by auto from Boston expressly to visit the exposition, said of the Worcester Magazine, "If the Board of Trade did nothing but publish that, it would be worth while for it to exist;" and they backed up their commendation by purchasing four copies.

WORCESTER BOARD OF TRADE
11 FOSTER STREET
WORCESTER MASSACHUSETTS
EACH FOR ALL ALL FOR EACH
USA

Officers.

President, GEORGE F. BROOKS. *Vice-President*, J. RUSSEL MARBLE.
Secretary, JOHN L. SEWALL. *Treasurer*, SAMUEL D. SPURR

Directors.

GEORGE F. BROOKS, CLARENCE W. HOBBS, JOHN J. POWER,
GEORGE F. BOOTH, JOHN W. HIGGINS, EDWARD J. CROSS,
IRVING E. COMINS, WINTHROP HAMMOND, DR. THOMAS HOWELL,
J. RUSSEL MARBLE, WILLIAM FORSBERG, CHARLES T. TATMAN,
THOMAS T. BOOTH, VICTOR E. EDWARDS, CHARLES L. GATES,
FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
HERBERT H. FAIRBANKS, WILLIAM WOODWARD.

Clerk of the Corporation, WILLIAM H. SANFORD. *Auditor*, H. WARD BATES

Annual Meeting and Annual Banquet

The present month brings to the Board of Trade two important events, which deserve and will doubtless receive the attention of all its members. On Tuesday evening, April 20, occurs the annual meeting of the corporation, which will be held in the Board of Trade Hall. The annual reports of the officers and chairmen of committees will there be presented and considered, and any new business taken up. The terms of the following directors expire at that time: Mr. George F. Booth, Mr. Thomas T. Booth, Mr. George F. Brooks, Mr. Irving E. Comins, Mr. J. Russel Marble; and their successors have been nominated as follows: Mr. Louis H. Buckley, Mr. Arthur C. Comins, Mr. Marcus D. Foster, Mr. A. W. Parmelee, Mr. E. M. Woodward. The other nominees for official positions are as follows: For clerk, William H. Sanford; for treasurer, Mr. Albert L. Stratton; for auditor, Mr. H. Ward Bates; for membership committee: E. Bruce Dunn, Mark F. Cosgrove, Gustaf A. Berg, B. B. Snow and H. W. Bartlett.

Plans for the annual banquet on Thursday evening, April 22, are going forward under the direction of competent committees.

In other years it has been possible for members to buy guest tickets freely; this year, on account of larger membership, it is likely that this privilege will have to be curtailed, but if possible a limited number will be issued.

Mr. A. A. Brigham is to be in charge of the catering, which is a sufficient guarantee that this important part of the programme will be handled in the very best manner. The "feast of reason and flow of soul" which will follow, provided by President Brooks, Mayor Logan, Congressman Washburn, Governor Draper and Senator Cummings, is likely to be one that has never been surpassed in the history of the Board.

A Traffic Bureau for New England

The recent appointment, by the Executive Committee of the Merchants Association of Boston, of Mr. David O. Ives as chairman of the New England Board of Transportation is a matter of deep interest to Worcester as well as to Boston. Mr. Ives is chairman of the Joint Classification Committee, which represents all trunk lines east of the Mississippi River, with his offices in New York. He has for years stood high as a railroad official, and his appointment to his present position in New York was made because of his judicial qualities. The selection made by the Executive Committee of the Merchants Association will probably be regarded, both at home and throughout the country, as an excellent one. He will probably take up residence in Boston about May 1st.

Mr. Ives is a New England man, and a graduate of Harvard University. In his connection with the Joint Classification Committee he has made himself familiar with the railroad situation in New England. He has had an interesting career, having been continuously in official relations with various railroads since 1889. He has held high positions with the Burlington lines in Iowa and Missouri, and from 1905 to August 1, 1908, was general traffic manager of the Wabash system.

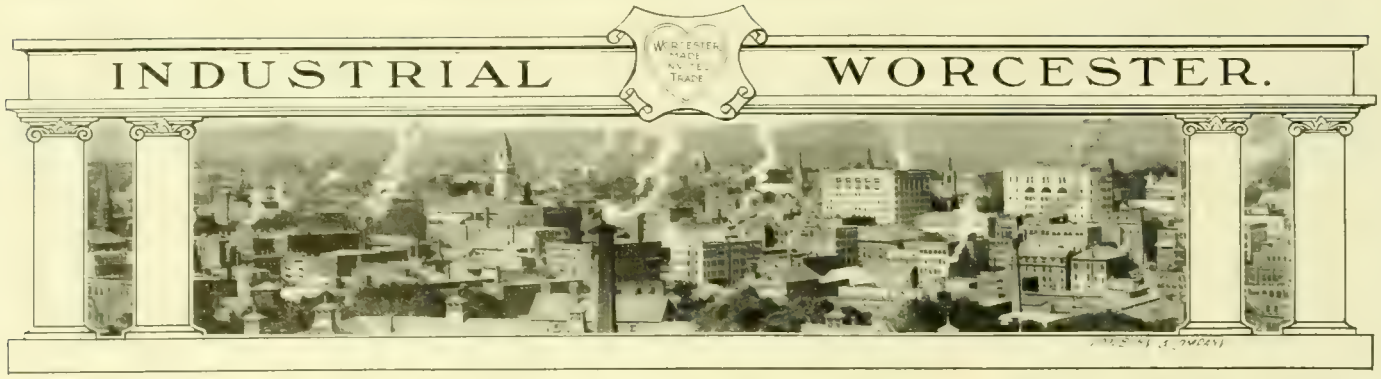
While conferring with the committee in regard to the work of the transportation board, Mr. Ives, in answer to questions, made the following statement:

"The object of the new organization of the Merchants Association is to help the people of New England make the best use of the transportation facilities and advantages they have, and secure those to which their achievements in trade and manufacturing, financial stability, business integrity and geographical position entitle them, and develop its foreign and domestic commerce.

"In order to accomplish these things, it will be the function of the Board of Transportation to make a thorough and exhaustive investigation of the service given by the water and rail transportation companies, with a view to finding out to what extent, and in what ways, it fails to meet the requirements of shippers or passengers. As far as possible, crystallized statements of such problems will be submitted and suggestions for solution made to the interested carriers.

"In the same way, questions of new facilities, and of enlargement of and improvements in old ones, and of changes in methods, will be studied and reported upon; the freight, express and passenger rate situation will be studied as comprehensively and intelligently as possible, with a view to finding how new traffic or new industries can be built up, or existing ones stimulated and assisted, by any readjustment of rates. The railway or steamship companies will be shown the facts and figures and their co-operation requested.

"Great interest has been expressed in the formation of this board by many of the local and trade organizations of New England, while the members of the combined Merchants' Association and Chamber of Commerce have unanimously endorsed the proposition. 'The long pull, the strong pull and the pull all together' are needed to make this movement a success; the enthusiasm which is aroused in the beginning must gradually become changed into a dogged determination to face cheerfully all the discouragements, and to overcome all the obstacles which will inevitably appear, and to 'stay with' the proposition until it has become a firmly established institution. The thorough study given the matter, and the caution displayed before reaching a conclusion, as well as the general earnest endorsement of the plan, all promise that the support will be continuing and permanent."



The Story of the Mechanics Exposition of 1909

He would have been a bold man indeed who would have predicted, one year ago, that the Worcester County Mechanics Association at the close of fourteen months of business depression could have carried to successful completion a mechanical and electrical exposition of the magnitude of that which came to a close on the night of April 3. Luckily in President Daniel E. Denny the Association had such a man and under the energetic supervision of Supt. H. F. Campbell and an untiring committee, the Association added to its already proud record the honor of conducting the most successful industrial exposition ever given in Worcester, and one of the most interesting ever given in this country.

Worcester County, the Home of Metal Trades.

Thanks to the Worcester Magazine the Exposition obtained world-wide prominence and as a matter of fact visitors were present, during the seven days the show lasted, from all over the United States and even from as far away as Hong Kong, China. There were in attendance men from Denver, from Grand Forks, N. D., from Chicago, Cleveland, Cincinnati and Philadelphia, and from all over New England. The visitors' book of the Board of Trade bears among a large number of other signatures the autographs of I. F. Corning, Fitchburg; R. H. Roberts, Hartford, Conn.; H. S. Nixon, Philadelphia; Fred L. Wood and E. C. Perry, Springfield; R. E. Carpenter, Woonsocket, R. I.; H. E. Jones, W. A. Carr, M. D. Farnum, A. R. Rogers and G. H. Hosmer, Boston; F. F. Hitchcock, Chicago; E. J. Lander, Grand Forks, N. D., and M. B. Ferguson, St. Louis, Mo. Hundreds of people from all the surrounding cities and towns flocked to the fair, swelling the normal attendance; but the scope and appeal of the exhibition was to a much wider clientele. Machinery men from all over the East were attracted in large numbers. General Manager Percy M. Brotherhood and George H. Swift of New York, of the great machinery house of Manning, Maxwell & Moore, and Walter M. Wood, their Boston representative, visited the show in company with ex-President E. M. Woodward of the Mechanics Association, and on their departure they pronounced it one of the most admirably conducted, interesting, and fruitful industrial expositions they ever attended. Similar testimony was given by every machinery expert that entered the two halls while the display lasted; and the resultant benefit in orders will be felt for months to come. One concern reports prospective sales in Sterling, Southbridge, Ashland, Westfield, Lynn, Nashua, N. H., and New Haven, Conn., as a direct result of the exhibit, and with hardly an exception the exhibitors are enthusiastic over the practical outcome of the show.

It was the universal opinion that the amount of money involved in making the display was the best possible investment from a publicity standpoint. The only drawback was lack of room to show goods. The enthusiasm for a hall big enough to accommodate a much larger number of exhibitors will, it is believed, eventuate in the construction of a splendid modern auditorium, in this city, before 1910 rolls around.

Both halls of the Association were artistically decorated, and at frequent intervals shields were displayed bearing mottoes calculated to impress the visitor with Worcester's advantages as an industrial centre; a reproduction of them scattered through this article affords striking evidence of their cleverness and applicability.

Over each booth was a handsome sign with the name of the exhibitor and something about his product. Through the courtesy of the Mechanics Association the Board of Trade was given a convenient space where it entertained hundreds of callers during the life of the show, and did its share toward making the exhibit the great success it proved. Mottoes declaring that "You can't keep house in Worcester without the Worcester Magazine" and pointing out the fact that Worcester is the geographical centre of over five millions of people and therefore the ideal location for any kind of manufacturer, confronted the visitor to this booth and satisfied him that the Board of Trade is fully alive to the superiority of its city.

The electric lighting of the exhibition was one of its features. The Worcester Electric Light Company received many compliments for its individual exhibit of electrical devices for cooking purposes, and it is entitled to quite as many for the superb lighting it gave the two halls. A ladies' orchestra rendered delightful music daily, and there was an enthusiasm and uplift about the whole show that fairly rejuvenated exhibitors and visitors alike.

The exhibits were all surrounded by a wooden railing about two feet from the floor with a red electric globe on the boundary posts and every foot of space in the two halls, the stage and all the ante-rooms, and in many instances the walls, were utilized to show goods.

In Washburn Hall one of the magnets of interest was the $700 "Wigwarm" erected by E. F. Hodgson Company, Boston, Mass. This was visited among hundreds of others by prospective customers from Dublin and Manchester, N. H., Springfield, Mass., New York, Philadelphia, St. Louis and Denver. One feature of this house was the display of electrical conveniences it contained. These were installed by the Coghlin Electric Company, and included an electric range, electric chafing-dish, broiler, plate-warmer, clothes-washer and wringer and a multitude of other labor-saving devices calculated to make housework one grand, sweet song. This house and its contents made one of the biggest hits of the show with the women attendants.

The Case Shoe Company had an interesting display in various leathers, of the Case Arch-Prop Shoe, for falling insteps and rheumatism, and reported prospective customers in many Massachusetts cities and towns as a result of the exhibition.

Never Order Poor Goods in Worcester County. They are not made here.

The Carlton Engraving Company made an artistic display of its halftone line and other engravings; and close by a model of the Stevens automatic elevator door and gate lock excited much interest. This lock is the personal invention of C. F. Stevens, proprietor of the Aurora at 656 Main Street, and owes its birth to an incident which happened in the hotel five years ago and which is thus naïvely described by Mr. Stevens:

> "In the early spring of 1904, the elevator door on the street floor was left unlocked. One of the lady guests of the house came in from the street and pushing the door open walked into the elevator opening, not noticing the absence of the elevator, and but for the timely arrival of a gentleman who grabbed her, she would have fallen into the sub-cellar, nineteen feet below, which probably would have ruined her bonnet and broken some of the elevator

FROM PHOTO BY F. E. JONES

TWO VIEWS OF WASHBURN HALL

machinery, thereby putting that out of service, to say nothing about the long bill and jury findings for personal repairs. This event received my undivided attention, which the next day developed the Stevens automatic elevator door and gate lock. I installed one on each floor of the Aurora at this elevator, removing the old locks. Since then, no one has complained of the elevator doors making a noise, and the locks have been in constant use over five years, having been on these elevator doors a considerable time before the patent was granted.''

The backbone of the corset trade is in Worcester County.

The Massachusetts Corset Company, adjoining, made a handsome display of its goods; its beautiful painting of Queen Wilhelmina was one of the show pieces of the exhibition.

The Dow Surgical Battery Company employed an attractive young woman to demonstrate the beauties of vibrating massage as revealed by the Arnold massage vibrator, and she found many interested listeners as she depicted its merits.

G. E. Stimpson & Company showed a fine line of office furniture, including adding and copying machines, typewriters, business phonographs, sanitary desks, sectional book cases, steel filing cabinets, etc.

One of the exhibits that aroused the most attention in Washburn Hall was encountered as soon as one entered the door; it was made by O. S. Kendall & Son, who showed a vacuum cleaner of their own selection that can be manipulated by any housekeeper whether her house was wired for electricity or not. This cleaner, which sells for $25 or rents for $3.50 a day, sweeps, cleans and dusts at one operation, and absolutely purifies the dirtiest carpet or rug so that it is as spotless as when first laid down. Dirt that has been fairly ground into a carpet is taken out as easily as if it reposed on the surface; and the machine can be worked by the frailest woman as well as by the strongest man. Inasmuch as this is an independent cleaner and is not dependent on electricity brought in from outside, it is particularly valuable to houses not wired for the electric current. O. S. Kendall & Son, who are agents for this cleaner, are having their hands full to meet the demand for it now that spring cleaning is in order, and they assert that it is bound in a very short time to do away with the old-fashioned sweeping-day, with its discomfort from dust and danger from bacteria, in every house in Worcester. The Simplex is practically indestructible, and is an absolutely dustless cleaner. The booth where it was shown was surrounded by women two or three deep during the entire exhibition.

A. K. Gammon made a display of his loose-leaf system and vertical files, and found among others a customer, during the exhibition, from Grand Rapids, Mich. Henry C. Burnham of the Multigraph Sales Company exhibited their new $325 machine and explained its merits as a labor-saving device in office work to hundreds of interested listeners; much interest also being taken in their new and separate device for folding letters.

The Acme Wireless Construction Company of Cambridge had a display of its line, and the Worcester Cut Glass Works had a beautiful and illuminating exhibit of its varied products. Few indeed who visited the show had any idea that cut glass rivaling the finest products of the old world is made right here in Worcester, but such is the case; and this particular display gave every person who saw it an added pride in the artistic ability of Worcester workmen. Calls from people in Philadelphia, Boston, and many other cities revealed the interest in their work.

The Tunstall piano player shown by Tunstall, Biggar & Tunstall was a centre of interest during the entire exhibit, and the company were most enthusiastic over their experiences. Prospective orders from all over New England and from many of the Middle States were booked. This piano player can be incorporated in any piano for $150; and instruments now dull and lifeless because the one who formerly evoked beautiful melodies from their strings has gone from the home can be re-awakened into life by this small outlay. The Tunstall player has an action designed to give life and vivacity to the composition rendered; it boasts superior bellows and a very simple and ingenious set of controlling levers. The player can be installed in any piano without disfiguring it in the slightest degree or even cutting the key rail. Perhaps the most important claim made for this instrument is its automatic tracker, a registering device which automatically adjusts the roll so that any music, it matters not who makes it, will register perfectly when run off. The perfect registration of rolls, no matter how badly worn nor from how many different sources obtained, has made this piano player the wonder of all who have seen it. It is an 88-note player, and is as perfect as competent workmanship could make it. The concern is located at 258 Park Avenue, and is doing a flourishing business there.

An exhibit that was a classic of its kind and elicited the highest praise from every person of aesthetic taste who saw it, was the superb wall paper display of the Allen-Higgins Wall Paper Company. Their celebrated Vogue papers enjoy an international reputation, but this is the first time the Worcester public was ever privileged to scrutinize them at a show of this kind. Unfortunately the space allotted to the company was so small, no adequate conception of their extent, variety and beauty could be obtained, but such as were seen were most beautiful in conception and detail.

It is not generally known even in Worcester that the Allen-Higgins Wall Paper Company, at Greendale, is the largest wall paper concern in New England, and one of the most exclusive in the world. The line of papers manufactured at this great plant is designed to cover the highest possibilities of the decorative art in medium values, and style and quality are the points of excellence chiefly sought. The company also makes high-grade decorative novelties. Its product in the higher goods meets an urgent demand in the domestic trade. Principally the company makes its own designs, which are never copied, except where it is desired to match fabrics to be used in connection with the papers. All the rollers used in the printing of its paper are made by the company, and in the departments of printing, designing and block cutting, the very highest grade of skilled labor is employed.

This company possesses the only sixteen-color machine in the country. It requires the most carefully adjusted machinery to print a design embodying sixteen colors, with the exactness and with nearly the same rapidity of a design one-fourth this number of colors, and yet it is done constantly.

The representative of the company in charge of the Allen-Higgins exhibit was delighted with the practical results of the show and reported a large number of fine prospective orders.

Alsten & Goulding's automobile display was one of the distinctive features of the exposition, and was constantly surrounded by admiring and interested automobilists. This concern now occupies a basement and four floors at 36 Foster Street, and the entire 7500 feet of space is packed with automobile accessories, many of which were shown at the fair.

They carry a complete line of tires with new standard universal rims, including the Hartford, Standard quick detachable rim, which enables the driver to remove the tire, put in an inner tube and have it blown up again inside of a minute provided the chauffeur uses Prestolite air tanks, of which they are selling a large number this year. There was a fine display of horns, including the new Klaxon electric horn, which has been denominated the X-ray of sound, because of its penetrating tone. It is operated by storage battery or with eight dry cells, and has a carrying capacity of from three to five miles when blown. They showed a line of Witherbee storage batteries, magnetos and Wyco plugs, also the Geiszler storage battery, a non-sulphating storage battery of 6 volts, 60 ampere hours, selling for $15, making it the cheapest battery on the market to do the same work. They had one of these batteries running the entire week of the show without recharging.

Their exhibition of lights was particularly comprehensive and included both the Rushmore and Solar lights for the very best class of trade. They also had a line of Saxon lamps and Brown side and tail lights that are unsurpassed for the price. These lights were all of a powerful type and were beautifully and strongly encased.

Send on your orders. Worcester will oil them, grind them, wrench them, shape them, drill them and envelope them.

Dash-board voltmeters, showing exact amount of voltage remaining in the storage battery and the exact amount of current being consumed by the coil at all times, attracted much favorable comment. Packard cables, Schebler carburetors and non-skidding devices were a few of the multitudinous appliances they showed.

FROM PHOTO BY E. B. LEE

THE NORTON COMPANY AND THE NORTON GRINDING COMPANY.

FROM PHOTO BY E. B. LEE

THE ALLEN-HIGGINS WALL PAPER COMPANY.

In their quarters on Foster Street the various floors are packed to the doors. In the basement they have a line of solid tire work ranging from baby carriages to 7-inch truck tires; here also is their power plant. On the first floor is the sales room, the second floor is used as an office and stock room and shipping room, the third floor is given up to bicycle and buggy repairing and the fourth floor to their vulcanizing plant. They have three brand new vulcanizers, each taking two tires at a time. Alsten & Goulding report the business outlook in their line as excellent.

The World is Dependent on Worcester County.

Evidences of the handiwork of W. D. Kendall Company abounded in both halls. They not only had a most interesting individual display, but they did all the electric wiring for the exposition, and a most competent and thorough-going job it was too. Their motor generating sets converted the 500-volt Worcester Electric Light Company current into four different currents, 500, 220, 110, and an alternating 110-volt current for the decorative lighting scheme. There were about 400 decorative lights used and about two miles of wire consumed in the two halls. The large feed wires were loaned by the Electric Light Company, the Crocker-Wheeler Company loaned the four dynamos used and the Westinghouse Company loaned all the small motors employed on the individual machines. It required ten men to do the wiring for the lighting and connecting up the various plants, and W. D. Kendall Company received the highest praise from the management and the individual exhibitors for the splendid job they did in this line. The lighting of the hall was one of its distinct attractions to everybody.

Besides this the company had a most interesting electrical exhibit of their own, including a high grade small special motor for dental lathes, upright drills, etc.; a simplex electric heating apparatus for flatirons, soldering irons, bed warmers, etc.; also two switchboards from the W. M. Steele Switchboard Company, a sample of the fine work they do for special jobs. Perhaps as interesting a display as W. D. Kendall Company made was that of the Shelby Tungsten lamp, showing a comparison between the Tungsten and the ordinary carbon filament lamp. They also displayed one of the new celebrated Excello arcs, imported from Germany, which it is claimed gives the most powerful lights of any arc now on the market. Their entire display attracted the attention of every electrician who visited the exposition, and cannot but react beneficially on their business.

Outside Washburn Hall, at the foot of the stairs leading to Mechanics Hall, was a knight in full armor, the characteristic and well-known emblem of the Worcester Pressed Steel Company, together with many of its less striking and more valuable products. If Mark Twain's idea that the steel-clad knights of the middle ages were the original hardware dealers is correct, there was something eminently fitting in having this gentleman stand at the very portal of a show devoted to the modern age of iron and steel.

In Mechanics Hall what was perhaps the place of honor was given to the Worcester Polytechnic Institute, which had the entire stage devoted to its exploitation.

The Department of Mechanical Engineering conducted a series of tests on lubricating oils on a new Kingsbury variable speed motor-driven oil-testing machine. They also had a drill dynamometer in operation which showed the thrust and twist necessary to drill holes of various sizes and at different speeds in metals of varying hardness, also some of the latest types of indicators, gauges, planimeters and other instruments used in engine testing, together with a collection of freak indicator cards. There was also a collection of drawings and designs showing the work of the students. The Civil Engineering Department exhibited the following civil engineering instruments: Transit instruments. Latest type by Ball & Ball for use in accurate city engineering or for triangulation; horizontal circle reads to twenty seconds of arc. Engineer's transit by Bausch & Lomb; this instrument has several new and important features; it is provided with very large object lens, which makes the illumination good, and the magnifying power may be varied between the limits of fifteen and twenty-five diameters by screw head at the eye end of the telescope. Old transit by Pike & Sons, illustrating a good instrument of forty years ago. A transit made in England some 100 years ago, a recent gift to the department; this transit was used on the Blackstone Canal and upon many surveying jobs in the Blackstone Valley.

Precise level. Known to engineers as the Mendenhall level, because the first instrument of this style was made for the Institute on lines suggested by its former President, Dr. T. C. Mendenhall. This form of leveling instrument is the one adopted by the United States Geological Survey. Precise level as recently perfected and adopted by the United States Coast and Geodetic Survey. Features are: very sensitive level bubble, low and protected support of level tube, non-reversible telescope, secondary telescope, which, with prisms, allows the observer to see the exact position of the bubble at the instant he reads the level rod. An old form of leveling instrument.

Bridge model, showing truss construction by loose pieces secured by pins. This model may be arranged in a great variety of ways, but as shown it illustrated the arrangement of members in a Pratt truss bridge.

The Department of Chemistry exhibited specimens of products illustrative of the instruction given in the courses of industrial and organic chemistry. There was a display of products and glazes illustrative of research work in ceramic chemistry, and also specimens showing the applications of biological chemistry to sanitation.

The display of the Electrical Engineering Department consisted of two parts, a working exhibit and an exhibit of instruments and apparatus. First among the working exhibit was a double current generator supplying both direct and alternating current for other parts of the Institute display. This machine was similar, except in regard to size and voltage, to machines used in railway power stations for supplying direct current to the cars near by, and alternating current to be transmitted to a distance and there converted into direct current for use in the cars. A mercury arc rectifier for converting alternating into direct current was in operation. Such devices are now largely used for charging storage batteries and for operating arc light circuits, as, for example, here in Worcester. Near by there was a graphic recording ammeter, giving a continuous record on a strip of paper of the total current used by the entire exposition. Some vacuum tubes designed and made in the Electrical Engineering Department were shown in operation on high voltage, high frequency circuits. These tubes were directly connected to a vacuum pump so that by varying the degree of vacuum the color and quality of the light was altered.

Another interesting exhibit was a piece of apparatus designed to illustrate the effects of the rotating magnetic field. It is upon this principle that the induction motor depends, a type of motor now very largely used in the electrical distribution of power.

Among the instruments shown there were a number from the standards laboratory, whose accuracy has been tested at the national standardizing laboratories, the American National Bureau of Standards, the English Board of Trade Laboratories and the German Reichsanstalt. Among these there were a Kelvin 3000 ampere balance, a Wolff bridge and a Wolff potentiometer, a Westinghouse precision wattmeter, a series of Wolff standard resistances, a Weston standard voltmeter and a Weston standard cell.

Worcester, the Heart of the Commonwealth.

The Washburn Shops exhibited four examples of their very latest designs: a motor-driven variable speed sensitive drill, a variable angle twist drill grinder, a variable speed motor-driven speed lathe, and a Worcester drawing stand having a raising and lowering device with automatic lock. All of these machines were in operation and were of special interest from the fact that they had never been exhibited before, as they were all new styles, each one having been designed within a year.

The Wells Chemical Bronze Works made an interesting display of castings and of Wells chemical babbitt, which interested many foundrymen. Both C. A. Harrington, the President, and F. C. Harrington, the Treasurer, were right on the job every minute, and they gave a living picture daily of what two bright young Worcester men can do when they get behind a business proposition. They act as founders of bronze, brass composition, aluminum, manganese bronze, and as makers of babbitt.

The Walden ratchet wrench proved an interesting tool to a large number of mechanics, who were impressed by its simplicity and power. This wrench is the only ratchet wrench, it is claimed, made with no small springs or pawl. There are only three parts to

WORCESTER POLYTECHNIC INSTITUTE

THE WHITE-BAGLEY COMPANY

the tool; it has drop forged heads and a powerful leverage in its handle, and is manufactured in all sizes, square and hexagon openings. It is particularly recommended for lag screws and for any class of work where trouble is experienced from the wrench's slipping off.

S. R. Leland & Son had an interesting exhibit of musical instruments; and there was a showing of special steels for special purposes that interested every iron and steel man that entered the hall, made by Pratt & Inman, a firm with eighty years of experience behind them as steel makers. Their exhibit demonstrated that they are not dependent on former greatness for present prestige. The concern carries constantly four grades of machinery steel, from 15 to 20 carbon, and covering a wide range of sizes. It also carries best machinery steel from ¼ to 2¾ inches, 25 carbon, and lead screw steel from ¾ to 5⅛ inches—35 to 40 carbon—with each billet hand-finished by pneumatic tool. It also carries a splendid line of Viking crucible steel finish, besides refined iron, Swedish iron and different grades of tool steel and drill rods. They maintain one of the largest steel warehouses in the East; and it is their boast that they supply their customers with a higher grade of steel at the same store prices as common grades sell for elsewhere.

"Worcester Made Invites Trade"

L. Hardy Company, who adjoined them, showed a fine line of machine knives of various shapes and sizes.

The Stockbridge shaper had a novel exhibit, which attracted much attention. One of its shapers was shown in practical operation, and its patented two-piece crank motion received much favorable comment from visiting mechanics. This motion gives results that makes this tool unique among shapers,—a powerful, even cutting speed the entire length of cut, and a quick return. The theory behind the construction of this machine is that it makes no difference what make the shaper is, the time consumed in returning ram, after its forward or cutting stroke, is lost time as far as production goes. The Stockbridge crank motion cuts the time of the plain crank motion in halves. The machine has a powerful patent driving gear, and is built throughout in the strongest and most capable manner. It has given splendid results wherever used.

Duncan & Goodell had a comprehensive display of hardware; and one of the prettiest displays made in the hall was that of White & Bagley, which adjoined them. This company had a revolving automobile wheel lighted from behind by electricity, its glass spokes being filled with its products. The effect was one of both novelty and charm. This concern is one of the most celebrated handlers of cutting lubricants in the United States; it deals in mineral, animal and vegetable oils, making a specialty of lubricating oils. Its well-known specialty, "Oilzum," is an indispensable automobile adjunct, and the company guarantees that it will not only keep valves, pistons and cylinders clean longer than any other oil in the market, but that it is not necessary to give so frequent attention to crank pin, crank shaft and other bearings. The company gave away interesting literature anent all three of its specialties—Oilzum, Washzum, Cleanzum—the two latter being new cleaners that are meeting with marked success in the trade.

The Lowell Wrench Company made a splendid display of their reversible ratchet wrenches, fitting any size nut from three-eighths of an inch to five inches. The latter were genuine Moguls, and are used for bridge work. The whole display attracted great attention, and had a superior position in one of the main ante-rooms. This company makes a specialty of its reversible ratchet wrenches. These wrenches will reverse and work right or left-handed at pleasure, and the sockets fit nuts square or hexagon. These wrenches are made from carefully selected steel castings, and their special distinction is that they will turn nuts on or off without removing the wrench. With this line was shown a line of Warnock's smooth pipe tools for plumbers, engineers and machinists by the Warnock Manufacturing Company of this city. The genuine Warnock wrench displayed excited much interest. Concerning this wrench, the company says in a leaflet:

> "Genius burned one day when Warnock looped a linen strap, fastened it to a handle by a shackle, and started in to do fine plumbing. Some laughed—others tried the tool—then dozens said, 'You have got a good wrench.' Then hundreds tried it; and now the Warnock is known as the best, quickest and surest wrench for smooth pipe. The original features: a linen strap to turn the pipe; a swinging shackle which, by presenting a larger opening than any other, makes the Warnock quickest in a close or dark place; carving nose to prevent crushing; all have been imitated but never equalled."

Near by was the unusual exhibit of the Globe Dental Company, and W. H. DeLong, dental disks. Thirty different varieties of abrasive papers for the manufacture of paper disks were shown, and five different sizes of carborundum separating disks and stump wheels. Mr. DeLong makes separating disks from one-half inch to seven-eighths inch, and stump wheels from three-eighths to one inch. These are shipped in packages of one hundred, or in wooden boxes of a dozen, as desired. In the display made by him he exhibited 13,000 carborundum disks and 2,000,000 paper disks. Mr. DeLong makes sixty different varieties of carborundum disks and stump wheels. All his separating disks and their cup shapes are made with one smooth side, also with grit on both sides. He found during the exhibition one man who had been buying his goods in Chicago, not knowing they were made in Worcester.

The Ramsden Specialty Company showed in an adjoining booth a line of screw machinery products; while adjoining was the exhibition of the Hill Dryer Company. This included one of their celebrated Hill-Canton sanitary cabinet dryers, equipped with the Hill patent adjustable metal ball-bearing guide rollers. This dryer was the cynosure of every woman's eye that came near that section of the hall; and the Hustler ash sifter and the model of an apartment house showing a Hill piazza dryer on every floor, also came in for their share of attention. The company had not room to show all their specialties, particularly their fine line of automobile supplies; but they reported themselves as well pleased over prospective business as a direct result of the fair.

H. B. Ward, mason repairer; the Standard Rug Company; the Keepshape Shoe Forms, and H. R. Hoyle, painter, also had displays in this section, as did the Blake Pump & Condenser Company.

One of the most striking and beautiful displays in the whole building was made at this point, in the panels showing the new luxogravure process of Woodbury & Company, incorporated. The samples of commercial work shown were marvelously fine as to detail, but more beautiful still were some of the still life subjects portrayed. The panel of half-opened roses shown was simply exquisite, and some of the others were almost as classic.

The Oakley Steel Foundry Company of Millbury had perhaps as unique a display as was made in the hall. This concern makes all kinds of castings, including crank shafts; and it makes a specialty not only of crucible steel, but of carbon steel, nickel steel, nickel chrome and vanadium. It guarantees to make anything in the line of a casting from one-half ounce to 1000 pounds, and to make for a customer not only what he wants but to give him quick delivery. Mr. Oakley has made a scientific study of casting crank shafts all in one piece, and he declares that they are stronger than those that are drop-forged. His crank shafts have been used for several years in England with perfect success; and he has recently received an order from one of the leading and most particular marine engineers in the United States to furnish him a line to be installed in his motor boats. A sample crank shaft from the works of the company, handsomely machined, excited a good deal of attention from machinists familiar with the splendid work done by the drop forging process in Worcester shops. Mr. Oakley secured some exceedingly valuable orders as a result of his exhibit, and he was naturally enthusiastic over the outcome. He is one of the brightest men in the iron and steel industry in this section, a fact which he attested by promptly joining the Board of Trade. As long as Worcester cannot annex the town itself, it is fortunate that the Board of Trade can annex its industrial leaders as in this case.

What do you need? Tell Worcester County. It's made here.

H. A. Desper Manufacturing Company showed an interesting and varied line of specialties, including elevator service recorders, bracket rings for range boilers, soil pipe testing valve and fresh air inlet guard. Mr. Desper's elevator recorder is a rather remarkable instrument which serves as a check on the watt meter where electricity is used; and where there is a short circuit or leak in the controller it detects it at once. With hydraulic elevators the recorder can be made to read in cubic feet direct, so that the owner

THE W. D. KENDALL COMPANY.

PORTABLE HOUSE, BY E. F. HODGSON & COMPANY. ELECTRIC LIGHTING AND APPLIANCES BY THE COGHLIN ELECTRIC COMPANY.

or engineer can tell exactly how many cubic feet of water are pumped per day to run the lift against the head shown by the pressure gauges. This concern has recently sold 45 of these elevator recorders, to be placed in one big New York office building where there is a very high pressure; and they have worked to the queen's taste ever since installation. The water pressure in this particular building is 800 pounds per square inch, and it is claimed this is the only recorder made that is capable of withstanding such force. The concern also makes several valuable auxiliary attachments that can be used in connection with the register to show the number of trips made, the number of stops, a maximum speed detector, and an electrical indicator to be placed in the chief engineer's office, which will show in miles the duty of the elevator.

Wire Worcester for Wire. We make it.

Boynton & Plummer, Inc., had an exhibition of improved shaping machines that evidenced a determination on the part of the new management to add to the splendid reputation the concern has always enjoyed for thorough workmanship and reasonable prices for its tools.

William J. Smith Company, from New Haven, Conn., in an adjoining booth, displayed a line of one-lock adjustable reamers, for which the claim was made that the tool can be accurately adjusted to any size within range in one minute. They reported inquiries from Fitchburg, Providence, and other cities.

John J. Adams had a line of cutting dies for leather, paper, cloth and rubber on exhibition; and the Francis Reed Company showed an interesting set of drills, including their 16-inch drill press and their three-spindle drill—a sensitive drill with independent drive for each spindle with or without automatic feed. The company's new multiple drilling attachment was also demonstrated and elicited much favorable comment.

E. B. Luce had an interesting display of commercial photography; and adjoining him was an exhibit by the Leicester Polar Spring people.

The artistic and handsome display made by W. H. Leland & Company attracted among others hundreds of automobilists, most of whom were well acquainted by reputation with the superior work done at this model plant. The company had a show-case filled with crank shafts, machined at their factory and running from a single cylinder to a six-cylinder, although they build up to a twelve. This company, in addition to its other functions, builds a high-grade universal tool and cutter grinder that is very satisfactory as a cylindrical, surface and internal grinder. They also make a four-cylinder dash coil and a combination rotary switch, which have proved exceptionally valuable and trustworthy. No concern in Worcester enjoys a higher reputation for scientific accuracy and skillful workmanship.

Prentice Bros. Company's display was always surrounded by an interested crowd of onlookers. They showed one of their 26-inch drills running 600 revolutions per minute, drilling one-inch holes at rate of 10 inches per minute in cast iron. They also showed a 12-inch geared-head lathe with draw-in collets and turning 5½-inch bar of steel, removing 125 pounds of chips per hour. Their 26-inch gear speed change vertical drilling machine was shown with testing device attached in the Worcester Polytechnic Institute exhibit. This company gave out a large amount of literature illustrating their various types of machines, especially their 16-inch shaft-turning lathe and their geared-head high-speed universal turret lathe. They reported inquiries from various New England cities.

The Norton Company display was a drawing-card throughout the fair.

In addition to a variety of shapes of grinding wheels, rubbing stones and oil stones, backed by a series of photographs, there was a large rock-like crystal of alundum weighing about 100 pounds. This was pure white, and in refracting the surrounding lights, very noticeable.

Bauxite is the purest natural form of aluminum oxide. It is found in France near Le Baux, from which city it received its name. In purer forms it occurs in Georgia, Alabama and Arkansas. Usually the ore resembles a clay, although, technically speaking, its formation is by an entirely different process.

From the mines it is sent to the Norton Company's electrical plant at Niagara Falls, where it is thoroughly calcined in a rotary kiln sixty feet long by six feet in diameter, and then fused in electric furnaces. The current for this process is very high and is generated directly from the falls. The product of the furnace is in the form of an ingot, and this has been given the trade name "Alundum." The ingots are broken into sizes that can be readily shipped to Worcester.

On its arrival at the Worcester plant it is crushed in heavy machines. Its hardness is so excessive that the manganese steel from which the crusher jaws are made must frequently be renewed.

It is now in a granular condition, and after separation by magnetism of any iron that may be contained, is passed over a series of screens of different sizes, the difference in size allowing very accurate separation of the different sizes of grain. The grain designated as No. 12 is material which has passed through a screen with 12 meshes to the lineal inch, or 144 meshes to the square inch. No. 200 is grain that has passed through a screen with 40,000 meshes to the square inch. Very much finer grain than this is prepared.

There are many steps in the process which there is not space to describe. The more interesting ones have been given.

The material, in the form of grain, is ready for use in the manufacture of wheels, etc. Unlike natural abrasives, alundum contains no impurities. A more direct cause for the superiority of alundum as an abrasive material is its remarkable sharpness, durability and uniformity. Each grain is pure crystal, and in chemical composition is the same as the sapphire except the jewel has an iron content, which accounts for the color. Alundum has been produced in beautiful sapphire crystals, but the individual crystals are not of the correct dimensions to be cut as jewels. It is the property of aluminum that affords the hard, sharp, cutting quality, and in alundum this property is in a far higher percentage than in natural abrasives.

The Norton Company were organized in Worcester some thirty or forty years ago and they have always followed modern, progressive methods of advertising in New England, as well as all over the world, and yet through the medium of the exposition they have received inquiries and orders that mean a further growth of their business. They as well as all other concerns have directly profited by the exposition.

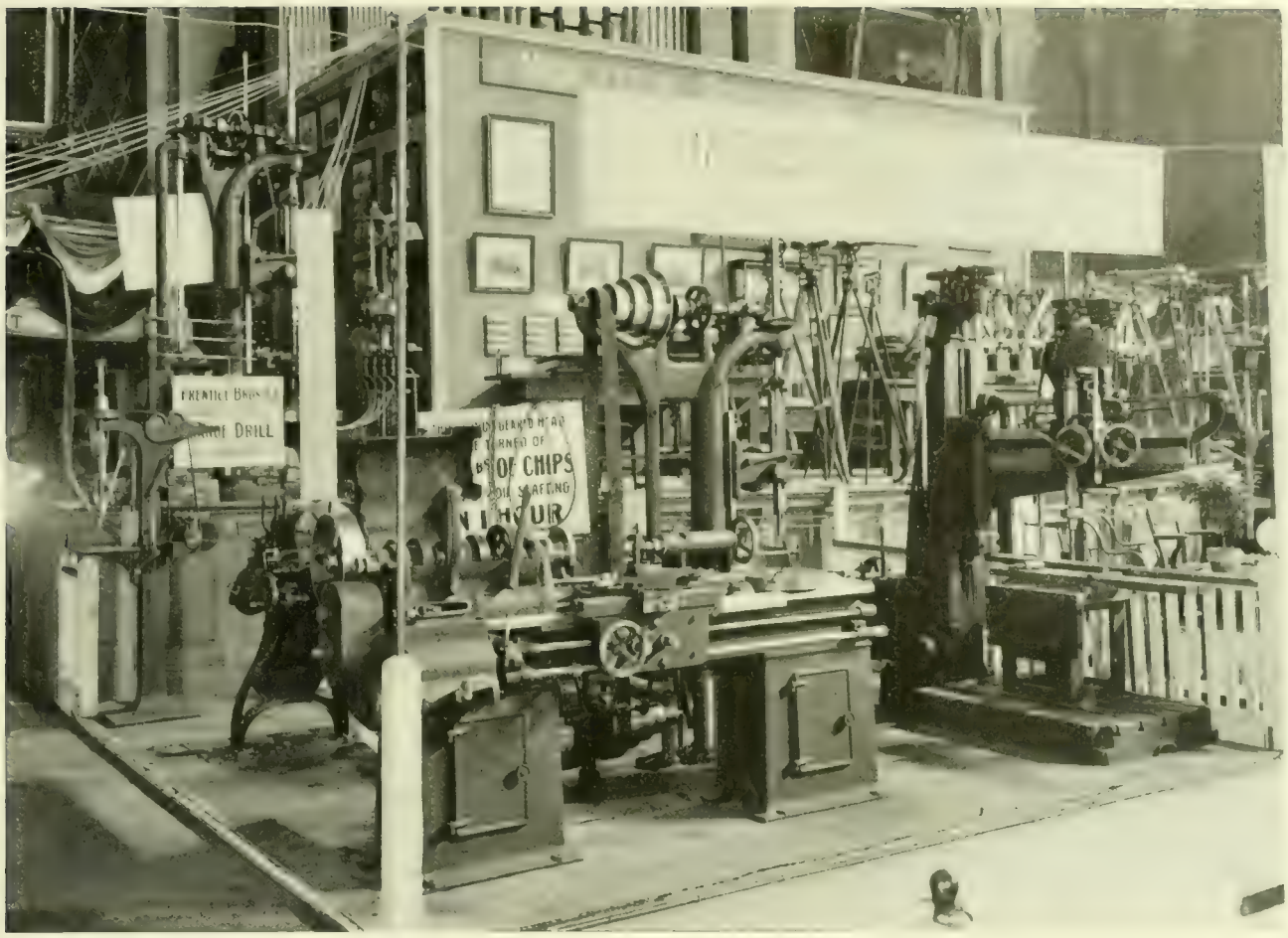
Howard Bros., card clothing manufacturers, gave an exhibition of about 100 varieties of the many they make and for purposes of comparison showed an improved German heddle alongside the old domestic heddle, which they also make. They showed among other things a full line of hand shipping cards and card clothing machines, setting 400 teeth per minute, side by side of the original machine built for that purpose in 1797 by Eleazar Smith of Walpole. They also showed a machine introducing the patent end clip for revolving flat top work, that was both simple and effective. The display made by this company was unique and was always surrounded by a big crowd. The card clothing manufactured by this company has enjoyed for many years a national reputation in the textile industry.

The U. S. Envelope Company exhibit was one of the unique parts of the fair. It was constantly surrounded by a perfect throng, and hundreds of the elderly people who visited the exposition recognized some of the machines shown as near relatives to those they ran a generation ago in some of its factories in this city. One woman claimed to have run one of the machines back in 1859. They included one invented by Milton G. Puffer

Worcester envelopes the earth.

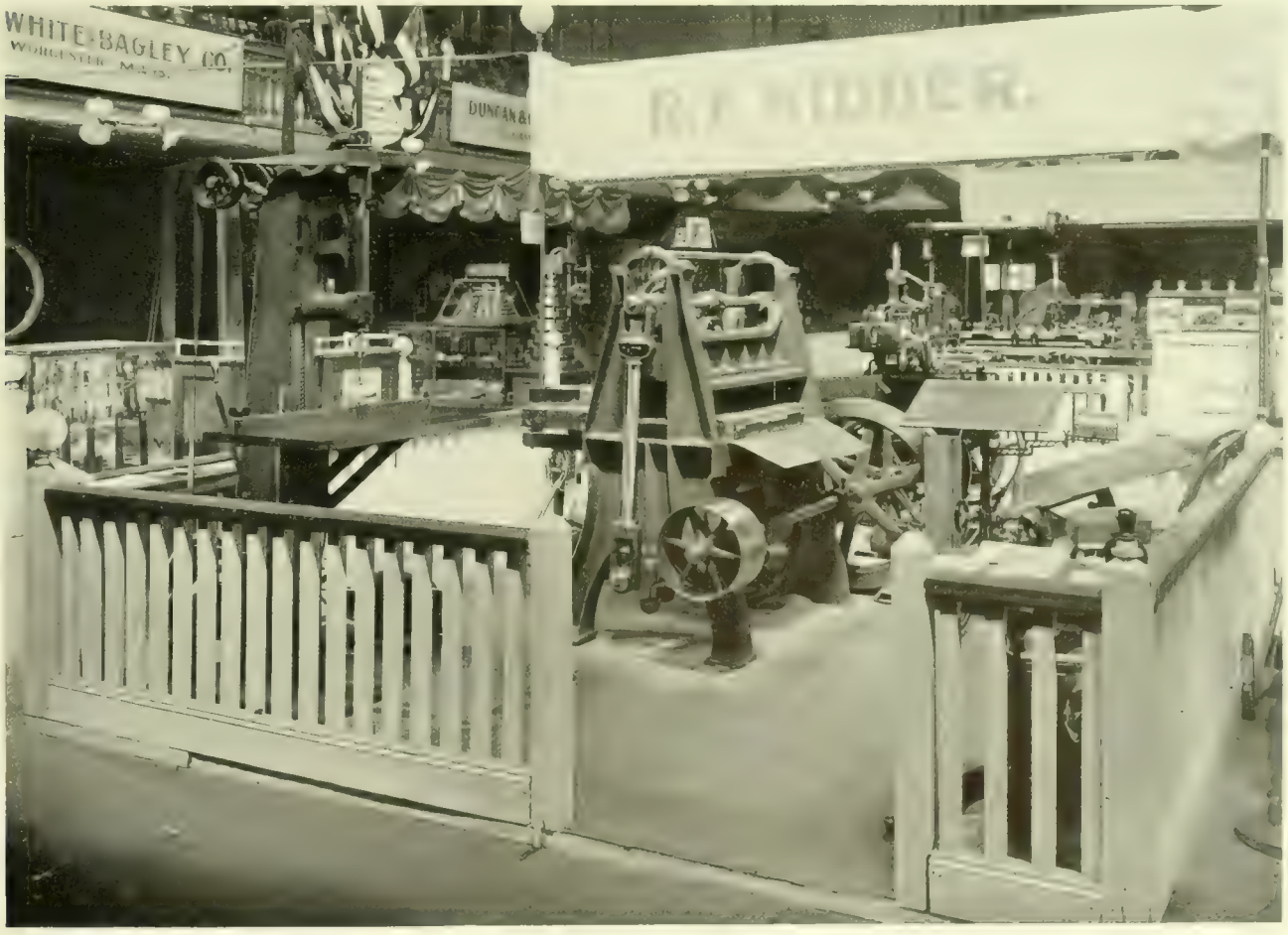
of Rockville, Conn., in 1854, with a capacity of 1200 envelopes a day. The Reay machine, invented by George H. Reay about 1856, with a product of 20,000 envelopes a day followed, and that in turn was succeeded by the Swift round-table machine, invented by H. D. and D. W. Swift and patented May 30, 1871, with a capacity of 35,000 envelopes a day. The Swift self-gumming machine, patented by the Swifts, Washington's birthday, 1887, was the next machine shown and then came the 1909 model built by the U. S. Envelope Company, which was turning out envelopes under a young woman's skillful guidance at the rate of about 125 a minute or 75,000 a day of ten hours. The company had an artistic display of its stationery and a steel die stamping press in operation.

W. T. Carroll had an exhibit of his oilless bearings, and the Elliott Addressing Machine Company showed their addressograph.



FROM PHOTO BY E. B. LUCE

PRENTICE BROTHERS COMPANY



FROM PHOTO BY E. B. LUCE

R. E. KIDDER.

The Sherman Envelope Company had one of their envelope machines in active operation during the fair, and it was constantly surrounded by a curious and admiring throng. This machine is the fruit of over 25 years' experience by President John A. Sherman of the company, and its various features have been worked out to meet actual conditions of practical envelope manufacture. The machine requires but 5 by 7 feet floor space and enjoys a very large sale in the envelope trade everywhere.

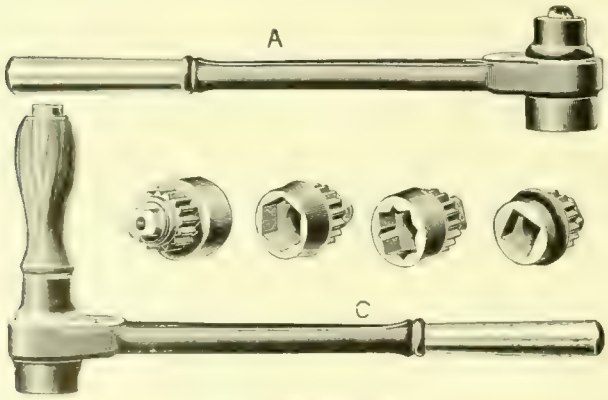
The Wire Goods Company made one of its characteristic displays and it excited constant interest. Only a few of the 4400 articles the company makes could be shown, but they included among a multitude of others mill goods, hitching rings, jack chains, universal chains, picture cord, spool wire, moulding hooks,

WORCESTER IS ON THE CARD FOR CARD CLOTHING AND IT LOOMS UP STRONG.

door mats, door springs, screen door pulls, coat and hat hooks and garment hangers, kitchen goods, culinary baskets, soap holders, tumbler holders, fly killers, sink brushes, milk-jar carriers, mouse traps, muzzles, and a host of other specialties. The company also made a display of wire goods treated according to the new Sherardizing process, a patent process for dry galvanizing. Although differing both from the electric and hot dipping systems of galvanizing, it fulfills, it is claimed, in a more satisfactory manner the same object of covering iron, steel and other articles with a coating of zinc in order to render them rust proof.

O. S. Walker & Company showed a fine line of magnetic chucks, surface grinders, universal grinders and their new 1½ plain surface grinder. This grinder is motor-driven and has a special belt-drive and countershaft arrangement attached to the machine so that each machine is absolutely independent and all overhead shafting is eliminated. The belt-drive is most ingenious and must be seen to be appreciated. The grinder can run at an angle of forty-five degrees from the vertical plane and the entire machine is one of the most remarkable in its operations and scope recently put upon the market. This concern makes an exhaustive line of fine grinding machinery and its specialties include a thoroughly practical demagnetizer, invented by Mr. Walker himself. Their exhibit was surrounded by an interested throng during the entire show.

The Coates Clipper Company made an exhibit of their goods, and the Chandler & Farquhar Company of Boston showed the Vixen milling tool. The Multiple Woven Hose & Belting Company had one of their belts running in water, a novelty that interested all belt buyers.



LOWELL WRENCH CO.
Reversible Wrench

THE WARNOCK WRENCH

R. E. Kidder showed his celebrated die press and his improved new boring machine, as well as a complete line of drawing tables. The spindle for Mr. Kidder's boring machine is made of crucible steel and the bearings are of genuine babbitt metal. It has two stops, one in the head to adjust the downward stroke and one in the treadle for the upward. It has proven very satisfactory wherever tried. The Kidder die press shown is one of the most powerful as well as one of the smoothest running on the market, and excited great interest by its operations. It is peculiarly well adapted for cutting envelopes and similar purposes.

William H. Brown had a complete line of carders' tools, and other displays were made by the Power Maintenance Company, Autoforce Company, Thomas F. Eagan, the Franklin Company, E. F. Hodgson, Protectograph Company, Lamsdell Specialty Company, Rector Gas Light Company, Richardson Manufacturing Company, J. E. Snyder & Son, William F. Russell and William J. Smith & Company.

Heavy Increase in General Imports

It is noteworthy that for the first time in the history of the port of New York the appraised value of foreign merchandise entered at that port during any single month reached $87,997,387.42 in March. The increase over February is approximately $21,000,000. Appraiser George W. Wanamaker states that conspicuous increases were made in hides, rubber, precious stones, silks, cottons, furs, woolens, drugs, chemicals, sugar, metals, coffee, tea and cigars, in comparison with the corresponding month of last year. His statement shows that the March imports of the entire country must have been unusually heavy. It is his opinion that the increased entries for March were not due to the pending revision of the tariff, as it is uncertain whether any given schedule in the Payne bill will be retained. Importers had simply allowed their stocks to become greatly depleted, and with the return of prosperity an unusual demand exists for foreign goods of all kinds.

Electric Welding of Street Railroad Rails

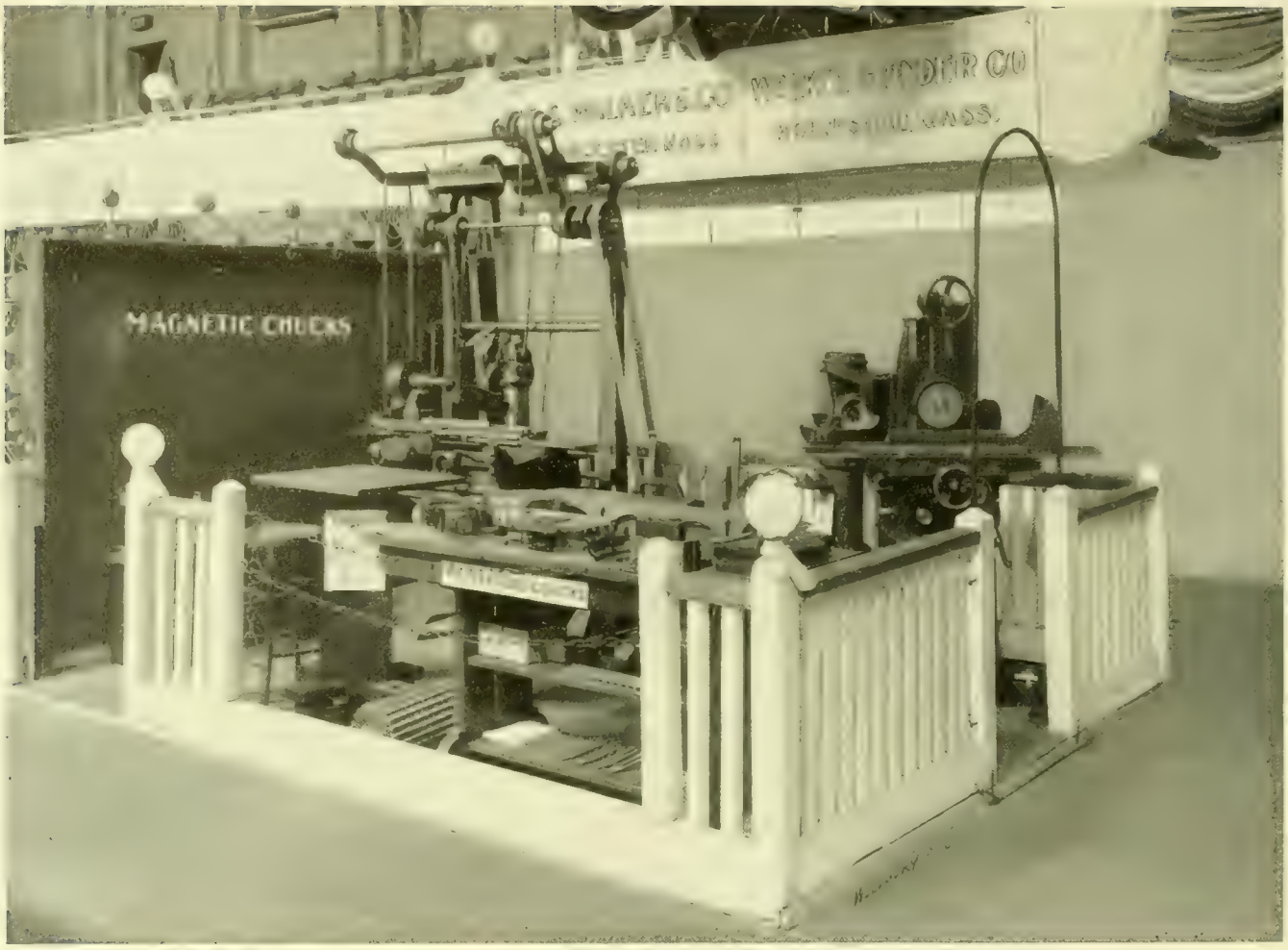
British engineering papers refer to a process for the electric welding of street railroad rails, as developed by J. Lord, Birmingham, England. It is described as substantially the Thomson process of electric welding combined with the process of fusion welding, and rails by the use of this method can be welded together in position on the track. It is not necessary to raise the metal to a welding temperature—2737 degrees F.—the temperature required being about 2100 degrees F. This lower temperature eliminates the risk of burning the steel. Around the adjacent ends of the rails to be welded is placed the lower half of a steel box in which a composition is rammed. Over the top of the joint between the two rails is placed a piece of copper; the whole is then entirely covered with the composition and inclosed with the top half of the steel box. On each side of the box the rails are held by a pair of heavy copper clamps. Each pair of clamps forms a terminal of the secondary winding of a transformer, the winding being formed of one massive turn of copper. The switch is placed in the primary circuit, alternating current being employed. When the switch is closed a strong current is caused to flow across the welding points which are raised to white heat, but the current can be regulated to give any desired temperature.

It is said that the gas formed by the heating of the composition, combined with the high temperature at the joint, causes the copper to run, the fluid copper molecularly interpenetrating the two rails. The joint is referred to as a true weld and not merely adhesion, and it is stated that any iron or copper oxides on the surface are reduced to metallic iron and copper, respectively, by the CO gas given off by the composition. The power may be taken from the trolley wire and converted from direct current to alternating current by a rotary converter. The time required to make the weld is from 15 to 25 minutes. The experiments in connection with the new process have been carried out by the British Insulated & Helsby Cables, Ltd.

In answer to the objection that if track were made continuous there would be buckling of the rails in case it became necessary to take up the surrounding paving or that contraction and expansion of the rails would damage the paving, it is said experience shows that such rails are practically immovable. The differences in temperature merely change the molecular condition and the stresses in the rail. Variation of temperature is not a serious factor in street railroad work, owing to the rails being entirely covered in by paving, which is more or less a nonconductor of heat.

FROM PHOTO BY E. P. [illegible] THE WORCESTER MAGAZINE. THE OAKLEY STEEL FOUNDRY COMPANY

FROM PHOTO BY [illegible] PRATT & INMAN



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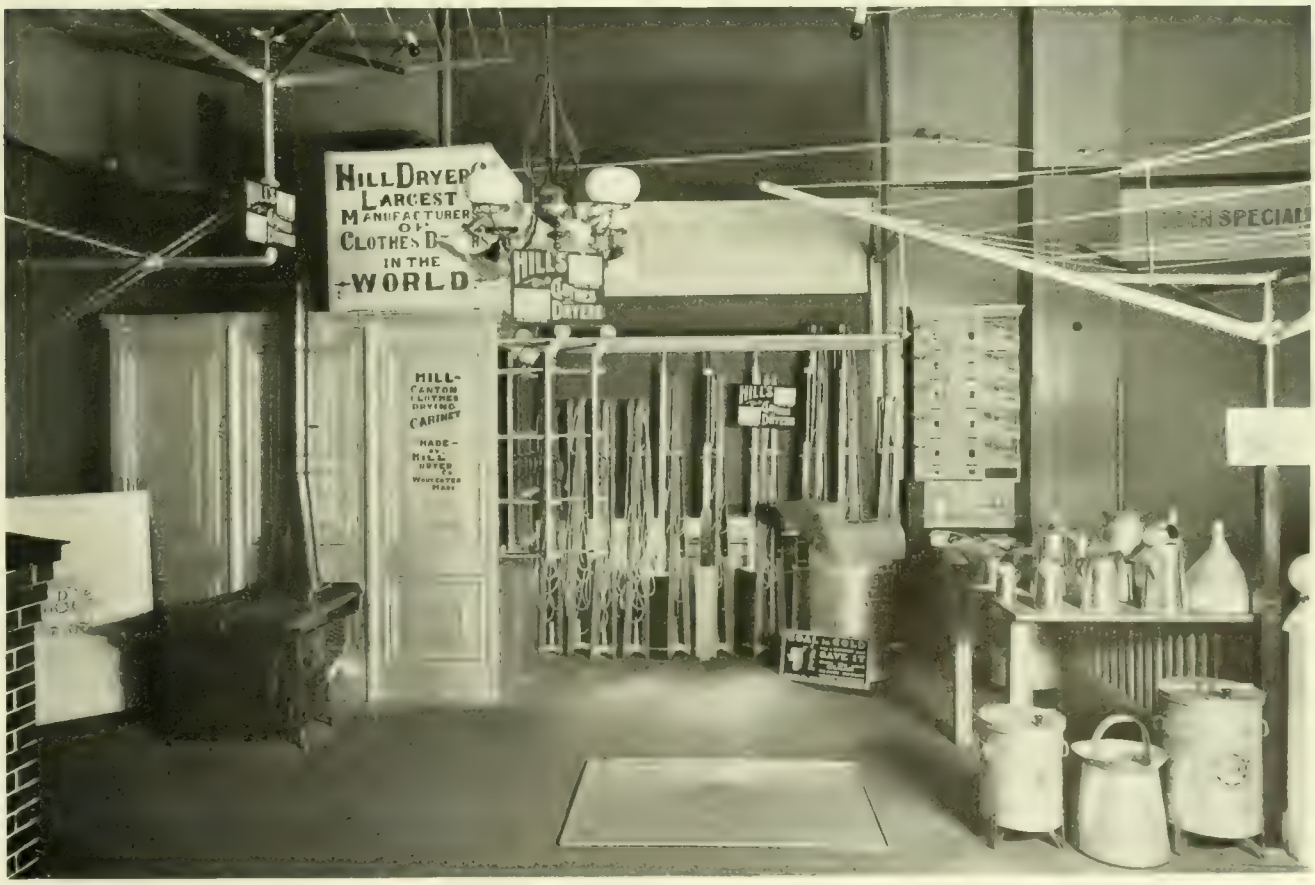

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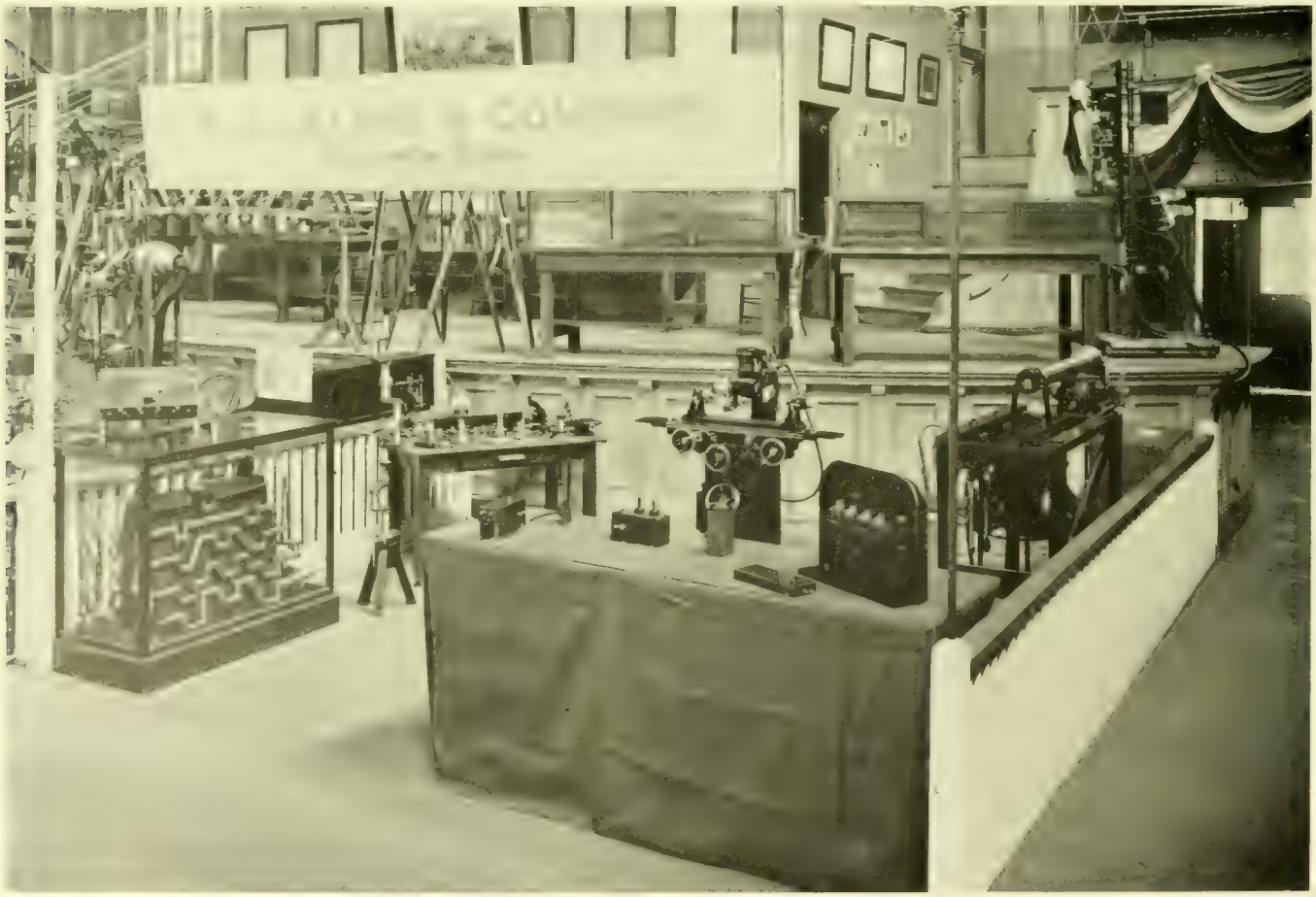
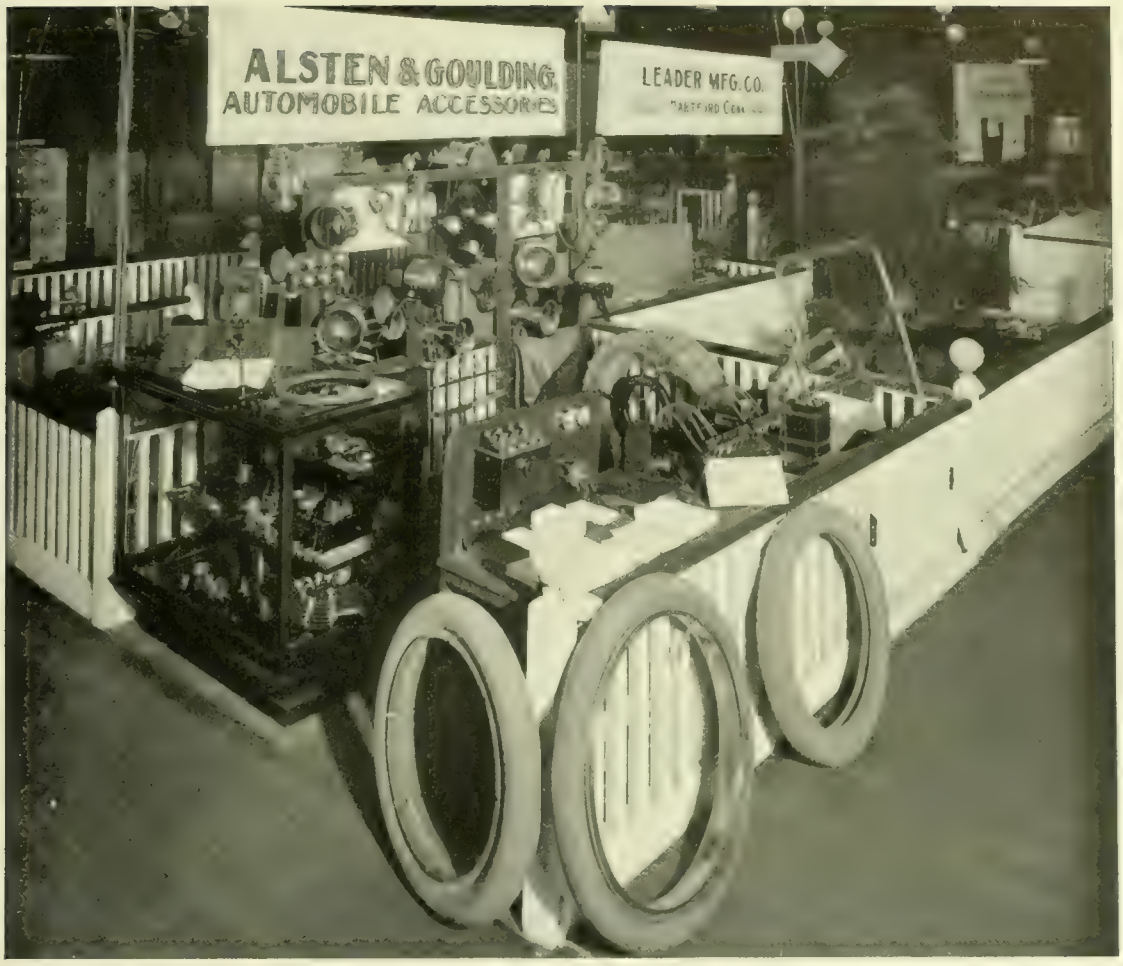


H. [illegible] COMPANY EXHIBIT, CRANK SHAFTS, GOOSE NECK GRINDERS, SPARK TIMERS, ETC.



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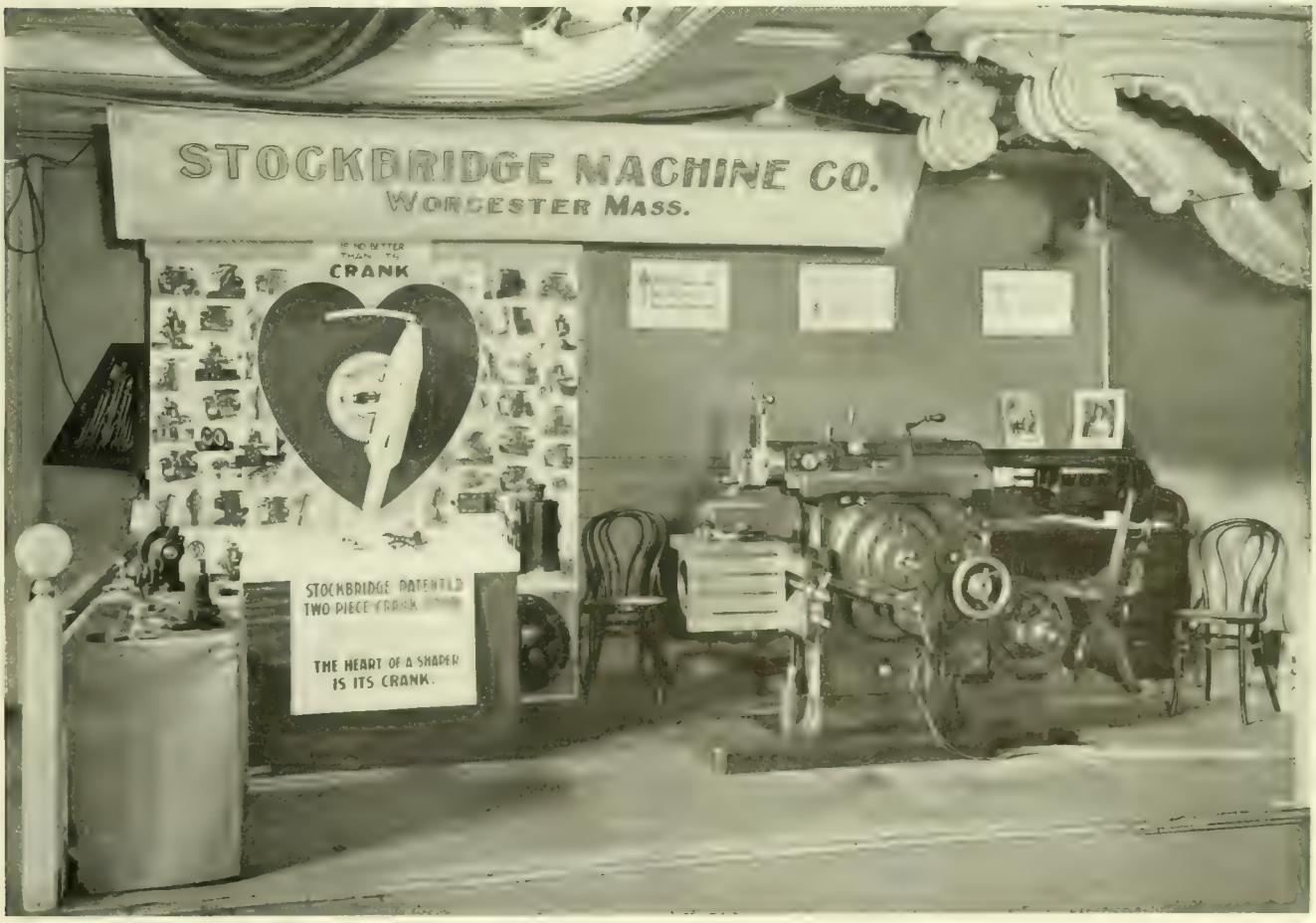

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THE UNITED STATES ENVELOPE COMPANY

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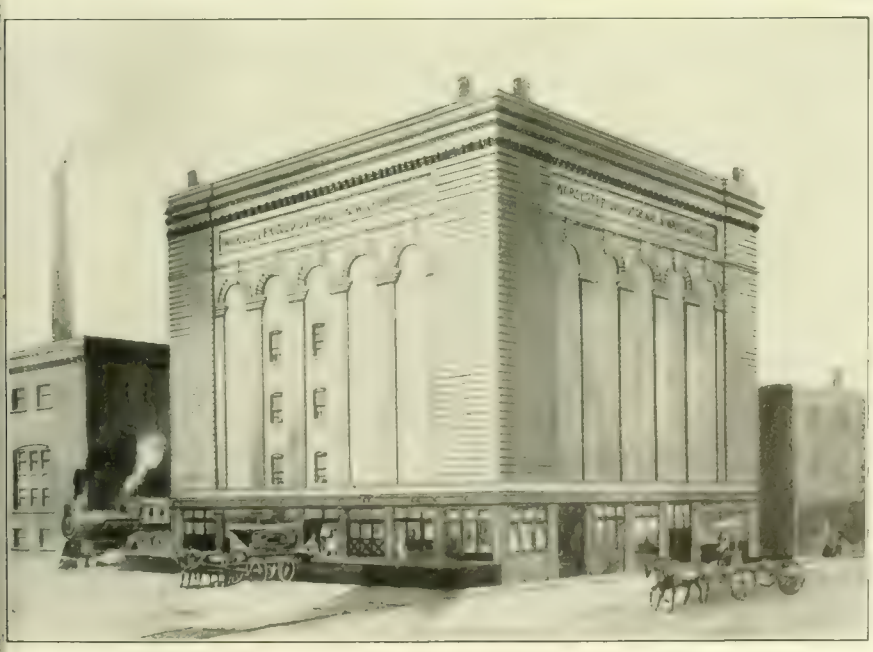

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The Hart Renting & Power Company

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Hart Renting & Power Company

and John F. Harrigan is treasurer.

Both Mr. Grady and Mr. Harrigan are among the occupants of the building.

J. W. Grady & Company,

the company consisting of W. P. Farrell, is probably the largest house in this country marketing bicycles and bicycle sundries. All his competitors are in automobile sundries to a great extent. He keeps 1000 bicycles constantly on hand and he ships to Canada, Mexico and all the other North and South American countries. He also has a good trade in Japan. He does a business of $200,000 per annum, all of which has grown up in the last six years.

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Harrigan Brothers,

who also occupy the building, started in business in 1894, at 540 Main Street, and removed from there to 48 Southbridge Street, whence they came to their present quarters. They publish the Holy Cross Purple, and also issue many other publications and catalogues for that college, for Clark College, for Emerson College of Boston, and for many other schools and colleges.

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The WORCESTER MAGAZINE Illustrated

"WORCESTER MADE INVITES TRADE"

Story of the 1909 Annual Banquet of the Worcester Board of Trade.

Full text of addresses by

Hon. Duncan E. McKinlay, Member of Congress from California.

Hon. Eben S. Draper, Governor of Massachusetts.

Hon. Charles G. Washburn, Member of Congress, Third Massachusetts District.

Hon. James Logan, Mayor of Worcester.

Worcester's Public Library, by Robert K. Shaw, Librarian.

Reports of the Officers and Committees presented at the annual meeting, April 20th, 1909.

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THE WORCESTER MAGAZINE

VOL. XII. MAY, 1909 No. 5

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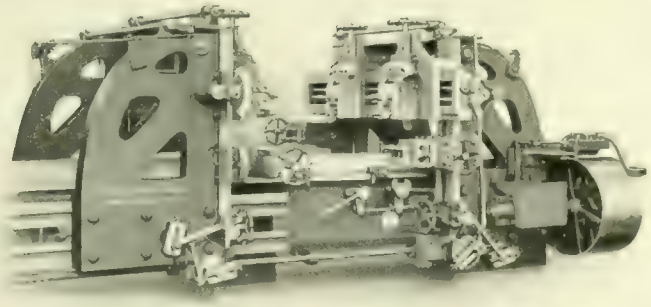

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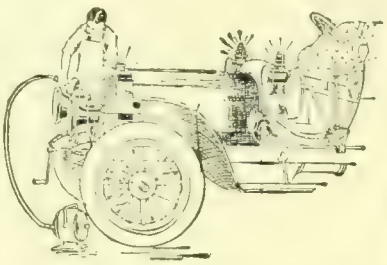

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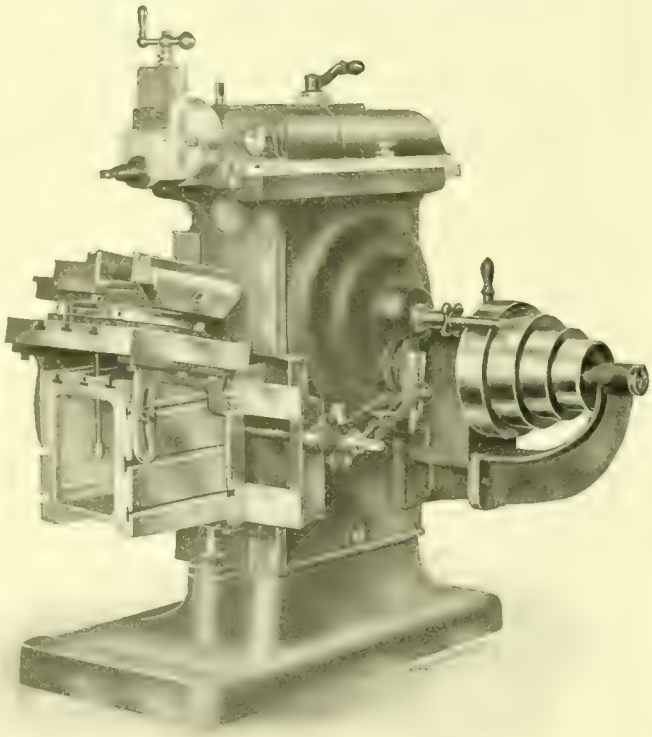

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The WORCESTER MAGAZINE

Editorial Comment

Leading Features of this Number.

The annual meeting of the Board of Trade held on April 20, with its review of the activities of our organization for the last twelve months, and the proceedings at the annual banquet in Mechanics Hall on April 22, afford ample and valuable material for filling the body of this number of the Magazine. By means of accurate stenographic reports we are able to give our readers the privilege of a leisurely perusal of the speeches which were originally heard with such keen interest and appreciation. We believe that an examination of the reports of officers and committees will convince any reader that genuine and helpful progress has been made by our board during the last year, laying foundations for larger visible results in coming days. The board will greatly miss the counsels and active aid of some who through time limitation retire from the directorate at this time; but the names of those who take their places give assurance that the interests of the corporation are to continue under efficient guardianship.

Worcester and Our State Legislature.

The coming of a legislative committee from Boston to hold a public hearing in this city is an event so rare as to make it worth while to give some adequate preliminary notice of it, which was not given in the case of a session in our City Hall, of the Committee on Public Service. The measure under discussion does not seem to have been calculated to call out any very widespread interest; but we heartily approve of the strong hint given to this committee by our Honored Mayor, who is quoted as saying, "Cities are now run altogether too much from Boston. Municipalities have brains enough to run their own affairs if they are permitted to do so." We suspect that it has been lack of manifested conscience, rather than brains, that has led our legislatures to deprive some other municipalities of certain powers. In no spirit of undue pride we venture to express the hope that our own city is sufficiently equipped in both directions to be left undisturbed in its present autonomous powers.

A Regretted Delay in the Progress of the Industrial School.

The members of the Board of Trade and the citizens of Worcester in general may be pardoned for some impatience and regret over the succession of delays which are blocking the beginning of our new industrial school. The time occupied in securing agreement as to the representation of various interests upon the Board of Trustees was well spent; but it seems a pity that so much time should have been wasted over the removal of building restrictions on the Armory Square site, if it was to be rejected finally. We recognize the privilege and obligation of every member of the City Council to exercise individual judgment on all details affecting the success of the school; but we trust our Aldermen also appreciate the importance of bringing about at the earliest possible date an agreement on some site, followed by the prompt provision for a loan which shall make possible the erection of the building in time for occupancy in the autumn or early winter. The enthusiastic agreement of the entire membership of the Board of Trade with Mayor Logan's words upon this matter at the banquet could hardly be misinterpreted.

A Gathering of Unappreciated Significance.

On April 13 last, there met in Boston a group of business men representing the largest and weightiest commercial and industrial interests of New England. Although meeting as guests of the newly organized Chamber of Commerce, the assembly was no more local in its aims than in its constituency. Each of the New England States was represented by some active participant in its proceedings. Its immediate object was to make united protest against unjust discriminations in freight rates, especially in the matter of a proposed abolition of differentials; and it voiced such protest in a distinct and forceful manner. A remoter but more significant motive for this gathering seems to have been the revelation of a far-reaching purpose on the part of our hosts at the Hub to seek co-operation with all parts of New England, regarded as a unit, in all matters affecting Boston's protection and welfare in railroad matters. The most important aspect of this gathering is its relation to the work of a general transportation bureau for this entire section, centering around the new executive, Mr. D. O. Ives, whose work began on the first day of this month, a brief account of which appeared in our April number. We would again call the attention of all shippers in Worcester to this new movement, and advise that they carefully study its possibilities of help for our city.

Tariff Revision and New England's Markets.

The emphasis placed by the chief speaker at our banquet upon the need of larger markets for Worcester's products, finds enforcement in recent utterances of some of our exchanges, whose editors seem to think that New England is giving a disproportionate

attention to freight differentials, and not enough to the progress of the tariff bill, now approaching its critical stages in the United States Senate. The importance of foreign markets is thus emphasized by the New York Journal of Commerce:

The section of the country whose markets New England manufacturers can supply to advantage is an extensive one whose wants will continue to multiply. They can turn their attention to improving the grade and quality of their goods and to extending their markets beyond the domestic barrier. There, owing to their firm establishment, their long experience and developed enterprise and skill, they should be able to compete without demanding favors; but they need to change the policy which they have heretofore supported with reference to foreign trade. They must recognize the doctrine which dawned upon McKinley in his last days and was proclaimed with his latest breath, that "the period of exclusiveness is past," and that we "should sell everywhere we can and buy wherever the buying will enlarge our sales and productions."

The Springfield Republican, commenting upon this utterance, in a vein which seems to us to do scant justice to the interest which Worcester manufacturers are manifesting in tariff revision, alludes to the measure now before Congress as follows:

It promises to remove no tax from any important raw material entering into our manufactures, and whose general effect must be to close outside markets more tightly than ever against us. And while this is going on our manufacturing interests for the most part sit by approvingly, while threatened disturbance to a small railroad differential arouses them to the utmost. Better by far for this section than any railroad differential would be freer trade with Canada, and an open market for raw materials.

o o o

The Agitation for Trolley Waiting-rooms.

We are glad to chronicle the fact that the movement inaugurated by the Board of Trade for directing to some successful end the agitation for waiting-rooms for our trolley passengers has made progress in the last month. The uniting of so many citizens and representatives of various interests in such a movement is itself a sign of civic progress, as was well pointed out by the President of the Metal Trades Association, Mr. Charles E. Hildreth, in an admirable speech at the first meeting of the committees. At the time of this writing opinions seem to be gathering around two different courses: one, the use of a portion of the Common for waiting stations; the other, the use of property on Park Street, now owned or controlled by the Consolidated Street Railway. One suggestion which we have heard, concerning the construction of an underground central station below the surface of the Common, avoiding any interference with its present space and uses save inclined passage ways for the entrance of tracks, seem to us worthy of more thought than it has yet received. As a radical and permanent relief from present street congestion, such a plan has manifest advantages. The question of cost, which at first seems prohibitive, is worthy of more careful examination. The building of such a central subway station as an investment by the city and its lease to the Consolidated Railway has precedents of some force. We sincerely hope that all plans for the ultimate object of waiting-rooms will be properly considered, but that the public will not become so involved in the discussion of different plans as to allow the whole matter to fail of solution.

What will Happen Next in Boston?

For a staid and traditionalized community, rejoicing in being the fountain head of culture for this part of the universe, Boston is certainly behaving strangely in these recent days. Apparently a most undignified epidemic of western booming and boosting has broken out. Not content with a new street-lighting contract, —distinctly inferior to that of Worcester—a new city charter, not yet quite in hand, and a new chamber of commerce, Boston now proposes to have the millennium dawn in all parts of her domain on January 1, 1915; and after five years of enjoyment of its bliss, to have a world's fair to commemorate the landing of the Pilgrims three centuries earlier. To be sure, this event happened in another place, nearly as far distant from Boston as is Worcester; but of course every one knows that the Pilgrims would have moored their bark at the foot of Bunker Hill save for a lamentable lack of historic foresight. More amazing than all, however, the traditional personification of Boston as a spinster of uncertain age has been supplanted by the masculine form of a stern and stalwart Puritan; and misguided citizens of the Hub even dare to applaud in public print such vandalism. Furthermore the Ad Men's Club emerges from its chrysalis as the Pilgrim Publicity Association. If such rash innovations continue, we are alarmed lest the even pulse of the "Heart of the Commonwealth" be disturbed. We have nothing but the kindliest feelings toward our sister city, but we are wondering what she—or must we say, he? —will do next.

o o o

A New England World's Fair.

As regards the project of an industrial and international exposition to be held in the vicinity of Boston in 1920, we have nothing but the heartiest sympathy. It may not be too early to begin planning for it, or at least to give notice of a foreclosure on that date for such a purpose. It strikes us, however, that such a project should be removed as speedily as possible from the realm of exploitation for some newspaper which may have first suggested it, and also from being regarded as peculiarly the possession and property of any one city. If there is reason for commemorating the date suggested, it is to do honor to New England as a whole, with the largest possible vision of all elements in her progress and influence. It will be proper to give large consideration to the religious, political and intellectual forces, which have gone out in world-wide reach from the section of our land first settled by the Pilgrims. It is true, as has been suggested, that the historical spots in eastern Massachusetts will draw multitudes as shrines for modern pilgrimages. It is a mistaken notion, however, to consider a display of the material progress of New England and of our entire country as foreign to a suitable tribute to the Pilgrims and their immediate associates; for they were business men as well as religious enthusiasts, builders of an industrial empire and inventors of a mighty governmental system, as well as defenders and exponents of intellectual progress. If this project is to be pushed seriously, we trust it will be placed on a sufficiently broad basis to appeal to the whole of New England.

An Averted Tragedy and its Lessons.

A news story in the columns of one of our daily papers, a few mornings since, is in such glad contrast to items which appear all too often in print in all sections of our land where trolley cars run through densely settled regions and crowded streets that we repeat its leading details, in order to comment upon certain lessons which it teaches. A street car moving at its ordinary rate, a seemingly clear track, the sudden swift movement of a little girl into the zone of danger, and but let the reporter tell the rest:

> The car was so close upon the little girl that the motorman, Robert Martin, did not have time to stop the car at all before it struck her. He was relieved to see the fender pick her up and carry her securely until he was able to bring the car to a stop, 150 feet from where it struck her.
>
> She was out with an elder sister to meet her father when he came home from his work. When the child saw her father across the street, she clapped her hands joyfully and ran toward him before her sister could stop her. She did not see the car close upon her, and before the motorman could attract her attention by the bell or bring the car to a stop, he was upon her.
>
> He applied the emergency and closed his eyes. He expected to see the girl come out from under the car, mangled. He could hardly believe his eyes when he saw her tucked in the double-action fender, safe and sound and unhurt.
>
> * * *
>
> The fender is a Worcester double-acting fender, being tried out by the Worcester Consolidated on a few of its cars. It is manufactured by the Worcester Railway Supply Co., which has been introducing them throughout the country. All Los Angeles cars, except 100, are equipped with them, and they are being equipped as rapidly as feasible.
>
> The accident was witnessed by several people who were on the street at the time. All expected to see the little girl crushed to death, as one was on the same street a few months ago, when a car without the new fender struck a child.
>
> D. T. Doyle was conductor of the car and went with the father to the house to make sure the child was not hurt. Examination showed nothing but the trifling scratch on the arm and no other bruises. The accident was just as the car was passing the end of Endicott Street. Those who saw it said no blame can be attached to the motorman.

We have a feeling that no parent can read this story without being touched first of all with its human pathos. Adults may properly be expected to think and watch and guard themselves from trolley cars and other engines of destruction which have even freer course on our highways; but it is impossible to expect little children to be ever on the alert for such perils; it is therefore the duty of society to safeguard such. What it means to the individual affected ought to be manifest to any who has a particle of imagination; but if one has not, let him read these words from the lips of the mother:

> "If it was not for that kind of fender, I don't know what they call it, I shouldn't have had any little girl now. I suppose if she had been killed I might have got $5000 from the road, but I tell you, I'd a good deal rather have my little girl than the whole Consolidated and the city of Worcester thrown in. I think I'm about as happy as anybody in Worcester today.
>
> "She isn't hurt a bit. She's a little nervous and excited from the scare, but she's been sleeping and will be all right soon. She didn't even get a scratch worth calling one."

The lessons from this averted tragedy ought to be evident without direct mention; but their importance warrants their specific statement. First of all it seems to be demonstrated, sufficiently for our present purpose, that a street car fender has been devised and is now on the market which will save human life, where the ordinary car fender will surely murder and mangle its victim. We read elsewhere in this story that once before this same fender on this same car has similarly saved a human life. If it has done it twice, is there any reason to suppose that it will fail on a third or fourth test? It should be remembered that in the most searching tests possible with dummies, conducted by the Public Service Commission of New York, this fender received the very highest rating for efficiency. It is of course conceivable that a person might be overtaken by a car thus equipped and not absolutely saved from all bruises or injuries, as in this case; but it seems to be a reasonable presumption that a successful device is at last available for all trolley companies in this truly humane and absolutely unique fender made in our city by the Worcester Railway Supplies Company.

Another lesson which seems to follow from this incident is the right of the public to demand either the immediate application of this safety device to all trolley cars as speedily as possible, or else an explanation to the public of the reason for their delay. We are convinced that those in charge of our railroads are, as individuals, as kind-hearted and compassionate as other citizens; but the history of the adoption of all safety devices is the story of tardy and too often compulsory action on the part of individuals associated in a corporation. The public will not soon forget how the railroads of the country, as a whole, fought to the very end the introduction of air-brakes upon freight trains; nor how positive were the trolley managers of this Commonwealth that vestibules for motormen were utterly impracticable. To the ordinary citizen the fact that a child upon this very same street in Worcester was horribly mangled, only a short time ago, by the fender in general use on our cars, and the fact that two children have been saved by this new device, logically combine to produce a very clear conviction as to what ought to be done with all trolley cars in this or any other State, at the earliest date.

In view of these facts, the question presses for an answer. How much more evidence will be required to convince the Railroad Commissioners of Massachusetts that an available device for stopping the slaughter of the innocents by trolley cars is at hand? and how much more pressure from the public will be needed to secure an order for the adoption of this or any other equally satisfactory life-saving fender? In New York city, where 444 persons were killed by trolleys last year, such an order has just been issued. Is Massachusetts longer to lag behind?

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The Banquet's Feast of Reason.

One of our members remarked, not long since, "One great reason why I want to keep up my membership in the Board of Trade is because in the course of a few years it brings to Worcester a group of some of the best speakers in the country, whom we could hear in no other way." We believe that all who sat down to the gastronomic treat of April 22 did full justice to it, though possibly few of them realized all the difficulties under which the caterer served the largest number who ever sat down on one of these annual festive occasions. The beauty of the decorations, the inspiring tones of the orchestra, and the superb singing of our Board of Trade

Glee Club, all contributed to the pleasure, which seems to have been universally experienced. And yet, as we pass this event in review, we are inclined to the opinion that the memory of those present will linger longest upon the intellectual delights of that hour.

One of the most important though perhaps least noticed achievements of the committee was its wisdom in avoiding an overloading of the programme. By reason of promptness in beginning, and by virtue of direct and condensed utterance from every speaker, no one was in the least wearied when the close came.

Each speaker gave utterance to some subject which was at the time uppermost in his thinking, and thus imparted both variety and timeliness to the speeches. Mayor Logan was at his best in his carefully prepared discussion of the industrial school, and his strong appeals for speedy progress upon the same. Governor Draper, who is always assured of an enthusiastic reception from any Worcester audience, most wisely took his audience into his confidence upon what is likely to be the most important achievement of his first year's administration —the consideration of a just and wise solution of the tangled problem of railroad development and railroad control. The fair-minded and comprehensive views, which were uttered so frankly and convincingly, added further laurels to the distinguished gentleman, who is adding to his power and reputation as an effective speaker with every new exercise of his gifts.

The pride and genuine satisfaction with which Worcester regards her member in Congress found ample opportunity for expression in the greeting given Mr. Washburn, and the applause which followed his address. It impressed all who listened with the mastery over his subject, which so well fits him at this juncture to share the counsels of the nation at Washington.

When Congressman McKinlay from California was presented to the Board of Trade, and entered upon the discussion of his chosen theme, any disappointment which may have been felt over the failure of Senator Cummins to appear was soon dispelled. Without attempts at jesting or persiflage, Mr. McKinlay went straight to the heart of his subject, and, by his deep earnestness and manifest sincerity, at once won his audience. Without the slightest trace of the anti-Japanese feeling which is supposed to prevail on the Pacific coast, the speaker discussed calmly but plainly the conditions in Japan as regards possible markets for American manufactures, from the viewpoint of an eye witness and student of present conditions. While some of his listeners may have felt that possibly some modifications of apparent conclusions were possible, they all recognized the strength of his main positions. The climax of his argument, to the effect that we ought to make much more of our markets in the Philippine Islands than some are inclined to do, is most timely, and cannot be pressed too earnestly in connection with the Senate's action upon the tariff bill.

The Board of Trade will not soon forget its enjoyment of this feast of reason, nor its indebtedness to those who planned and provided it.

The Saturday Half-Holiday Movement.

A [illegible] for good to the [illegible] in the [illegible] of Worcester has received public endorsement [illegible] a week from two distinguished sources—one of them keenly alive to the theoretical side of life, and the other a practical business man dealing daily in the realm of fact with things as they are.

The Saturday half-holiday movement thus launched in Worcester by the combined efforts of a scholar and a merchant is worthy the serious study of every retail trader in this city.

We are aware of the obstacles that stand in the way of this as every other reform, but the fundamental objection in this case can, we believe, be removed if the public themselves—the buyers—will consent to co-operate in the movement.

The arguments for the Saturday half holiday during the summer months are so numerous and so unanswerable as to render their repetition in this age an absurdity. It was once, and not so many years ago either, thought to be necessary to keep the retail stores open every night in the week. Then the evenings on which the stores were opened were cut to three, and finally in many cities it was cut to one—Saturday night.

If this night of toil, the hardest and most nerve-racking of the week, can be eliminated, the clerks of Worcester will be a most envied class, and their lot will be made by this simple stroke a thousand fold more desirable.

The great difficulty with the Saturday closing movement everywhere is the fact that the great bulk of the employees in all our cities are paid for their week's labor on that day. In order to make this movement the success it should be, it would undoubtedly be necessary to make Friday the pay day in our manufacturing and mercantile establishments. With that done and with the stores opened Friday evening as Mr. Healy proposes, perhaps the only objection to the proposed change would disappear.

Saturday is always a hard day in the stores and it is not to be expected that after a long hot day and a still more wearying evening the clerks behind our counters would feel like rising early Sunday morning to attend divine worship. In many cases they are so fagged out that even Monday morning does not find them keyed up to the concert pitch of activity.

Every merchant obliged to work his help Saturday night knows how hard the wheels start Monday morning and the majority of them would be glad to close their doors at 12 o'clock Saturday noon, instead of 12 o'clock Saturday night.

One thing characterizes the Saturday half holiday. It is universally popular. Wherever it has been thoroughly tried out, it has never been abandoned. Wednesday half holidays and Friday half holidays please some and inconvenience others. They are at best a makeshift. The Saturday half holiday enables a man, if he is of a religious trend, to get rested so he can go to church on Sunday, and if he isn't, it gives him time enough to take a little vacation without going into the store wearied Monday morning.

It is one of the infallible signs of a metropolitan city when it adopts this plan, and if the co-operation of the community can be secured Messrs. Healy and White will be deserving of unstinted praise for their leadership in so practical a movement. As we said in the start, we know of no effort so fraught with good to the clerks in our stores as this proposition to make Sunday a day of rest indeed, instead of one of wearisome recovery from a day of unusual toil.

American Markets in the Orient

An Address by the Honorable Duncan E. McKinlay, Member of Congress from California, at the Board of Trade Banquet, April 22, 1909

"MR. Toastmaster, your Excellency, your Honor, Members of the Worcester Board of Trade, Ladies and Gentlemen: It is a far cry from California to Massachusetts, and yet we belong to the same great country, and the industries and the progress of the nation are as dear to the people on the Pacific coast as they are to the hearts of the patriotic citizens of Worcester. It is one united country.

"I am glad to be with you to-night to say something in regard to the problems of industrialism and of commercialism. I want to say something on the other side of the question. I have heard much to-night as to the supremacy of New England in manufacturing and in the extension of commerce and in the production of wealth and the employment of labor. I want to tell you something of the opponents you are to meet in the industrial field and some of the difficulties you must overcome if you intend to retain the supremacy you now have. The great generals of the world secured magnificent victories by knowing the strength of the enemy. The United States to-day is in a high position from an industrial standpoint. We began a period of magnificent achievement, development and extension about twelve years ago. Since then the national wealth has nearly doubled, increasing from about sixty-five billions of dollars to somewhere in the neighborhood of one hundred and fifteen to one hundred and twenty billions. The labor force of the country has almost doubled in numbers in that time. The capacity of the farms to produce products to supply the needs of the workers of the nation has nearly doubled during the same period, and we flatter ourselves that we have made magnificent progress. Perhaps we have progressed too rapidly. We have, undoubtedly, developed a great industrial system, but perhaps hundreds of thousands of men should better be employed upon the lands of the nation. There are to-day employed in the United States in industrial employment over 7,000,000 of men. Depending upon these are women and children, and according to the figures of Mr. Gompers the industrial system of our land supports nearly 35,000,000 of souls. At the same time the prices of everything upon which men live have been rising, because the lands have been drained of labor. Men have been concentrated in cities, and a year ago when we felt that shock by a displacement of industry and a disorganization of our finances, we found that at once our industries were compelled in a measure to put men out of employment, and we were face to face, not only with a financial but an industrial panic.

HON. DUNCAN E. MCKINLAY

"These conditions are serious, and therefore I take it that a body of men representing the industries of a great section in a city like Worcester, should give their close attention to the means and the methods whereby this great industrial system we have builded up should be kept going. What would happen now if a serious industrial depression set in such as was in effect in this country between 1892 and 1896, with over 7,000,000 of men employed in factories, with 35,000,000 living upon the industrial system what would be the result of another great industrial panic? I take it my friends, it is the duty of every patriotic American citizen, regardless of the fact as to whether he is Representative in Congress or Senator, to take these propositions home to himself and help the nation solve these great questions.

"Last year our industries turned out nearly $1,500,000,000 worth of products. We sold abroad of our manufactured products over $600,000,000. We consumed at home over $1,490,000,000. Last year the farmers of the nation turned out over $7,000,000,000 of products, and mines and forests about $6,000,000,000 more, making the total output of this nation of somewhere in the neighborhood of $26,000,000,000 or $28,000,000, and of all this output all of it, excepting a billion and a half, was consumed at home.

"Therefore, it must become apparent that the great market of the world, the great market of the American manufacturer and the market of the American producer, is the home market. Until recently we have been giving, as a nation, very little concern as to the extension of our markets over the nations of the earth. We have not concerned ourselves very much with foreign trade and methods for the securing of foreign markets. We have been content to send some food products across the Atlantic and to meet in competition the nations of Europe in a few special products, but we can no longer pursue such haphazard methods, a change has taken place. The world is being reorganized industrially, even

as the industries of America have been reorganized within the last twelve or fifteen years. Enterprising men have been looking forward to the time when they would be shipping out to the great East and open up the markets of the orient to the products of the mills and factories and forges of the United States. We have heard a great deal about the open door of China, Manchuria, Korea, Japan and India, and we have expected the time would come when we would control our portion of this great world's market as we choose to call it.

The Awakening Orient.

"What are the facts? My friends, there is no open door in the orient. The orient is awakening. It is undergoing an industrial and commercial revolution that is staggering the world because it is beyond estimation. I speak not only of Japan, the leader of the oriental countries, but speak of all the oriental lands. For thousands of years the East has remained bound in shackles of sloth and indifference to progress, extreme conservatism and a civilization the antithesis of our own. All the orient asked until a quarter of a century ago was to be left alone in isolation, left alone in conservatism, but the East is awakening to-day to the responsibilities and opportunities of world-wide twentieth century civilization and progress. There are more than 800,000,000 of people in those lands we call oriental lands, those countries surrounding the Pacific Ocean, not counting America. There are about one billion, five or six hundred million people in the world. A little over half of them inhabit lands we call oriental lands, about 435,000,000 or 440,000,000 in China, about 200,000,000 in India, 25,000,000 in Manchuria, 8,000,000 in Korea, 50,000,000 in little Japan, and numbers in other countries containing lesser population, making up the sum total of about 800,000,000.

"We have always looked to the oriental lands to some day becoming the market of our products. What will happen then, when this 800,000,000 of people, seven-eighths of them always on the verge of starvation, all of them workers, when they are taught to reach out their hands and grasp the tool that makes the tool, when they are taught to use the same kind of machinery in your city of Worcester, when that great force of 800,000,000 of people is thrown into the world's equation from an industrial standpoint, will they sell us their products or shall we sell them ours? That is the problem before not only the United States but every European nation in this very hour, and it is a problem well worth the deep consideration of every patriotic American citizen.

"I have not time to-night to go very deeply into this subject, but I want to give you the result of a little experience I had in Japan three or four years ago. I was in Tokio at the time of the armistice, when two great armies were standing over and against each other on the plains of Manchuria. I was with the Taft party visiting the orient. While in Tokio I had the opportunity of meeting Marquis Ito on two different occasions. The Marquis Ito is called the 'Gladstone of Japan,' probably the most astute, comprehensive and constructive statesman of all the eastern world. We drifted into conversation over the antipathy of people of the Pacific coast toward oriental labor, and, knowing I was from California, as he at one time visited that State, he began a conversation with me in regard to the labor question. He said to me, 'Mr. McKinlay, why do you people of America, and particularly you people of the Pacific coast, object to Japanese laborers going to your country and engaging in business or working in your mills and factories?' He, said, 'We have a labor force here that could spare millions. We could send you two or three million men. You could use them in your cotton or woolen mills or shoe factories, and with that cheap labor you could reduce the price of your output until you could undersell your competitors and subdue new markets.' I said, 'Marquis, you forget one thing. In the United States, despite the fact we are an aggressive people, despite the fact we love money and business success as well as any people in the world, still we esteem the welfare of our laboring men, their standard of living, their education and their well-being more than we do money (applause), and therefore we must object to the coming of the millions of laborers from the orient.' 'Well,' he said, 'Mr. McKinlay, there will be no trouble between Japan and the United States upon that subject, for Japan herself is now engaging in the laying of the foundations of a great industrial system which we believe some day will astonish the world.' I remember his words well: 'When we bring back those millions of men from the fields of Manchuria and from the ships upon the sea, we shall begin to train them in every kind of trade and craft, and, yes, in every kind of system of business that is known to the world. The government of Japan wants to keep its laborer at home. We cannot afford to give you the cheap, adaptable laborer of Japan to run your mills and factories, because we ourselves are going to establish an industrial system that will embrace every sort of industry, and by and by we shall sell you the products of those industries instead of giving you the men to make them.'

"This was said to me in 1905. Then I began to study the Japanese industrial system—not only the industrial system of Japan, but that of China, of Korea and of Manchuria. The remarks which I apply to Japan apply equally well to the countries I have indicated, even to India, which has now become one of the principal competitors of the United States in the production of raw cotton. Then I began to look around and study the situation. The empire of Japan consists of 600 islands scattered along the seas along the coast of Asia for 2000 miles. The whole empire of Japan contains only 147,000 square miles of territorial area. The State of California, to give you a comparison, contains 158,000 square miles, and that is in one solid strip of land. The empire of Japan contains 147,000 square miles, and that is broken up into 600 islands that are inhabited. In addition to that there is only 16 per cent. of the land of Japan susceptible of cultivation. It is a volcanic formation—the whole archipelago. Many of the islands are barren, and only 16 per cent. of the land may be used for the production of food supplies, and yet last year Japan produced 250,000,000 bushels of rice, 100,000,000 bushels of wheat, rye and barley, 100,000,000 pounds of tobacco, 56,000,000 pounds of silk, and her rice crop was worth $250,000,000.

"Japan upon that territorial area I have indicated to you to-day has 50,000,000 of people, and those people are increasing at the rate of 800,000 a year, the natural increase, and when I speak of Japan I am not including the island of Formosa, which contains

3,000,000 more. This great country of the orient is a vast beehive. The average farm contains an acre and a half. The average income of the Japanese farmer is $52 a year. The average income of the Japanese mechanic is about $2 to $3 a month, in American money, and so when Marquis Ito spoke to me about the organization of a great industrial system he indicated that the government of Japan would itself become a promoter of an industrial system that would give employment, as near as could be given to the population of Japan, and so they are organizing to employ that great force of 50,000,000 of people as nearly as may be.

Government Aid.

"I have been watching developments since then, and what do we find? We find the government of Japan taking the lead. It is the greatest business corporation on this earth. It is leading the way in the establishment of every kind of factory. There are 118 factories in which cotton yarn is manufactured. There are 40 factories in which cotton cloth is manufactured. There are 38 factories in which electrical fixtures are manufactured. There are 65 manufactories in which iron products are manufactured, and you may go down the line and find in Japan anything that is made in the United States or Europe, and they are making these articles under conditions which are peculiarly advantageous to them.

"In the first place the government of Japan assists the promoter by lending him the capital, if it be an individual or a corporation, at 2 per cent. interest, the capital to be paid back in installments. In many cases where the company could not buy machinery, the government of Japan buys the machinery, puts it in the factory and lets the company pay it back on the installment plan. Many times the land is donated, but when the walls of the factory are builded and it is time to place machinery therein, they do not use obsolete machinery of some of our competitors in European lands. They come to the United States or they go to Great Britain, and they buy the latest machine. Now if you are organizing an industrial company here, you build the walls of your factory, and the capitalization of the machinery is a great item of expenditure. You must go out into the market and pay the market price for your machinery. Perhaps you want to put 100 machines in because there are 100 employees in your factory. You must pay $100 apiece for every one of them You know it does not cost over $40 or $50 to make the machine, but some of the cogs or wheels or spindles are patented, many parts are patented, and the paying of $100 includes royalties.

"They do not do that in Japan. They send to the United States. They buy one machine from this country, take it to Japan, and make a couple of hundred more just like it, and equip their factories and get ready for work, and when their factory is ready for operations they hire their labor. They work boys and girls in Japan when they toddle from the side of the cradle. They work old men and women in Japan till they fall into the grave, so that it is not an exaggeration to say that of the 50,000,000 of people there, 45,000,000 of them are workers. Take up the reports of your consuls, and you will find the great cotton mills of Japan employ adult laborers for 13 cents a day, in American money, men and women. These employees work twelve hours a day in the great factories that are built just as ours are, equipped with the same kind of machinery. They work under supervisors, foremen, and the foremen are brought from the United States or taught in the United States. They are using the same kind of machinery we are, under the conditions which I have indicated.

"I have heard complaints within the last year or two that our cotton factories, for instance, were not paying returns. Taking the returns of last year, you will find the cotton mills of Japan making from 22 to 70 per cent. dividends. They are selling cotton cloth all over India, China, Manchuria and everywhere in Asia, and they are turning to the United States.

The wages of the skilled mechanic there are from 20 to 50 cents. An adult man or woman makes 13 cents a day. A good mechanic gets 20 cents, and a first-rate mechanic 30 cents, and higher skilled labor of all Japanese men whose fingers can fashion a fine, delicate surgical instrument or make a watch, they employ such mechanics for less than 50 cents a day, in American money. Then they turn their ships out to buy raw materials. They can go to Australia and buy Australian wool as cheap as we can, but they bring it to Japan in a ship that is subsidized by the government, and on the cargo upon it the government pays at least half freight. Japan pays $6,150,000 a year in ship subsidies. And they are now getting ready to put a subsidized line on to San Francisco, and later one to Chili, and later one to Panama. That is to the manufacturer's advantage. It helps pay the freight on each shipment of raw materials into the country in order to supply the mills cheaply. When the articles are manufactured she sends them out again, scattering them into the world in these same subsidized ships.

Imitation of American Products.

"Then she goes farther than that. You perhaps are manufacturing a certain kind of product. They imitate it. They will take a Cleveland bicycle—this is something brought to my personal attention. They will manufacture this same bicycle in their factories, paint it the same, put the Cleveland name on it and the trade mark, and send it out as the Cleveland bicycle. They sell typewriters that way and sewing machines, agricultural implements and carriages; they sell furniture and almost anything that can be manufactured. I was talking with our consul, formerly stationed in a Chinese city, a few days ago, and he told me he wished to buy a Fairbanks scale in Yokohama. He visited the agent of the company, and pointed out the kind of scale he wanted, and it was $65. He thought he would consider it, and walking down the street passed what was the Japanese wholesale quarter of Yokohama, and saw what he thought was the same scale, and he went in and inquired the price. It was the same scale absolutely, the same size, the same shape, painted the same, had the Fairbanks name on it and the paper tag which was put on the Fairbanks scale, and this scale was $30, but it was made in the Japanese factory and not in the American. They even got the better of the American tobacco trust a couple of years ago. They took the cheap tobacco of the orient, put it in boxes the same as the tobacco trust boxes, the same picture on the top, the same trade mark, and even the facsimile of the American

revenue stamps, and sold it as American tobacco (laughter).

"Now this may seem rather funny, but it is the kind of competition we shall be compelled to meet. To-day in Japan 335,000 people are employed in cotton mills alone, in a little bit of territory less than the State of California. They are sending products to every market in the orient. They are displacing us in China.

"I remember two years ago we were battling in Congress what was called the Foster bill. Mr. Foster of Vermont had introduced the bill at the request of the cotton manufacturers of the east and south. Trade was falling off in China, he thought, on account of the boycott. They came to Congress with that bill, and the purport of it was to extend more privileges to Chinese labor, because Mr. Foster thought more privileges should be given to the Chinese. We were permitting them to come in under some limitations, and as a result of the bill the boycott would be declared off in China. We opposed it. The bill never did go through. It was an invasion of Japanese articles that caused the falling off of our trade with China. In 1905 our trade amounted with China to $56,000,000; in 1906 it had fallen to $35,000,000; in 1907 it had gone down to $29,000,000, and it is still going down. It is the same in Manchuria and in Korea.

"While I was in Yokohama on this same visit my attention was called to a storehouse, in which my Japanese guide told me there were 30 American flour mills. He could speak English well. He said, 'There are 30 American mills there. They are assembled there. We are going to take them to Manchuria as soon as the military operations are over.' Some wheat was piled up there, and a very dear article. I said, 'These are American flour mills?' and he said 'Yes.' I said, 'I suppose we sold you the 30 flour mills?' He said, 'No sir, you sold us one, and we made 29 more.'

The Men Behind the Machines.

"These are the conditions under which the orient is developing its great industrial system. Now, friends of Worcester, I want to submit to you that Japan as a government leads the way in the foundation of this great system, when she sends here bright young men and to all parts of the world as she is doing to-day. You can go into the factory towns of almost any part of the United States, and you will find bright Japanese working in almost every trade and every line of business, studying banking and other forms of business and commerce, and by and by having accumulated knowledge they will go back to Japan, and you see that in the building up of that great system.

"We all know Japan went to war with China fifteen years ago, for the purpose of securing sovereign rights over Korea. Japan was being over-crowded by population even then. It became a problem of the government how their teeming millions should be cared for and Japan went to war with China to secure territory rights in Korea. After her success with China she was disappointed, Russia leading the European powers in robbing Japan of the fruits of her victory. She began her preparations then to overcome the great power of the north of Europe. She sent her bright young men into the world to acquire information and knowledge of the art of war on land and sea. They could be found in every military and naval academy of the earth, in every medical school, tens of thousands of them, and when the time came they were called home. In the meantime Japan strengthened her army and navy and learned the art of war. She was only born in the company of nations in 1868. It was several years after Perry opened Japan that the movement was made in placing that country on a footing of the western nation, and so the country got ready for a conflict with Russia, and you know how it shocked the world. She established victories on land and sea. She had become mistress or master in the art of war within twenty years. To-day the same keen, intelligent, ready statesmanship, the constructive statesmanship of some of the best statesmen of the world, is leading Japan to achievements and triumphs that will shock this broad earth. You will say, How does it concern us? Already the advance guard of Japanese products is invading the United States.

"A few months ago a ship entered San Francisco harbor laden with boots and shoes, not what you would call a very large shipment, of the common kind, with all kinds of cheap cotton goods, of silks, of cutlery, of brushes of every kind and of American school books, because in Japan they teach English in almost every school above the primary grade, and six years ago they sent to the United States and purchased a consignment of our school books, and last year they brought a consignment of books made in Japan, exactly the same as they received from us, and offered them at 13 cents apiece (laughter). The orient is waking up. That tremendous force of energy is being kept under the leadership and skillful supervision of masters of industry of the world, and here in United States to-day, we have great importing houses which are soliciting Congress every hour almost to lower the duties on cotton goods of every kind, hosiery for instance, so that it may come more cheaply in the country, and we know that some of these great houses are interested in the manufacture of cotton goods in Japan, and they are using oriental labor in ways I have indicated, and demand an American market for the products they have had made in Asia.

"I do not want to make a political speech. I do not want to touch on the tariff question. We endeavor in Congress to balance things, and try to do one little thing, and when we do that we solve the tariff question. The effort of Mr. Washburn and myself and others is to let every man have protection on what he sells, and give him free trade on everything he buys. That is all we are trying to do (laughter). Somehow it does not work out, and so we have to balance these things.

"Constructive statesmen of the nation must take cognizance of the facts that I have indicated to-night. Perhaps it will be necessary to follow the lead of the British in their colonial policy. Only a month ago they began the organization of Africa, so that it will be a British province from the Cape to Cairo, and I saw in the report of that organization that Ex-president Stein of the Orange Free State and General Botha of the Dutch Republic had met in the conference and were ready to organize the farmers of South Africa under British dominion. Their tendencies to organization are great factors in promoting the traffic of the world, and they are taking cognizance of the rivalry of the orient and endeavoring to shape their foreign policy so as to meet these conditions, fortunately for the United States in this emergency—and I claim it is an emergency, because our home market no longer suffices for the consumption of the output of all our mills and factories.

MARKETS IN THE PHILIPPINE ISLANDS.

"We must look out into the world and endeavor to secure some portion of the business of the Philippine Islands. I will concede to the citizens of Massachusetts that you take a different view of the Philippine Islands than we of the Pacific coast do. But we have the Islands. Last year their trade amounted to $35,000,000; yet we got no more than $4,500,000, and I am told by authority that if the Philippine Islands are given a chance to develop their country, if they are brought into close relation with the United States, in ten years they should be consumers of at least $60,000,000 of the products of our shops and factories. We have the Hawaiian Islands. We have other opportunities for the extension of American trade, so as to offset the losses we are meeting in the orient, but we do not follow the lead of that great statesman of the nation who gave us proper advice.

"You remember President McKinley's last speech at Buffalo. He stood before us for the last time, his achievements were all behind him. He looked out into the future, and saw the time fast approaching when the American home market could no longer absorb the products of the tremendous system being developed, no longer give employment to 7,000,000 men in factories, so we must reach out into the world to obtain some portion of the world's trade. He turned his eyes to South America. He said in his last message the Panama canal must be built to assist Amerian commerce. 'We must,' he said, 'pass measures for the reconstruction of the American merchant marine, so that we may have agencies to distribute the products of our shops and mills and factories.' That is just as necessary to-day as it was then. It was acquiesced in and insisted upon by President Roosevelt, and now President Taft—than whom no man in the country is better qualified to give advice as to national policy—advises us to bring the Philippine Islands closely to us, and give them tariff privileges so that their products may come in free so that they will take ours free, and put up the tariff wall as the nations of Great Britain and Germany and France and Japan are doing.

"I submit these propositions to you because you are keenly interested in the development of American trade. You desire to keep men employed, and your influence must be given to the nation to help solve these great questions. Above all, we people on the Pacific coast are concerned in seeing the American flag floating again from the mast-heads of merchant vessels. There are only six merchant vessels on the Pacific coast carrying on Asiatic trade. The United States must do something in giving us a merchant marine to take our products around the world. We have no line of communication between North and South America. We should secure one to South America, as we have no means of sending our products to them.

"In conclusion I say I believe it is a wise policy to follow the advice of President Roosevelt and President Taft to instruct and support your representatives in Congress in those measures recommended by the President to bring the dependencies closer to us, for those measures mean the holding of the American market above all things over the Asiatic manufacturer, and next prepare for the establishment of lines of communication so that we can secure our own share of the markets of the world. Administration and legislation, of course, must be imperfect when we cannot pass a perfect law. When administration is perfect, then some one who has tried for many years to secure a supreme position, as President of the United States may be successful, but administration or legislation is in its very essence imperfect, but still the inherent patriotism in 90,000,000 of citizens of the great republic will, in time, secure knowledge, will overcome obstacles, will solve difficulties, and will carry the nation on to even higher and greater exploits than were ever dreamed of by statesmen of the past. When this is done, the vast reservoir of American patriotism will remain undiminished still, and the great depths of the country's devotion to liberty will still remain unsolved." (Loud applause.

The Situation in Korea.

As an evidence of the exact truth of the statements made by Mr. McKinlay in his illuminating address, the subjoined, from the Daily Consular and Trade Reports issued by the United States Government under date of May 1 as to trade conditions in Korea, may be appropriately cited. It embodies the report of the Korean customs authorities for the year 1908, and demonstrates conclusively that Japan is seeking by every means in her power to dominate the trade on the peninsula. The report reads:

"The Korean customs authorities have issued a report on the foreign trade of the peninsula in 1908. From this it appears that Korea, like Japan, did not make a very good showing last year, although in her case the decline is comparatively small. The total of the foreign trade, including gold, silver and specie, amounted to 63,687,114 yen (yen=49.8 cents), as compared with 66,467,504 yen, being a decrease of 2,780,390 yen. The export of goods, apart from gold and silver, reached only 14,114,510 yen, which compares with 17,002,234 yen in 1907, while the imports totaled 41,025,849 yen, as against 40,050,405 yen in the previous year.

"The net result was an excess of imports of goods to the amount of 26,911,339 yen. In 1907 the corresponding figure was 23,048,171 yen. The main causes of the decrease in the exports are said to be a decline in rice and the non-export of ginseng. Among the imports decreases occurred in cotton yarn, gray shirtings, and other articles used mostly by Koreans, owing to the tightness of money caused by the depression in Japan and to the lessening of the purchasing power of the native population by the decline of the export trade. These decreases were more than made up, however, by the import of materials for the various works lately set on foot and of necessaries of life for the growing Japanese population, with the result that the imports finally exceeded those of last year by about 1,000,000 yen.

"Turning to the value of the trade with the various countries, it is found that Japan took the largest part of the exports, with 77 per cent. of the total value (76 per cent. in the previous year). Next came China, with 16 per cent., while all other countries together did not exceed 7 per cent. of the whole. In the import trade Japan also took first place, with 59 per cent. of the total value of the imports, and Great Britain came next, with 16 per cent., while China and the United States had each about 10 per cent., and all other countries together 5 per cent. of the whole."

Our Public Library

Its Work, with Some of its Problems and Hopes

By City Librarian Robert K. Shaw.

"I AM in favor of multiplying man's opportunities to do good, and lessening his opportunities to do evil," declared recently a close student of sociological questions. In this great work of social redemption, the greatest, indeed, of this century, the public library claims a prominent part. To our schools, we owe an incalculable debt for supplying us with those rudiments of education which make all future culture and most future usefulness possible. But our years of formal schooling must be but few compared with the long term of active service in business or professional life. It is the public library which always stands ready with its rich treasure-house open wide to all, offering, inviting, urging the public to make freest and fullest use of its facilities.

To many the public library is merely a recreative institution, whence the literature of amusement may be drawn, to while away a leisure hour. Not that this function of the library should be frowned upon or minimized; recreative books are needed by all of us at times, and it must be borne in mind that the highest literary talent, both at home and abroad, has been devoted to the art of fiction. Fiction reading may be thoroughly educative, too, if pursued aright, as the amount of information relative to history, language, manners, customs and religious beliefs to be found in high-grade fiction is simply immense. Best of all, good fiction reading is intensely humanizing. Is there any other experience (apart from the personal association with good men and women) so quick to stir the best in us as a day's absorption in a masterpiece of George Eliot, Thackeray or Meredith? But let this be no excuse, however, for our seeking to devour every fresh bit of extravagance in fiction merely because it bears the date of 1909.

CITY LIBRARIAN ROBERT K. SHAW

Countless examples, however, may be found to prove that a large and ever-increasing number of Worcester people resort to the Public Library for purposes of serious study. Among these may be mentioned teachers who use the special collections in the children's room, or the files of educational magazines in the reference department; students of genealogy and local history; ministers from Worcester and the surrounding towns; post-graduate students from Clark University and elsewhere, for aid in special research work; undergraduate college students, many of them from Clark and Holy Cross; art students from the Museum classes; debaters from the high schools and academies and (among the most valued of our patrons) artisans, mechanics and other skilled workmen, looking for material to help them to a better knowledge of their work, and to render them more useful to their employers.

Before any detailed statement of the plans and problems of the library is attempted, it may be well to define and differentiate by departments its resources. According to the last printed report, for the year ending Nov. 30th, 1908, the total number of volumes in the library is 167,313. Of these 27,190 are in the Green Library, and comprise either books in the original library of Dr. John Green (about 7,000, bequeathed to the city in 1859) or books bought from the income of the generous fund of $30,000 from the same legacy. According to the terms of Dr. Green's will, incorporated into the City Ordinances and the Acts of the Legislature, these books must be used within the building. No officer of the library has, therefore, any authority to lend any book in this collection for home use for however brief a period. The reference library contains 62,487 volumes. While these normally are for reference rather than home use, there is no legal restriction upon them, and many of them which are not in frequent demand at the library are loaned outside the building for short periods.

Books in the Green and reference libraries are shelved together in the stacks of the reference department, entirely separate from the circulating collection. Those in the Green Library may always be distinguished by the book-plate, which bears the legend, "From the fund of John Green," or "Gift of John Green" (for those in the doctor's original library) or, by the circular embossed stamp on the title-page, "Library of John Green, M. D." Excluding the children's collection of 8,832 books, shelved in the children's room, the whole library is divided in two great sections: in one, the books chiefly in demand for popular reading and home use; in the other, the old, rare and valuable works; those of bulky and unwieldy nature, such as bound newpapers, atlases and large folios on various subjects; complete sets of standard and technical magazines; most of the government documents and reports, with the bulk of the pamphlet and ephemeral literature.

In the matter of catalogues this library shares the common opinion that it is unwise to attempt to print a

complete catalogue of its resources. Such an instrument would be out of date before it was through the press, and would be so costly that few would subscribe for it for the sake of having a catalogue at home. Partial catalogues have been issued recently to index all the English fiction in the library, the children's books, music, and books in modern foreign languages.

Of card catalogues the library has three. These receive daily additions and are kept strictly up to date. They are arranged with authors, titles and subjects in one alphabet exactly like a dictionary, and are always accessible to the public during library hours. The only complete catalogue of all material in the library is that in the reference department. It is contained in a case of 375 drawers, holding over 300,000 cards. Symbols in red ink preceding the call number, in the upper left corner of the various cards, show at a glance whether the book in question belongs to the Green Library, the reference, circulating or children's departments. In the circulating library may be consulted a catalogue of that and the children's department. Up stairs the children have a card catalogue of their books all to themselves.

Striving to do its duty by those who come to its doors for help or counsel, the library of to-day realizes that it has another and a most imperative function. In these days of modern progressive enterprise, when even the church feels that it must advertise to insure success, the public library, too, must push out beyond its doors, join the ranks of the missionaries, and adopt some of the methods of the business world, in the effort to win new readers and new students as its patrons.

The most progressive institutions to-day, particularly those which wish their sphere to be all-embracing, have learned that after their central plant is completely organized and doing its maximum of work, they must establish branches in outlying sections. Just as the great institutional church organizes its mission chapels in unfavored districts, as banking-houses and mercantile concerns equip their branches, and the post office its substations in various quarters of the city, so should the public library, at least in cities which have passed the 50,000 mark, seek to reach out toward suburbs and outskirts to offer to people living at a distance those privileges which they will never, to any large extent, enjoy if left to themselves.

That branch libraries are an imperative need in Worcester to-day goes without saying. That the directors of the Free Public Library would speedily embrace an opportunity to equip and maintain five branch buildings in appropriate sections of the city, is likewise a truism. That the people would welcome and enjoy branch library facilities is the writer's fixed belief.

Let us pause for a moment, at the outset of this survey, and make a clear distinction between the delivery station, nine of which the Public Library now maintains, and the branch library proper, to which we aspire. The delivery station is merely a means for supplying patrons of the library living at a distance with specific books, without the necessity of traveling to the main building on Elm Street. On Tuesdays and Fridays cards, with slips bearing the book numbers, may be left with the station-keepers, to be mailed, on the evenings designated, to the main library. On Wednesdays and Saturdays, the books are delivered in boxes to the station-keepers, who hold them in readiness for call. In addition to this system a small deposit of from twenty-five to fifty books is kept at the station, to use as substitutes for books not available at the central library, or to be drawn on cards as at the main building. The station-keeper, in many cases a druggist or grocer, will naturally regard the library books much as he does general merchandise; it is

PUBLIC LIBRARY—REFERENCE DEPARTMENT.

unfair to expect from him the same interest as would be shown by a library assistant. The delivery station will thus appear as a useful auxiliary to the central plant, but far short of an ideal factor in spreading the gospel of the book.

A branch library, on the other hand, is a real microcosm of the main institution. It need not contain all its elements, but its main features will be clearly in evidence. First in importance is the collection for circulation. This should contain 5,000 to 10,000 carefully selected books, with a generous percentage of standard fiction, and a trained attendant of quick sympathy and winning manner in charge. Telephone connection should be maintained with the central building, so that difficult inquiries, or requests for books not in the branch collection, may be intelligently and speedily answered.

Children, of course, will be welcomed at the branch building, but should be provided, if possible, with separate quarters. The little ones troop in in such numbers after school that from four to six o'clock it is impossible to keep a children's room quiet enough for adult persons to use as a study, or even a reading-room. Here, too, will be a collection of carefully selected duplicates, accessible on low shelves to the children, with another willing attendant to take an interest in the boys and girls, to encourage taste for the best reading, and make the library a real influence for good in their lives. The story hour, clubs for boys and for girls, nature walks and talks, and other auxiliary interests should be introduced as far as practicable.

The reference department in a branch library is naturally not its strong feature. The building should be equipped, however, with a good encyclopedia, dictionary, atlas, gazetteer, etc., and should particularly have a good supply of current magazines (and some newspapers), with comfortable chairs and good light in abundance. The reading-room feature should, in fact, be strongly emphasized, that the branch may come to be recognized, in a measure, as the citizen's club, where even the friendless wanderer upon the street, provided he be clean, sober and quiet, will always be welcome to find his place without asking favors of anybody. What a pride and joy it would be for all Worcester citizens if, passing some busy corner in Quinsigamond, South Worcester, or other active center, a stranger's eye should be caught by an attractive, low brick building bearing the legend: "Free Public Library; East Side Branch." Stepping in from the wintry chill to the genial warmth inside, the stranger would at once be made at home by a pleasant nod of welcome from the attendant on duty, who, seeing him to be unfamiliar with his surroundings, would take some pains to make him comfortable, and (if this is not too wild a leap of the imagination) would bid him join the semi-circle before the open fire. Fireplaces in libraries are common enough, though to see them performing their cheerful duty must be admitted a rarity.

Though a system of separate buildings owned and administered by the library would be highly desirable in a city as large as Worcester, such a scheme is not really essential for the beginnings of good work. At Brockton, for instance, much is accomplished in two branches, one in two connecting rooms over a barber-shop, and the other in a small store. These are open for at least portions of every day, including Sundays, and are well equipped with newspapers and magazines, and together cost the city less than $1500 annually. The yearly circulation from the two branches amounts to over 22,000. The presence of a branch library, whether in owned or rented quarters, serves admirably to show that the city is interested in bringing library facilities not only to the blue-stocking quarters, but also to districts particularly in need of them, and helps foster a general spirit of civic sympathy and community of interest.

In Boston's great system of twenty-seven branch libraries one may see an excellent adaptation of means to ends. Of all the twenty-seven, only one—that at Dorchester—is housed in a modern structure, erected specifically for purposes of a library. Particularly interesting are those called the "South End" and "West End" branches, respectively. Here unused church buildings have been bought or rented by the city. With their spacious floor areas, high ceilings and long windows on both sides, furnishing ample natural light, they make ideally cool and airy reading-rooms for the summer season, and should be highly valued on that account, as they are situated in the heart of the crowded part of old Boston.

There are to-day but few separate branch buildings, designed as such, in operation in Massachusetts. One of the best may be seen at Indian Orchard, a suburb of Springfield. This ideal little building, erected with money given by Mr. Carnegie, at a cost of $16,000, was opened on March 26th of this year. Citizens of Worcester who are interested in the extension of the use of the library will desire to pay a visit to this thoroughly modern representative of the most useful form of library extension to-day.

Since in Worcester the relation of the Public Library to the public schools has always been close and cordial, owing to the splendid pioneer work of Mr. Green, it is possible that some disused room might be found in a school-building and equipped as a reading-room, with or without a circulating library. Better still, as a permanent feature, some new school-building might be erected, with one or two rooms designed for use as a branch of the Public Library. If the city should hesitate to spend $20,000 for a separate branch library building, the Council might see its way clear to make this provision for the library in a school-house whose construction was already determined on. From the library's standpoint, the advantages to be thus obtained for work with the children are quite obvious. For Worcester, however, special branch buildings must ultimately be provided.

A branch library system, however, would not lead to the abolition of all deposit and delivery stations. If money could be had to buy the necessary books, the library would be glad to open deposit stations at many more of our great industrial concerns—shops, mills, factories, and larger stores—wherever, in fact, large numbers of men and women come together daily, and have at least a few spare minutes of time, either for reading a little every day at the noon hour, or for selecting books to be taken home and read at leisure. The requirements for the successful operation of the deposit station are first the collection of twenty-five, fifty or one hundred good books. The store or factory receiving them provides a locked case (which costs very little) and an employee to arrange, presumably during the noon hour, for the distribution and exchange of the books. In the matter of keeping records the library aims at the utmost simplicity consistent with security. The demands made upon the employee in charge of the books are the very lightest.

The privileges to be enjoyed from free libraries are understood only vaguely by the community as a whole, so that if the directors were able to equip twenty-five branch buildings in Worcester to-morrow, it would still be desirable to maintain deposit stations in various sections, to bring to the direct notice of people books which perhaps they would never read unless almost thrust into their hands by some such agency.

Within the library itself the question of book-room is becoming a serious one, and each year more pressing. In the circulating department particularly this need is felt, as here the opportunities for any considerable growth are practically exhausted. The stacks, too, are antiquated, and not adapted for free access to shelves. Such access is a prerogative dearly valued by those who are accustomed to it, and one not lightly to be denied. For an exhaustive examination of the resources of the library on some special subject, the card catalogue is the most useful aid, but for the student who wishes to select two or three good manuals on American literature or electricity or United States history or socialism, the catalogue is cumbersome and an intolerable bore. By going to the shelves the student can run quickly over the titles, passing by at a glance what is out of date or otherwise undesirable, and readily choosing an armful of books to take back to a table and subject to a more thorough examination. The writer shares with many citizens an earnest hope that in the Worcester library of to-morrow its patrons will have the privilege of inspecting books in the circulating library in light, comfortable and convenient book-stacks, where the true book-lover can wander at will among his favorite friends, enriching his mind by making new acquaintances, and revisiting the old ones with new delight.

One class which should be particularly favored in the matter of free admission to stacks is that of the inventor, artisan and mechanic, who come to the library for help in devising machinery to lighten man's labor, or to study systematically matters connected with their special trade or handicraft. An "industrial arts" room, such as exists in some of the larger cities, would enjoy great popularity in a city of such important and diversified manufacturing interests as Worcester. In this room would be found the library's invaluable set of drawings and specifications from the United States Patent Office (the ladies in whose reading-room they now have to be kept would probably consent to spare them), the Scientific American, and files of technical periodicals in electrical and other departments of engineering, agriculture, building, and the applications of science to industry. Thither would be transferred also the literature of the library on the useful arts, including such valuable sets as the "International Library of Technology," the various encyclopedias of engineering, machine-shop practice, etc., with facilities for draughtsmen and other students to work within the building. The assistant in charge of this room should have some knowledge of technical literature, and be well versed in its sources.

Another phase of our work which deserves encouragement, and whose development is entirely in accordance with the traditions of this library, is the use and enlargement of the teachers' collection. The children's librarian has now reserved in an alcove several hundred volumes of value to teachers. These include the books of supplementary reading in the schools, texts on methods of teaching arithmetic, geography, etc., some gift books for children, specially illustrated standard books, like "Pilgrim's Progress" and "Robinson Crusoe," with a few picture books in French and German by the best illustrators. A fully developed teachers' collection may be made the means of a liberal education in itself, if money enough can be found to enrich it properly.

PUBLIC LIBRARY—CIRCULATING DEPARTMENT.

A room for the blind, containing our three hundred or more books in raised type, and comfortably fitted up for reading and conversation, would form a welcome addition to our ideal building. Perhaps a music room, containing a piano and a large collection of sheet music, might be arranged in connection with the blind room. Music teachers and pupils would have an opportunity to come to the library to try new selections, and might occasionally give concerts for the blind. At the Library of Congress great pains are taken to induce blind persons to make use of the facilities afforded them. A list of all the blind known to the authorities is kept, and every week readings or concerts are given. A systematic attempt is made to have the blind persons called for and escorted to and from the library. Some of the most distinguished opera singers have volunteered their talents for the benefit of these unfortunates.

If the element of life and activity seems to be lacking in this description of one of our great municipal institutions, let the interested sceptic pay the library a visit toward the end of a winter's afternoon. Mounting the steps of the old building, let him enter first the waiting-room of the circulating library. Here he will perhaps find two groups seated at the tables, selecting titles from the card catalogue; a row of fifteen or twenty in front of the open shelves, choosing a story, a biography or book of travel for Sunday reading; three or four standing at the registration desk, and fifteen more seated, waiting for their books to be brought from the stacks. A glance to the rear of the room shows a small group looking over opera scores at the music shelves.

Passing to the magazine-room he will find, if it be Saturday, every one of the fifty seats occupied, but if he will stay a moment, the attendant will bring him an extra chair; from his seat he can look into the ladies' reading-room, also well filled; two patent attorneys are examining "specifications" at the round table. Taking a peep next at the children's room, he may notice several groups of boys and girls reading at the round tables; others before open shelves and at the registration desk as in the adult room below. A favored few are roaming along the banks of the Nile or climbing the Matterhorn, under guidance of the marvelous Underwood stereographs; others gaze with interest at the familiar face of William Wordsworth in the "daffodil bulletin"; three little fellows from the east side are admiring the skilled workmanship shown in the observation bee-hive. Two more, proving their superiority to Archimedes, have found a place to stand from which they are able to move the world, and display their knowledge of applied physics upon the revolving globe.

The reference department will show our visitor perhaps forty students at work. Many of them will be high school boys and girls busy at their supplementary school work or preparation of debates. Two or three genealogists, with volumes of the New England Register, will certainly be seen; a young man with Pergande's manual, preparing for the civil service; an art student looking over designs in the "Dekorative Vorbilder," and many others. On the floor above may be found a Clark student and Tech. professor engaged with many books on a prolonged investigation, and on the upper floor twenty-five persons attending the exhibition of large photographs from masters of the Italian school. On the lower floor the newspaper room has its usual thirty or forty men, some of them reading home news from many countries of Europe.

The unprejudiced citizen who comes thus and inspects in its every-day garb, without attempt at parade, the many activities of the Public Library, will go away persuaded that it is an institution deserving heartiest support in its effort to carry out the avowed aim of our American Library Association: "To provide the best reading, for the greatest number, at the least cost."

PUBLIC LIBRARY—CHILDREN'S DEPARTMENT.

The Story of the Annual Banquet of 1909

Timely Themes Treated by Representatives of the City, State and Nation

THE annual banquet of the Worcester Board of Trade Thursday evening, April 22, in Mechanics Hall, was epochal in many ways. The attendance, 629, was the largest in the history of the organization and taxed the capacity of the hall to the utmost. The speaking was all of the highest order and the oration of Hon. Duncan E. McKinlay, on the so-called yellow peril, was the most informing, luminous and thought-creating presentation of that subject ever vouchsafed a New England audience. Mr. McKinlay's facts were gathered at first hand and he showed himself a thorough master of his subject. If the orient is to conquer the occident commercially as it did Russia martially, it will certainly not have an easy victory with a statesman of Mr. McKinlay's calibre on the firing-line. The manufacturers and merchants of Worcester present who had expected to hear Hon. A. B. Cummings, United States Senator from Iowa, felt that in his absence the committee in charge of the banquet had provided a speaker of the first class, and one who delivered an impressive message in a most logical, convincing and brilliant manner.

The superb ovation given Mayor Logan when he arose to speak testified the universal love and admiration that this community has for its official head, and the applause that greeted his words showed how close to the heart of every man present is the theory of industrial training and the desire that Worcester shall at once provide herself with a school where it can be taught. Governor Draper's practical solution of the distressful railroad situation in this State, with its consequent menace to our commercial interests through the Boston & Maine control falling into hands indifferent if not antagonistic to Massachusetts' welfare, aroused intense enthusiasm, and the scholarly, patriotic and eloquent address of Congressman Washburn was in his very best vein.

A reception was held in Washburn Hall prior to the banquet, at which hundreds of Worcester men met the distinguished guests of the evening and extended the greetings of the Heart of the Commonwealth to the eminent Californian who had come amongst us.

Mechanics Hall was artistically and patriotically adorned and the tables were laden with great bunches of crimson ramblers and bouquets of tulips and other spring flowers. The Glee Club was never in better voice and the instrumental music by the Light Infantry Orchestra was of the most inspiring type.

The speakers had a most responsive audience, the galleries containing the families and friends of the members, and both gallery and floor vied in testifying their appreciation of the intellectual feast offered them.

The banquet itself was served by A. A. Brigham in his accustomed competent manner.

President George F. Brooks presided and acted as toastmaster, and in opening said:

THE TOASTMASTER.

Honored Guests, Ladies and Gentlemen, Members of the Worcester Board of Trade: We are assembled to-night to mark the rounding out of another year, and I desire at this time to take the opportunity to thank the Hon. Mr. Washburn, Ex-president Booth and Vice-president Marble for their labors in arranging the programme for the evening. I shall not go into the detail of the labor necessary to arrange for the annual banquet of the Worcester Board of Trade. Some of you will recall that last year His Honor the Mayor was unable to be present and respond to what I have been given to understand was the most flattering introduction any mayor ever received. Fortunately for us, however, we have with us to-night the same Mayor, and while my introduction may be less flowery, it is, nevertheless, as hearty and sincere. It is unnecessary for me to take another moment in presenting to you a man whose record and worth are so well known as the Hon. James Logan's. I therefore take great pleasure in presenting to you His Honor Mayor James Logan, who will speak for the city of Worcester. (Loud applause.)

HONORABLE JAMES LOGAN, MAYOR.

Mr. President, Members of the Board of Trade, Ladies and Gentlemen: Any man might feel deeply moved by such a cordial reception as you have been pleased to give

the Mayor. I deeply appreciate it. I am endeavoring to serve the city as best I may, giving to it the best I have in me. I wanted to-night to speak on an important subject, and in order that I might not wander, that I might not say, as our good friend Washburn says when he goes to church, that I have said those things that I ought not to have said, and I have left unsaid those things that I ought to have said, and there is no health in me, I have thought best to put it on paper, in order that I might hold to the text and keep inside the time limit.

When last year we met in this hall the dark clouds of business depression had settled over the industrial activities of the land, and we were facing the future with many misgivings, but the sunlight of business activity has broken through the clouds of depression, again the wheels of industry are beginning to revolve, once more the streams of humanity flow from our factory doors, and with the bright rainbow of commercial and industrial promise in the heavens, we look into the future with expectation and hope.

Thirty-two years ago on Jan. 30, 1877, the Worcester Board of Trade dedicated its new rooms, and of the twenty-nine men whose names appear on the invitation as officers, reception committee and invited guests, all but one have finished their work and crossed the great divide, Mr. J. Brainerd Hall, the Secretary of the Board, being the sole survivor.

I refer to this fact to give point to the thought that in thirty-two short years the burden of commercial, industrial, educational and municipal administration will have been laid aside by the men who are here to-night, and the boys of to-day will be carrying the burden, but as the men of 1877 laid foundations which made possible the Worcester of 1909, so the men of to-day are to determine what the Worcester of 1940 is to be. It will be just what the men in this hall to-night decide to make it. Your decision may be negative to do nothing to help it, but that will be your decision just the same.

For a great many years at these gatherings we have dilated on the diversified industries of the city. We have thrown bouquets to the men who laid broad and deep the foundations upon which men of this generation have been permitted to build the Worcester that now is, but if your great-grandfather sleeping in Rural Cemetery gives you your only right to be recognized as a force in the city of Worcester, then God help Worcester, and she needs divine help.

A man to-day is not judged so much by pedigree as by performance.

To-night I am going to take it for granted that the past is secure, but we cannot grow on the glories or achievements of the past, and with your permission I want to turn your thought toward the future.

GEORGE F. BROOKS,
Toastmaster.

What gave Worcester her place in the days that we delight to hark to? Two words answer the question, *team work*.

The men of Worcester organized to do large things for Worcester, and they worked together to bring things to pass. We need to-day the spirit which built this beautiful hall in which we gather to-night.

We need a vision of larger things, some large undertaking, to bring us together for a common good and then knit us into a working unit to make the vision a reality, and one of the things to do that is right here, if we can but see it.

Worcester is known throughout the length and breadth of this land as the home of the skilled mechanic, the high grade workman, whose handiwork, like the roll of Great Britain's drum, has followed the rising sun 'round the world, but she cannot maintain her position if she follows the methods of the past.

Modern methods have abolished the idea that men must be mere machines. In industry as in war, the officers no longer are able to control their men as formerly, because the fighting formation covers so much more ground and therefore the men in the ranks must have a higher standard of industrial intelligence, while among the staff and line officers, intelligence, self-reliance and the power of leadership must be on a proportionately higher level.

The industrial battle of the future is not to be won by the skill of the captain of industry alone; the plan of campaign may be his, but the results are to be wrought out by the line officers and men in the ranks.

If Worcester is to win in the industrial battle, she must strengthen her lines of defense; she must present a solid front, and her men and boys must go into the fight with the best equipment that can be furnished.

The next great step in industry is to be in the training of men. Prof. Louis Duncan said in 1903: "In the industrial battle being fought between nations, the most important weapon is an intelligent man technically educated." And he then added: "This has been recognized in Germany for about twenty years and in the United States for about fifteen years."

Here is a man, probably one of the brightest men in this country, who says that the man as an important weapon in the industrial conflict is but just beginning to be recognized in the United States.

During the past forty years we have spent much time and large sums of money on machinery, and standardizing methods have reached a high state of development, but we have largely neglected the most important factor, the workman. We can never standardize men; the personal equation will always be the controlling factor.

Now to the main point. In educational matters, if we are to hold our place in the onward march of industrial

progress, we must face the future with an open mind, and we must work together as a unit for Worcester.

Too long the trend of education has been away from the shop. The present generation does not seem to realize that it was the shop that has given to Worcester its proud place in the Commonwealth.

To meet the new industrial conditions there must be an entirely new type of both instruction and instructors. The object of this new type of instruction must be to train the youth, both boy and girl, to work, never losing sight of this one great fact—that bread, shelter and clothing constitute the main business for the great mass of mankind.

We must train the youth toward the shop rather than away from it, as we have been doing for years. We must root out the false notion that working at a trade is a social handicap or barrier.

To be effective, and to render the largest service in the production of efficient men and women, we must have a shop with a school attachment, rather than a school with a shop attachment, where they play with machinery. It must be a real shop permeated with the atmosphere of work and business.

Education, to be of any real value, must aim at usefulness and efficiency, and in striving to attain these men learn the joy of clear thinking and doing, and they begin to love work for work's sake, and the foundations of real culture have been securely laid.

Culture is the by-product of education, and wherever you find the man who starts out with simply culture as the goal to be striven for, too often you find the man who has to be carried.

Yours Sincerely
C. G. Washburn

The great educational movement in Germany during the past thirty years was not started primarily with the thought that Germany was to distance other nations in the industrial race. The movement started with the thought of bettering the conditions of the workmen, and Germany, by getting industrial and commercial efficiency, has secured industrial and commercial supremacy as a by-product of her work.

The finished product of this new instruction must be a man of power rather than a man of polish, and rightly managed, as I feel sure this school will be under the able men who have rendered, and stand ready to render, a large service of time and thought which money cannot buy, it can and will produce men of both polish and power. That is what we want to do for Worcester; we want to better the conditions of our people by giving them an education second to none in the country, an education that will fit them for life's battle.

One of the most important questions in Worcester to-day is, shall we have that kind of instruction for our youth, so that Worcester shall not only hold her place in the line, but advance?

The answer to that question will be far-reaching in its results, both for our manufacturers and the fathers and mothers who have boys and girls who want the training which will fit them for lives of greater usefulness.

There are those who object to the location of the site which has been selected, and their objection is entitled to consideration, provided always that their objections are sound, but not otherwise.

We need to remember that the Commonwealth is to pay one-half the cost of maintenance, and that the State Industrial Commission must also approve the site before the matter is definitely settled.

The Commonwealth is wisely planning to expend large sums of money for industrial education to develop efficiency in our workmen, and of the money expended by the Commonwealth Worcester will have to pay her proportion of the State tax, and she wants to get into the game early and not repeat the blunder that has been made in the matter of State highways, where the city of Worcester has paid 44% of the cost of construction and maintenance in Worcester County, while she has been given a little over 3% of the mileage.

We don't want to be asleep at the switch in the matter of industrial education.

One of the objections is that the site is not large enough, even though this site has 31,000 square feet more than the Classical High School, 36,000 square feet more than the English High School, and 15,000 square feet more than the South High School.

Some say they want the plant started so it can expand; that is no new idea; every thinking man wants that.

Some object because they think it is not large enough to accommodate at once all the boys who will want that type of instruction.

They point to our large educational institutions and industries which have expanded, but not one of them started on the line these objectors advocate, but every one of them started exactly as it is planned to have this start.

In my opinion, if we want to make it a failure, follow the lead of men who would start a great unwieldy organization to try the experiment on an enormous scale, and thus invite a colossal failure.

The men behind this movement who will give to it direction are the very men who started small industries in Worcester, and who know how to start them right, and having started them right they know how to make them grow strong and healthy, and when this site has been fully developed it will accommodate not less than twelve hundred boys, which is almost twice as many students as there were last year in any one of the three high schools.

If this school is a success, as I have not a particle of doubt that it will be, other schools of like character will be established when needed in different parts of the city exactly as we have established other high schools.

Some object because provision is not yet made for the girls, but it won't help the girls to hold back from making a beginning for the boys, and industrial education for the girls will follow as surely as daylight follows darkness.

The real question is not "where shall the school be located?" but "shall we have a school and start it now?"

Shall our youth be deprived of the education which will fit them for their life work while men play politics?

We need a vision of the future large enough to recognize and study the needs of Worcester as a whole, a vision which extends beyond ward lines. What we want to do, and do now, is to "play ball," not for individual records, but for the Worcester team.

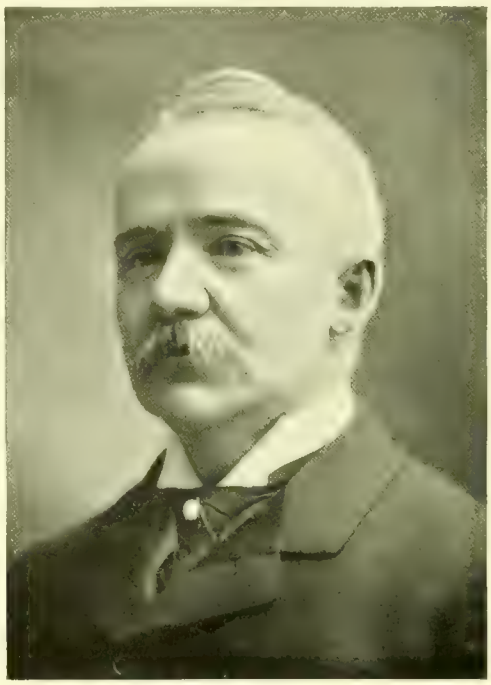
A great many cities in the United States spend large sums of money to advertise their cities. Some of it is wisely and some unwisely spent. Might I suggest that this Board of Trade, representing the initiative of Worcester, should stand behind this movement for industrial education.

This, to my mind, is the next great move for Worcester; this will unite us for a common good, and when this education shall have been provided, our young men and women will go out from Worcester into the great world of industry, strong, able, capable men and women, each one bearing the hallmark of efficiency, "*Educated in Worcester.*"

The Toastmaster: We shall now be favored by a selection by the Glee Club entitled "A Continuous Performance."

Following the song Mr. Brooks said: I am not sure but that all of you would be in the same box as I was placed in just a few moments ago when asked a question by Representative McKinlay, if I should ask you some questions in regard to Worcester County, and so I will put them in the form of a statement instead of asking you.

It may be known to you that Worcester County contains fifty-nine cities and towns, having the largest number of any county in the State. Perhaps you also know that since 1780, when the Constitution was adopted, Worcester County has had five governors. They were taken from Worcester County. Two of them were from Worcester: Governor Levi Lincoln, from 1825 to 1834; Alexander H. Bullock, from 1866 to 1869. If I figure it right, that makes it just forty years ago. We have this year a Worcester County governor, from Hopedale, a manufacturer, a man of business, and when he was elected the first time as lieutenant-governor, why, they said no business man could be elected governor. Well, what did last November tell when the votes were counted after election? The largest vote of any governor for a long time, and he has broken his rule at the earnest solicitation of Ex-president Booth, and has come here to-night to say a few words to us, and after forty years we have a governor from Worcester County, and it is my great pleasure and honor to present to you at this time His Excellency Eben S. Draper, governor of Massachusetts. (Loud applause.)



MAYOR JAMES LOGAN.

HONORABLE EBEN S. DRAPER, GOVERNOR OF MASSACHUSETTS.

Mr. President, Your Honor, Ladies and Gentlemen: I confess that I did not realize the distinguished honor that has been done me by the citizens of the Commonwealth in making me the fifth governor from Worcester County. I sincerely hope, and I shall try to the best of my ability, to see that I do not bring reproach on the other four by comparison. (Applause.)

It is always a great pleasure for me to hear your Mayor speak. He always says something worth hearing, and he says it extremely well. (Applause.) I was very much pleased at one part of his speech, and I confess that if it had not been from such a reliable authority I should have doubted its accuracy. That Worcester in Worcester County ever pays more than its own share in the county is a great surprise to me. (Laughter.) And when I heard him say that they had contributed a great deal more than their share in taxes, considering the amount of State roads they had got, I was very glad to see they had not carried the principle in State roads that they have carried successfully in most offices. I live in a small town of the county, and while I did not know how many towns there were until to-night, I knew something about the political history of places.

One thing I wanted to say in all seriousness. I was interested in the admirable argument in favor of industrial schools that was made by the Mayor. I do not know that you are familiar with the fact that the ques-

tion of education I considered the principal topic of discussion in my inaugural when I was made Governor this winter, and to have a man of his experience and ability state the arguments in favor of industrial education as he has stated them here to you to-night has been to me a very pleasant feature of this meeting. I agree with every word that he said in that direction. The people of this State are with me in it, and we are going to make great strides in immediate features along that road, and it is going to be, in my opinion, of great benefit to the Commonwealth of Massachusetts. (Applause.)

I want to say just a few words of welcome to your distinguished guest from California. It is always a pleasure for the Governor of the Commonwealth to welcome distinguished men to Massachusetts, but it is doubly a pleasure to welcome them to the city of Worcester and to Worcester County. I am informed that to-morrow he is to spend some time in visiting some of your great manufacturing industries, and I am sure that he will go away with a very good impression of the city, and a great respect for what is accomplished here. I greet him most cordially. I hope his stay will be pleasant. I trust sincerely he will soon return and stay longer than he now can.

At this particular time we are all very much interested in what is taking place in Washington. I refer to the discussion of the tariff bill. I do not propose to talk politics in the slightest degree, but I do want to call your attention to one fact which is to me very impressive. I have lived through several revisions of the tariff, and never before have I seen so little upset to business when a tariff revision was going on as at the present time, and that shows distinctly that the people of this nation believe that whatever the details of that bill may be the result is not to be dangerous to the great industries of this nation. (Applause.)

There are many things in that bill which may not meet our entire approval. I am convinced that in its entirety it is fair to Massachusetts and to this section of the country. There is one feature of the bill which is being considered that I say frankly I am utterly opposed to, and that is the inheritance tax. That, it seems to me, is a tax that should be left to the State, for them to have the benefit of (applause), and I do not believe that it ought to be in the tariff bill. I realize that your distinguished Congressman from this city has publicly taken that position, and while the House has left it in the bill I trust and believe that when it comes out of the Senate that feature will be missing. (Applause.)

There is one other thing that I want to say in regard to that tariff bill. Your Mayor has spoken to you about the bright promise of business. I believe that to-day, as he said, business is looking much better, that is, than for many months past. We are improving in all directions. There is not any doubt about it, and with the passage of that bill, so that every great industry can know what it is to do in the future, what rates of duty it may govern itself by, I feel convinced, and I am not afraid to prophesy that we shall start on a career of business prosperity that is going to be great and lasting. (Applause.)

There is one matter in which the Commonwealth and its citizens are intensely interested, and that is the railroad question in the Commonwealth of Massachusetts. You are more or less familiar with it, all of you. I have within two days sent a special message to the Legislature dealing with this question, and I want to speak for just a few moments about it. You are all familiar with the troubles we have had in the last two or three years in regard to the regulation of railroads, the purchasing of the stock of electric railroads by a great steam railroad in this Commonwealth, and the resulting litigation which has followed. This litigation has been taken to the Supreme Court of the Commonwealth, and as you are very familiar, as you know very well, the Supreme Court has decided that as a matter of law all these electric railroads have been held unlawfully. I believe that I can state to you with authority that the ownership of those street railways is to be given up in accordance with the decision of the Supreme Court, and the great railroad who has owned them will bow, as it should bow, to the will of the Supreme Court of the Commonwealth of Massachusetts. (Applause.) They further had bought control of a very large amount of stock in the Boston & Maine Railroad, and after this decision of the Supreme Court they had disposed of this holding of stock.

It is generally supposed and believed to be held by men or corporations not in the Commonwealth of Massachusetts, and as a consequence of that condition that stock might at any time be purchased by a foreign railroad corporation or by some syndicate whose interests must not be entirely in New England or Massachusetts, but would naturally be first where their largest interests were in the great trunk lines of the country. It has seemed to me, and I am sure to the citizens of this Commonwealth, that that was a very undesirable position to occupy, and left us in a state of mind where we never knew from day to day what might happen.

I have recommended to the Legislature of Massachusetts within the last two days the formation of a Massachusetts company, which would have the right to purchase Boston & Maine stock, the stock in the Boston & Maine Railroad; that when that corporation should be formed it should be limited in its charter, so that the majority of its directors must be Massachusetts men, so that the office of the company must be in Massachusetts, the meetings held there, and further, that that stock so acquired by them could not be sold to any corporation or individual without the consent of the Commonwealth of Massachusetts. (Applause.)

I think I can say to you authoritatively that if the Legislature of the Commonwealth should decide in their wisdom to pass a law in line with the message that I have sent to them, that arrangement can be carried out, and that this great block of stock that is now hanging like a menace over the citizens of the Commonwealth can be purchased by the Massachusetts company, and I believe that will be the first step toward the solution of the railroad situation, which I say to you frankly to my mind has not been entirely satisfactory. I believe that after that has been done other things may be done in the future which will tend further to straighten out this situation, but I want to call your attention to this salient fact: that if this stock is purchased by this company, which will be a corporation of the Commonwealth, it cannot be disposed of without the consent of the Commonwealth, but it seems to me any improvements that may be desired by the railroads represented by that stock can go on without let or hindrance. It is a new principle in railroad legislation in my opinion in this State or nation, and the circumstances would not arise often where such a control of such a large block of stock could possibly be attained under such conditions. I believe it would be very much more for the interests of Massachusetts and New England to have this stock controlled by our own people than

by those outside, and in saying that I do not reflect on outsiders. I simply assume they are human, and if they are human their interests are going to be possibly somewhere else, while if the men of the company are located here, with all interests here, if no better but equally human, they are going to look out for Massachusetts and New England, and that is what we want. (Applause.)

I sincerely hope that the position I have taken in this matter will commend itself to the citizens of the Commonwealth, and that they will say that they are opinions well expressed, and I hope they will be favorable to the suggestion.

I assure you it has given me a great deal of pleasure to come here to-night, and, as your President has said, I have been out very little to meetings of any kind which have taken place in the evening, because I have discovered if a man undertakes to do the full work of the Governor of Massachusetts he has got quite enough to do to attend to what he has at the State House, without attempting to eat a splendid dinner every night, and attempting to talk about things of which he knows very little, but I am always glad to come to Worcester. I am proud of the fact that I am a Worcester County man, and feel honored more to-night than I have ever before since I have heard your President's description of the past governors in this county.

I thank you very much indeed for your kind attention, and I congratulate you, sirs, on the splendid meeting of the Worcester Board of Trade. (Loud applause.)

The Toastmaster then introduced

HONORABLE CHARLES G. WASHBURN.

He said: Mr. President, Your Excellency, Your Honor, Fellow Members of the Board of Trade, Ladies and Gentlemen: When His Honor the Mayor began his speech he ventured into the mysteries of the services of the Episcopal Church. I find no particular fault with his having misquoted it (laughter), because of his unfamiliarity with the subject. (Laughter.) I suggest to him that the next time he shall bring his prayer-book with him, and let me add that he will be most cordially received at any time into that church, and I want to say—and I speak from experience—that there are no better Episcopalians than those whose early training has been in the Congregational church. (Laughter and loud applause.)

I wish that I could attribute some small measure of your most kindly reception as an indication of approval of my public conduct. You know it has seemed to me that, as a rule, men in public life get very little commendation when they simply do their duty, but a great deal of reprobation when they do not. They are a good deal in the situation of that country boy of whom I heard the story told the other day, who, on a hot day, was hoeing potatoes in the field, and a gentleman driving by pulled his horse up by the side of the road and said: "My boy, what do you get for doing that?" The boy stopped hoeing, pulled off his old straw hat, wiped his forehead. Said he: "Nothing if I do it, and hell if I don't!" (Laughter and loud applause.) I hope the reporters will not take this down. I should not dare to tell the story on the eve of a political campaign. (Laughter.)

I congratulate the Board of Trade and the city of Worcester upon this magnificent meeting. If the Board of Trade accomplishes nothing else—and I know that it does vastly more—it would be well worth all the time and money expended in maintaining the organization to get together once a year all of the great forces so potent in making for the well being of this community. In this age of high specialization the individual finds little time to attend to any matters except those that are purely personal. But the patriotic citizen cannot forbear to give some of his time to the service of his city or town, of the state and of the nation. The local affairs appeal to him most strongly, because the nerve which runs to the pocketbook is more immediately affected by local taxation, and it is strange that when this is true our municipal governments should, on the whole, be more extravagant than the other two that I have mentioned. That, happily, is not true of our city of Worcester, whose chief magistrate here present, a man of high ideals and conspicuous ability, enters no field of human endeavor but to improve it.

We are all proud of the State of Massachusetts—one of the original thirteen, and now of the sisterhood of forty-six, which always has led in the best things; has had a conspicuous place in politics and in literature, and also has contributed largely to the material resources of the country. We are apt to speak of the great size of the United States. I sometimes wonder if we realize how great it is, and how relatively small this old Commonwealth, which we so dearly love. Let me make one comparison to indicate it. Massachusetts, as suggested here to-night, has something over 8000 square miles of territory, and a little lacking 3,000,000 of population. The eleven southern states once in rebellion have an area of upwards of 270,000 square miles, and a population of 19,000,000. And while in the forty years since 1860 Massachusetts has increased the annual amount of her manufactured products from something over $154,000,000 a year to something over $1,130,000,000, the eleven southern states to which I have referred have increased their product from something over $104,000,000 to over $940,000,000.

In a word, while the industrial resources of the South have increased nearly nine-fold, the little State of Massachusetts now produces annually $200,000,000 more than those eleven states combined. While this gives us gratifying assurance of our own accomplishments, it conveys also to us the suggestion that the industrial expansion of the South must still be enormous. In that I believe, your excellency, you will agree with me, and there will be no people more sympathetic in the advancement of that section of the country than ourselves.

Your excellency, in speaking of the Commonwealth I wish to congratulate you upon being the chief executive of a State which now leads, and always has led, in the great paths of human achievement, whose people have been scattered all over the nation, and who have leavened the whole lump of our national life. (Applause.)

I suppose that I am expected to say something upon national questions. I should be glad to speak at some length upon many national issues, but I share your impatience to hear the distinguished guest of the evening. I will, however, take advantage of this opportunity to say a single word, and to express a feeling which has often occurred to me of dissatisfaction with the fact that our national affairs are not brought more closely into the lives of the citizens of the United States, who, save in time of war, scarcely realize that they owe any allegiance to the national government.

The taxes are all indirect. They are paid by the people unconsciously, except perhaps in the heat of a politi-

cal campaign, when their attention is called to them. It is for that reason that I think our national affairs should be dwelt upon whenever the occasion offers. Our country has grown enormously, and as it has expanded in size by reason of the railroad and telegraph, its territory has grown smaller and smaller, until now, through the invention of the telephone for social and business purposes, this vast domain is now within the reach of the human voice. The boundaries of states are unknown to the flow and ebb of business. Most of our business is interstate, and as such under the control of Congress. The interstate commerce act of 1866, the Sherman anti-trust act of 1900, both passed for a good purpose, both affecting this mighty trade that flows over the whole country, have developed in their application certain defects which are likely soon to be remedied.

And does it occur to you that the great growth of the country has occurred within the last forty years? In 1860 the combined output of manufacturers throughout the whole United States is now equaled by the State of Pennsylvania in a single year. In 1860 we raised $56,000,000, the total amount of our revenue, $53,000,000, from imposts; in 1908, exclusive of the postal receipts, over $600,000,000, $285,000,000 from imposts, and the balance from internal revenue. And while our expenditures during that period, exclusive of expenditures for postal purposes, increased from $66,000,000 to nearly $700,000,000, the expenditure in proportion to the national wealth is no greater now than it was then, and, while there is need for the practice of economy in the management of our national finances, there is less reason than there is for the close scrutiny of the budget of the states and of the cities.

We are now undertaking in Congress to revise the tariff. This has been a burning political question since the foundation of the government. Indeed, it was because of the necessity for a central power, which should have the sole right to collect imposts, that the national government was organized. It was the tradesmen and the mechanics of Boston that compelled the adoption of the Constitution in the Massachusetts convention, and after it had been ratified by the states, processions in honor of that great event were seen all over the country bearing the inscription: "May the National Government Protect the Manufacturers of America."

Under the beneficent influence of a protective tariff we have become the first among the great nations of the world. We have occupied that position now for upwards of fifteen years. It is my belief that when that act now under consideration shall become a law, and not many weeks hence, business will revive and the volume of our revenues will increase.

And let me suggest to you that it is extremely difficult to anticipate what the amount of the revenue from any tariff bill may be. It was, I think in 1907, that a former treasurer of the United States called attention to the fact that the income for the fiscal year of 1907 exceeded the expenditures by $90,000,000. He urged that we should make a reduction of 13% in our tariff rates and in our internal revenue taxes, and predicted that in the following year we should have a surplus of $120,000,000. The panic which set in in October, 1907, turned the anticipated surplus of $120,000,000 into a deficit of $60,000,000.

I quote this statement to re-enforce my position, which is that Congress should impose no new tax until it has been demonstrated how much money will be raised under the new law after it is in operation.

Now let me say one word about the tariff on the lumber schedule. The Payne bill, when it came into the house, reduced the Dingley rates by one-half. A motion was made in the house to put lumber on the free list. I voted against it. The reduction was proposed for two reasons, either to benefit the consumer by giving him lower prices or to conserve our forests by enabling us more readily to draw upon the forests of Canada.

It seemed a fair proposition that free lumber would tend to the preservation of our forests, but expert opinion was different. The national forester, in a letter to the Ways and Means Committee, stated that in his opinion free lumber would hinder rather than aid forest preservation, because if the price of lumber were reduced it would tend to careless methods of foresters, and it was his belief that if lumber were placed upon the free list the Canadian owner of stumpage, and perhaps the American dealer, might get the advantage.

On that state of facts, as I understood them, I voted for the rates in the Payne bill, and I was not unmindful of the fact that while that matter might not be one in which my constituents were interested, there are over 1300 saw-mills in the State of Washington, employing upwards of 100,000 men and disbursing $75,000,000 of wages annually. Eliminating, then, the question of forest conservation, I saw no reason why that industry was not entitled to the protection that I demand for those in my own Congressional district. (Applause.)

We have just passed through a national election. It is an impressive spectacle to see a man who has occupied the position of the greatest ruler among the nations of the earth resume his place in the ranks of private citizens. It is still more impressive when that man, through deeds accomplished, has firmly entrenched himself in the confidence and affection of his countrymen. (Applause.) His successor, no less patriotic, no less high-minded, no less able, will, I believe, face his problems with courage, and decide them rightly, and hold aloft the torch of liberty among the nations of the world. (Applause.)

My friends, we are in a historic place. This temple, builded over fifty years ago, will be an enduring monument to the mechanics of Worcester. Here have been heard the great orators and statesmen of this period. Here have been discussed more important questions than any which have ever been considered since the nation was born. Here our people have gathered in times of joy and in times of sorrow, and with our churches, our educational institutions, our museums and our parks, give evidence of the generosity and public spirit of the generations which have passed away.

May we pass on to our children that magnificent heritage untarnished, and may I say enriched by the efforts of the men I see before me? (Applause.)

The masterly address by Hon. Duncan E. McKinlay which followed and which brought the banquet to a brilliant close will be found in another section of the Magazine.

Local April Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

The most noteworthy feature of the month is the pronounced confidence in the early revival of normal trade conditions. While universal satisfaction is not expressed in immediate conditions, the volume of sales in many branches shows a gradual expansion. There has been an increasing demand during the month for wire and wire specialties, and textile machinery plants report very satisfactory conditions, plants running on full time.

Worcester's importance as a corset manufacturing centre is fast developing, and plants are being steadily equipped for much larger outputs. Worcester manufacturers to-day are exporting more corsets than the total imports from all foreign countries and find the foreign demand steadily increasing.

Worcester bank clearings for March showed an increase of 18.8% over the corresponding month of last year.

Failures in the county for April numbered seventeen, with total liabilities of $453,787 and assets of $150,769. For the corresponding month of 1908 they showed the same in number, with liabilities of $488,293 and assets of $140,850, while in April, 1907, they numbered twelve, with liabilities of $298,591 and assets of $141,673, and April, 1906, with a total of seven, liabilities of $47,771 and assets of $6,710.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

E. W. Fletcher, Ice Creeper, No. 915,758.

An ice creeper composed of a metal heel-plate fastened to a toe-plate by adjustable links, removable spurs being set in both toe and heel plates, and straps provided to fasten the plates to the shoe.

H. D. Sargent, Buckle, No. 915,798.

A suspender buckle provided with a resilient portion interposed between the points of attachment of the buckle.

W. H. Sheppard, Counter Controlling Mechanisms, No. 916,042.

A counting device especially adapted for use in an envelope printing machine. The device is provided with means whereby it does not register unless an envelope is fed to the machine.

J. R. Ba[illegible] J. Mercatile, Speed Change Gearing for Lathes, No. 916,525.

A gearing for transmitting power from the head spindle of a lathe to the feed rod thereof. A train of gearing is arranged in a gear frame which is fixedly secured in position, preferably to the under side of the bed, and which extends partly into the leg. Journaled in the frame is a shaft which projects outside of the leg, and which carries a series of gears, and is arranged so that power can be imparted from any one of these gears to the feed shaft of the machine.

A. C. Higgins, Treating Aluminous Materials, No. 916,866.

The method of making an abrasive, which consists in fusing an oxide of aluminum, chilling the fused product in the furnace into a pig or mass, and crushing the mass.

F. O. Woodland, Label Supply Mechanism, No. 917,509.

A label supply mechanism comprising a label holder, glue-carrying pickers that take labels adhesively from the pack, and prongs that peel off or roll up portions of the glued label from the glued picker-face as it leaves the pack of labels.

Current Events

Personal and General City Happenings.

April 1. Veteran Odd Fellows have annual banquet at State Mutual restaurant.

George R. Stobbs, law partner of District Attorney George S. Taft, appointed special justice of Central District Court vice Hollis W. Cobb incapacitated by illness from service.

Receipts from stamp sales at the Worcester Post-office for March, $34,801.64. Receipts corresponding month last year, $32,288.66. Gain for 1909, $2,512.98.

4. Rev. George F. Haines, pastor of Second Advent Church, resigns after seven years' pastorate to return to Chelsea, his former charge.

5. W. A. Lytle elected Lieutenant-colonel of the Worcester Continentals; Major, Charles S. Holden; Captain A Company, Warren E. Tarbell; First Lieutenant, Alfred M. Van Dusen; Captain B Company, Charles S. Longley; First Lieutenant, George N. Jeppson; Captain C Company, Harry L. Hastings; First Lieutenant, Frank L. Coes; Captain D Company, Frank D. Freeman; First Lieutenant, Henry A. Leslie.

6. Joseph M. Sharry re-elected President of the Washington Club.

7. Rev. J. E. Charlton of Newton Highlands assigned to Grace Methodist Church by Methodist Conference.

9. George F. Hicock of New York, vice-president of the Radio Telephone Company, speaks before the Commonwealth Club on wireless telegraphy and wireless telephony.

Mayor James Logan cables Worcester's congratulations to Gen. William Booth, head of Salvation Army, on completion of his 80th birthday.

Hahnemann Hospital Trustees vote that the Treasurer, Dr. George A. Slocomb, give a bond of $10,000.

One hundred and one tourists leave for Washington on Healy's first spring tour from Worcester.

11. Worcester County Commandery, K. T., attends Easter services at All Souls' Church.

Adams Square Baptist Church wipes out deficit of $500 in church finances.

15-16. Successful dog show in Mechanics Hall. Large number of classes and particularly fine exhibit of collies.

16. At a meeting of the Hahnemann Hospital stockholders $5000 is raised for the institution.

20. Annual meeting of Worcester Board of Trade. E. M. Woodward, Marcus L. Foster, Arthur W. Parmelee, Louis H. Buckley and Arthur C. Comins elected Directors. William H. Sanford, clerk; Albert L. Stratton, treasurer; H. Ward Bates, auditor, and the following membership committee: E. Bruce Dunn, Mark F. Cosgrove, Gustaf A. Berg, Benjamin B. Snow and Hartley W. Bartlett.

At annual meeting of Worcester Art Museum, Rev. Dr. Daniel Merriman re-elected president; Francis H. Dewey, vice-president; T. Hovey Gage, Jr., clerk; Lincoln N. Kinnicutt, treasurer, and the above with Lyman A. Ely, George E. Francis, Mrs. Helen B. Merriman, Nathaniel Paine, Miss Frances M. Lincoln, Rev. Dr. Austin S. Garver, Mrs. Charlotte E. W. Buffington and Frederick S. Pratt are the Trustees. The report of the Treasurer showed that the Museum owns property amounting to $3,387,559.84.

22. Annual banquet of the Worcester Board of Trade at Mechanics Hall. Addresses by Hon. Duncan McKinlay of

California, Hon. Charles G. Washburn, Hon. James Logan and Hon. Eben S. Draper. Covers laid for 629, largest number in the history of the organization.

The will of Josiah H. Heywood leaves $2000 to Trustees of Memorial Hospital, $1000 to Trustees of Home for Aged Women and $500 to Worcester Children's Friend Society.

23. Mrs. Anne Wells Munger resigns as President of the Art Students' Club.

City Affairs.

April 6. Supt. H. P. Lewis recommends open air, disciplinary and additional night schools in his report to the School Committee. It is voted inexpedient to publish records of applicants for teachers' positions.

Teachers' pay roll for 300 teachers who desire their remuneration weekly made up for first time by City Treasurer DeWitt Clinton.

9. Sub committee on private schools and truancy of school committee license thirty newsboys.

16. Worcester has 2,045,000,000 gallons of water in storage

17. Forty-four Worcester druggists make application for sixth class licenses.

21. City Auditor Frank E. Williamson announces gross city debt of $9,694,392.96 and net debt of $5,822,763.69.

28. License Commission grants one sixth class druggist's license to Duane B. Williams for the city of Worcester.

Dr. Thomas Howell, retiring superintendent of Worcester City Hospital, given farewell banquet by his colleagues and medical fraternity of city.

Building and Business News.

April 5. Pliny W. Wood buys property and plant of Worcester Lumber Company, 11 Gardner Street, paying therefor $50,000. Business to be conducted hereafter as P. W. Wood Lumber Company.

6. Walker Armington transfers 74,756 square feet of lands and buildings in Worcester to the Walker Armington Real Estate Trust, capitalized at $125,000, Mr. Armington retaining 1247 of the 1250 shares.

Hygeia Brush Company organized with capital of $20,000 to make toilet brushes at 554 Main Street. Frederick W. Mark president and treasurer, Augustus F. Timme clerk and manager.

7. W. E. Buck re-elected President and Treasurer of Manufacturers Mutual Insurance Company, and Charles S. Baker secretary.

12. Worcester Trust Company re-elects William D. Luey president and chooses its other officers as follows: Vice-presidents, Hon. Henry A. Marsh, Nathaniel Paine and Henry P. Murray; Treasurer, Samuel H. Clary; Secretary, Alvin J. Daniels; Directors, Charles S. Barton, George F. Blake, A. George Bullock, John H. Coes, Alexander DeWitt, Thomas B. Eaton, William Endicott, Jr., Henry F. Harris, Charles H. Hutchins, Lincoln S. Kinnicutt, Edwin T. Marble, J. Russel Marble, A. W. Parmelee, Neal Rantoul, William H. Sawyer, Frank Bulkeley Smith, Charles M. Thayer, Robert M. Washburn, Geo. W. Wells, M. J. Whittall, G. Marston Whitin, Robert Winsor and A. O. Young.

21. Norcross Brothers Company, lowest bidders for new Portland, Me., city hall, to cost $479,000.

23. United States Envelope Company Directors vote to declare a special dividend of $1.75 per share to stockholders on record April 24.

28. Mortgage Security & Finance Company, organized Feb. 17, chooses these officers: President, Augustus W. Bowers, New Haven; Vice-president, Charles F. Finne; Secretary, Carl H. L. Bock; Treasurer, Richard Anderson; Directors, C. H. L. Bock, P. C. Kaner, O. Messler, Richard Anderson, N. A. Pearson, Philip G. Bowers, North Grafton, and A. W. Bowers, New Haven.

Worcester Necrology.

April 1. In Singapore, Siam, Miss Dorothy Lincoln, daughter of Mr. and Mrs. Waldo Lincoln.

6. Joseph Addison Knight, president Graton & Knight Mfg. Co., dies at his home, 810 Main Street, of apoplexy, aged 80 years.

9. Deacon Simeon N. Story of the First Baptist Church, a member of the Baptist denomination since 1831, dies at his home, 14 Oxford Street, of old age, aged 92 years 2 months and 16 days.

Edward M. Johnson, for sixteen years foreman at Graton & Knight Mfg. Co.'s, dies at his home, 28 Chandler Street, of Bright's disease, aged 54 years.

11. George L. Sanford, president of the Sanford-Putnam Company, stationers, 310 Main Street, dies at his home, 15 Schussler Road, of acute dilation of the heart, aged 71 years 2 months 23 days.

12. Samuel Eli Bullard, a locomotive engineer in the employ of the Boston & Maine R. R., dies at his home, 97 West Boylston Street, of pneumonia, aged 40 years 5 months and 3 days.

14. Thomas Goddard Kent, for many years a leading member of the Worcester County Bar, dies at his home in Waverley, aged 79 years 4 months and 2 days.

19. Dr. John E. W. Sanderson of New York, formerly of Worcester, dies there aged 49 years.

Worcester Quotations

(Reported by Kinsley & Adams).

BANKS.

	Bid.	Asked
Worcester National Bank	195	.....
Mechanics National Bank	120	.....
Worcester Trust Co.	250	.....
Merchants National Bank	158	.....
Millbury National Bank	75	.....
First National Bank, Webster	115	.....
Fitchburg National Bank	150	.....

ELECTRIC ROADS.

Boston & Worc. St. Ry. Co. 4½ per cent. bonds	97½	....
Worc. & Southbridge St. Ry. Co. 4½ p. c. bonds	90	.....
Worcester Consolidated 4½ per cent. bonds	.....	.....
New England Invest. & Security Co. pref. stock	78	85
Worcester Rys. & Investment Co. stock	.....	.....
Worc. Consolidated St. Ry. Co. 5 p. c. bonds	100	105
Worcester & Marlboro St. Ry. 5 per cent. bonds	98	.....
Worc. & Webster St. Ry. Co. 5 p. c. bonds	.....	.....

MISCELLANEOUS.

Norwich & Worcester R. R. Co. preferred stock	205	.....
Providence & Worcester R. R. Co. stock	270	.....
Worc., Nashua & Rochester R. R. Co. stock	143	.....
Worcester Gas Light Co. stock	250	.....
Worcester Electric Light Co. stock	245	.....
Crompton & Knowles Loom Works pref. stock	140	.....
Graton & Knight Mfg. Co. common stock	110	.....
Graton & Knight Mfg. Co. preferred stock	110	.....
Royal Worcester Corset Co. stock	.....	.....
Wright Wire Co. common stock	100	.....
Wright Wire Co. preferred stock	100	.....
United States Envelope Co. common stock	36	37
United States Envelope Co. preferred stock	104	107
United States Envelope Co. 5 per cent. bonds	99	.....
Norcross properties 6 per cent. bonds	.....	.....

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

Officers.

President, CHARLES T. TATMAN. *Vice-President*, EDWARD M. WOODWARD.
Secretary, JOHN L. SEWALL. *Treasurer*, ALBERT L. STRATTON.

Directors

FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
CLARENCE W. HOBBS, JOHN J. POWER, HERBERT H. FAIRBANKS,
JOHN W. HIGGINS, EDWARD J. CROSS, WILLIAM WOODWARD,
WINTHROP HAMMOND, DR. THOMAS HOWELL, LOUIS H. BUCKLEY,
WILLIAM FORSBERG, CHARLES T. TATMAN, ARTHUR C. COMINS,
VICTOR E. EDWARDS, CHARLES L. GATES, MARCUS L. FOSTER,
ARTHUR W. PARMELEE, EDWARD M. WOODWARD.

Clerk of the Corporation, WILLIAM H. SANFORD. *Auditor*, H. WARD BATES

The Annual Meeting

The annual meeting of the Board was held in the Board of Trade Hall on Tuesday evening, April 20, with an unusually large attendance. President George F. Brooks presided, and Mr. Dana M. Dustan was elected clerk pro tem. The following officers were elected for the ensuing year: Clerk, William H. Sanford; Treasurer, Albert L. Stratton; Auditor, H. Ward Bates; Directors, Louis H. Buckley, Arthur C. Comins, Marcus L. Foster, Arthur W. Parmelee, Edward M. Woodward.

At a meeting of the Directors, held Thursday evening, April 29, Chas. T. Tatman, Esq., was chosen president, Edward M. Woodward, vice-president, and John L. Sewall, secretary.

The annual reports of officers and committees follow:

CHARLES T. TATMAN, President

Report of the President.

To the Members of the Worcester Board of Trade.

In submitting my report for year 1908-9, I find it somewhat difficult to put upon paper the activities which the Board of Directors have undertaken during this period that will not be fully covered in either the report of the Secretary or in the reports of committees.

I believe all committees to whom any matter has been referred have given prompt and careful consideration to it.

The Committee on Membership should be especially mentioned for their zeal and energy in pushing the campaign for a large membership.

The Committee on Meetings and Receptions has provided excellent smoke-talk entertainments.

The Committee on New Enterprises had a somewhat difficult task in wrestling with the question of financing new enterprises, and their report, which was made to the Directors two months ago, is still before them. Whether Worcester is ready for such a plan is a question; other cities are trying it.

The Committee on By-laws has been active and it submits a report to-night for your consideration.

The question of waiting stations for passengers on the electric street railroads has just come to the front; having been called to our special attention by a petition signed by Herbert L. Adams and others, and a hearing is to be given to all interested parties on Saturday, May 1st, at 10.00 a.m., by the Railroad Commissioners. It is expected before that time that concerted action will have been taken by parties interested so that a well-defined plan can be presented.

The question of differential freight rates was brought to our attention at the April board meeting and a committee was appointed to attend the hearing in Boston on April 13, 1909.

Invitations were received and accepted from the Worcester County Mechanics Association, the Worcester Merchants Association, the Builders' Exchange, and the Metal Trades Association to attend their annual banquets. Also received an invitation to the concert and ball of the Worcester Letter Carriers' Association for April 21st.

The Publication Committee will probably report fully in regard to the publishing of the Magazine, and if the first aim of a board of trade is to have a high class magazine, Worcester Board of Trade certainly has it. There is a question, however, whether so much energy and time should be given to a magazine, but if it brings the results desired, it should be continued.

We expect the largest banquet in the history of the Board of Trade will take place next Thursday evening in Mechanics Hall, and I hope just so far as it is possible that every one will be on hand, that the banquet and speaking may begin and end on schedule time.

I desire to thank the members, and especially the Board of Directors and secretaries, for their help and suggestions, and I wish you success in all your future planning.

GEORGE F. BROOKS,
President.

Secretary's Report.

The Secretary would respectfully report to the members of the Board of Trade that he entered upon his work on the first day of last July; and with the exception of two absences as authorized by the Directors, he has given his continuous atten

tion to them. As the Directors were aware when they invited him to this position, these duties were wholly new to him, and he has been obliged to tax somewhat their patience and forbearance while becoming familiar with details.

In any attempt to report to this corporation the way in which the Secretary's time and strength have been employed by the Directors, the first mention may properly be made of the claims of the Worcester Magazine. A year ago last January the enlargement of this periodical was deemed wise by the Directors. Before the new venture was fairly established upon a paying basis the responsibility for it was placed upon the present Secretary; a responsibility which included not merely its editorial management, but also supervising the profitable financial conduct of the Magazine, a matter in which he was wholly without experience.

When the regular activities of the Secretary's office became more numerous in the autumn, the Publication Committee very kindly made an appropriation for editorial assistance upon the Magazine; and this in turn led the Directors in December to authorize the employment of an assistant secretary, who should give his whole time to the work of the corporation, dividing his efforts as seemed best to the Secretary between the Magazine and other tasks. Mr. Herbert N. Davison was chosen for this position, and has shown himself the right man for the place, not alone in planning and carrying out some of the most interesting and remunerative features of later numbers, but in promoting the general interests of the organization. Any detailed discussion of the Magazine and its progress belongs to the report from the Publication Committee; but the Secretary may be permitted to bear grateful and appreciative testimony to the work which has been done by Mr. Charles H. Bosworth, the manager of the advertising department of the Magazine, on which it depends for its financial support. He has secured sufficient patronage from the business men of this city to put it upon a basis not merely of self-support but of financial profit to this Board; and while doing this he has accomplished a great deal in awakening interest among the men of Worcester in this Board of Trade, and should be credited with the largest share of any one man in securing our large increase of membership.

ALBERT L. STRATTON, Treasurer.

During the year the number of publications on file in our rooms has been largely increased; notably by the appreciation of many publishers for the present form and contents of our Magazine, and a willingness to exchange with us. A filing rack has been added to our furnishings, also drawers for storing the cuts used in the Magazine, which are accumulating rapidly and are coming to have permanent value. Space has been secured in an adjoining room for cloak-room accommodations, which have been evidently appreciated by attendants at our smoke talks. Another set of chairs has been purchased for the Board of Trade Hall. The further addition to our furnishings of an extension of our filing cabinets has been recommended by the Committee on Statistics and Information, but has not yet received favorable action from the Directors. The supply of commercial directories and maps has been brought well up-to-date, and is appreciated by a number of users which ought to be much larger. The Board is indebted to Mr. Edward B. Clapp, whose desk as Secretary of the Merchants Association is now in our rooms, for placing on our shelves a series of directories of Worcester reaching back to the year 1852, which is a valuable addition to our library. Our Directors' room is in large demand for the meetings of committees and organizations represented in our membership, and for conferences of business men seeking a convenient centre for gathering. To all these groups the Secretary has been glad to extend the hospitalities of the Board, except for certain mental reservations when the object of such meetings was to plan for carrying away Worcester capital for investment in the remote corners of the earth, instead of in needy enterprises in our midst. We have continued to receive an income from sub-rental of our hall and rooms upon the third story of this building; whether such income is as large as it should be is a matter which should engage the attention of the Directors at an early day.

Early last October the Secretary was invited to represent this corporation at a gathering of the presidents and executive officers of boards of trade at Atlantic City; and by vote of the Directors the invitation was accepted. The stimulating and instructive addresses and discussions at these sessions gave helpful light upon the coming problems and latest methods of organizations like our own. The Worcester Magazine was chosen as the official organ of this meeting, and published full accounts of the proceedings.

In December, upon recommendation of the Committee on New Enterprises, the Secretary was sent by the Directors on a tour of inspection of methods used in other cities for industrial and commercial development. Newark, Washington, Baltimore and Williamsport were visited; and the results of investigations formed the basis of the plan for a Guarantee Credit Fund, now being perfected by a sub-committee.

The Secretary has also attended several meetings of the Council and committees of the State Board of Trade, and the recent gathering in Boston of representatives of various parts of New England in consultation as to our transportation interests. He has attended two meetings of secretaries of boards of trade in adjacent regions, and is at present engaged with them in forming plans for a New England Association of Commercial Executives, which promises to be a helpful factor in strengthening the work of our own and similar bodies.

Another line of activity in which the Secretary's help has been asked has been securing legislation at Boston, desired by members of our Board in the protection of their interests, notably in connection with a revision of the boiler rules now in force. The appreciation with which these activities have been received indicates that here is a useful field of service which might be enlarged with advantage.

The necrology for the year has been as follows, notices of these deaths appearing in the current numbers of the Magazine: Dr. Charles Homer Perry, May 1, 1908; Felix J. Charbonneau, August 28, 1908; Frank E. Powers, November 6, 1908; John B. Hunt, November 18, 1908; Carroll Davidson Wright, February 20, 1909.

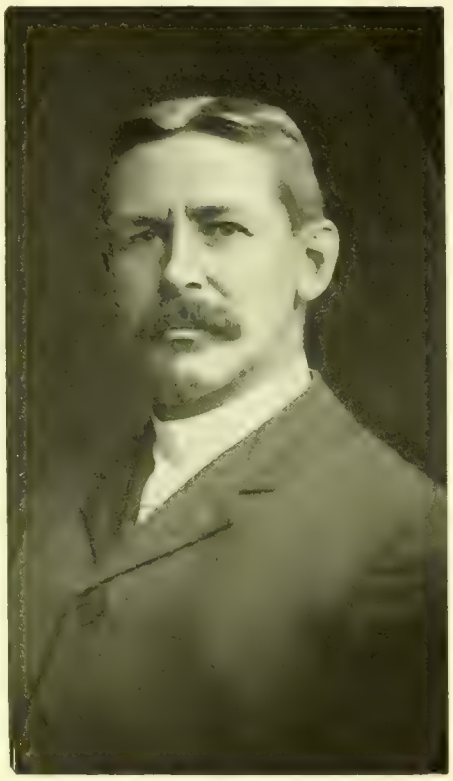
Report of the Ways and Means Committee.

The Ways and Means Committee of the Board of Trade have no extended report to make, as they have had very few matters referred to them, and all matters that have been placed in their hands have been acted upon and referred back to the Board of Directors, who have taken action upon them, and they are included in the records of the Board, with the exception of the purchase of the new chairs for the hall of the Board of Trade, which was referred to the Ways and Means Committee, with authority to purchase new chairs. The committee found that the Horticultural Society had purchased new chairs for their hall and wanted to dispose of their old ones, and offered the committee the whole lot of old chairs, some 325 or more, for the sum of $125. These chairs were very much better than any of the samples of new chairs submitted to the committee, and at a very much less price, therefore the committee thought best to take the whole lot and run the risk of disposing of the surplus or what chairs might not be needed to furnish the hall. By this means there were obtained very much stronger and better chairs than could be purchased by buying new ones, as the lowest price at which new chairs could be bought was 75 cents each, and it was a very much cheaper and a very poorly constructed chair. By this means the committee obtained, as they think, a very much better lot of chairs than was possible if they had purchased new ones, and also they are all of the same style.

Respectfully submitted,

H. H. FAIRBANKS,

Chairman for the Committee.



JOHN L. SEWALL, Secretary

Report of Committee on Manufactures.

Your Committee on Manufactures has had one meeting during the year. The single matter, the new boiler inspection rules, referred to it was duly considered and acted upon.

The Committee was invited to sit with the Committee on New Enterprises to consider various new propositions, and some members did so.

Respectfully submitted,

C. W. HOBBS,

Chairman.

Meetings and Receptions.

To the Directors Worcester Board of Trade.

The Committee on Meetings and Receptions have given five (5) entertainments to the Board of Trade during the past year, including the New Year's reception to members on January 1. Most of the meetings have taxed the capacity of Association Hall.

Respectfully submitted,

J. RUSSEL MARBLE,

Chairman Committee on Meetings and Receptions.

Report of the Committee on Transportation.

The Committee on Transportation has not had so many matters referred to it this year as is usually the case, largely owing to the fact that the lull in business has given a much lessened opportunity for complaints of the delivery and receiving of freight. Then again, the railroads, particularly the Boston & Albany, have increased their freight facilities so that there has been less occasion for complaint than heretofore.

A number of matters that have come to the committee have been adjusted. There has been a general complaint about the increase of express rates. In connection with other boards of trade and the Boston Merchants Association, we protested against these rates and a reduction was made in the rates, within the fifty-mile circle from Boston. This benefited Worcester as far as that zone was concerned, but outside of that it has been impossible to obtain relief from the advance. In this connection the committee would call attention to a recommendation made several years ago, that the Worcester Board of Trade employ some expert traffic man to look after the shipping interests of Worcester manufacturers and business men.

It is impossible for any committee to take up the question of adjusting freight rates, or express rates, with the knowledge that is essential to discuss these matters intelligently in all their phases with the traffic managers of the railroads and express companies. Inasmuch as the expense of this work would be very considerable, the question has been discussed at times by those interested as to whether it was feasible to establish such a bureau under the auspices of the Board of Trade, to which in some way the manufacturers would be willing to contribute. Furthermore, in order to get the desired attention and relief in these matters, it is usually necessary to obtain the co-operation of boards of trade in other cities. This has been a long and sometimes unsatisfactory way, especially when the relief asked for is such that the matter should be at once adjusted if possible. It would appear that there is now a way for the Worcester Board of Trade to enter into such an arrangement through the Chamber of Commerce of Boston.

That body, which is about to have amalgamated with it the Boston Merchants Association, has recently formed a New England Board of Transportation, and has engaged the services of a recognized, high class, expert traffic manager. We understand that their intention is not alone to look after Boston's interest, but the interest of all of New England in the matter of freight and shipping. It is expected that they will be glad to have the co-operation, in a sustaining way, under some plan which they will soon announce to boards of trade and similar organizations in the cities throughout New England; and, under this arrangement, any complaints or any adjustments that are required by any of our manufacturers or business men could be referred to them for settlement, with a result much more expeditious and satisfactory than can be obtained in the present way, or by anyone not especially trained for that business. It is suggested that this matter be referred to the next Board of Directors at an early meeting for their consideration.

There has been suggested to the chairman of the committee

ARTHUR C. COMINS, Director.

EDWARD M. WOODWARD,
Director and Vice-President

a question of asking the Consolidated Street Railway to issue ticket books at a reduced rate, to be used during the early hours of the morning, and between six and seven at night, for the benefit of those employed in the factories who use the cars in going to and from their work at these hours. The suggestion was received rather late in this term and the matter has not been referred to the full committee, because your chairman has felt it was not wise to do so while we had the questions of the trolley freight service and of suitable waiting rooms for suburban passengers now under consideration. It is, however, a matter the attention of which may be called to the next committee by your Secretary.

On the question of the trolley freight franchise, your chairman has had several conferences with General Manager Connette of the Consolidated, and a number of conversations with His Honor the Mayor on this matter. As is well known, the Aldermen declined to grant the franchise asked for last year, and the matter now seems to be in abeyance, awaiting a decision of the Consolidated officials as to renewing their request for a franchise. The matter is being held up owing to a difference of opinion as to the form the franchise should take, between that desired by the Consolidated Street Railway and that which it is understood the City Government is willing to consider. There seems nothing for this committee to do at this time other than has been done.

The matter of waiting rooms for trolley passengers is now before the joint committee of various business organizations and citizens, as the result of a meeting which the Board of Trade called to consider this matter.

It is earnestly recommended again that the question of obtaining the services, in some way, of an expert traffic man for the benefit of Worcester shippers be given early consideration.

Respectfully submitted for the Committee on Transportation,

GEO. F. BOOTH,
Chairman.

LOUIS H. BUCKLEY, Director.

ARTHUR W. PARMELEE, Director

MARCUS L. FOSTER, Director.

New Enterprises.

Members of the Worcester Board of Trade:

The Committee on New Enterprises begs leave to report that while its activities for the past year have been quite numerous, the immediate results of the same have not been as apparent as we could wish, owing to the fact that we have had nothing to offer applicants for assistance in business enterprises except possible suggestions as to the best means of temporarily meeting pressing financial difficulties. As is always true, there have been many seeking assistance who had nothing to offer that was especially inviting from an investment standpoint. There have been several parties, however, who have been given suggestions which have been helpful in practical ways.

The need of some plan whereby deserving enterprises can be assisted by local capital has been long felt. Your committee has given considerable time and thought to a plan of this sort, guided somewhat by what the boards of trade of Williamsport, Penn., and Newark, N. J., have been considering or utilizing for the benefit of their local manufacturing interests.

We have now in hand a scheme embodying the strong features of both of the above mentioned plans, together with some new provisions of an entirely original nature. The plan proposed will require the co-operation of the banking institutions of the city. With this in mind your committee is submitting to the local banks the proposition which it has formulated, and is receiving from that source additional suggestions which will tend to make the plan more practicable. Within a short time it is hoped the matter will be fully matured and your committee will submit the same to the Board of Directors for their approval.

The features of the proposed plan it is not necessary to indicate at this time in detail. It may, however, be in order to state in a word that it is the purpose to provide temporary financial aid to new or deserving local enterprises through the medium of loans from banks to approved applicants, which loans could not be secured, probably, without the aid which the Board of Trade could afford. The plan does not provide for the furnishing of permanent capital. This would necessarily be made possible only by interesting individuals in any given enterprises. Your committee has found that in many instances temporary aid alone is necessary to place new or deserving manufacturing industries on a sure footing, and such it may be possible to provide by the plan proposed.

It will prove to be a decided assistance to the work of the Board of Trade along these lines if the plan about to be proposed for the aid of new enterprises is practicable. Such a plan has done wonders, we are told, in the city of Williamsport, Penn., the population of which has practically doubled within ten years. To some extent, at least, this result has been secured by the efforts of the Board of Trade. At the request of your committee, and in connection with other matters which took him away from the city, our Secretary went to Williamsport and Newark and made a personal investigation of the working of the plans mentioned.

Your committee has co-operated with the Committee on Manufactures in the work of the year, for the reason that the respective provinces of these committees are not so clearly defined as to make it perfectly obvious what each is expected to do. We have had several joint hearings, at which have been present manufacturers or inventors who have been given the opportunity of laying their plans before the meeting. At one of these meetings quite a number of capitalists were present and witnessed a demonstration of the interesting features of various improved mechanical devices.

Whatever else may be said regarding the activities of your committee, we think it has certainly been true that we have made a brave attempt, at least, to prove that assistance can be rendered in a measure to local enterprises seeking aid, which is in some material sense practical and helpful.

Respectfully submitted,

Committee on New Enterprises.

WM. WOODWARD,
Chairman.

Municipal Affairs.

To the Worcester Board of Trade.

The Committee on Municipal Affairs has had several matters referred to it during the year, and it has in each case met promptly and given considerable time and discussion to the

WILLIAM H. SANFORD Clerk.

subject in hand, and has reported seasonably to the Board of Directors.

The committee reported favorably on the question of widening the mouth of Park Street, and the laying out and construction of several new streets in that neighborhood, varying slightly in its recommendations from the report of the Commission on Street Congestion.

The committee reported that no action was practicable in regard to the erection of buildings distasteful to neighboring land owners in different parts of the city.

The committee reported in favor of action to improve the water service for fire protection, and a communication was consequently sent to the Mayor suggesting appropriate action.

For the Committee,

CHARLES T. TATMAN,
Chairman.

Statistics and Information.

Mr. George F. Brooks, President Worcester Board of Trade.

Dear Sir: Your Committee on Statistics and Information has had two meetings during the year, as well as numerous conferences between individual members. Plans for inaugurating a modern system of collecting and indexing statistical and other valuable information for the use of members were carefully considered, and expert advice was sought, with a view of establishing a permanent and, as we believe, a very valuable feature of the work of business organization such as the Board of Trade. It is the belief of your committee that a collection of catalogues, circulars and descriptions of every article made in Worcester should be gathered, and kept constantly up-to-date, and above all, after having secured such a collection, it should be so indexed and cross-indexed as to make it accessible to the public at short notice. In addition to this there is much very valuable matter concerning the municipality, the county, the State, and the business interests in general, for which we believe this office should be the headquarters—a clearing house, if you please, of information for the business man.

H. WARD BATES, Auditor.

In addition to the above we would recommend the starting of a library of general trade and business directories, as well as directories of the larger cities of the country; the numerous annual reports of municipal departments, local institutions, State and Government reports, etc. All should be systematically arranged and properly indexed. Some one has remarked that the next best thing to knowing a thing is to know where to find it.

The initial cost for a suitable filing cabinet, with the necessary blanks and card indexes for the system, would cost from $125 to $150. Owing to the fact that the Board of Directors has not as yet seen fit to appropriate the money for this object, your committee has been unable to progress beyond the point of suggesting plans.

With the increased office force of the Board, by the appointment of an assistant secretary, we would urge the incoming Board of Directors to take this matter up, believing that in no other way can a wiser expenditure of money be made to carry out the legitimate work of this organization.

Once established, a small annual appropriation would keep the service in efficient order, and would make it a popular feature of our work.

Respectfully submitted,

F. S. BLANCHARD,
Chairman Committee on Statistics and Information.

Publication Committee.

To the Worcester Board of Trade.

The Worcester Magazine is now entering upon the ninth year of its existence, the first number having been published January, 1901. Its publication was entered upon after careful consideration by the Board of Directors and upon the unanimous recommendation of the Committee on Statistics and the Committee on Ways and Means.

It may be well to consider the point of view occupied by the Board of Trade during the closing months of the year 1900 while the publication of the Worcester Magazine was under discussion, and to this end you will permit me to quote from the Announcement of the Committee on Publication contained in the first number of the Magazine:

"There is no field of study and inquiry more fruitful than that exceedingly broad one which includes the development of the modern city, and none more interesting to the student of civics. In America the modern cities are the wonder of the world, having risen so rapidly as to seem veritable products of magic. While European cities trace their beginnings back to times almost coeval with the beginnings of history, in America many of the cities have been created within the life of the past two generations, and all have become great since our grandsires' times * * * In nearly every American city there is now a very strong sentiment calling for orderly and effective methods, and demanding that the best that science can devise in the way of principles of government and growth be understood and tested.

"This spirit has opened a field of study of very great importance and interest. It is the aim of the Worcester Magazine to enter this field in the spirit of the earnest student, hoping to be of special and particular service to the city of Worcester. It is realized that the civic problems that present themselves to Worcester are of vital importance to other cities, and vice versa. It is not possible, therefore, that this Magazine be local, in the sense that it shall be of no value to other cities. On the contrary, it is inevitable that its field of interest can only be defined as extending to and including all municipalities. * * *

"While it is neither possible nor desirable exactly to limit or precisely define the scope of a publication of this nature, and its conductors desire not to fetter themselves in such a manner, the Worcester Magazine designs to concern itself chiefly with what may be called the physical condition and progress of cities, rather than with those questions that more particularly relate to sociology and ethics. These two fields cannot be completely separated. They infringe upon each other's territory, and overlap at many boundary points. * * *

"In nearly every line of civic activity the work is comparatively new, and in many it is yet distinctly experimental. The gradual working-out of the principles of city control, the

getting of the civic machinery into easy and correct operation, is a process of surpassing interest and value to citizens. It is a leading motive of this Magazine to become the medium between the interested citizen and the interesting process of civic growth. To this end it is designed to make it of a graphic and expository nature, rather than of a philosophic and academic character, Worcester being always the key-note.''

The first number of the Magazine contained a brief expression from thirty-one citizens of Worcester stating their views upon the most pressing need of the city. It contained articles by Dr. G. Stanley Hall, President Mendenhall of the Polytechnic Institute, J. Evarts Greene, Harrison P. Eddy, an original poem by Francis Roe Batchelder, among local contributors; a letter of greeting from Edward Everett Hale, an article on the origin of municipal incorporations by the Hon. Amasa M. Eaton, and an analysis of Baltimore's new City Charter, which was then commanding much public attention, by William Reynolds, Esq., of Baltimore, among contributors from writers from beyond our own limits. The first number represented the industrial life of Worcester and not less the interests of its business public in the new enterprises of the Board of Trade by thirty pages of advertisements.

For more than eight years each member of the board has received the monthly issues of the Magazine, and it is for the membership of the board and not for the Committee on Publication to determine to what extent the keynote of that initial number in January, 1901, has been maintained. It may safely be affirmed, however, that no magazine issued by any commercial organization in this country has ever attempted a publication with so ambitious a purpose or maintained it with varying degrees of excellence for a period of nine years. If any of the subsequent issues of the Magazine have fallen below the high standard set in the first number, they may nevertheless have appealed to the interests of a wider constituency.

At the beginning of the year 1908, a difficulty encountered in procuring sufficient advertising patronage to support the Magazine from its own resources made it advisable to change the form of the Magazine by increasing the size of its pages, improving the typographical execution and increasing its illustrations. This change in the size and character of the Magazine was of necessity experimental, but after a careful consideration your committee were fully of the opinion that it was an experiment worth undertaking, and that the increased receipts would warrant the increased expenditure. The Magazine in its present form has now been issued fifteen months. The total receipts from its advertising contracts, subscriptions and sales have exceeded the expenses of its publication on the 7th day of April, 1909, for the period since January 1, 1908, by the sum of $1,040.67, the total receipts amounting to $13,518.56, and the expenses of publication, including the salary of the assistant secretary, amount to $12,477.89. In the above statement the salary of the Assistant Secretary has been included as a regular publication expense, for the reason that the employment of the Assistant Secretary was largely made necessary by the increasing work in the Secretary's office, due to the publication of the Magazine, and the employment of the Assistant Secretary as an aid in the editorial work was voted by the Board of Directors upon the unanimous recommendation of the Publication Committee, and the unanimous approval of the Committee on Ways and Means.

The editorial management of the Magazine is at present under the control of Mr. John L. Sewall, secretary; and Mr. H. N. Davison, assistant secretary of the Board of Trade. The charge of the advertising department is under the management of Mr. Charles H. Bosworth, a gentleman of large experience in the advertising department of similar magazines. His employment by the Publication Committee has been fully justified by the receipts from the advertising department for the last fifteen months.

The printing and binding of the Magazine has been done by F. S. Blanchard & Co., upon a detailed schedule of prices, covering every item of work performed upon the Magazine of different character. The printing bills are rendered monthly according to the schedule agreed upon and each item is checked off by comparison with the pages of the Magazine by a member of the Publication Committee. The general oversight of the publication, the distribution of copies to the members of the Board of Trade, to subscribers and to foreign consuls, is under the direct supervision of the Secretary of the board.

No feature of the work of the Worcester Board of Trade so well represents the industrial life of the city, the public spirit of its citizens, or the activity of the board itself as the Worcester Magazine. When other interests have temporarily waned or been entirely disregarded, the Worcester Magazine has continued with its monthly issue to advertise to the community at large that some effort is being made to render Worcester not only a busier, but a better city.

Respectfully submitted,
For the Committee on Publication,
RUFUS B. FOWLER,
Chairman.

Membership Committee.

The Membership Committee desires to make the following report:

Members annual meeting, 1908,		546
Deaths,	5	
Dropped for non-payment of dues,	27	
Resignations,	26	
		58
		488
New members added:		
Glee Club,	40	
Membership committee,	215	
		255
Present membership,		743

Respectfully submitted,
L. H. BUCKLEY,
Chairman.

Report of Treasurer Samuel D. Spurr.

PERIOD FROM APRIL 15, 1908, TO APRIL 15, 1909.

RECEIPTS.

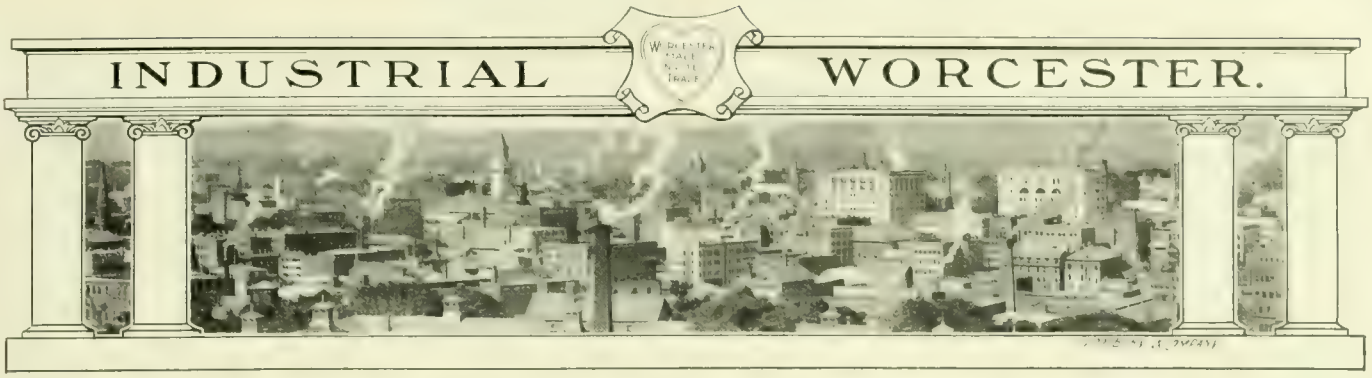
Dues,	$6,330 00	
Magazine,	8,923 46	
Magazine sales,	712 95	
Magazine illustrations,	92 43	
Rents and sundries,	604 07	
Banquet,	8 50	
Glee Club,	140 50	
Interest,	177 23	
		$16,989 14
Balance April 15, 1908,		4,809 57
		$21,798 71

EXPENDITURES.

For Commission,	$2,012 25	
For Magazine printing,	5,915 36	
For Magazine illustrations,	1,017 17	
For Magazine incidentals,	86 87	
For Magazine postage,	395 00	
For Magazine editorial work,	430 00	
For salaries,	2,721 57	
For postage,	244 00	
For banquet,	328 63	
For stationery and printing,	171 78	
For telephone,	110 42	
For gas,	46 94	
For smoke talks,	258 45	
For business incidentals,	891 89	
For rent,	930 00	
For furniture,	202 32	
For Glee Club,	195 50	
		$15,958 15
Balance April 15, 1909,		5,840 56
		$21,798 71

The balance is deposited as follows.

Worcester National Bank,	$1,816 31	
Worc. Mech. Sav. Bank,	1,271 06	
Worc. Five Cents Bank,	569 98	
Worc. Co. Institution for Sav.,	1,249 95	
People's Sav. Bank,	933 26	
		5,840 56



THE INDUSTRIAL SITUATION LOCALLY.

Business conditions in Worcester during the month of April showed general though gradual improvements in all lines despite two rather important failures, one mercantile and the other manufacturing.

Manufacturers who have been running short time in piling up goods have increased to full time and begun unloading their stocks, and there is a much more hopeful feeling than there has been for many months past. Still it must be confessed that except in a few instances the practical improvement over 1907 conditions that was so earnestly hoped for has not yet materialized to the manufacturers generally.

One Worcester concern manufacturing heavy machinery received orders one day the last of the month for eleven machines and others report better business in April than in any month so far this year.

It is particularly gratifying to the Worcester Magazine to know that some at least of this new business has been brought to this city as a direct result of publicity in these columns. Orders were received by large Worcester concerns last month from Ohligs, Germany; Christiania, Norway; Paris, France, and Minneapolis, Minn., that were directly traceable to advertising in the Worcester Magazine. None of these concerns have ever bought any goods in Worcester before, and it is fair to assume that none of them would ever have heard of the Worcester manufacturers who received their orders if it had not been for this Magazine.

The two big industrial plants that were so severely damaged by fire in quick succession, the Webb Granite Company in February, and the Wright Wire Company in March, are both being rebuilt on a larger and more substantial scale than ever.

The Wright Wire Company started up some of its machinery April 28, and it will be running full blast at its factory on Hammond Street inside of sixty days, while the Webb Granite Company has a full gang of men already at work in its incompleted shops and is prepared to fill orders from any source precisely as well as before the conflagration. It has already installed its two new cranes, one of ten, and the other of 20 tons, and although all the details about its new shops are not complete there is nothing lacking that will in any way interfere with prompt shipments anywhere. They are hard at work on the contract for the stone work for the splendid new twenty-one-story building that they are to build for the People's Gas Company of Chicago, and they have a fine outlook for a big season's business.

Indeed, that is the personal testimony of Norcross Bros., who have just received the contract for building a new $500,000 city hall in Portland, Me.; the Fiske Carter Company, who have just received a $200,000 contract for a factory in West Durham, N. C., to be erected for the Erwin Cotton Mills Company, and all the other constructing firms in Worcester.

CHARLES E. DRAPER.
Worcester Leather Supplies Company

THE WORCESTER LEATHER SUPPLIES COMPANY.

One Worcester concern which reports very much better business conditions in 1909 than it experienced in 1908 is the Worcester Leather Supplies Company, 15 Hermon Street, Mr. Charles E. Draper manager.

Mr. Draper is a natural leather manufacturer. His father made shoes before him and he grew up in that atmosphere. Furthermore he has made a thorough study of the leather trade since he was a boy, and as a result there is probably not a man today in Worcester who is better equipped in his particular line than he is.

He makes for the market soles and box toes from the best grade of oak leather that he can buy. Those are his two main lines and he is selling now from 80,000 to 90,000 soles a month. He gets rid of about twice that number of box toes. His business has doubled since last December, and he is now working to capacity in his Hermon Street shop.

He has been in business in Worcester since 1899, and in those ten years he has seen his busines grow from nothing to its present proportions. He has a splendid line of customers, many of whom he has sold for years and he has never enjoyed the trade that is coming to him now.

Besides his soles and box toes Mr. Draper makes underlifts and tops and leather washers used in electrical supplies. In fact there is no such thing as waste in his factory; every scrap of leather is accounted for. The soles are divided into six weights and are carefully sorted before they leave the works. Every detail of the business is under Mr. Draper's own eye

and he gives his personal attention to every order that is sent out. His factory on Hermon Street is a fine, light establishment, well equipped with machinery conveniently arranged, and contains a big stock of leather besides the finished product. As a sample of a small business handled in an up-to-date, systematic manner built up to its present estate by honesty and hard work, the Worcester Leather Supplies Company comes pretty near being a model. It is an excellent example of the hundreds of small concerns of which we never hear, that are doing their share toward making this city the industrial centre that it is.

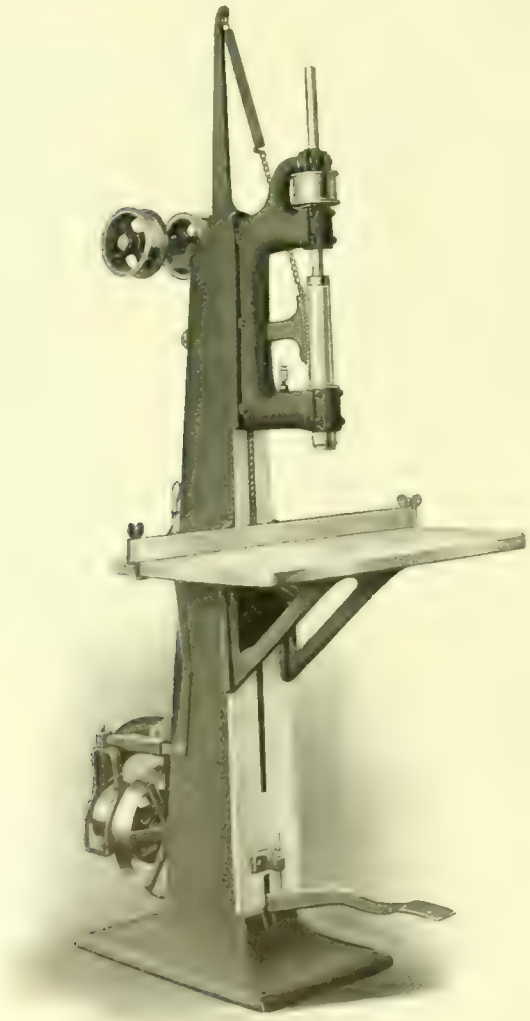
Mr. Draper was born in Holliston, Mass., Sept. 21, 1853, and graduated from the high school of his native town when he was sixteen. He took the commercial course in Bryant & Stratton's Business College and from 1871 to 1881 he was employed in the office of his father's factory. He had extensive experience in the shoe leather trade in Binghamton, N. Y., and in other Massachusetts cities before coming to Worcester. A picture of Mr. Draper accompanies this article.

R. E. KIDDER IMPROVED WOOD BORING MACHINES.

The new boring machine for woodworking recently brought out by R. E. Kidder has received a great deal of attention from the various trade journals and has been warmly welcomed by the trade itself. An interesting technical description of the machine, accompanied by the cut shown herewith, appeared in a recent issue of "The Iron Age." This journal in its descriptive matter said of the machine:

The treadle operates a lever arm fulcrumed at the back of the column and carrying a gear segment engaging a rack cut on the back of the spindle quill. The spindle is balanced by a coil spring attached to an arm on top of the frame, making it self-contained. The head has a vertical movement of 6½ inches. Two stops regulate its travel, so that any limits within the range may be had. One adjustable stop is on the lower arm of the spindle head, controlling the downward stroke, while the stop just above the treadle controls the upward stroke.

To provide for tightening the driving belt the bracket carrying the driving pulley has a vertical adjustment of 2 inches on the column. The face of the bracket and the column are tongued together to preserve alignment during adjustment, which is obtained by loosening the clamping bolts and moving the bracket downward by means of a screw, which tightens the belt. The spindle is of crucible steel, running in babbitt boxes. The table is 20 by 36 inches and has a vertical movement of 21 inches. It is counterbalanced by a weight inside the column.

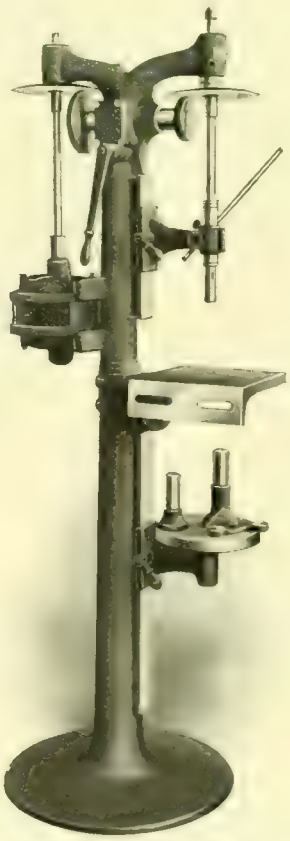


R. E. KIDDER WOOD BORING MACHINE

MOTOR-DRIVEN SENSITIVE DRILL PRESS.

The illustration shows the motor-driven sensitive drill press brought out by the Washburn Shops of the Worcester Polytechnic Institute during the past year. The drill is made in both the motor-driven and belt type and in the latter type is made up to four spindles. The drill has proved very successful, as witnessed by the increasing monthly sales.

The construction of the friction drive is on an entirely new principle. The pressure of the disk on the roll is controlled automatically and varied directly as the work requires. In other words, when the machine is running idle, the only pressure on the rolls is the weight of the disks. Two rolls and disks are used in order to give a greater range of speeds. In this particular type, the motor runs at 1200 R.P.M. and the ratio of rolls to disks is designed to give a speed variation of the spindles from 400 to 1600 R.P.M. With the belt driven



MOTOR-DRIVEN SENSITIVE DRILL PRESS.

type, the range of speeds is from one half to double the speed of the back shaft. That is, if the back shaft is belted to run at 800 R.P.M., the range of speeds of the spindle is from 400 to 1600 R.P.M. These speeds are the approved range for high speed steel for drills from ⅛-inch to ½-inch in diameter. The control of speeds is by the lever shown, and changes can be instantly obtained by moving this lever. When the lever is in the extreme position, the roll is out of contact with the back disk, the disk being recessed for this purpose. With the motor-driven type, this permits the motor starting without load, and with the belt-driven type does away with any necessity of a countershaft. This drive is especially advantageous on the multiple-spindle type, not only in the ease with which the variations of spindle speeds may be obtained without the trouble of shifting belts, but each spindle may be started or stopped at will independently of any other spindle.

THE WALKER GRINDER.

An exhibit which attracted considerable attention at the recent Electrical and Mechanical Exposition was that of the Walker Grinder Company, which exhibited a unique motor-driven surface grinder and a universal cutter and reamer grinder, possessing improved features never before shown on a grinding machine. The characteristic features of the Walker surface grinders are the self-oiling bearings, the absence of overhead works, and the magnetic chucks used in connection with the machines, thus doing away with the bolts, straps and vises for holding the work.

Mr. Walker is the pioneer designer of cutter and reamer grinders in Worcester, and his earlier designs have been widely copied. His latest production, the one exhibited at the late exposition, is the result of many years of study, and the difficult work performed by this machine is well worth investigation.

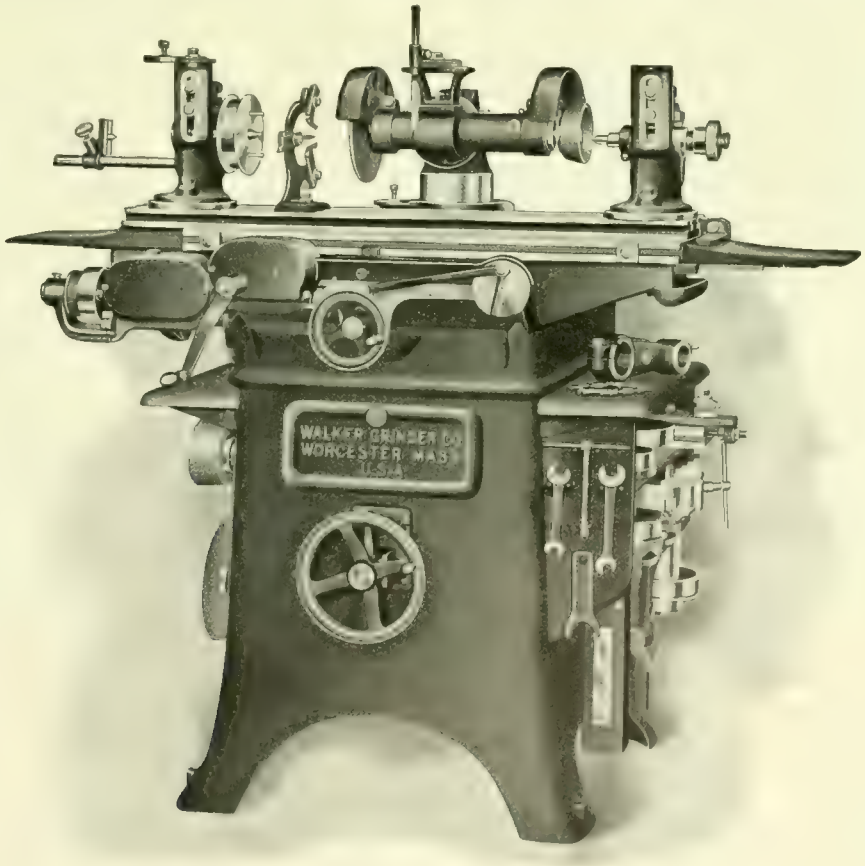
The most notable feature of this machine is the unique and novel grinding head and improved belt drive. Instead of swivelling a heavy carriage around a column, as is usual in cutter grinder machines, in the Walker machine all the angular adjustments are in the grinder head, which is capable of being horizontally swivelled 180 degrees and the spindle of which can be vertically swivelled 45 degrees, and at the same time the grinding wheel can be raised or lowered in any of its angular positions without varying the tension of the belt. It will thus be seen that it is not necessary to employ any of the usual insecure devices for clamping heavy cutters in angular positions, that the cutter can remain securely fastened in a horizontal position, and that clearance is obtained by setting the wheel at the desired angle.

This improvement in the belt drive of the Walker grinder renders it especially valuable for surface grinding the radial faces of the teeth in formed cutter grinding, as the wheel can be adjusted at any desired vertical angle, so that it will suit the angle of the groove in the cutter, and in every case the convex side of the wheel is employed in the grinding, and spiral grooves are ground as easily as straight ones.

A new attachment for spirally grooved cutters was shown, in which any desired rotation of the cutter while being ground was obtained by an angular taper bar operating through gearing to the cutter spindle.

To meet the modern trend toward motor-driven tools, the Walker universal grinder has been fitted up with a neat iron framework for holding the necessary overhead works. This framework is bolted to the machine column, and practically forms a part of it, the motor being fastened to a bracket at the rear.

The Walker Grinder Company is located at 25 Union Street, Worcester, where interested visitors are always welcome.



THE WALKER GRINDER

HENRY C. BURNHAM.

RESIDENT MANAGER FOR MULTIGRAPH COMPANY.

Mr. Henry C. Burnham, who for several months past has occupied office room in Board of Trade headquarters, opened an office May 1, in State Mutual building, room 632, as the resident manager of the American Multigraph Sales Company, of Cleveland, O.

The honor is a deserved one to a bright Worcester boy, whose salesmanship has so impressed the great corporation by whom he is employed that they have given him this new opportunity to develop his undoubted talents.

Beginning with May 1, the company opens three new offices in New England outside of Boston, one in Providence, one in Portland and one, properly enough, in Worcester. Out of the large number of possible appointees, Mr. Burnham was chosen for the office in this city—one of the most important in the entire six New England States.

Mr. Burnham has had excellent commercial training. Coming to Worcester fourteen years ago from Ashland, Mass., he engaged in the laundry business and then later began selling investment securities; entering the employ of the Multigraph Company as a traveling salesman, covering western and central Massachusetts two years ago. His success since has been so marked that the company has decided to give him permanent headquarters in this city.

The multigraph is one of the necessary adjuncts of modern office equipment, particularly for large establishments having extensive correspondence. Mr. Burnham is very well acquainted with the business men of this section through his enterprising and convincing demonstrations of the worth of the multigraph as a labor, time and money saver, and in his new office he expects to reach more of them than ever. His advancement ought to be a stimulus and an inspiration to other worthy young men in this community who are equally keen, intelligent and loyal to their employers' interests, and who are now occupying subordinate positions waiting for the call to come up higher.

IDEAL BOOK MAILING CORNER COMPANY.

One of the little known Worcester industries is the Ideal Book Mailing Corner Company, of which C. C. Andrews is Treasurer and which is located at 81 Mechanic Street. Mr. Andrews has been engaged in making metal devices to protect the corners of books for eight years, and has a very large trade in the central and western states. He deals direct with the publishers, and has a sale of these corners amounting up into the thousands annually. One of his employees manufactures between 12,000 and 13,000 of them daily and is regarded as an expert in the trade, so much so that Mr. Andrews prefers her work to that of a complicated machine which he formerly employed for the same purpose. For his corners he uses steel slips about two inches long and one inch wide, which he cuts off a ribbon hundreds of feet long which he buys of the American Steel & Wire Company. These slips are covered with strong manila paper and make a firm and lasting corner when bent into position.

ADDITION AT PETER WOOD DYEING COMPANY'S.

Peter Wood Dyeing Company, at their works on Holmes Street, have built a new modern storehouse, 70 x 40 feet, and one story high, to accommodate the overflow of their product. The storehouses they now possess are not adequate to provide them the necessary room to care for all their material and output and so it has been found necessary to make this addition. This concern does a very extensive business in bleaching and dyeing cotton yarns and warps, threads, tapes, braids, etc. Its works are on Holmes Street near Cambridge Street, and it is one of the oldest and best known concerns of its kind in this section.

WOOD PRODUCTION IN GERMANY.

Among all the nations of the world Germany receives the credit of being the most thoroughly scientific. She does with her limited natural resources what younger nations will soon be compelled to do in self protection; she conserves them.

When our wood supplies, stored up from 100 to 500 years, are within sight of their end, and sawmills that have been moved from the white pine belt of the north to the yellow pine belt of the south have been moved to the Pacific Coast for their last stand, then Germany's scientific forestry policy will receive better recognition.

We do not think of moving a grist mill about from one wheat field to another as the fields in turn become exhausted. After one crop is harvested another is coming on. So it must be with the sawmill and the crop of trees. If it takes 50 years to raise a tree of a given species, then one-fiftieth of the forest may be cut each year, provided it reseeds or is replanted—and the sawmill stays at the same place and the workmen live in their permanent, snug homes near by; the "lumber shanty" will be a thing of the past; raising trees is a business like raising wheat.

Receipts at Port of Worcester.

The following receipts at the port of Worcester for the month of April are reported by the deputy collector of the port, Charles H. Pinkham:

From Copenhagen, 1 package effects; 2 packages machinery; 1 package instruments.

From Hamburg, 4 cases books; 10 cases hosiery; 1 case apparatus; 5 cases chromos; 87 cases pickled fish.

From Liverpool, 2 cases teasles; 1 package photos; 2 packages cottons; 150 boxes glass; 1 case rubber; 137 bales wool; 2 packages books; 1 package plants; 2 packages machinery.

From Naples, 4 cases vegetables.

From Havre, 1 case of hair; 1 case copperware.

From Glasgow, 1 clock; 1 bale cotton yarn.

From Antwerp, 12 cases heddles; 7 packages plants; 27 cases trees; 1 package paper; 36 cases tea.

From Rotterdam, 2 cases trees.

From Bremen, 1 package printed matter.

From London, 37 bales wool.

From Manchester, 1 case emery wheels.

Total, 540 packages; value, $12,000.

The WORCESTER MAGAZINE Illustrated

"WORCESTER MADE INVITES TRADE"

THE NEW WATER TOWER IN OPERATION

Published by Worcester Board of Trade.

JUNE, 1909

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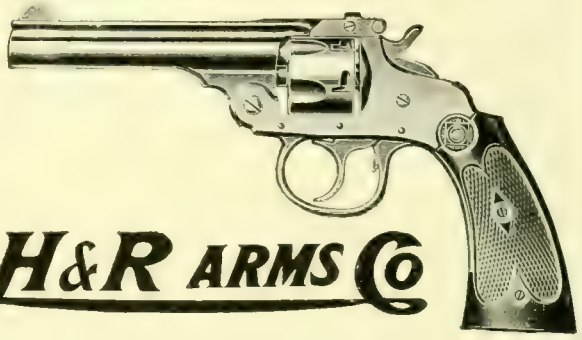

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Descriptive Catalog on Request

Worcester, Mass.

Made in Worcester.

THE WORCESTER MAGAZINE

VOL. XII. JUNE, 1909 No. 6

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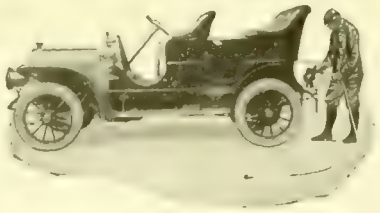

He will think you stay up nights to polish your brass

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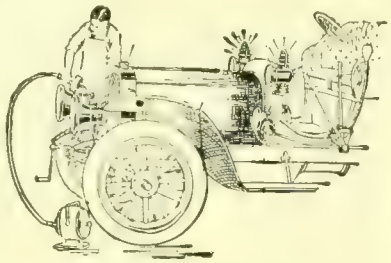

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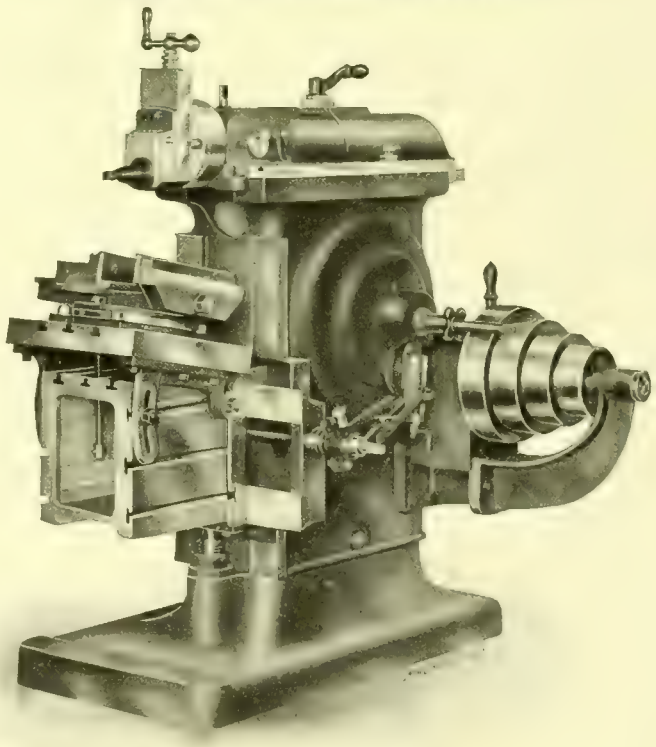

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The WORCESTER MAGAZINE

Editorial Comment

The Coming of the Prophets.

The Mystic Order of the Veiled Prophets are coming to Worcester June 10 and 11 from all over the United States, and the event is so important a one to Worcester financially as well as socially that the Worcester Magazine has felt it was worthy of special notice and of large space.

Organized twenty years ago in Hamilton, N. Y., this little known order has progressed in spite of prejudice, conservatism, and sometimes direct antagonism throughout the Union, and now numbers in its membership almost 10,000 souls. Recruited from the oldest and staidest of all our fraternities, it has steadily won its way into public approval and recognition. Many men eminent in every walk in life have been prominent in its councils, and it has contributed by its mirth-provoking rites no little to the sum total of human happiness and sane, healthy living.

Aletheia Grotto, through its energetic Monarch Edward M. Woodward, its tireless Secretary Arthur Burtelle, and its pains-taking and enthusiastic Executive Committee, has made full preparation for the entertainment of all the visiting brethren, their wives, daughters and sweethearts.

The welcome they will extend their guests will be echoed and shared by the community as a whole. Worcester will be glad to see the men from Jersey, and from Omaha, from Los Angeles, and from Halifax, and whether they come from near or far, she will extend to them the bounteous hospitality that has rendered the Heart of the Commonwealth notable among both men and Masons for a century and sixteen years.

Our Latest Exponent of the Water Cure.

The new water tower that has been added to the equipment of the Worcester Fire Department is a piece of apparatus that has long been needed in this city. Like the Texan's gun it may not be needed often, but when it is needed it is exceedingly desirable to have it immediately handy. All metropolitan cities are now equipped with apparatus of this type, and in most of them it has earned its cost over and over again by checking a fire that otherwise would have developed into a conflagration. That Worcester has not been visited by a holocaust ere this is simply a matter of the utmost good fortune. All the necessary material for such a devastating experience as Chelsea had, for example, is at hand in this city. A great industrial community like this, filled full of burnable material, offers as attractive a field for the operation of the fiery element as does a barn whose mow is gorged with last year's timothy.

It is a matter of sincere congratulation that ere such a catastrophe occurred we have had time to protect ourselves against its advent by a machine capable of throwing 1500 gallons of water a minute on a flame.

It is not the intention of the department, it is understood, to use the water tower save in an emergency. In most instances the other apparatus will be found sufficient, it is believed, to cope with the flames, and only in some extraordinary emergency will the tower be called into play, but whether it is used next week or not for a year and a half, it is on the ground ready for service when required, and the taxpayers and real estate owners and manufacturers who saw it operate last month on Salem Square, and observed its tremendous energy there demonstrated, went away satisfied that they could sleep sounder o'nights and breathe easier day times, because it had been added to the city's fire-fighting machinery.

An Alaska-Yukon Number in July.

Before the next number of the Worcester Magazine appears, the Secretary, Mr. John L. Sewall, will have returned from Seattle, where he is at this writing in attendance upon the opening of the Alaska-Yukon-Pacific Exposition, which will be inaugurated in that city June 1 and continue until October 16. As a result of this trip, he will be able to tell the readers of this Magazine, and prospective visitors to the Exposition generally, all about the arrangements that have been made for the entertainment of the New England contingent in the far West. Washington and Oregon were both saved to the Union by New England men, and the name of the lamented Whitman, the pioneer missionary, is written high in the scrolls of fame of both States. From the days of "54-40 or Fight" down to the present moment, the great Northwest has been the Mecca for the very best blood and brain that the East has boasted, and the visit of the Worcester Board of Trade, with its unrivaled Glee Club, to that region has aroused quite as great enthusiasm there as it has here. A special day has been set aside as Worcester Day at the fair. The Glee Club will give several concerts on the Exposition grounds, and everything that can be done to exalt Worcester will be done by the fair management. All this will be detailed at length in the July issue. It is bound to possess historic value as well as current interest, and our advertisers and subscribers both, who have honored us so handsomely this month, will find that in literary merit and intrinsic worth the July number will take no backward step. If you are at all interested in your country and its outlying possessions, you must not miss the July number of the Worcester Magazine. The last word in our commercial greatness is spoken at Seattle.

Behold the Future!

There is one item of industrial news in this number which is of much larger import to Worcester than is suggested by its space and position. We refer to the article in "Industrial Worcester," describing the prospective advent into this city of cheap electric power, and its adoption by the American Steel & Wire Company, in connection with the installation of the new type of electrical furnace. We specially commend the description of this forward movement to all interested in the progress of this industrial centre. We congratulate not only the management of our largest enterprise, but all the manufacturers of Worcester, on the prospect opening before them in this connection. In the next number of the Magazine we hope to give a more extended account of the possibilities of this new supply of power as related to the growth and welfare of our city.

The Right Kind of Tariff Revision.

"I am hoping that after this discussion in Congress is over we shall have a fairly good tariff bill," remarked one of our leading manufacturers a few days ago; "but for one I do not want any favors shown my own business or this section of the country which will work to the disadvantage of other sections or lines of industry. What we need is a revision that shall benefit all as much as possible, so that a universal revival of business may result. If we are to continue sending our goods all over the South and West, we want them to prosper equally with New England in order that they may be able to give us orders." This is a common-sense view of the situation, and we believe it fairly represents local sentiment. To seek special and selfish favors at the hand of the tariff revisers will prove a short-sighted policy, if its success is to lessen the ability and disposition of one's customers. We trust that a broad and statesmanlike view of tariff adjustment will overcome all methods of mere log-rolling and barter between different sections and interests to the end that confidence and contentment may take the place of fear and unrest.

"Commercial Missionaries."

The recent tour of representatives of the Boston Chamber of Commerce through the State of Maine, ending at Bangor May 6, is a noteworthy sign of the times. Such excursions are common enough in other portions of our country, where trade expansionists are continually devising some new methods of pushing business. We believe this is the first time that New England has witnessed such an effort to bring the business men of our commercial metropolis into friendly social intercourse with the leading cities of another commonwealth. The mere fact that over one hundred of Boston's most representative men were willing to take the time and money involved in this three days excursion is significant. The purposes and the results of this tour are well stated in the words of President Rothwell, as reported in the Boston Herald:

"The journey has been impressive in that it has stimulated among our own members, and among the several commercial organizations, an earnest purpose to create and use constructive work for the development of New England, while the members of the Boston delegation have learned to appreciate the progressive, wide-awake spirit of the business men with whom they have come in contact.

"The benefit derived from the trip has been the widening of acquaintance, clearer knowledge and better understanding among the members of the organization themselves, who have certainly come to know each other better within these few days than they would have otherwise done in a long term of years.

"The trip also did much to promote belief in the essential solidarity of the six New England states, the identity of their interest and the need of their constant and effective co-operation in all matters that concern the common welfare, the fact that if existing interests are to be safeguarded and new enterprises encouraged, they must in good faith pull together as one powerful unit.

"One of the concrete results of the trip was the accession of 120 new members to the ranks of the Augusta Board of Trade. They came forward unsolicited and joined the local body because of what they read in the newspapers about the New England trade extension movement."

Uncommon Thieves.

There are some methods employed by certain exponents of "high finance" which have won a kind of admiration because of their open audacity in getting possession of other people's money or valuable possessions; but we have observed only undisguised contempt expressed for the sneak-thief methods by which the American Sugar Refining Company has profited at the expense of the government, or rather all the citizens of the United States. The complete exposure of its methods by the camera, as published in the Outlook, has called out a righteous and universal condemnation from the public. It has long been believed that this great corporation has used most questionable methods in securing legislative protection through tariff schedules, to the continual detriment of the purchasing public; but it was an astonishment that such an extensive system of corrupting weighers and checkers and thus falsifying the figures on which duties were computed could be devised and be successfully worked for such a long period. More astonishing than all else, however, is the attempt of the directors to persuade the public that they were ignorant of these fraudulent profits of hundreds of thousands of dollars. The Wall Street Journal well says upon this point:

"They cannot, as men of ordinary common sense, suppose that the world will believe that a small band of subordinate employees, receiving salaries of not more than thirty dollars a week each, at the outside, would, among themselves, organize a plot to put upward of two millions of the public's money into the pockets of the American Sugar Refining Company out of sheer altruism.

"The supposition is absurd, and it is equally absurd to suppose that the existence and method of this peculiarly dastardly swindle was not known in quarters much more exalted. Public opinion will certainly not be satisfied with the punishment of one or two of the sugar company's weighers, or even a couple of customs officers, who might, quite easily, have lost their positions had they carried their suspicions past their immediate superiors. As men of the most elementary personal and commercial honor, the responsibility of handing over the real criminals rests with those directors who sat upon the board of the American Sugar Refining Company through the past ten years."

The Fear of Ridicule.

Satire has been defined as the rapier thrust of the intellect, and many men brave enough to seek the bauble reputation at the cannon's mouth have quailed before the ridicule that flowed from a coward's pen. The American people with their fun-loving and mercurial temperament are adepts in the abuse as well as the use of irony, and many a good cause and many a worthy movement has been laughed out of court in this country because our people refused to take it seriously. For years the Society for the Prevention of Cruelty to Animals had to combat the jibes and sneers of the men who saw in Henry Bergh and George T. Angell nothing but a couple of faddists seeking a new and absurd method of securing notoriety. They had to live down the sentiment against the "society with the long name," created by a mischievous press before they were able to accomplish any permanent good for the dumb beasts. As a result of their efforts docking is practically unknown, horses as well as humans wear straw hats in summer, and in many cities more thought is given to the housing of animals than is given to the housing of men.

Worcester has its share of iconoclasts, and sometimes one is inclined to believe that it could spare a few and still have a good working majority. No reform, no matter how worthy is ever instituted here, but it encounters at the outset more or less derision. This has recently been shown in a marked degree in the very praiseworthy effort made by Mayor James Logan and Chief of Police David A. Matthews to increase the esprit de corps, gentlemanly bearing and general efficiency of the Police Department.

The effort to improve the soldierly appearance of the patrolmen by the drills at the State Armory seemed to fill the daily press with unholy glee. The descriptions of the scenes at the Armory were portrayed with a humorous touch that would have done credit to the late lamented William Nye, and when it was announced that besides this effort to make the department smart and natty and well set up the authorities proposed to add white gloves to the uniform, the shout of derision that went up was absolutely deafening.

And yet to the sober-minded citizen of Worcester, to the man who pays the taxes, there does not appear anything incongruous in a policeman wearing gloves any more than there would be in any other gentleman wearing them. For the policeman is a gentleman, and if he is not, he is unworthy of the uniform that he wears. As a result of the efforts of the authorities, the department has already lost much of its slouchiness, and the patrolmen present an appearance on the streets far superior to anything they have ever before shown.

The effect upon strangers of the new order of things is distinctly satisfactory. The men themselves have a far better bearing than they had under the old régime, and the city itself gets a reputation as a result of the change for being metropolitan rather than provincial that ought to appeal to every lover of Worcester.

Ridicule under some circumstances is desirable and wholesome, but as a corrective it should be employed with discrimination and intelligence. Not every reform is bad, and although the new and unusual may at first blush strike us as peculiar, it is not on that account necessarily wrong or inadvisable.

Much stress is laid nowadays on the man who knocks, but his influence for evil upon a community is not comparable with the man who, incapable or unwilling to improve existing conditions, merely ridicules them. There is no element of provincialism so frequently encountered and so deadly as the belief that as a community, we cannot be improved upon. Worcester is indeed splendidly laid out, but it is not yet ready for a headstone inscribed "Perfection."

A Voice for Peace.

The *cost* of war, as measured in dollars and in woe, is getting a good deal of attention in these later days, after so many centuries of glorification. Most of the history of the world, as written, is a record of combat and the clash of arms, with very little attention paid to the justice of the causes involved. In truth, many, if not most wars, have had no sufficient provocation to justify the side which began the conflict, and most, if not all wars, could have been avoided if some mighty influence had been in a position to intervene and to compel the quarreling parties to settle their differences on the basis of justice and right.

To diplomacy the world is indebted for the avoidance of countless bloody struggles with their untold cost in misery and treasure. Diplomacy in settling international disputes is the appeal from Philip drunk to Philip sober. It is the getting together of the cool-headed representatives of excited peoples, seeking the adjustment of mutual differences on grounds of justice or compromise.

But diplomatists as well as other statesmen, and all citizens and subjects, are only human beings, and through their own frailties or for other causes they often fail in their pacific efforts. And here opens the great field of international arbitration.

In case of a dispute between two nations, what could be more fair, more honorable, or more wise, than to leave the question to an impartial nation, or other just tribunal for settlement? Certainly war is not more fair, because it is always the stronger who wins—not necessarily the right one. Certainly war is not more honorable, for it is never honorable to play the bully or the bullied. And, certainly, war is not more wise, for it frequently costs more than the question involved ever could amount to, and it never settles anything except the question of present physical strength.

Great progress has been made, in the last ten years, towards the substitution of peaceful methods in place of force in the settlement of differences between nations. For this end more has been accomplished in these ten years than in all the world's history before, and we take great satisfaction in the fact that the United States has been a leader in the great work. There is no more patriotic people on earth than the American people. They have demonstrated their ability to fight when necessary, but they are by preference a peace-loving people, and public opinion in this country has supported the government enthusiastically in its attitude at The Hague conferences, and in the making of more arbitration treaties than any other nation.

A great influence in moulding and stimulating public opinion in this country is the Lake Mohonk Conference on International Arbitration, the fifteenth annual meeting of which was held in May. To Mr. Albert K. Smiley, the founder of the conference and its sole financial supporter, should be given great honor and credit for having done so much in the cause of intelligent patriotism and universal good-will.

International Arbitration

The Lake Mohonk Conference on International Arbitration was held at the Lake Mohonk Mountain House, May 19, 20 and 21. The place is ideal for a meeting in the cause of peace. The hotel is situated on a little lake well up towards the top of a mountain some miles west of the Hudson River and south of the Catskills. The country all about is rough and wooded, and most picturesque. Certainly it is entirely free from the distracting influences of the town.

The conference was attended by about 450 persons, of whom more than 50 were delegates appointed by business organizations in all parts of the country. The audiences included many prominent educators, men in public life and professional men, some of whom were from foreign countries.

The character and importance of these conferences may be judged from the personality of the speakers. The presiding officer at each of the six meetings was Nicholas Murray Butler, president of Columbia University, who made a masterful address in taking the chair. Among the many distinguished men who addressed the conference were Dean Kirchwey of the Columbia University Law School; Senor Calderon, the Bolivian minister to the United States; Admiral Stockton of the United States Navy; Hon. William I. Buchanan, representative of our government at The Hague; Dr. Wu Ting Fang, the Chinese Ambassador; Judge Karl von Lewinski of Berlin, Germany; Justice MacLaren of the Ontario Court of Appeals; Hon. J. Allen Baker, member of the British House of Commons; Hon. Joseph Shippen of the Seattle Chamber of Commerce; Gov. Martin F. Ansel of South Carolina; Hon. K. Midzuno, Japanese Consul General at New York; Hon. Andrew D. White, formerly American Ambassador to the German Empire; President W. H. P. Faunce of Brown University; President Judson of the University of Chicago; Rt. Hon. James Bryce, British Ambassador to the United States; Hon. Richard Bartholdt, representative in Congress from Missouri; and Richard Watson Gilder, editor of the Century Magazine.

The addresses were nearly all very carefully prepared, and were characterized not only by profound learning, but also by lofty thought, and especially by sanity and a view to practical accomplishment. To be sure, the freedom of discussion brought the meetings perilously near the rocks at times, but the skill of President Butler as steersman guided affairs successfully through. Mr. Buchanan was the sheet anchor of the conference, and any one who was in danger of being blown away by any tempest of mere eloquence was stayed by the quiet influence of this very safe and sane statesman.

The conference was heartily in favor of stopping the huge increase in the armament of the nations. It was pointed out, for example, that sixty-five per cent. of the revenues of the United States government is devoted to the payment of the debts incurred through past wars and preparation for possible future wars. Accordingly, the sentiment of the delegates was expressed in the following platform:

"The fifteenth annual Lake Mohonk Conference on International Arbitration, meeting on the tenth anniversary of the opening of the first Hague Conference, reviews with profound satisfaction the signal advance of the cause of international justice during the decade, a progress unexampled in any previous period in history. The memorable achievements of this period are at once an inspiration and an imperative call to renewed effort.

"We urge upon our government, which has been so conspicuously and so honorably identified with the progressive policies of The Hague, prompt action toward perfecting the important measures there inaugurated, and the complete development of the system of arbitration. We especially urge its early initiative in the establishment of the International Court of Arbitral Justice.

"We further urge the negotiation of a general treaty of arbitration between all nations, and look forward with the increasing hope to the day when treaties of arbitration shall provide for the reference to The Hague of all international differences not settled by regular diplomatic negotiation.

"The clear logic of The Hague conventions prescribes the limitation and gradual reduction of the machinery of war by the nations parties to those conventions, corresponding to the development of the instrumentalities of law and justice for the settlement of international differences. The great armaments of the nations, whose intolerable burdens prompted the call to the first Hague Conference, have during the decade increased so portentously as to have now become, as recently declared by the British Foreign Secretary, a satire upon civilization. They fill the world with apprehension and alarm; they create an atmosphere unfavorable to the system of arbitration; and their drain upon the resources of the peoples has become so exhausting as to menace all national treasuries and disastrously check the social reforms and advances which the interests of humanity demand. It is the opinion of this Conference that the time has arrived for carrying into effect the strongly expressed desire of the two peace conferences at The Hague, that the governments 'examine the possibility of an agreement as to the limitation of armed forces by land and sea, and of war budgets,' and address themselves to the serious study of this pressing question. Accordingly we ask our Government to consider whether the peculiar position which it occupies among the nations does not afford it a special opportunity to lead the way toward making these weighty declarations a basis of public and concerted action."

The delegates from business organizations had several meetings apart from the other members of the Conference, in addition to their participation in the regular meetings. The business men adopted the following resolution, which was reported to the full conference before the adoption of the platform, and no doubt had some effect upon the development of the latter:

Resolved: That the representatives of the organized business interests of the country, assembled at the fifteenth annual meeting of the Lake Mohonk Conference on International Arbitration, desire again to express their hearty endorsement of the broad and beneficent purposes of the conference, as embodied in its many utterances favoring international arbitration in the settlement of disputes between nations, to the end that war, with all its horrors, may be avoided, and commerce may be protected from its blighting effect.

The rivalry among civilized nations for increased armament is greatly to be deprecated.

We believe the time has come in which nations should depend upon justice.

Therefore, we advise that nations trust to arbitration rather than force, to courts rather than arms, for the adjustment of international disputes.

We urge upon the President of the United States to take the initiative in leading the nations to a concurrent limitation or reduction in the armies and navies of the world.

It is worthy of note that the resolutions and the platform were adopted by unanimous vote.

And Hamilton Only Twenty Years Away!

In Two Decades the Order of the Veiled Prophets has Grown from a Purely Local Body to an International Institution

LE ROY FAIRCHILD,
Founder of the Order.

Ex postmaster General Thomas L. James of New York was the first Grand Monarch of the Supreme Council of the Mystic Order of Veiled Prophets of the Enchanted Realm, whose pilgrimage to Worcester this month will be one of the notable celebrations of the year in New England. A history of this unique organization is of interest at this time to thousands of Worcester people who have at best only a vague and hazy knowledge of its aims, principles and membership, and who are looking forward with interest to the coming amongst us of 1000 men and women from all over the United States to celebrate the twentieth anniversary of its founding.

In a word it may be stated that the membership of this organization is confined to Master Masons in good standing, and because of this determination the order stands in the same relation to the blue lodge fundamental Masonry - that the shrine does to the Commandery Templar Masonry. Neither Veiled Prophets nor Shriners claim to be of Masonic descent, albeit none but Masons can belong to either order.

L. F. McGREGORY
Present Grand Monarch, Supreme Council, M. O. V. P. E. R.

The Order of the Veiled Prophets had its birth in Hamilton, N. Y., still the headquarters of the Grand Secretary, Sidney D. Smith, in the summer of 1889, and its origin was among the membership of Hamilton Lodge, No. 120, F. and A. M., of that city. Mr. Le Roy Fairchild was its founder, and in his honor the organization, which was then thought to be a purely local institution, was dubbed the "Fairchild Deviltry Committee." The first meeting was held Sept. 10, 1889, and the following band of prospectors assembled that night for the original trip of exploration into the enchanted realm of Thalia, the land of fun and frolic: Le Roy Fairchild, George Beal, Sidney D. Smith, Thomas H. Beal, William M. West, J. W. Clark, U. C. Van Vleck, B. J. Stimson, Adon Smith, H. S. Gardiner, C. J. Griswold, Robert Patterson, A. M. Russell, John A. Holmgren, John F. Horn, G. G. Waldron and Edwin L. Peet. These seventeen men were the pioneers in an order which has now reached 8151 members. Le Roy Fairchild was chosen as the head of the first lodge and Sidney D. Smith as its secretary. Mr. Fairchild passed within the veil Jan. 23, 1897, universally mourned, but Mr. Smith still remains at the post of duty, the honored historian and grand secretary of the organization. Many of the other original seventeen Prophets have also risen to distinguished positions in its membership.

Messrs. R. R. Riddell and H. P. Tompkins were the first novitiates to make application for admission to the order, and Mr. Riddell proved of great value to the lodge, being one of the leading spirits in the compilation of the ritual, which was at once undertaken and carried to a conclusion by a committee composed of R. R. Riddell, George Beal, Adon Smith, Le Roy Fairchild, T. H. Beal and William M. West, the present grand treasurer.

The order spread throughout New York State, as indeed it did throughout the Union, Bishop John P. Newman and many other distinguished men enrolling themselves in its ranks, and on the evening of May 28, 1890, the members assembled and unanimously resolved to establish a Supreme Council to extend, distinguish and govern this unique organization.

The Supreme Council was organized in the Masonic Temple, Hamilton, N. Y., Friday, June 13, 1890, Le Roy Fairchild, its founder, calling the organization together. The constitution and statutes of the Supreme Council of the Mystic Order Veiled Prophets of the Enchanted Realm were read and adopted, and the following officers duly elected for the first year: Grand Monarch, Thomas L. James, New York; Deputy Grand Monarch, Le Roy Fairchild, Hamilton, N. Y.; Grand

Chief Justice, George H. Raymond, New York; Grand Master Ceremonies, J. C. Terry, St. Paul, Minn.; Grand Treasurer, William M. West, Hamilton, N. Y.; Grand Secretary, Sidney D. Smith, Hamilton, N. Y.; Grand Keeper of Archives, Oren Root, Clinton, N. Y.; Grand Orator, James Byron Murray, Auburn, N. Y.; Grand Captain of the Guard, Thomas H. Beal, Hamilton, N. Y.; Grand Alchemist, J. F. McGregory, Hamilton, N. Y.; Grand Standard Bearer, Samuel F. Todd, New Orleans, La.; Grand Marshal, John Cunningham, Utica, N. Y.; Grand Steward, J. W. Clark, Hamilton, N. Y.; Deputy Grand Chief Justice, B. J. Stimson, Hamilton, N. Y.; Deputy Grand Master Ceremonies, George Beal, Hamilton, N. Y. These officers were duly installed by Grand Chief Justice George H. Raymond and a charter was issued to Druid- afterwards changed to Mokanna Grotto, No. 1, of Hamilton, N. Y. On motion the obligation submitted by W. C. Eaton was adopted and the new order was formally launched on the fraternal sea.

The lodges of the order are known as grottoes, and it was decided at this time that the turban of a Veiled Prophet shall be of such color as each grotto may select with a silver veil. All turbans of the same grotto are alike as to color, but no subordinate grotto can use purple, that royal hue being reserved for the Supreme Council alone.

The Hamilton Grotto met the expenses of the launching of the Supreme Council and started it on its way rejoicing, free and clear of all incumbrance.

At the annual meeting of the Supreme Council at Hamilton, N. Y., June 11, 1891, a dispensation was granted to Ilion, N. Y., Masons to form Grotto, No. 2, in that city, and this was closely followed by dispensations for the formation of new grottoes to be known as Lalla Rookh Grotto, No. 3, of Rochester, and Zeba Grotto, No. 4, of Rome, N. Y.

From that time on the order has progressed by leaps and bounds. Thomas L. James continued as Grand Monarch until 1894, when Adon Smith, of New York, was elected as his successor. Sir Knight Smith was Past Grand Commander of Morton Commandery, No. 4, K. T.; he held the position of Grand Monarch until his death, which remarkably enough occurred on the tenth anniversary of the founding of the order, June 13, 1900. His successor was George F. Loder of Rochester, N. Y., who was elected Deputy Grand Monarch on the death, Jan. 23, 1897, of Le Roy Fairchild, the founder of the order who had served in that capacity from the beginning. Now by Mr. Smith's death Mr. Loder rose to the supreme position.

EX-POSTMASTER GENERAL THOMAS L. JAMES.
Grand Monarch from the Founding of the Order until 1894

George F. Loder's Masonic career is a most distinguished one. At the time he became Grand Monarch he was Past Master of Genesee Falls Lodge, No. 507, F. and A. M.; Past District Deputy Grand Master Thirty-third Masonic district; Member Hamilton Chapter, R. A. M.; member Doric Council, R. and S. M.; member Rochester Consistory, A:. A:. Scottish Rite; Past First Lieut. Commander New York Consistory, A:. A:. Scottish Rite; Past Commander Munroe Commandery, No. 12, K. T., and Past Grand Commander Grand Commandery, K. T., State of New York.

He was Deputy Imperial Potentate for nine years of the A. A. O. N. M. S. and the Potentate of Damascus Temple for twenty-eight years. In the Grotto he was a past monarch of Lalla Rookh Grotto, No. 3, and a life-member of the Supreme Council.

He held the office of Grand Monarch from the death of Grand Monarch Adon Smith, June 13, 1900, until Oct. 23, 1902, when at the thirteenth annual session held in New York, J. Harris Balston was elected in his place.

This was not done, however, until Grand Monarch Loder had declined resolutely further election, he being returned for the office for another year on the first ballot.

Grand Monarch Balston was Past Master of Attair Lodge, No. 601, F. and A. M.; Past High Priest Zetland Chapter, No. 141, R. A. M.; Past T. I. M., Adelphic Council, R. and S. M.; Past Eminent Commander Morton Commandery, No. 4, K. T.; Past Grand High Priest Grand Chapter, State of New York. He was also Monarch of Azim Grotto, No. 7.

At the fourteenth annual session held at Hamilton, N. Y., Oct. 20, 1903, the Grand Secretary, Sidney D. Smith, reported that the organization had been formally incorporated under the benevolent orders law. He also reported that he had compiled and published a history of the order from its founding. This work will ever remain a valued monument to the Grand Secretary's research and literary ability, and in time to come will prove invaluable to those interested in the early history of the organization. At this session Chas. W. Mann of Buffalo was elected Grand Monarch.

Grand Monarch Mann will always possess a particularly warm spot in the hearts of Worcester Prophets from the fact that he it was who instituted Aletheia Grotto. At the time of his election he was Past High Priest of Apollo Chapter, No. 48, R. A. M.; Junior Warden of Lake Erie Commandery, No. 20, K. T., and a member of Buffalo Consistory, A:. A:. Scottish Rite.

ADON SMITH.
Grand Monarch Supreme Council, 1894-1900.

He was a member of Oriental Temple, A. A. O. N. M. S., and Past Monarch of Zuleika Grotto, No. 10.

In 1904, at the annual session held at Elmira, N. Y., Dr. Grover W. Wende of Buffalo was elected Grand Monarch. At this time Dr. Wende was Past Monarch of Zuleika Grotto, No. 10, and a member of Ismailia Temple, A. A. O. N. M. S., of Buffalo. His Masonic connection was with Ancient Landmark's Lodge, No. 441, F. and A. M.; Adytum Chapter, No. 235, R. A. M., and Buffalo Consistory.

The sixteenth annual session was in Buffalo, Oct. 5 and 6, 1905, and was attended by twelve grottoes, the largest number that had been represented up to that time. At this session it was stated that preliminary steps had been taken to organize the order in Canada and Mexico. Charles E. Lansing, of New York, was elected Grand Monarch.

Mr. Lansing's Masonic history has been most notable and his elevation to the head of the order served to round out a distinguished secret society career. At the time of his election he was Past Grand Steward of the Grand Lodge of New York, F. and A. M.; Grand Representative Grand Chapter, R. A. M., of Missouri; Past Grand Representative of the Grand Commanderies, K. T., of both Nebraska and New Jersey; Past Master of Central Lodge, No. 361, of Brooklyn, and York Lodge, No. 197, F. and A. M., of New York; Past High Priest of Amity Chapter, R. A. M., of New York; Past President Fraternal Union of Anointed High Priests; Past T. I. M., Union Council, R. and S. M., New York; Past Eminent Commander Palestine Commandery, No. 18, K. T., New York, and a member of the various Scottish Rite bodies. He was also a member of Mecca Temple, A. A. O. N. M. S., and Past Monarch of Azim Grotto.

In 1906 Charles Mead Colton, of Rochester, N. Y., was elected Grand Monarch at the session held in that city, Oct. 2 and 3. At this Supreme Council fourteen grottoes were represented, among them one in Washington, one in Chicago and one in Milwaukee. The order had begun to branch out. The new Grand Monarch had been Grand Chief Justice and Deputy Grand and was well qualified for the place. His Masonic history at the time of his elevation was as follows: Past District Deputy Grand Master thirty-third Masonic district, State of New York; Grand Representative Grand Council of Colorado; Past Master Genesee Falls Lodge, No. 507, F. and A. M., Rochester, N. Y.; Past High Priest Hamilton Chapter, No. 62, R. A. M., Rochester, N. Y.; Past T. I. M., Doric Council, No. 19, R. and S. M., Rochester, N. Y.; member of Munroe Commandery, No. 12, K. T., Rochester, N. Y., and of the various Scottish Rite bodies. He was also a member of Damascus Temple of the Mystic Shrine and Past Monarch of Lalla Rookh Grotto, Veiled Prophets.

He was succeeded by George McCann of Elmira, N. Y., at the annual session of 1907. The new Grand Monarch was a member of Union Lodge, No. 95, F. and A. M.; Elmira Chapter, No. 42, R. A. M., and St. Omer Commandery, No. 19, K. T. He was a member of Kalurah Temple of the Mystic Shrine and Past Monarch of Cashmere Grotto, No. 11, Veiled Prophets.

The nineteenth annual session held last year, June 26 and 27, in the city of Chicago, showed the largest membership in the history of the order. Seventeen grottoes responded at roll call. Grand Secretary Sidney D. Smith reported that there were three others enrolled. The total membership was 7087. Although but eight

GEORGE F. LODER.
Grand Monarch Supreme Council, 1908-2

months had elapsed since the previous Supreme Council, the Secretary reported that more business had passed through his hands in that time than in any previous year. Among the new grottoes organized had been one at Davenport, Iowa, and another at Dayton, Ohio, and a request had been received from Salonique, Turkey, for power to institute one there.

The Treasurer, William M. West, reported receipts amounting to $8,481.12 and disbursements totaling $5800.95, leaving balance on hand of $2,680.17.

At this session J. Frank McGregory of Hamilton, N. Y., the present Grand Monarch, was elected. Sir Knight McGregory is a member of Hamilton Lodge, Cyrus Chapter, Utica Council and Norwich Commandery. He is a member of Mokanna Grotto, the parent lodge of the order, and is universally esteemed by both men and Masons.

Grand Monarch McGregory's associates in the Supreme Council are: Deputy Grand Monarch, George E. W. Stivers; Grand Chief Justice, George E. Hatch; Grand Master Ceremonies, Henry A. MacGruer; Grand Treasurer, William M. West; Grand Secretary, Sidney D. Smith; Grand Keeper of Archives, Everett L. Haynes; Grand Orator, Hiram D. Rogers, Jr.; Grand Captain Guard, Dr. Ernest L. Volgenau; Grand Standard Bearer, Robert G. Holden; Grand Marshal, Julius R. Kline; Grand Alchemist, William H. Snyder; Grand Steward, William J. Cross. The Grand Trustees are Edwin A. Quick, George F. Loder and Dayton F. Smith.

J. HARRIS BALSTON.
Grand Monarch Supreme Council, 1902-3.

The following is a list of the grottoes at the present time, their names, location, membership and officers:

Mokanna Grotto, No. 1, Hamilton, N. Y.; 255 members. Monarch, Herbert C. Williamson; Chief Justice, George L. Bennett; Master Ceremonies, George Beal; Secretary, Sidney D. Smith.

Lalla Rookh Grotto, No. 3, Rochester, N. Y.; 957 members. Monarch, Fred D. Morgan; Chief Justice, Franklin E. Kent; Master Ceremonies, Emil H. Schmidt; Secretary, Charles M. Colton.

Zeba Grotto, No. 4, Rome, N. Y., 64 members. Monarch, William F. Tremain; Chief Justice, Charles E. Wardwell; Master Ceremonies, Stephen E. Bailey; Secretary, Harry J. Douglass.

Azim Grotto, No. 7, New York, 835 members. Monarch, Charles T. Lunt; Chief Justice, Frank C. Kaye; Master Ceremonies, Charles A. Udell; Secretary, George E. W. Stivers.

Zuleika Grotto, No. 10, Buffalo, N. Y.; 1299 members. Monarch, Alonzo G. Hinkley; Chief Justice, Ernest A. Southall; Master Ceremonies, Arthur E. Becker; Secretary, Arthur W. Percival.

Cashmere Grotto, No. 11, Elmira, N. Y.; 831 members. Monarch, William C. Metzger; Chief Justice, Edgar G. Crowell; Master Ceremonies, Wesley L. Jennisen; Secretary, Henry K. Ball.

Keder Khan Grotto, No. 12, Syracuse, N. Y.; 793 members. Monarch, John P. Listman; Chief Justice, George D. Kirtland; Master Ceremonies, Gardner J. Chamberlin; Secretary, Frank J. Kniskern.

Aletheia Grotto, No. 13, Worcester, Mass.; 208 members. Monarch, Edward M. Woodward; Chief Justice, Arthur B. Chapin; Master Ceremonies, Charles W. Delano; Secretary, Arthur Burtelle.

Iran Grotto, No. 14, Glens Falls, N. Y.; 136 members. Monarch, Herman B. Parks; Chief Justice, Loyal L. Davis; Master Ceremonies, Albert V. Brayton; Secretary, Charles N. VanTrump.

Zemzem Grotto, No. 16, Jersey City, N. J.; 490 members. Monarch, Rudolph C. E. May; Chief Justice, Edward Durham; Master Ceremonies, William J. Doll, Jr.; Secretary, Fred W. Schacht.

Al-Sirat Grotto, No. 17, Cleveland, O.; 524 members. Monarch, Joseph S. VanDeBoe; Chief Justice, William H. Mellinger; Master Ceremonies, Howard T. French; Secretary, William Kenney.

Aryan Grotto, No. 18, Chicago, Ill.; 484 members. Monarch, Joseph H. MacDonald; Chief Justice, Will F. Durbin; Master Ceremonies, William P. Preble; Secretary, Everett L. Haynes.

Kiramat Grotto, No. 19, Milwaukee, Wis.; 144 members. Monarch, Thomas J. Ware; Chief Justice, Aug. F. Uttech; Master Ceremonies, Edw. A. Kickhaefer; Secretary, Arthur J. Steetz.

Kaa-Rheu-Vahn Grotto, No. 20, Albany, N. Y.; 67 members. Monarch, Arthur N. Lefevre; Chief Justice, Ben V. Smith; Master Ceremonies, Edward Smyth; Secretary, T. Austin Williamson.

CHARLES W. MANN.
Grand Monarch Supreme Council, 1903–4.

Umarkan Grotto, No. 21, Geneva, N. Y.; 107 members. Monarch, William A. Bickford; Chief Justice, Ira H. Levy; Master Ceremonies, Edwin R. Dobbin; Secretary, Charles A. Dewey.

Mohassan Grotto, No. 22, Davenport, Iowa; 92 members. Monarch, Willis N. Bragg; Chief Justice, Alfred V. Abbott; Master Ceremonies, William S. McLeod; Secretary, Edward H. Sanford.

Ali-Baba Grotto, No. 23, Hornell, N. Y.; 129 members. Monarch, Fred P. Smith; Chief Justice, Ray V. Woodbury; Master Ceremonies, Milo W. Waldorf; Secretary, William G. Hollands.

Ormus Grotto, No. 24, Dayton, O.; 149 members. Monarch, William J. Blackburn; Chief Justice, Rudolph Roemhildt; Master Ceremonies, Jonas W. Fox; Secretary, Francis G. Kemper.

Jan-Ben-Jan Grotto, Omaha, Neb.; 100 members. Monarch, Frank W. Boyer; Chief Justice, William R. Bennett; Master Ceremonies, Edwin Haney; Secretary, George E. Hawes.

Uzbek Grotto, U. D., Minneapolis, Minn.; 100 members. Monarch, Albert L. Hazer; Chief Justice, Andrew G. Perry; Master Ceremonies, Frank J. Meyst; Secretary, William C. Allen.

Kallipolis Grotto, No. 15, Washington, D. C.; 85 members. Monarch, Frank K. Raymond; Secretary, Fred A. Sebring.

Bokhara Grotto, Indianapolis, Ind.; 153 members. Monarch, Frank Z. Sherer; Chief Justice, Albert Smith; Master Ceremonies, Brandt C. Dewey; Secretary, William A. Bogardus.

Chindara Grotto, Wilkes Barre; 100 members. Monarch, Robert Ireland; Chief Justice, Roland B. Bell; Master Ceremonies, Wilson Marsden; Secretary, Edward Watts.

El-Zobeda Grotto, Halifax, N. S.; 29 members. Monarch, William R. Richards; Secretary, Isaac J. Castle.

Few organizations have been brought into being under circumstances that augured greater ill for their future than the Mystic Order of the Veiled Prophets. Among all the fraternal societies with which men are acquainted, none is more conservative than that ancient and time-honored body which rejoices in the designation of speculative Masonry.

The members of the grotto do not claim that their order is Masonry in any form, for it is not. It is simply an order to which none but Masons can belong. Masonry itself has laws as fixed as those of the Medes and Persians, its metes and bounds are definitely determined, and no prophet veiled or unveiled would ever seek to remove its ancient landmarks.

The grotto, however, is not without its objects. Occupying a unique field it has successfully catered to that universal desire to be amused inherent in the human breast in every clime and at every age. Its growth has been steady and satisfactory. Its weird and spectacular ceremonies, combined with its gorgeous costumes and its splendid stage settings, give it an appeal that makes it well-nigh irresistible.

Requests for dispensations for new grottoes are numerous, and its founders declare that the time will come when every city and town that boasts a blue lodge will also boast a grotto, where in their hours of relaxation and ease Masons may gather for an hour, leaving dull care and earth behind to make the welkin ring with joyous shouts of mirth and laughter unconfined.

DR. GROVER W. WENDE.
Grand Monarch Supreme Council, 1904–5.

Aletheia Grotto

Defying the Fates, the Thirteenth Grotto, Organized April 13, 1904, Proves Anything but a Hoodoo to the Order

ALETHEIA Grotto, No. 13, M. O. V. P. E. R., had its origin in a meeting holden in the ladies' parlor of the Horticultural Society March 28, 1904, there being fifty members of various Worcester Masonic bodies present. On motion of Henry A. Knight, Frederick A. Blake, who was responsible for the gathering, was chosen as Potent Monarch for the purpose of organization. Frank S. Ellard was elected secretary and Matthew Gault treasurer. Various committees were appointed and the gentlemen present adjourned to April 7. At that meeting the fees and dues were fixed, the name Aletheia was adopted in honor of the Greek goddress of truth, and the preliminary steps taken to secure a constitution and by-laws.

All things being in readiness, the prospective prophets assembled in Odd Fellows' Hall, April 13, 1904, Charles W. Mann of Buffalo, the Grand Monarch, being in the chair, and Aletheia Grotto was formally instituted with the following charter members: Frederick A. Blake, Dr. Charles A. Blake, Dr. J. Marcus Barton, Benjamin A. Barber, John N. Barber, George D. Barber, Herbert A. Booth, William W. Brown, Arthur H. Burton, Arthur Burtelle, Charles A. Bartlett, Rev. Dr. Frank Crane, Thomas A. Callahan, Elbridge S. Carlton, Gen. Robert H. Chamberlain, Arthur B. Chapin, Herman S. Cheney, Edwin S. Clark, Robert W. Clifford, William H. Cook, Charles Cooper, Frank A. Clark, James Draper, William S. Dadmun, Walter R. Dadmun, Wilton W. Dadmun, Gilbert G. Davis, Parkman T. Denny, Charles W. Delano, Frank S. Ellard, Charles L. Gates, Matthew Gault, Henry L. Green, Hon. Francis A. Harrington, Frank C. Harrington, Charles A. Harrington, Leander A. Hastings, Henry F. Harris, Hon. Frank M. Heath, Melville F. Heath, Austin A. Heath, Earle E. Howard, John H. Howell, Frederick A. Huntress, George H. Jewett, Henry B. Keith, Henry A. Knight, Walter S. Knowles, Justin W. Lester, William F. Little, Henry A. Macgowan, Frank L. Mellen, Frederick A. McClure, M. Francis McHenry, Clarence W. Mirick, George H. Mullen, Albert L. Pratt, Hon. A. S. Pinkerton, Hon. A. P. Rugg, Winslow H. Robinson, Harry C. Robinson, Alanson P. Robbins, Waldo E. Sessions, Frank E. Sessions, Walter J. Stone, John A. Sherman, Parkman H. Stearns, Rev. Dr. Vincent E. Tomlinson, R. James Tatman, Henry L. Trafford, Charles A. Trafford, W. Henry Towne, Edwin C. Tripp, Henry D. Temple, Romondo C. Ware, John T. Wheeler, Warren H. Willard, Fred E. Wilcox, Franklin B. White, Oliver B. Wood, Edward M. Woodward, Langdon B. Wheaton and George K. Willand.

CHARLES E. LANSING.
Grand Monarch Supreme Council, 1905-6.

Officers were elected as follows: Monarch, Frederick A. Blake; Chief Justice, Frank L. Mellen; Master of Ceremonies, Charles A. Harrington; Treasurer, Matthew Gault; Secretary, Frank S. Ellard; Trustees, for one year, R. James Tatman; for two years, Hon. Francis A. Harrington; for three years, Gen. Robert H. Chamberlain.

In attendance upon the Grand Monarch as a degree staff were the following distinguished Veiled Prophets from abroad: Monarch Dr. Albert T. Lytle, past monarch Zuleika Grotto, Buffalo, N. Y.; Chief Justice Philip V. Fennelly, monarch Zuleika Grotto, Buffalo, N. Y.; Master of Ceremonies George E. Hatch, past monarch Lalla Rookh Grotto, No. 3, Rochester, N. Y.; Assistant Master of Ceremonies Worthy Prophet Charles E. Koster, chief justice Azim Grotto, New York; Judge Advocate General Charles D. Stickney, Zuleika Grotto, Buffalo, N. Y.; Grand Monarch of the Realm J. Harris Balston of New York, past grand monarch; Grand Captain of the Guard George E. W. Stivers, secretary Azim Grotto, New York; Rhadamanthus Charles E. Lansing of New York, grand master of ceremonies and past monarch of Azim Grotto; Charon Charles W. Mann, Buffalo, grand monarch. The degree team was further assisted by the newly-elected officers of Aletheia Grotto. There were eighty-three charter members, including two honoraries, and two novitiates were admitted that night, B. Austin Coates and Granby A. Bridges. The work was

WELCOME
SUPREME COUNCIL
M.O.V.P.E.R.
WORCESTER, MASS. JUNE 10TH & 11TH 1909.

"IF WORCESTER DOES IT, SHE'LL DO IT RIGHT"

Programme

For the 20th Annual Convention of the Supreme Council, M.O.V.P.E.R.

In the City of Worcester, June 10 and 11, 1909.

Wednesday Evening, June 9th.

Reception of officers and representatives, Supreme Council. Headquarters, Warren Hotel, No. 201 Front Street.

Thursday, June 10th.

9.00 a.m. Welcome to Supreme Council by His Honor the Mayor, at Odd Fellows' Building, No. 674 Main Street.
2.30 p.m. Parade by all the Prophets.
3.00 p.m. Take trolley cars for Woodland Park.
5.00 p.m. New England clam-bake at Woodland Park.
8.00 p.m. Vaudeville entertainment at Woodland Park.
9.30 to 12.00 p.m. Dancing.
12.00 midnight. Return to city by trolley cars.

Friday, June 11th.

10.00 a.m. Sight-seeing for our lady guests. Automobiles will call at hotels for the ladies at 10.00 a.m. SHARP.

The Committee on Transportation and Hotels will be at the Union Railroad Station on Front Street to receive our guests.

Executive Committee of Aletheia Grotto in charge of the Celebration

Chairman
Edward M. Woodward, 6 Schussler Rd.

First Vice-Chairman
Arthur B. Chapin, 330 Main St.

Second Vice-Chairman
Charles W. Delano, 1 Lowell St.

Supreme Council
Henry A. Knight, P.M., 11 City Hall

Transportation and Hotels
Herbert M. Fowler, 717 State Mutual Building

Entertainment
Z. W. White, 10 Westland St.

Printing
Arthur H. Burton, P.M., 21 City Hall

Ways and Means
Moses Gross, 335 Main St.

Souvenirs
Charles A. Harrington, P.M., 518 Main St.

Sight-seeing
Frank C. Harrington, 518 Main St.

Ladies
Winthrop Hammond, 526 Main St.

Music and Parade
Frederick E. Frost, 505 Main St.

Press
Frank R. Batchelder, 22 Boynton St.

Treasurer
Matthew Gault, 33 City Hall

Secretary
Arthur Burtelle, 19 Fiske St.

GEORGE McCANN.
Grand Monarch Supreme Council, 1907-8.

performed upon Mr. Bridges and the ritual and its enactment created great enthusiasm.

In the evening there was a banquet, at which the speakers were Charles D. Stickney of Buffalo, N. Y.; Henry L. Follett of New York, monarch of Azim Grotto; J. Harris Balston, past grand high priest of the Grand Chapter of the State of New York, and also past grand monarch, and past monarch of Azim Grotto; Geo. E. Hatch of Rochester, N. Y., grand alchemist of the Supreme Council, and past monarch of Lalla Rookh Grotto of Rochester; George E. W. Stivers, past grand high priest of the Grand Chapter, State of New York, and secretary of Azim Grotto; Charles E. Lansing of New York, grand master of ceremonies and past monarch of Azim Grotto; Hon. P. V. Fennelly, monarch of Zuleika Grotto of Buffalo; Albert T. Lytle, past monarch of Zuleika Grotto, Buffalo; Past Eminent Commander Robert W. Clifford, and Sir Knights Henry A. Knight and Dr. J. Marcus Barton of Worcester County Commandery, K. T.; F. Olpp of New York, Charles W. Mann of Buffalo, and Frederick A. Blake, the new monarch of Aletheia.

On Jan. 16, 1905, the election of officers occurred for the ensuing year, and Henry A. Knight was elected monarch. Edwin C. Tripp was elected secretary at this meeting, but never served, and March 20, 1905, Arthur Burtelle, the present secretary, was elected to the position. Mr. Burtelle is entitled to great credit for his work in this capacity. Arthur H. Burton was elected Jan. 15, 1906, to succeed Mr. Knight as monarch, and his administration proved so popular that he was elected in 1907 to succeed himself. Charles A. Harrington followed in January, 1908, and he in turn was succeeded by Edward M. Woodward, the present monarch. The Grotto now has 223 members, 9 life members and 2 honoraries.

The officers are: Edward M. Woodward, monarch; Arthur B. Chapin, chief justice; Charles W. Delano, master of ceremonies; Matthew Gault, treasurer; Arthur Burtelle, secretary; Will A. Gray, assistant monarch; Austin A. Heath, marshal; J. P. Gray, captain of the guard; Frank C. Harrington, Cerberus; Earle E. Howard, Charon; Andrew B. McGown, Rhadamanthus; Charles E. Hitchcock, Chaos; Henry A. Macgowan, orator; Melville N. Heath, Herbert M. Fowler, Langdon B. Wheaton, Fred Newcomb, R. W. L. Dixon, Wm. J. Denholm, Edwin C. Harrington, Louis E. Bragg, imps; W. F. Little, W. S. Knowles, B. A. Barber, H. C. Robinson, A. P. Robbins, W. S. Young, L. R. Paige, H. O. McCauley, sailors; George W. Ward, judge; Edwin P. Crerie, Frank R. Batchelder, Charles B. Perry, councilors; Frank W. Chaffin, Howard R. Hill, Charles A. Normand, Joseph W. Truda, Prespero Truda, orchestra; M. Francis McHenry, organist; Henry D. Temple, electrician; Moses Gross, commissary general; Charles A. Harrington, Albert S. Richey, directors; Parkman H. Stearns, sentinel; Robert H. Chamberlain, 1910; George F. Brooks, 1911; Francis A. Harrington, 1912, trustees.

CHARLES MEAD COLTON
Grand Monarch Supreme Council, 1906-7.

The Founder of Aletheia Grotto

Frederick A. Blake, the Knight Without Fear and Without Reproach Who Introduced the Order of Veiled Prophets to Worcester

THE institution of Aletheia Grotto, No. 13, M. O. V. P. E. R., of this city, is directly due to a letter written by Prof. David S. Estes of Colgate University, Hamilton, N. Y., to the late lamented Frederick A. Blake. And the remarkable thing about it is that the letter was written by a man who was not a member of the Grotto and was not even a member of the Masonic fraternity.

Professor Estes was, however, a very good friend of Mr. Blake's, and being well acquainted with the personnel of Mokanna Grotto, he thought it was just the kind of an organization that would appeal to him.

He accordingly wrote Mr. Blake to the effect that there had been organized in Hamilton a new social body whose members were all Masons of the highest standing in the community—college professors, doctors, lawyers, bankers—and he believed if he would come there and get acquainted with these men that he would certainly identify himself with their number. Mrs. Blake urged her husband to go, as she had a great deal of confidence in Professor Estes' judgment as well as a great deal of admiration for his character. Mr. Blake finally agreed to go to Hamilton as Professor Estes' guest, and on his arrival there was introduced to a large number of the men identified with the parent grotto.

FREDERICK A. BLAKE.
Founder of Aletheia Grotto.

It is rare indeed that an organization of any sort is launched with a membership as distinguished as that which characterized Mokanna Council. It was created in a college atmosphere permeated with the mysteries and lore of Greek-letter societies, and among its members were a large number of men of the highest intellectual calibre. They warmly welcomed their visitor from the valley of Worcester, and having made application for membership, he was enrolled in the parent council.

Mr. Blake found the grotto all it had been pictured to him and he returned to this city enthusiastic in its praise. As a direct result of his efforts a grotto dedicated to Aletheia (the goddess of truth) was instituted in Worcester.

Mr. Blake left behind him not only a clear Masonic career, but a most enviable record as a business man and a reputation for integrity and industry second to none.

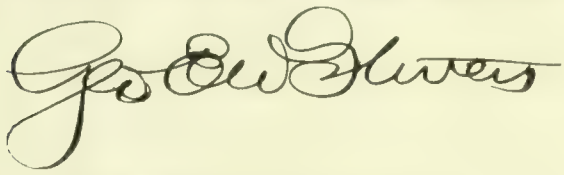
Born in Lowell Aug. 25, 1840, Mr. Blake was a son of one of the Spindle City's most distinguished physicians, his father having been a classmate at Harvard with Dr. Oliver Wendell Holmes.

He early entered the employ of the Chase Mfg. Company of Boston, shoe findings, as a bookkeeper, and the executive ability and intelligence he manifested produced such a marked impression on Hon. Jos. H. Walker, then in the boot manufacturing business in this city with his brother under the firm name of J. H. & G. M. Walker, that he asked him to come to Worcester in a similar capacity for that concern. Mr. Blake accepted the offer and proved to be of so great service to the firm that he was entrusted with Mr. Walker's private correspondence as well as having direct charge of his Chicago business. Mr. Walker made a great deal of money at this time and he was kind enough to attribute much of his success to Mr. Blake's perspicacity and business energy.

In 1874 Mr. Blake determined to enter upon the manufacture of boots and shoes himself, under the firm name of Blake, Hastings & Company, his associates being J. E. Hastings, G. F. Thompson and A. D. Pratt.

In 1881 he retired from this concern and entered into partnership with his brother-in-law, J. D. Clark, in the woolen business at Rochdale, the concern being known as J. D. Clark & Company. The business was growing very fast and taxed Mr. Clark's ability to care for it to the utmost. The new partnership proved most successful and the house did a tremendous volume of business from the start. On Mr. Clark's death in 1893 a corporation was formed with Mr. Blake as president and manager, and Irving E. Comins, treasurer, and continued thus until January, 1900, when Mr. Blake resigned because of ill health and retired from active business.

The winter of 1901 he and Mrs. Blake spent in Cal-



Deputy Grand Monarch Supreme Council, M. O. A. F. F. R.

ifornia. The remaining winters, until his death, he spent in Worcester.

Mr. Blake's interest in business was shared by his love for music and flowers. His conservatories were celebrated all over the East for the rare and beautiful varieties that they contained. His hothouses boasted a number of interesting orchids and other exotics, but his great specialties were pinks and peonies—particularly the former. Mr. Blake had the rather unusual honor of winning, two years in succession, the silver cup offered by the Massachusetts Horticultural Society for the best scarlet carnation seedling produced in Massachusetts. This pink, the Bon Ton, enabled him not only to win but hold the cup, it being stipulated by the society that if the seedling should not be excelled for two years in succession the cup should become the property of the exhibitor.

Mr. Blake was prominently identified with the Worcester Horticultural Society, leaving it $1000, the income to be devoted to the encouragement of those who should bring out the best varieties of flowers through hybridizing and in other ways. He was also a member of the Massachusetts Fruit Growers' Association and the Worcester Agricultural Society.

His death was universally lamented by the Masonic fraternity with which he was so closely identified during his closing years and his memory will ever be kept green in the ranks of the grotto that he founded, of which he was so proud and to which he gave so much of his time, attention and love.

GEORGE I. HATCH
Grand Chief Justice Supreme Council, M. O. A. F. F. R.

A Model Pension Department

Social Welfare Work of the American Steel & Wire Company, with Special Reference to the Worcester Branch

SIDNEY D. SMITH.
Grand Secretary Supreme Council, M. O. V. P. E. R.

IT IS sometimes said, and more often felt, that the aggregation of capital into colossal amounts endangers the expression and even the existence of a kindly personal feeling between those in executive control and the individual workman. Any condition which lessens the human element and substitutes the mechanical in the growth of modern industrialism is to be regretted; any counteracting influence is to be welcomed.

In the rapid growth of collectivism it is pleasant to record progress in the practical expression of sympathy between the employer and employees; and one specially interesting instance is at hand in Worcester, showing how the leaders of a corporation whose plants reach from the Atlantic to the Pacific are devising ways for reaching the individual needs of men whom they can never meet personally. In the olden time when each employer bargained individually with each laborer, such neighborliness was a simple matter. In the present hour, under radically changed conditions, the old-time spirit is finding effective expression, thereby giving added vindication to the soundness of the theory of industrial combination.

The American Steel & Wire Company, whose plants and processes were recently described at some length in our March number, has had in successful operation since 1902 a pension department for the aid of its employees who have given years of faithful and continuous service, and who are approaching an age when their efficiency is inevitably lessening. The insistence upon young men is quite as marked in the industrial as in the professional world; fortunate are those who find some provision awaiting them in such a time of need. Entirely from its own resources, with no tax whatever against the wages of its employees, this great corporation is paying out annually thousands of dollars to men who, in the opinion of the company, are incapacitated for further service or have reached the age limit. Two classes are included in this plan; first, all who have been in the company's service for ten years, and who have attained the age of sixty-five; and second, employees who have been in the company's service for ten years, from fifty-five to sixty-five years old, who, in the opinion of the Board of Administration, have become physically disqualified for further service. In connection with such pension provisions, the company are naturally careful as to the terms of employment, and they have established the rule that no inexperienced person over thirty-five, and no experienced person over forty-five, shall be taken upon their rolls, unless their services are professional or otherwise special in their nature, and then only with

DR. E. L. VOLGENAU.
Grand Captain Guard, Supreme Council, M. O. V. P. E. R.

WM. WEST.
Grand Treasurer, M. O. V. P. E. R.

W. H. SNYDER.
Grand Alchemist, M. O. V. P. E. R.

the approval of the Board of Administration. At each plant there is a "Mill Committee," made up of the superintendent, the chief clerk, master mechanic, chief timekeeper and superintendents or foremen of departments, who furnish to the Board of Administration the necessary data as to the eligibility of employees for pensions; also to take up the matter of similar aid to any who may become sick or destitute.

EVERETT L. HAYNES.
Grand Keeper Archives, M. O. V. P. E. R.

The pension allowances are paid monthly, and upon the following basis: For each year of service one per centum of the average monthly pay for the ten years preceding retirement. This would give to a man who has been at work for forty years and has averaged $50 per month for the last ten of those years a sum of twenty dollars per month, forty per cent. of fifty dollars. It is provided in the company's plan that this basis may be changed if the total expenditures exceed the sum set apart by the company for this object. All beneficiaries are liable to the withholding of pensions in case of gross misconduct; nor will assignment of pensions be permitted or recognized. The benefits of the system apply only to those who give their whole time to the work of the corporation, and do not apply to the law or surgical departments. One interesting feature is the closing provision of the regulations, which is as follows: "Employees placed on the pension roll will be expected on request of the officers of the company to report and give to the company the benefit of their experience, and act as advisers when called upon."

The total amount paid out to its Worcester employees has been as follows:

1902	$4,389 22
1903	10,224 95
1904	11,702 79
1905	15,511 78
1906	18,875 82
1907	19,606 73
1908	22,021 84
	$102,333 13

During the last year this sum of over $22,000 has been divided among 154 men, or an average of over $143.

The Worcester Society for District Nursing

By the Superintendent, Rosebelle Jacobus, R. N.

"ES MOTHERING

DISTRICT or visiting nursing is not new; in fact, it dates back to the days of St. Paul. Between the pre-Christian civilization and our own the historical link is broken, but there is a record covering nearly 2000 years to the present time. The earliest district nurse, visitor and social worker was Phebe of Cenchrea, who lived 60 A. D., the friend and helper of Saint Paul, who says of her, "She hath been a succorer of many and of myself also." She was a woman of wealth, importance and dignity, and took upon herself the office of deaconess of the Church of Cenchrea. From her day the work of the district nurse has never been unknown. In 1617, Vincent De Paul went from Spain to France. He settled in the hospital and assisted with the work of what would now be called the out-patient department, meantime supervising the work of the visiting sisters, and soon decided that in order to obtain better results there must be two distinct departments, one for the regular visiting and one for nursing the sick,—hence the first society for district nursing, 1618, called the "Ladies of Charity." Very quaint and practical were the directions for the work of the members. "'The Ladies of Charity' shall visit only those whose cases have been examined and passed upon by the president, assistant and treasurer. The lady who visits shall get the nourishment from the treasurer, cook it and bring it to the invalids, cheerfully and kindly salute them on entering their apartments. She shall arrange a tray on the bed, spreading a napkin over it, and placing on it a glass, spoon and bread roll. Next she shall wash the sick person's hands, say grace, and then, having poured out the soup and put the meat in a plate, she shall arrange all in the tray. She shall kindly invite the sick person to eat, doing all in a spirit of love as if dealing with her own child. She shall try to cheer the invalid if downcast, cutting his food and pouring out the drink. Thus having set things going, if there is any one at hand she shall leave the rest to him and go on to the next sick person, whom she shall treat in the same way. She shall remember always to begin with those who have some one to help them and finish with those who have no one, so as to be able to remain a longer time with them. In the evening, she shall return with the supper, and go through the same arrangement as before. Each patient shall receive as much bread as is necessary, with a quarter of a pound of mutton or boiled veal for dinner and as much roast for supper, except on Sundays and feasts, when boiled chicken shall be given and two or three times a week minced pie. Those who have no fever may get a pint of wine every day, half in the morning and half in the evening."

In 1782 we find an attempt at cottage nursing in England. The Rev. Mr. Dolling, Vicar of Aldenham, raised subscriptions to send women for three months'

THE NURSES READY FOR THEIR DAILY CALLS

THE SMILE THAT WON'T COME OFF.

training in midwifery that they might work among the village women. In 1867 district nursing was well established in England. In the United States, in 1813, Charleston, S. C., was the first to take up district nursing. The New York City Missionary Society in 1877 was the first to employ a regular trained nurse. Boston followed in 1884, Philadelphia in 1886, Delaware in 1890, Chicago in 1892, and Worcester in 1892. On January 1, 1909, there were 500 associations in the United States employing over 1300 trained nurses.

The Worcester Society for District Nursing was organized in 1892, incorporated in 1899, is supported by voluntary contributions, employs six graduates and three pupil nurses. This includes the nurse whose salary is paid by the Worcester Tuberculosis Relief Association. Two pupil nurses are furnished by the City Hospital and one from the Memorial Hospital. The Society's headquarters is at 1 Elm Place. Kind friends, church and other societies have supplied us with sheets, pillow-cases, baby clothes, luxuries and necessaries for the patients, and extra pleasures at Christmas and Easter.

The basic principles upon which the work is administered are that the nursing of the sick in their homes should be done seriously and adequately, instruction being incident to it and not the primary motive.

Since the addition to the staff in December, 1908, of the nurse for maternity cases, there have been sixty patients under her care. Visiting hours are from 8.30 a.m. to 5.30 p.m. The nurse's work is to visit her patients once or twice a day if necessary, seeing that the physicians' orders are carried out, and to bring to each patient all the care and comfort that skilled and trained hands can give.

A visiting nurse is furnished without charge to those unable to pay.

Patients in better circumstances are expected to pay from five cents upwards. When able to pay the regular fee of one dollar they are referred to an hourly nurse.

If possible the nurses will visit in the morning those cases reported the previous day; those coming to the office before twelve, the afternoon of the same day.

The nurses are for the public and it is desired that physicians and others interested in the sick shall send for them.

Nurses are not expected to attend maternity cases during labor, but after confinement will care for mother and infant until recovery.

IN THE TUBERCULOSIS TENT.

One hundred and eighteen physicians asked for our services in 1908, and $4,957.45 was used for the support of the Society. In 1909 we need at least $2,000 more, if the opportunities to increase and improve the work offered the Society are used.

The following is from a nurse's daily report:

"My first call was a new case—a child with pneumonia. I reached the house and found the occupants all Italian. A man stood in the door-way, and, as I came along, called over his shoulder, 'The nurse.' Out of another door-way came a woman who said, 'Here, lady.' Inside the room, lying on two chairs, was a child of two years, fully dressed even to his shoes. The temperature was taken and registered 104½. A more uncomfortable little chap I have never seen. While trying to persuade the mother to let me remove some of the clothing and bathe the little fellow, just as I

AFTER THE NURSE HAS TIDIED UP THE ROOM.

ON THEIR DAILY ROUNDS

was about to give up the task in despair, the father appeared, and upon learning the trouble, pushed his wife aside with no tender touch, and said, 'Go on, she a woman, know nothing. Me be in hospital and know. Take everything off, and wash for fever; do him good.' My heart ached for the mother, so sure her boy was about to be sacrificed, but I began my work, meanwhile asking about the doctor's orders, which the man gave in a seemingly intelligent manner. A sponge bath of soap and water, and alcohol rub, the mouth cleaned, a sheet put over the old sofa (an improvement on the chair), the boy sleeping in his clean, fresh bed, with only one garment on his now cool little body, and in walked the doctor. I spoke of his order carried out for bathing, etc.; he looked at me, looked at the child, and at the discarded clothing, laughed and said, 'This is my first visit here; the patients I asked you to see last night are upstairs, two of them, in the same condition.' So up stairs I went, and began over again. It was ten o'clock before I left my Italian friends, after promising to call in the late afternoon.

"My second call was to a woman dying of tuberculosis. A fourteen-year-old girl is the housekeeper and mother to the three younger children. The house was neat and clean, the patient was as clean as the little girl could keep her, but she was restless and in much pain from constant coughing and the bed sores on her back. After the bath, when her bed had been freshly made, her hair combed and teeth cleaned, and had taken some nourishment I had brought for her, she thought she could sleep, and, after giving some advice to the little housekeeper, I went on my way.

"My third, fourth and fifth cases were very close together and all surgical dressing—women who had been operated on in the hospitals, and permitted to come home on condition that the district nurse give the necesssary care.

"It was now 12.30, and I went home to lunch.

"The first visit in the afternoon was to an old man with a leg ulcer, which is healing slowly under constant care and cleanliness. At first he did nothing but grumble and fuss when he caught sight of a nurse's uniform, as he considered all women 'a fool bunch,' a conclusion reached after he had wedded his third wife. Now he says he doesn't care which nurse comes to him, as each one is 'a spot of sunshine.'

WAITING FOR THE NURSE

"The next call is to a baby of three months, slowly starving to death because no food can be found to agree with him. At birth and up to two months he was strong and well, but his mother one sad day, after weeks of temptation, went on a spree and poor baby was so neglected that his recovery is doubtful. A neighbor called the nurse's attention to the pitiful crying of the child, and upon investigating she found the mother drunk on the floor and the poor, little, dirty scrap of humanity on a bed almost in a state of exhaustion. The mother is heart-broken, for she really loves her baby, and is now following instructions faithfully. The baby has an oil rub three times a day—twice by the mother and once by the nurse, and the food is prepared daily by the nurse.

"The next visit was to Mrs. B—, the prize patient of the Society and a pet of us all. Daily her knees must be steamed and rubbed, her braces adjusted that she may walk around her room; one year ago she walked for the first time in years. She usually has a morning visit, but is always glad to wait her turn when more serious cases need us.

BOTH ARMS FULL

"The ninth visit was to a little pneumonia convalescent, a dear little girl of eight. The evening temperature taken, a sponge bath given, and instruction as to her nourishment, then back to my Italian friends. All three temperatures were very high. The two upstairs were attended first—the usual treatment of alcohol sponges, etc. The boy downstairs seemed a little better, and far more comfortable than in the morning. This time there was no resistance from the mother; she realized what the morning treatment had done, and deeply appreciated it. Now she wanted to help, so I explained how she could sponge the boy during the night, and showed her how to prepare the nourishment. When I left her, she shook hands and in her broken English said, by way of thanks, 'I lika you too much.'"

The average for the year is sixty-four visits a day each working day of 1908.

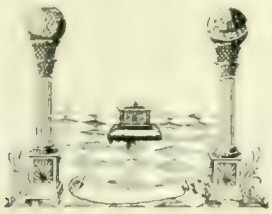
The following are the officers of the association: Board of Directors: President, Miss Harriet E. Clarke, 9 Chestnut Street; Vice-president, Mrs. Edwin Brown, 70 Elm Street; Treasurer, Mrs. Homer Gage, 8 Chestnut Street; Clerk, Mrs. Henry J. Gross, 23 May Street.

Directors: Miss Josephine C. Aldrich, Mrs. Frederick H. Baker, Miss Isabel M. Crompton, Mrs. Edgar A. Fisher, Mrs. T. Hovey Gage, Jr., Mrs. David Harrower, Jr., Mrs. George M. Bassett, Mrs. Matthew J. Whittall.

Advisory Board: Rev. Bernard S. Conaty, Mr. Alexander DeWitt, Dr. Thomas H. Gage, Dr. Warren R. Gilman, Dr. Leonard P. Kinnicutt, Rt. Rev. Alexander H. Vinton, Dr. Samuel B. Woodward.

Masonry in Worcester

It Dates Back in the Heart of the Commonwealth to 1793, and Now Has Over 1500 Members Here



FREE Masonry in Worcester was founded by Isaiah Thomas, the patriot printer, who was the first master of Morning Star Lodge, chartered March 11, A. L. 5793. With the exception of three years when Nathaniel Paine, William Caldwell and Benjamin Andrews sat in the East, he occupied that exalted place until 1802. Until Montacute Lodge was chartered June 9, A. L. 5859, Morning Star was the only blue lodge in Worcester, and many of the infant city's most distinguished men were numbered among its membership. The first master of Montacute Lodge was William A. Smith, who is still living at 85, active, influential, and highly respected by both men and Masons.

Athelstan Lodge, A. F. and A. M., was chartered June 13, A. L. 5866, Henry Goddard being its first master, and then came Quinsigamond, the youngest branch on the Masonic tree, which sprang into being Sept. 15, A. L. 5871, its first master being Henry Wadsworth. With the exception of Worshipful Brother Smith, the past masters of all these lodges have entered into rest.

Besides the blue lodges there are two chapters in Worcester: Worcester R. A. and Eureka R. A., one council of Royal and Select Masters, Hiram, and Worcester County Commandery of Knights Templars.

The Scottish Rite bodies are represented by Worcester Lodge of Perfection; Goddard Council, Princes of Jerusalem, and Lawrence Chapter of Rose Croix. There are also a large number of members in this city of Massachusetts Consistory, S.:.P.:.R.:.S.:.

Worcester County Commandery, like most such organizations, has had an extremely interesting career. It was instituted in the neighboring town of Holden 85 years ago, A. O. 706, and was the fifth commandery organized in this jurisdiction, being preceded only by St. John's of Providence in 1805, Boston of Boston in 1806, Newburyport of Newburyport in 1808, and Washington of Newport, R. I., in 1814. Instituted Dec. 17, 1824, it was the third commandery in this State to receive a charter.

In 1831 it was removed to Worcester, but it only stayed here eleven years, when it was taken to Sutton, where its conclaves were held until 1845. It then removed a second time to Worcester, and here it has continued to meet ever since.

In several years during the height of the anti-Masonic crusade no meetings were held, and from 1828 to 1843 there is no record of any work. Its territorial jurisdiction originally embraced the entire central portion of the State lying between the boundary lines of Connecticut and New Hampshire known as Worcester County, from which fact the commandery obtained its name.

P. M. WILLIAM A. SMITH.
Montacute, 1858-59-60.
Only Surviving Original Worshipful Master of any Worcester Lodge

The organization of Milford Commandery at Milford in 1859, and Jerusalem Commandery at Fitchburg in 1863, both children of Worcester County Commandery, drew largely from its membership and materially reduced its territory. It still, however, retains its historic name, and its membership has risen to 622 Sir Knights. Eminent Sir Fred M. Sampson is its present Eminent Commander, and among its members have been many men distinguished in the political as well as the Masonic history of the Commonwealth.

The officers at the head of the other Masonic bodies in Worcester at this time are as follows: Morning Star Lodge, Charles A. Normand, W.M.; Montacute Lodge, Melville F. Heath, W.M.; Athelstan Lodge, William Turner, W.M.; Quinsigamond, Frederick A. White, W.M.; Worcester R. A. Chapter, Wm. D. Chase, M.:.E.:. H.:.P.:.; Eureka R. A. Chapter, George H. Mullen, M.:. E.:.H.:.P.:.; Hiram Council, R. and S. M., Henry A. Knight, T.I.M.; Worcester Lodge of Perfection, Henry L. Green, T.P.M.; Goddard Council, Princes of Jerusalem, Edward J. Sartelle, S.P.; Lawrence Chapter of Rose Croix, Charles E. Davis, M.W.M.

TWO ANCIENT LANDMARKS—OLD MASONIC HALL AND TOWN HOUSE, BOTH OCCUPIED BY MORNING STAR LODGE PRIOR TO 1828

1868—WALDO BLOCK, MAIN STREET—1867.

1864—BANK BLOCK, FOSTER STREET—1867

The Masonic fraternity in Worcester has at various times occupied many different quarters, some of them far from elaborate and suitable according to present day standards. In the early history of Masonry such a thing as permanent headquarters was unknown.

The first Masonic communication in Worcester was in the house of Ephraim Mower, known as the old United States Arms, which stood on the south corner of Main and Mechanic Streets, Brother Mower being paid six pounds a year for the use of his apartments by the brethren of Morning Star Lodge. The date of the first meeting was Feb. 8, 1793.

Subsequently Morning Star lodged in a "New Hall," so called, but it was not until 1821, after several removes, that the craft found quarters in any way suitable for their purposes. In that year they moved into a hall in a building erected by Jedediah Healey in the rear of what is now Barnard, Sumner & Putnam Co's. Thence they removed in 1825 to the Town House, which was their home when, in 1828, the great Anti-Masonic storm broke over New England. Pictures of both these old buildings are shown.

From 1828 to 1842 no Masonic work was done in Worcester, no candidates were raised and no halls were occupied. If the members met at all it was secretly, and the charter of Morning Star lay dormant. In 1842, under a dispensation from Grand Master Augustus Peabody, the craft were called from refreshment to labor, and Morning Star resumed operations, hiring a hall from Brother John Green, M.D., on the west side of Main Street nearly opposite Central Street, for the magnificent sum of $25 a year.

In 1846 Morning Star removed to the hall of Dr. Benj. B. Heywood, and here they stayed until Waldo Hall was dedicated Jan. 20, 1857, with Masonic ceremonies. This hall, a hall in the Worcester National Bank building on Foster Street, occupied by Montacute Lodge, and the present temple on Pearl Street, comprise the homes that Worcester Masonry has occupied in the 116 years that it has been in existence. In this period the order has grown from 11 members to 1569 affiliated Masons, and from one small lodge meeting in an obscure room to one of the most important Masonic centres in New England.

Worcester Masons played a prominent part in securing the location of the new Masonic home at Overlook in the neighboring town of Charlton, and it is a source of much congratulation to the fraternity here that so ideal a site and so perfect a place has been designated for this model institution so close to the Heart of the Commonwealth. A particularly fine picture of the home appears in connection with this article.

1867—MASONIC TEMPLE, PEARL STREET—1909.

BLUE ROOM—MASONIC TEMPLE.

NEW MASONIC HOME, OVERLOOK, CHARLTON, MASS.

Local May Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Indications of renewed activity present themselves in nearly all lines, and the gains made, in spite of tariff and other disturbing features, are a fair indication of what may be expected in the immediate future. Local plants have been steadily adding to their working forces during the month, and almost normal conditions prevail in many instances. Orders are much heavier and the outlook better in the wire industry, and manufacturers of wire specialties are fully up to normal conditions. Manufacturers of machine tools and machinery feel much encouraged. The spasmodic conditions which have prevailed so long in these lines are gradually disappearing, and inquiries and orders have been steadily increasing during the month, and skilled labor in this line is much better employed.

Weather conditions have not been favorable for the development of trade in seasonable merchandise, in retail lines; nevertheless, merchants report some improvement over the corresponding period of a year ago.

The universal development in the revival of trade is shown clearly in the bank clearings, which, outside of New York City, for the entire country show a gain of 11.9 per cent. over last year and 16.8 per cent. better than in 1906. Local bank clearings for the first four months of 1909, 1908 and 1906 are as follows:

	1909	1908		1906
Jan.	$7,415,248	$6,820,800	+8.7%	$7,075,983
Feb.	5,970,095	5,213,048	+14.5%	5,569,739
Mar.	6,836,215	5,748,779	+18.8%	7,784,644
Apr.	6,997,329	6,393,909	+9.4%	7,203,436

Failures in the county for May show a total of eleven (11), with liabilities of $55,904 and assets of $26,392; for May, 1908, there were three (3), with liabilities of $5,608, assets of $2,415; in 1907, a total of six (6), with liabilities of $32,454, assets of $10,370, and in May, 1906, there were eleven (11), with liabilities of $35,567 and assets of $13,906.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

T. Brown, Manure Spreader, No. 920,260.

A manure spreader provided with a beater shield to prevent the pressure of the load upon the beater, a device for withdrawing this shield, and a device for scraping the movable apron or bottom of the spreader.

Frank R. Batchelder, Cartridge Belt, No. 920,117.

A belt provided with a number of loops adapted to receive clips upon cartridge pockets to attach these pockets to the belt, and also to receive the ends of the suspenders.

Joseph F. Marsolais, Currycomb, No. 921,136.

A currycomb consisting of a wire fabric formed of triangular wire coils interwoven, and a wire frame attached to the edges of this wire fabric.

[illegible] Cushion for Rubber Stamps, No. 921,224.

A [illegible] stamps comprising a sheet or block of flexible material having grooves on opposite sides, those on one side extending more than half way through the sheet and intersecting those on the other.

J. F. Marsolais, Machine for Making Wire Coils, No. 921,125.

A stationary wire guide inclosing a rotating mandrel, the guide consisting of a tube provided with a spiral slot and the pitch of the coils being regulated by this slot.

Worcester Securities

Three Well-known Concerns Whose Stocks and Bonds Find Favor with the Investing Public

Local holders of United States Envelope Company preferred stock were greatly pleased to receive on May 10 an extra dividend of $1.75 per share, being a payment on account of the accumulated dividends on the stock. While the holders were entitled to 7 per cent. dividends, the company have for several years been paying somewhat less than the required amount. After the payment, as above, there are back dividends to the amount of 12 per cent. still due. It is generally expected because of the new bond financing and general improved business conditions, the company will now be able to pay each year its full 7 per cent. dividends, and will also be able to make other payments at different times on its accumulated dividend account. The action of the Directors in declaring the extra dividend, and thus signifying their intention of attempting to make up some of the back dividends, has caused quite an inquiry for the stock, which has recently advanced to $110 per share bid. The common stock is likewise sharing in the improved condition of the preferred stock, and is quoted at 45 bid and none offered.

Local investors have also this year had an exceptional opportunity of securing some of the Denholm & McKay Company (Boston Store) 7 per cent. cumulative preferred stock. The company being organized under Massachusetts laws, the stock is free of tax to residents of Massachusetts. While the Denholm & McKay Company have been in business since 1870, the stock has been very closely held, and it is understood that partly on account of the company's recent purchase of the Clark Block, and also to allow their customers to become more directly interested in the business, the stock was offered. The amount offered to the public was 2313 shares, or $231,300 par value, and was very quickly taken by nearly four hundred investors, since which time there have been sales of the stock at 101 and 102. On May 11 the Board of Directors voted to make the dividends on the above stock payable quarterly, on the first days of March, June, September and December each year, instead of semi-annually as formerly. Changing the dividends from semi-annually to quarterly is in accord with the custom of practically all leading companies whose securities are held by the public. The company also at that time declared a quarterly dividend of $1.75 per share, payable June 1, 1909, to stockholders of record May 31.

The Graton & Knight Manufacturing Company recently sent out a notice to their stockholders, asking for authority to issue $750,000 first mortgage bonds. No effort has as yet been made to place the bonds on the market, and it may be some little time before they are issued. The high reputation enjoyed by this concern makes its securities a particularly desirable investment.

Worcester Quotations

Furnished by Fisk & Robinson, Worcester.

May 24th, 1909.

BANKS	Bid.	Asked.
Mechanics National Bank	120	. . .
Merchants National Bank	155	. . . .
Worcester National Bank	200	. . .
Worcester Trust Company	250	. .
RAILROAD STOCKS.		
Boston & Albany	233	234
Boston & Maine common	146	148
Boston & Worcester Elec. common	12	. . .
Boston & Worcester Elec. pfd.	.	56
Fitchburg preferred	133	134
New England Inv. & Sec. pfd.	85	90
New York, New Haven & Hart.	170½	171
Norwich & Worcester	205	last sale
Providence & Worcester	275	last sale
Worcester, Nashua & Rochester	146	last sale
Worcester Railways & Investment	.	70
INDUSTRIAL STOCKS.		
Crompton & Knowles pfd.	145	. .
Denholm & McKay common	200	. . . .
Denholm & McKay pfd	100	102
Graton & Knight Mfg. common	130	. . . .
Graton & Knight Mfg. pfd	112	115
Royal Worcester Corset Co.	165	. . . .
United States Envelope common	45	. .
United States Envelope pfd	110	.
Worcester Gas Light	255	. . .
Worcester Electric Light	250	. . . .
Wright Wire Company common	102	110
Wright Wire Company pfd	106	. . . . .
BONDS.		
Amer. Writing Paper 1st 5's	84½	85½
Boston & Wor. St. Ry. 1st 4½'s	98½	. . . . .
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 5's	5½	basis
Marlboro & Westboro St. Ry. 1st 5's	. .	98
Norcross Brothers 1st 6's	. .	100
United States Envelope 1st 5's	100	102
Worcester Cons. St. Ry. 1st 4½'s	94½	. . . .
Worcester & Marlboro St. Ry. 1st 5's	98	. .
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General.

April 27. South Unitarian Church celebrates its twentieth anniversary.

H. O. Glasure, assistant secretary of the Y. M. C. A., resigns to go to Oskaloosa, Iowa.

Worcester Merchants Association votes to eliminate all discounts in the stores save only to employees.

April 30. Hearing in the Common Council Chamber by the Massachusetts Commission on old age pensions. Prof. Alexander F. Chamberlain of Clark University, Rev. Eliot White, Representative Cornelius J. Carmody, John H. Bennett and Thomas Higgins, the latter representing the Central Labor Union, favored the plan. Alfred L. Aiken, president of the Worcester County Institution for Savings, and Prof. U. Waldo Cutler opposed.

Y. M. C. A. receives bequest of $5,000 from executors of will of late John D. Rice.

May 1. Stamp sales for April at Worcester post office $35,305.34; last year $31,009.44.

Total number of instruments recorded in office of the Worcester District Registry of Deeds for four months ending April 30, $5040, as compared with $4379 for corresponding period last year.

H. Stuart Michie of Washington elected principal of the Art Museum school.

3. Dr. Melvin G. Overlock begins circulating a petition providing for the establishment in Massachusetts of municipal tuberculosis sanitariums by referendum vote.

Peter Baker Lead Company plant, Cherry and Canal Streets, damaged $5000 by fire.

4. Claflin & Company cut coal prices 50 and 75 cents a ton at retail.

6. Executive board of the Victoria Association votes to turn over its funds, amounting to $2,763.72, to the Hahnemann Hospital to help endow a free bed in that institution in memory of Queen Victoria.

William J. Montgomery, 7 Barbour Street, awarded the Bancroft scholarship for 1909 of $400, and Miss Grace M. Ellis, 13 Francis Street, Greendale, awarded the scholarship of $250.

Tatnuck Congregational Church has first annual meeting and reports $248 in treasury.

Boston & Maine Railroad and State agree upon Fred Joy, Arthur Lord and George F. Swain as Worcester Grade Crossing Commission for abolition of grade crossings on that railroad.

7. Annual business meeting of Worcester County Sheriffs' Association in the Bay State House. Sheriff Robert H. Chamberlain re-elected president; Special Sheriff Benjamin D. Dwinnell of Fitchburg, vice-president, and Deputy Sheriff W. W. Scott of Worcester secretary and treasurer.

Worcester Council, No. 136, United Commercial Travelers, hold successful minstrel show at Franklin Theatre.

8. Willis A. White of Concord, a member of the jury which on May 4 convicted Chester S. Jordan of Somerville of wife murder, lodged in the Worcester Insane Hospital as a result of the nervous strain incident to the trial.

9. Fortieth anniversary of Plymouth Congregational Church inaugurated lasting two days. Addresses by Revs. George W. Phillips, Charles Wadsworth of Philadelphia, Archibald McCullagh and Andrew Burns Chalmers, its several pastors.

Rev. George F. Haines, pastor of Second Advent Church, reconsiders his determination to resign.

Highland Street Church of Christ celebrates fourth anniversary. Rev. A. P. Finley, its pastor, resigns to return to his home in Lexington, Ky.

10. Ernest I. Morgan resigns as assistant to District Attorney George S. Taft on account of ill health, and James A. Stiles of Gardner is appointed in his place.

Council dissolves pastoral relations between Rev. Dr. Willard Scott and Piedmont Congregational Church.

Annual meeting Veteran Light Infantry Association. Edwin B. Maynard elected President.

11. Hon. Josiah Quincy, Mr. J. Randolph Coolidge, Jr., of Boston, and Rev. Samuel M. Crowther of Cambridge address Worcester Economic Club.

13. Former Senator James H. Walker of Amesbury, guardian of William W. Sargent, files inventory of his estate showing $40,335 personalty and $24,675 realty.

14. Chengting T. Wang, a Yale student, and C. V. Hibbard, field secretary of the International Y. M. C. A., lecture on China and Japan, before 100 prominent Worcester business men.

Trustees of Clark College vote the sum of $100,000 for new library.

Worcester Polytechnic Institute branch American Institute Electrical Engineers elects officers for 1909. Ray H. Taber of the Senior Class elected president; Otto Escholz, vice-president; Albert H. Nims, secretary and treasurer. Prof. H. B. Smith, H. E. Hartwell and O. B. Jacobs, executive committee.

17. Jacob Riis of New York addresses Congregational Club.

18 and 19. Massachusetts Grand Court, F. of A., meets in Worcester.

18. Worcester Y. W. C. A. has its annual meeting and elects as President, Mrs. Charles H. Morgan; First Vice-president, Mrs. Josephine C. Aldrich; Second Vice-president, Mrs. Frank L. Durkee; Clerk, Mrs. William W. Bird; Treasurer, Miss Eldora M. Aldrich; Assistant Treasurer, Mrs. George H. Taft. The Association has 1766 members; its receipts for the year were $31,107.08; balance on hand May 1, 1908, $1,734.30; total, $32,841.38; expenses, $32,173.46; balance on hand, $667.92. Assets of the corporation, $119,988.19; liabilities, $19,131.98; balance, $100,856.21.

Estate of late Horace A. Young announced to total $203,766.80.

Miss Emily C. Wheeler, secretary and treasurer of the National Armenia and India Relief Association, announces that she has received $1,094.60 for the relief of the orphans in the province of Adana, Turkey, the result of the recent Armenian massacres there. Of this sum $216.21 has been contributed by Worcester people.

City Affairs.

April 30. Pearce B. Williams, granted the only sixth class druggist's license in Worcester, returns the same to the License Commission.

Commission on Street Congestion advocate widening Southbridge Street entire length seventy feet.

May 4. School Committee votes to raise salary of Supt. Homer P. Lewis from $4000 to $4250. Increases in school expenses are from $275,930.94 in 1890 to $730,212.16 in 1908. School population in same time increases from 15,165 to 22,589. Ratio per pupil: 1890, $18.12+; 1908, $32.32+.

11. City officials announced determination to widen Madison Street to fifty feet.

12. Official try out of new water tower proves satisfactory.

14. School expenditures for April, $56,826.90.

20. City Auditor Frank E. Williamson reports April drafts on city treasury from various departments total $360,-234.26. There was expended on the abolition of grade crossings, $2,250.60. Other items of consequence: City Hospital, $7,889.33; Fire Department pay rolls, $13,489.26; interest, $41,111.50; interest on sewer loan, $11,885; Police Department salaries, $14,-347.86; school salaries, $57,775.26; Street Lighting Department, $10,628.57; interest on water loan, $46,212.50.

24. Board of Aldermen authorizes $125,000 loan to erect new industrial school.

Building and Business News.

April 27. Notre Dame Church property on Park Street, damaged by fire last October, transferred from Rt. Rev. Thomas D. Beaven, bishop of Springfield, to the School of the Holy Family of Worcester. Part of the buildings included in the property have been used for school purposes for years, and it is now planned to occupy the entire premises.

30. Jamesville Construction Company purchases 20,000 feet of land and a four-story brick block on Central Street, alongside the Boston & Maine Railroad, of Arthur M. Evans estate for $30,000. Property to be utilized in handling builders' supplies.

Fifty-five lots of land, containing 598,959 square feet, located in William, Russell, Roxbury, Somerset and Sever Streets, sold at public auction by Deputy Sheriff Albert F. Richardson to Albert W. Royce for $1 above mortgages amounting to $121,500. The land was formerly a part of the old fair grounds, and had been held by the West Side Land Company for ten years.

May 3. Hon. Rufus B. Dodge appointed receiver of the Vellumoid Paper Company, and directed to give bond of $20,000.

8. Announcement made that American Steel & Wire Company is to install fifteen-ton Heroult electric furnace in its Worcester works, with a gross capacity of 35,000 tons of steel per annum. Power to be furnished by Connecticut River Power & Transmission Company.

10. Receivers for Cutting & Company authorized to pay creditors of concern 7 per cent. dividend, making 17 per cent. in all since dissolution. Expected that further dividends will raise total to 20 per cent. of claims, amounting to about $200,000.

12. Worcester Typothetae re-elects Gilbert G. Davis, president; Charles R. Stobbs, secretary; F. S. Blanchard, treasurer; these, with O. B. Wood, executive committee.

The Spencer Building Company incorporated with a capital stock of $20,000, divided into 200 shares of $100 each. E. J. Cross, president; Frank Kilmer, treasurer; these, with E. Bruce [illegible].

20. Quinsigamond grocery and provision dealers begin closing stores Thursday afternoons for six months.

Worcester Necrology.

April 26. Patrolman Silas D. Hemenway killed in a runaway accident on Belmont Street hill, being thrown from a wagon and crushed under a heavy hogshead.

May 6. Daniel Kelley, an ex-Confederate soldier, dies at the home of his daughter, Mrs. Edward W. Quinn, 16 Fruit Street, aged 75 years. His brother Dennis was a Union soldier, enlisting from Newton. Daniel enlisted in Virginia and came north at the close of the war.

14. John J. Rockwell, veteran of the Mexican War, dies at the home of his daughter, Mrs. Lizzie C. Boyce, 266 Webster Street, of heart disease, aged 80 years and 20 days.

15. Leopold Strauss, president and senior member of the Gross & Strauss Company, dies at his home, 908 Main Street, of Bright's disease, aged 71 years 4 months and 8 days.

18. Charles Stanley Pratt, musician, oldest son of the late John E. and Mrs. Anna P. (Rice) Pratt, dies at the Bemis Sanatorium of softening of the brain, aged 35 years.

CONNECTICUT RIVER POWER CO.—$3,220,000 CONCERN

The Connecticut River Power Company of Maine, which owns the Connecticut River Power Company of New Hampshire, which owns the dam at Vernon, Vt., and which is now seeking admission to Worcester, at a meeting holden May 25, at Portland, Me., voted to increase the capital stock from $2,500,000 to $3,220,000.

It is expected that the plant at Vernon will be in operation July 1. Power is to be furnished to Brattleboro, Vt.; Keene, Hinsdale and Winchester, N. H.; Gardner, Leominster, Fitchburg, Clinton, Shirley, Marlboro and Worcester, Mass.

WORK OF CARLTON ENGRAVING COMPANY.

To be effective, a business-getter, the advertising of to-day must be well-planned, unusual, above all, attractive. That is why the three and four half-tone color process is coming so generally into use. Reproduction in color direct from nature is now a practical fact, and the fidelity with which the results are obtained makes it increasingly sought for in the production of high-class catalogue, booklet, circular and magazine advertising.

The current issue of the Worcester Magazine contains in its frontispiece an example of this sort from the Carlton Engraving Company, of 418 Main Street, a concern which has achieved the highest reputation for work along this line. The Worcester Magazine affords, from month to month, splendid examples of the artistic as well as the industrial achievements of Worcester concerns, and it takes keen satisfaction in reproducing such. The color design on the cover of this number affords perhaps as striking an example of the superiority of Worcester workmanship as this Magazine has recently afforded. This cover was conceived by a Worcester artist, engraved by a Worcester concern, printed by Worcester printers and bound by a Worcester binder.

The Carlton Engraving Company, which was responsible for the engraving in question, and other samples of whose artistic workmanship are scattered through this number, is strictly a home development, and although it has been in existence but a year, has already achieved a high reputation in the engraving world. The colored reproductions in this number merely show the results of one phase of the company's work, which also embraces fine half-tones without color, line cuts, retouched photographic reproductions of intricate machinery, bird's-eye view drawings, general photographing, designing, art gelatine printing and special advertising work.

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

Officers

President, CHARLES T. TATMAN. *Vice-President*, EDWARD M. WOODWARD.
Secretary, JOHN L. SEWALL *Treasurer*, ALBERT L. STRATTON

Directors

FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
CLARENCE W. HOBBS, JOHN J. POWER, HERBERT H. FAIRBANKS,
JOHN W. HIGGINS, EDWARD J. CROSS, WILLIAM WOODWARD,
WINTHROP HAMMOND, DR. THOMAS HOWELL, LOUIS H. BUCKLEY,
WILLIAM FORSBERG, CHARLES T. TATMAN, ARTHUR C. COMINS
VICTOR E. EDWARDS, CHARLES L. GATES, MARCUS L. FOSTER,
ARTHUR W. PARMELEE, EDWARD M. WOODWARD

Clerk of the Corporation, WILLIAM H. SANFORD *Auditor*, H. WARD BATES

Glee Club Concert, June 15

"Help the Glee Club to go on the Seattle excursion and to boom Worcester." That is the slogan that is being used as the Worcester Magazine goes to press, to call attention to the concert that the Board of Trade Glee Club is to give in Mechanics Hall, June 15, to help them secure the funds necessary to enable them to go to the Alaska-Yukon-Pacific Exposition. It is no small undertaking to transport a body of forty men across the continent and back again, but the publicity features of the enterprise make it worth all it costs. The fact that through this trip Worcester gets an advertisement 6000 miles long, ought not to be lost sight of by any patriotic citizen nor by any shrewd far-seeing citizen, for this advertisement can be coined into good hard American dollars by Worcester's manufacturers and business men, if they will only take advantage of the trip to make their wares known in the various cities to be visited.

Secretary John L. Sewall is now absent on the Pacific slope making arrangements for the trip of the Worcester contingent, and everywhere he goes he finds that the people have heard of the Worcester Board of Trade Glee Club, and are anxious to hear it sing.

A sample of the publicity that Worcester is getting out of the trip is shown by the accompanying clipping from the Detroit Free Press of May 22, detailing the arrangements that are going forward in that city:

> John L. Sewall, secretary of the Worcester, Mass., Board of Trade, was a visitor at the Board of Commerce rooms yesterday to make arrangements for a stop in Detroit for his organization on its way to the Yukon Alaska Pacific Exposition. The visitors will be in Detroit August 5, and the Entertainment Committee of the Board of Commerce, of which Harry Skillman is Chairman, will outline a programme that will keep the Worcester men busy during their stay. A boat ride will probably be one of the features. The Worcester men will bring a glee club with them and will give a concert in the evening at the Wayne pavilion.

This sort of thing repeated in half a dozen other western cities, besides the celebration in Seattle itself, where the Glee Club is booked for a series of concerts, will make the name of Worcester more familiar to the people of the western country than thousands of dollars' worth of trade-mark advertising can do. It is, therefore, good business to help the boys out June 15 at Mechanics Hall. The tickets are only one dollar each, and there ought to be enough of them purchased to pack Mechanics Hall to the doors.

It Embodies the Worcester Spirit

At a meeting of the Directors of the Worcester Board of Trade held on Feb. 11, 1909, the following resolution, reported by the Joint Committee on Manufactures and New Enterprises, was unanimously adopted:

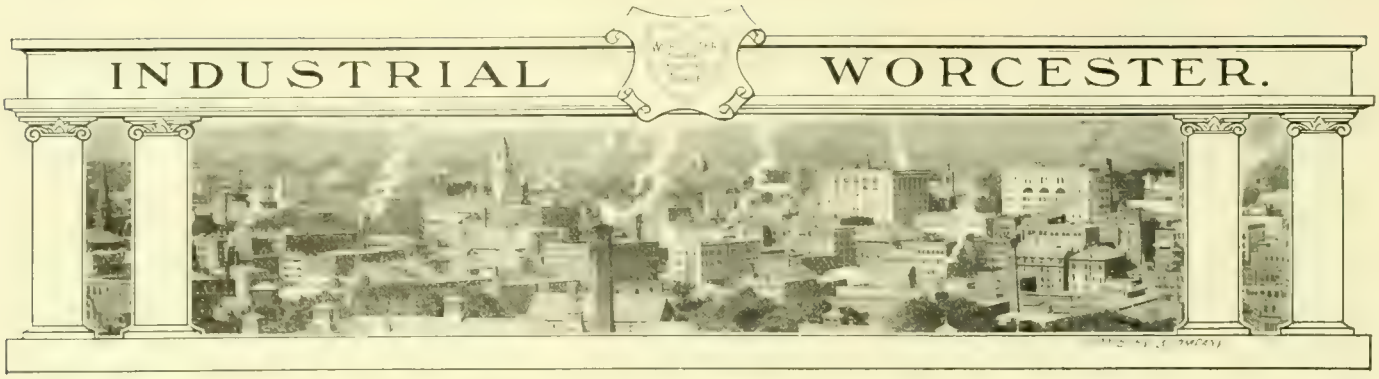
Resolved, that we learn with pleasure of the progress of the motor truck industry as developed by Ralph L. Morgan, and express our interest and readiness to cooperate in all practical ways in the establishment of this promising business in our city.

This vote is published here in full in order that not only the Worcester public, but the public at large may know two things: First, that the Worcester Board of Trade gave at the earliest possible moment its thorough approval of the enterprise in which Mr. Morgan is so vitally interested; and secondly, that the Worcester Board of Trade is more interested in building up here in Worcester new industries than it is in bringing to Worcester industries from other cities and towns, thereby robbing them of the revenue to which they are legitimately entitled.

Emphasis is placed on this point from the fact that after every fire in this city in which a great industry has been affected, its managers have been in receipt of invitations from boards of trade all over the Union inviting them to move, and offering them attractive reasons for so doing, including in many cases sites and buildings, rent free, for a period of years.

Worcester has never advanced at the expense of her neighbors, and in this case it is a source of profound congratulation that the R. L. Morgan Company, organized by Mr. Morgan, and financed by Worcester men, starts in business without any factitious aids whatever. It is always gratifying to learn of the launching of a new industry of the magnitude of this company, but it is doubly gratifying when the concern starts out as this does in a dignified self-respecting manner without being under the slightest monetary obligation to any organization, and absolutely free from patronage of any sort. We cannot refrain further from expressing our admiration for Mr. Morgan and his pluck in the face of great difficulties in raising the money necessary to finance his company. At a period when marked suspicion and timidity characterized the local money market, and men looked with distrust on almost everything of an investment character, Mr. Morgan succeeded in capitalizing a $300,000 company, and surrounding himself with a body of mechanical experts and financiers of the highest standing. There is no question but what the Morgan motor truck, as a commercial proposition, has a great future before it. The truck is essentially practical and absolutely indispensable for modern draughting purposes. The uses to which it can be put are almost unlimited. Mr. Morgan has carefully worked out all the details necessary for its marketing, and the demand for the truck is already so great that an assured business is guaranteed from the start.

Such an industry, organized by such a man and manufacturing such a product, is the sort of thing that has characterized Worcester from the start, and has raised it from a country town to the mechanical centre of this Union.

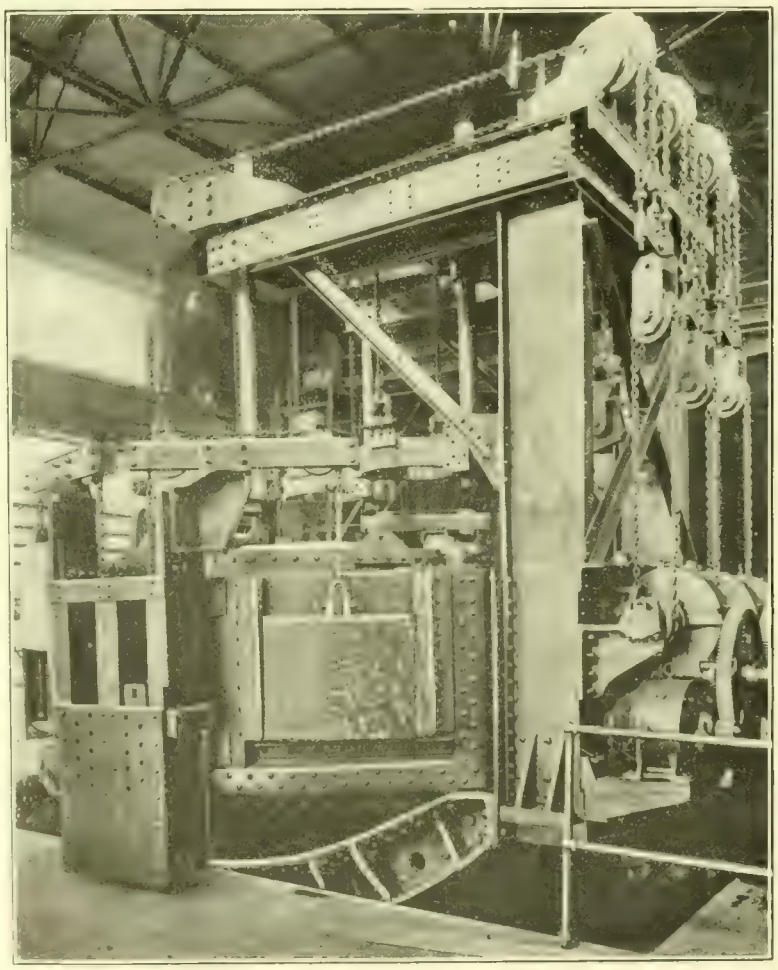


ELECTRIC STEEL FURNACE.

There is shortly to be installed at the South Works of the American Steel & Wire Company in this city a piece of apparatus the performance of which will be watched with the greatest interest by the steel making industry of the country, namely, an electric steel furnace of large capacity. This furnace is one of two which are being installed by the United States Steel Corporation; the other being located at the South Chicago Works of the Illinois Steel Company.

In the open-hearth process of manufacturing steel, which is now so generally employed, it has long been realized that certain inherent difficulties in the removal of injurious elements existed which could not be overcome in the ordinary commercial process. Important among these injurious elements is sulphur, which is extremely difficult to eliminate, largely on account of the limited temperature which can be developed in this process. Moreover, the flame used for melting, which is generally produced by gas or oil, is in itself likely to contain sulphur, which tends to increase rather than reduce the amount of this element in the molten steel. If, therefore, it is desired to produce steel, which in its finished state must be comparatively free from sulphur, which is very desirable, it is necessary to introduce only stocks which contain very limited amounts of this element. This is especially true of the so called acid process.

In the electric furnace, on the other hand, the temperatures which are obtained are extraordinarily high, and at these high temperatures the removal of sulphur, even in large quantities, takes place very rapidly, the resulting product being very much less contaminated with this injurious element than it is possible to produce in the open-hearth furnace.



THE NEW HEROULT ELECTRIC FURNACE AT AMERICAN STEEL & WIRE WORKS

In the process of treating steel in the electric furnace as ordinarily employed, the metal is first melted in a basic open-hearth furnace of the tilting type, and is poured, while in a molten state, into the electric furnace, together with the proper ingredients for forming the slag, which is necessary for the operation. The electric current, which is introduced into the furnace by means of large carbon electrodes, is then turned on and the electrodes lowered until an arc is formed. The arc produces an intense heat at the electrodes which facilitates the chemical reactions taking place between the slag and the molten steel, and further, by localizing the heat, sets up convection currents in the metal which tend to increase to a still greater extent the rapidity of the chemical reactions which are occurring. When the process of refining is complete, the current is interrupted and the molten steel is poured into a ladle, to be cast into ingots.

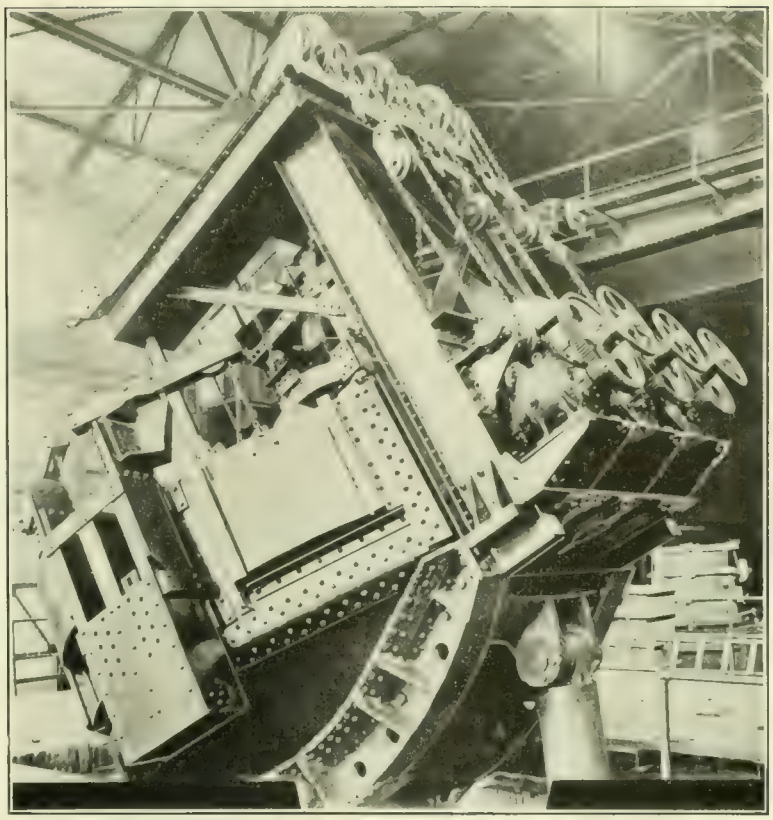
Although the electric furnace has been used in substantially one of its present forms for a number of years, it is only very recently that it has emerged from the essentially experimental stage into a device of real industrial value. Extended research in the field of electro metallurgy, which has been going on for a number of years, has all pointed to the electric furnace for steel making as a highly desirable piece of apparatus. The cost of electric current as generated under ordinary conditions through the medium of boilers and steam engines has, however, been a serious drawback to its adoption on anything like a commercial scale. Recent developments of the gas engine, particularly in its application to the use of blast-furnace gas and the increased utilization of water power throughout the country, have all tended to lower the cost of electric power to a point where it may be used to such advantage in metallurgical processes that the electric furnace now bids fair seriously to rival the Bessemer converter and the open-hearth furnace.

The United States Steel Corporation, realizing that it should take the lead in the introduction of this type of furnace in the United States, acquired the rights to install the Heroult furnace, which has been developed in small units in Europe, where there are in operation a number of furnaces of capacity never exceeding five tons. The Corporation decided to build two of these furnaces immediately. In selecting the locations it was quite natural that one furnace at least should be placed at a plant where exceptionally high grades of steel are used, since this furnace is particularly adapted for making such a product. Inasmuch as the Worcester mills of the Corporation are engaged in the manufacture of a varied line of products, nearly all of which necessitate the use of steel of high quality, the Corporation officials were inclined to favor this location, providing a source of cheap electric power could be obtained. The solution of this latter problem appeared to lie in the adoption of electric power as furnished by the Connecticut River Power Company from its hydro-electric development on the Connecticut River at Vernon, Vermont. Had

this power not been available, the electric furnace to be installed in Worcester would unquestionably have gone to some plant in the West where cheap power may be obtained.

It is proposed to produce in the electric furnace practically all of the high grade steel now made in the Worcester district. This will mean an annual production of approximately 35,000 tons. Later, if it is shown that the furnace is capable of producing lower grades of steel to advantage as far as cost is concerned, its range will undoubtedly be extended to include such grades, and possibly additional furnaces may be installed if necessary.

It is expected that the quality of the steel made in this furnace will be such as to increase the excellence of the product for which the Worcester mills already have a high reputation. Further, the electric furnace, if as successful as its performance in small units promises, will practically assure, for years to come, the continuance in Worcester of the manufacture of certain classes of wire which otherwise might, in the natural course of events, be made to advantage in some of the western plants where fuel is cheap and the cost of power correspondinly low.



SHOWING THE FURNACE TIPPED

In the manufacture of wire and wire products of high grade, the relative cost of labor is naturally very high. This means that the number of operators employed on this class of work is very large, and its removal from Worcester would consequently be a serious matter to the labor and commercial interests of the city.

Incidentally it is a matter of no small interest to participate most intimately in the development on a large commercial basis of this most interesting application of the electric current to metallurgical processes.

The Worcester Magazine is indebted to the Iron Age for the cuts used in connection with this article.

THE ROYAL MOTORCYCLE.

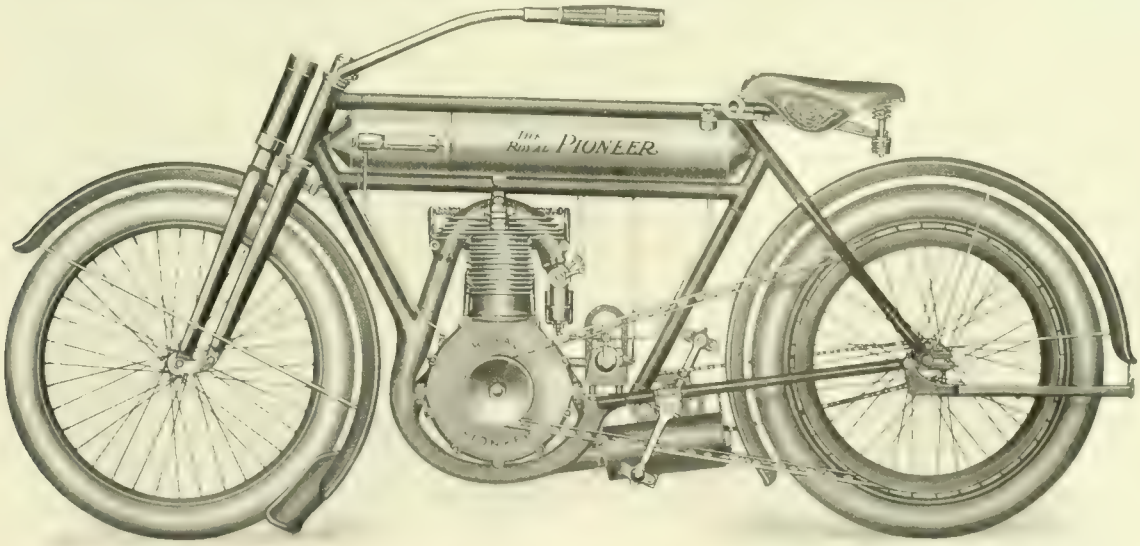
Among other things for which Worcester is noted is her manufacture of motorcycles. The Royal Pioneer Motorcycle made by the Royal Motor Works, Inc., 38 Bloomingdale Road, enjoys a high reputation both in this country and abroad on account of its superior finish and workmanship.

The factory of the company is devoted to the machining, finishing and assembling of the various castings and parts which go to make the complete machine. The material used is of the highest possible quality, and has to pass through rigid tests before it is used. All moving parts are finished with the greatest care and accuracy, not even .0005 of an inch variation from size being allowed, while absolute interchangeability is insisted upon. The output is limited to about five hundred machines for 1909, as compared with the output of ten thousand machines from some of the largest factories. Quality, reliability and perfection being insisted upon, the output must be limited, in order to do full justice to each motorcycle.

The new Royal Pioneer motor is the result of months of careful designing and planning, and as a result not only a finished and highly efficient engine has been produced, but the same holds true of the rest of the machine. In detail this new motor incorporates in its makeup the valve-in-the-head principle, in a new and very efficient form; for in this motor there are no valve pockets and the explosion takes place directly over the piston, which is dome-shaped, to conform with the most modern practice. This construction actually gives the engine from fifteen to twenty per cent. more power.

These valves are very large, one and one-half inches in diameter. Both are mechanically operated by pull-rods, under double spring tension, thus making them quick acting and silent. These valves are, with all their parts, absolute duplicates and are interchangeable.

The smaller bearings of the motor are of hardened steel, ground to size, with a maximum variation of .00025 of an inch, and are bushed with Parson's white bronze. The heavy duty bearing, on the crank shaft, is an imported annular ball bearing of large size and almost frictionless.



THE ROYAL MOTORCYCLE

RALPH L. MORGAN.
President.

HENRY E. WHITCOMB.
Treasurer and Manager.

JOHN R. BACK.
Superintendent.

A. R. GRUNDELL.
Secretary.

The lubrication is a combination of the splash and centrifugal systems, and is highly efficient, in that the oil which lubricates the moving parts never comes in contact with the hot gases until it has done its work. There is a trough on the inside of the piston, with holes drilled from the bottom of it at an angle of forty-five degrees to the outer wall of the piston, thus spreading the cylinder walls with fresh oil and insuring perfect lubrication.

The tanks in the Royal are of excellent design. They are two in number and are made of seamless drawn brass tubing, of heavy gauge, highly nickel-plated. These two tanks are absolutely separate and the oil tank telescopes into the gasoline tank, thus forming a combination of tanks of great capacity and strength, without the slightest danger of leakage.

The engine is very well muffled, including in its makeup something entirely new to motorcycles, an expansion chamber of seven times the cylinder capacity, under the motor base, where the gases expand, then cool, passing through the muffler under their own initial velocity, without piston back pressure.

The ignition is by the Bosch magneto, which is driven from the cam shaft by an enclosed bevel gear. The makers had the celebrated Brown & Barlow Company of Birmingham, England, make them a carburetor from their own designs, and it is, indeed, an excellent one, for it has shown one hundred and eighty-seven miles to the gallon of gasoline.

One of the last but most essential features of this motorcycle is the new spring fork. This includes in its makeup more than two feet of the finest tempered spring wire, in two shock-absorbing springs of different tensions and one large rebound spring. This fork absorbs all vibrations and allows the handlebars to remain stationary, no matter how severe the jar. It is, as its makers say, "the last word in luxuriousness."

The machines are given one of the hardest tests possible, in order to insure proper adjustment of parts and develop the highest efficiency. The test trip is forty-three miles long, and takes in the stiffest grades in the vicinity of Worcester, including that most difficult of grades, Leicester Hill, which it has taken at slow speeds and at over twenty miles per hour with the greatest regularity and ease, without any pedal assistance.

As an example of a highly developed type of gasoline engine, the mechanical engineers of the Worcester Polytechnic Institute were pleased to give a detailed lecture and demonstration of the Royal engine before a large audience of Tech students.

A NEW MOTOR TRUCK COMPANY.

The Ralph L. Morgan Company has been organized in this city for the purpose of manufacturing the Morgan motor truck, and it will begin operations at once in the factory formerly occupied by the Crompton & Thayer Loom Works on Cambridge Street. The company is capitalized at $300,000, and it starts out under the most favorable possible auspices. The officers are Ralph L. Morgan, president, F. B. Dutton, vice-president; Henry E. Whitcomb, treasurer and general manager, and Alfred R. Grundell, secretary. John R. Back will be superintendent of the factory, and this fact affords sufficient guaranty of the high order of workmanship that will characterize the new machine.

Mr. Morgan has had unusual experience in the construction of motor-driven machinery, and the motor truck that he has designed has successfully met the most drastic and difficult tests. It has been tried out again and again along practical lines, carrying the heaviest possible loads over country as well as city roads, and has proven thoroughly competent in every emergency to which it has been subjected. It can be operated, it is claimed, with greater economy than any other truck now on the market, and the demand for the machines is already so great that its marketing is assured from the start.

The factory is 150 by 50 feet, three stories, with an ell, giving an assembly room 350 feet long. Fifty men will be employed at the start besides the office force, and it is expected that 500 cars will be turned out the first year.

LITTLE & PRENTICE, ILLUSTRATORS.

The Worcester Magazine takes much pleasure in calling attention in this issue to the establishment of a new concern in this city devoted to general publicity work, especially along illustrating lines. The concern is that of Little & Prentice, at 416 Slater building. This firm makes a specialty of originating advertising ideas, furnishing not only the illustrations, but in many cases the reading matter as well. In this work they follow no beaten track, but they aim at the striking, the unusual and the impressive in all that they do. It is not often that two young men with such talent can be secured for the commercial side of art as Messrs. Little & Prentice. Both studied at the Eric Pape School in Boston, and after Mr. Prentice's return from Europe, where he studied under the best masters in both Munich and Paris, they formed the partnership alluded to above.

Both men have manifested unusual talent for figure drawing, and the designs that they have produced for the concerns fortunate enough to secure their services have manifested a freedom, a vigor and an artistic finish most unusual in these days of the conventional, the labored and the unimaginative in commercial art.

In this city where so many thousands of dollars are expended annually for booklets, catalogues, and other forms of publicity work, there is a wide field for two young men with the genius

HARRISON W. PRENTICE

A Timely Message to Every Miss, Maid and Matron

It has always been our purpose to progress, to keep abreast of the times, to do things better to-day than we did them yesterday—and one of the most notable examples of this axiom is our enlarged corset section on the second floor.

It is only one of the many departments of this growing store, but there is no other of more importance to the woman who would attain that most modern point of beauty—the ideal figure.

Nature has perhaps endowed your figure with curves where intended, but prevailing fashion does not permit them to be emphasized if one desires to be truly stylish. From every fashion quarter comes the edict that the continuance of the curveless figure, so-called, is eminently the proper mode, and the mission of the up-to-date corset is to create and preserve this individual type.

This is an era of progress and innovations, especially in the corset art, and the beautiful creations advanced for this season are indeed marvels of corset craft. Extreme slenderness, length of limb, and long, graceful lines are the attributes every woman must strive for if she would follow the present vogue—and a visit to our corset section will reveal how one may accomplish this with ease and comfort when properly fitted to a Bon Ton, Royal Worcester or an Adjusto Corset.

These renowned corsets are originated and produced in our home city, and emanate from a plant that is world-famed for its model equipment, perfect sanitary conditions, and charming environments.

There are innumerable styles for every conceivable type of figure, at prices ranging from $1 to $12. We are featuring many beautiful batiste models that are admirably adapted for wear during the approaching warm months, and the visitors to our store, in whose honor this magazine issue is dedicated, are especially invited to see the "last word" in corsets.

Two expert corsetieres from New York City are here, whose advice and assistance will make the selection of your corsets a joy rather than a burden—also, fittings may be arranged at any hour in our private fitting parlors. And further—you can buy Bon Ton, Royal Worcester and Adjusto Corsets in Worcester *only at the Boston Store.*

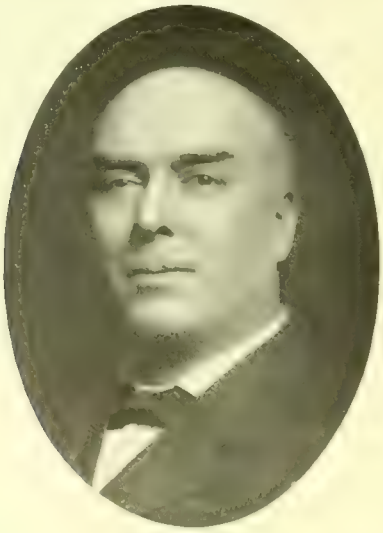
BOSTON STORE
Denholm & McKay Co.

PHILIP LITTLE.

these two young men so undoubtedly possess. In fact they ought to enjoy not only a local but a national reputation along these lines, for they not only have talent of high order, but their charges are exceedingly reasonable. If any doubt remains after what has been said that their work has an individuality, a finish, an unusual value all its own, the Worcester Magazine needs but call attention to the poster cover on this issue. It is one of their creations and it rivals in artistic beauty the finest work of any of our best illustrators. Worcester is fortunate in possessing a firm capable of doing such work, whose genius is at the instant command of the humblest as well as the greatest of our merchants and manufacturers.

THE ROYAL WORCESTER ARCH SUPPORTING SHOE.

The Royal Worcester Arch Supporting Shoe for men and women manufactured by the Charles Case Shoe Company, 40 Thomas Street, Worcester, is the only shoe made that has a positive guarantee behind it to relieve persons suffering from falling arches. Speaking of this shoe Mr. Case says: "The



CHARLES CASE

average shoe dealer knows as little about what to recommend as the person seeking relief knows where to look for it. Thousands upon thousands of dollars have been paid out by people who thought they were troubled with rheumatism and many more are to-day paying big money for having plaster casts of their feet taken from which to have supports made, with the only result [illegible]"

Mr. Case does not believe in pointed toes, high heels and shoes made on unnatural lasts, but does believe in footwear made in the most scientific manner, with a support for the foot already built into the shoe. The Royal Worcester Arch Supporting Shoe is such a shoe. It is made to fit any foot, with the flexibility of a turn shoe, and yet with a substantial sole.

These shoes are made by the Case Shoe Company, and were designed by Mr. Case and by Mr. James O'Sullivan, of the O'Sullivan Rubber Company, and Mr. Case makes the claim for them that they are the only shoes now on the American market that will cure and prevent flat feet.

These shoes are made for men and women in any and all leathers, and are sold at $5 and $6 a pair, and express charges, and if they cannot be obtained of your local shoe dealer, and you will send the Case Shoe Company your exact size and width with the price and your address, a pair will be forwarded immediately.

In case you cannot wear the ordinary ready-made shoe and have to wear custom-made shoes, have your shoemaker measure your foot in the ordinary way and send the company this draft with $2 extra and they will make a special pair of shoes for your particular feet.

Mr. Case desires particularly to impress the public with the fact that this shoe is not built with a special shank to stiffen the shank only, but is built after a special design for the express purpose of bringing relief and cure to those now suffering by reason of false arch supports. So confident is he that the Royal Worcester Arch Supporting Shoe will do all that he claims for it for the relief of those afflicted with falling arches, that to all purchasers he announces his willingness to take the shoes back and refund the money if at the expiration of two weeks after they begin wearing them they fail to get relief.

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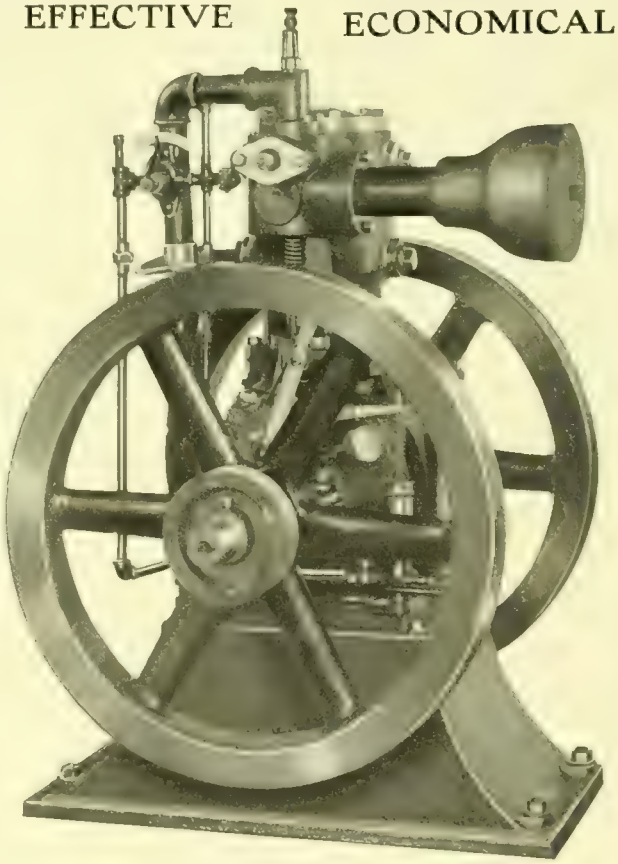

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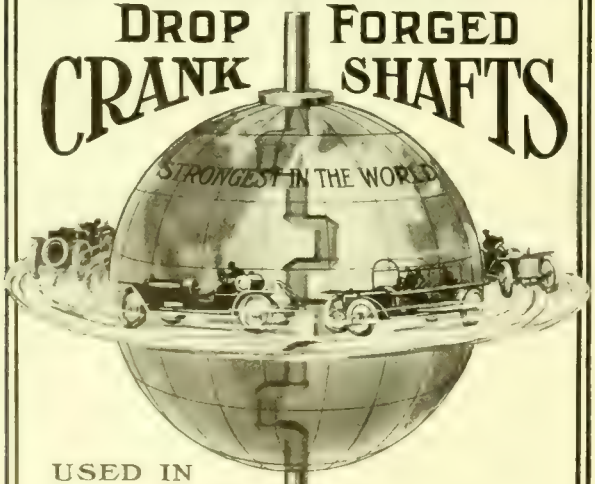

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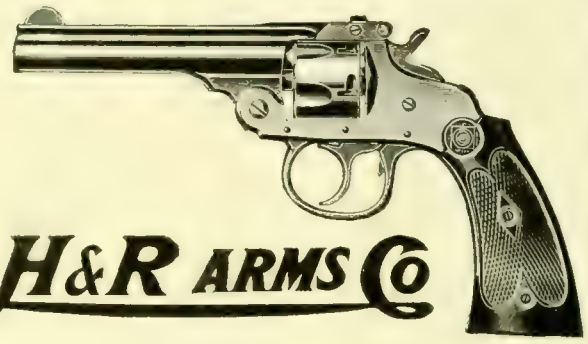

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THE WORCESTER MAGAZINE

VOL. XII. JULY, 1909 No. 7

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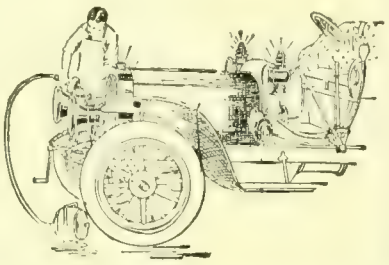

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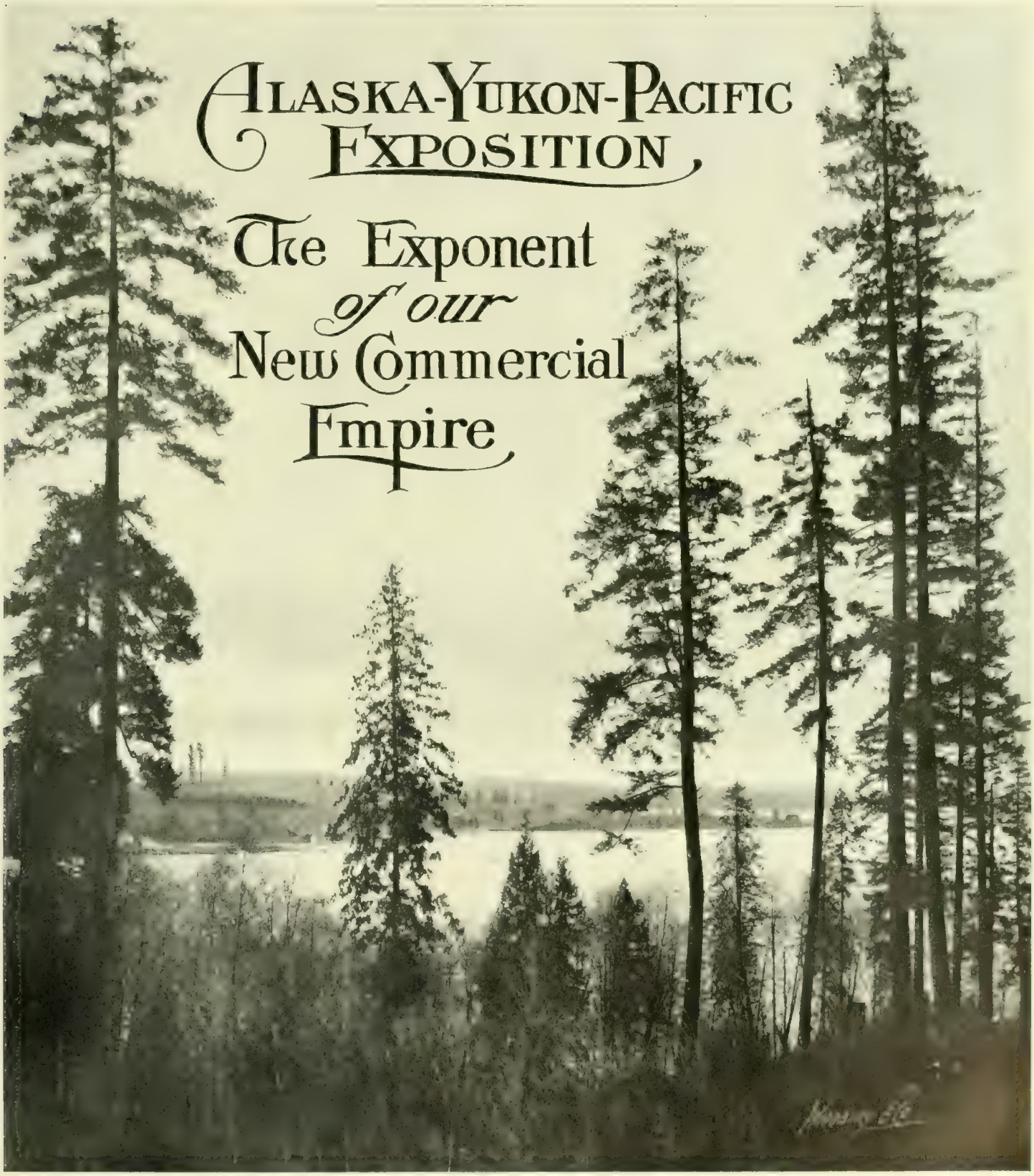

FROM two to ten million dollars is quite a leap in proposed expenditures for an exposition, but the backers of the fair at Seattle have already raised and expended the larger sum, and have produced a unique, varied and attractive display of the resources and achievements of the least-known portions of our national domain. Beyond doubt, the American public has grown weary of certain kinds of fairs, especially such disastrous failures as the last one at Jamestown. All this was fully appreciated by the "Aladdin's lamp" city of the Northwest; but it served to stimulate rather than dishearten. Her citizens set out to produce "the fair that should be different;" and as a first unique feature they announced that it would be ready on the day set for the opening.

This prophecy met with general incredulity; but when, on the first day of June last, the gates swung open and President Taft at the White House pressed the electric key, nearly one hundred thousand persons were present to bear witness to the right of this enterprise to claim, as its first distinguishing feature, a condition on the opening day which showed no marks of incompleteness or hurried construction. The mason and the carpenter and the gardener had done their work. A finished group of structures, many of which had been completed for some weeks or even months, were in evidence. Where but two years before, on the day when ground was first broken, a dense forest had stood, the spacious and beautiful Court of Honor sent its tumbling cascades down the hillside, gently sloping from the present buildings of the State University to the fir-embowered shores of Lake Union and Lake Washington.

In several other points besides that of unexpected preparedness, this latest Exposition is unique, and suggests that we have to do with a radically new type of fair, rather than with some variation of a type which has grown a bit wearisome. For one thing, this makes no claim upon the patronage of the nation nor upon its treasury because celebrating any anniversary of some far-away historical happening. The eyes of its creators are fixed steadily upon the present and future.

Furthermore, it does not start off as a risky financial experiment, with a big loan from Uncle Sam which it has neither the ability nor intention of making good. When the city of Seattle and the State of Washington and the great Northwest decided that it was worth while to create this fair, they went quietly to work to raise the money on the spot. With the lavish and far-seeing liberality of a region that is handling large sums every year and expects to handle much more in the near future, these people made their individual subscriptions, and then taxed themselves as cities and counties and commonwealths. The State of Washington made lavish appropriations, on the condition that some of the buildings should be made permanent in character, and revert to the State University, whose land was offered for the purposes of the fair. This was a piece of wise economy, which is a sample of the financiering which has characterized the whole enterprise. The national government has indeed made generous appropriations, but it has done so because of the unparalleled opportunity to demonstrate to all who might come some of its present methods and success in developing and controlling some of its best-known possessions.

Another unique characteristic of this Exposition deserves distinct notice; and if the reader will carefully and critically study the views of the grounds and buildings and surroundings which are here reproduced, no extended discussion of this point will be necessary. All fairs, of course, have sought to set forth the material products of the world's progress in surroundings as beautiful as possible. Philadelphia took advantage of her beautiful Fairmount Park; Chicago tried to atone for the flatness of the landscape by towering buildings, and gave to the world the first vision of the possibilities of staff as a counterfeit representation of traditional marble. St. Louis, of course, made her buildings bigger and her grounds more extensive and her exhibits more colossal than Chicago, almost to the despair of the sight-seer. Architectural elaborateness and decorations of allegorical groups of statuary grew apace in this race for the vast and the imposing. Seattle, like her neighbor, Portland, has had the sound judgment and discernment to adopt a simpler but no less satisfying scheme of beauty. She has deliberately substituted compactness for a superlative number of acres occupied; she has chosen the warmer tones of yellow, with just a suggestion of brown, for the dazzling white which has been so wearying and even nerve-racking to the onlookers at other expositions. The general style of French and Spanish renaissance has governed the architecture of the various buildings, with here and there a fine specimen of the strictly classic. The stiffness of the rectangular has yielded to pleasing curved lines, alike in walls and avenues. At first look one misses the elaborate decorations of other fairs; but upon analyzing his satisfaction with the scene before him, he discovers the new charm, which consists in the deliberate use of flowers and trees, with the distant settings of forest expanses and towering mountain ranges, with old Rainier looming above all, making any Eiffel Tower seem sublimely ridiculous. No photograph can possibly reproduce the effect of formal gardens and floral spaces measured literally by the acre, actual inspection alone will demonstrate the skill with which the native Douglass fir has been made to do service, nor bring into effective contrast some ornate facade or graceful pergola: here framing in some dainty vista of lake view, and there standing as solitary sentinels around some Spanish mission or log cabin or Mexican pueblo. Owing to the extremely late and cold spring, which has afflicted Washington quite as seriously as New England, one had to be satisfied with buds instead of full blossoms on the thousands of rose-bushes and the hundreds of thousands of geranium plants upon the opening day; but any lover of flowers could easily forecast the splendors which midsummer is sure to bring everywhere.

But all these unique characteristics have been, after all, incidentals of the sum total in this "fair that is different." It is time to touch directly upon the essential distinctions which put this Exposition in a class by itself, a class in which it is the first comer, but in which it is sure to have later followers. As we have seen, it makes no vain attempt to tie itself to some arbitrary date in a bygone century. As any one will see who visits it, there is no effort to make it a world's fair, in any other sense than that it has brought together a collection of objects which would delight and instruct visitors from any part of the known world.

MUSIC PAVILION.

As its name implies, it is an Alaska-Yukon-Pacific Exposition; literally and precisely, a showing forth of the resources and possibilities of far-away Alaska, the great Yukon region reaching down into British Columbia, the Pacific coast southward to the tropical regions of Mexico, the Hawaiian and Philippine Islands, and the two great nations facing our domain on the other side of the Pacific—Japan and China. It is manifest that there is nothing narrow or exclusive in this ambition. It is unlike the World's Fair at Chicago because it does not seek a comprehensive exhibit of what Europe has achieved. It might well claim, however, to set forth the contents of a new world, which is destined to equal in greatness some day the products of that world which has ordinarily furnished the main substance of humanity's notable achievements.

With sound judgment, as well as with becoming modesty, neither Seattle nor the State of Washington has sought to incorporate its name into the official title of this Exposition; but it will none the less write itself indelibly into its completed history. There appeared one day in the midst of Seattle business circles a visitor from Alaska. He had attended the Portland Exposition and had gone back to his northern habitat filled with discontent and regret that Alaska's purposed exhibit at the Lewis and Clark Exposition had failed to materialize. The conviction deepened within him that Alaska alone had within its vast and almost unknown borders sufficient material to form the basis of an entire exposition; and the feeling broadened to include a purpose that in some way this end should be realized. It required little more than the presentation of this thought to a group of Seattle's representative men to win their instant acceptance of

FORESTRY BUILDING.

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the idea, and their determination that their city, the gateway through which Alaska's thousands found their way to its shining sands and the four hundred millions of gold flowed back to enrich the world, should be the location of such an exposition. Fortunately, this germ-idea found for its development the most favorable kind of environment. The logic of the situation was finely appreciated. Neither Alaska alone, nor simply Alaska plus Seattle, a city which owes much of its swift growth and present riches to its connection with our northernmost possession; but the great coast-line from Cape Nome to San Diego, the opposite shores of the far-away Orient, and all the islands of the Pacific intervening,—here was the true scope of an exposition which should be worthy of hard struggle and self-sacrificing devotion; here was an unknown world waiting to be revealed to thousands whose feet had become familiar only with the products of many centuries of European civilization, to merchants and manufacturers whose vision is to-day centered on and limited by the markets of an old world, to students of latent wealth and undeveloped resources which are destined in the near future to play a strong and perhaps a disturbing part in the readjustments of power among the nations of the globe. In a word, the creators of this latest Exposition have had

the discernment to conceive a new world-empire that is to find its sphere delimited by the coast-line of the Pacific, even as ancient history centred about the Mediterranean, and modern history has found its location determined by the tides of the Atlantic. Fortunate, indeed, were they to have for their spokesman on the opening day, in that superb natural amphitheatre filled with thousands of listeners, James J. Hill, a man whose life has been dominated by ambitions of empire-building, and who uttered this significant message, setting forth in startling figures the basic greatness of this new province in the modern world of commerce:

Facing this majestic sea and looking across it to coasts full of mystery and attraction for men for thousands of years, the Pacific coast has participated in foreign commerce more extensively than its population or its wealth would suggest. In the fifteen-year period from 1893 to 1908, the growth of our total exports and imports by customs districts shows some startling contrasts. The foreign trade of the entire United States in these years increased almost 74 per cent. The Atlantic ports, with commerce already developed, show a growth of but 47 per cent. The sudden expansion of Chicago, Buffalo, Detroit, Duluth-Superior, and other interior shipping centres increased the trade of the northern border and lake ports in the aggregate 172 per cent. In the same time the increase for all the ports of the Pacific coast combined was 102½ per cent. But in the last seventeen years the foreign commerce of the Puget Sound district alone, which includes Seattle and Tacoma, jumped from $5,021,434 to $69,012,681, or 2,184 per cent. For the district of the Willamette the gain was 267 per cent., and for Alaska 8,844. Seattle is now the third city in the United States as a cotton exporter.

The historian of this coast, Professor Shafer, of the University of Oregon, says: "The people of the Pacific slope are fully alive to the strategic importance of their position in the historical scheme of national development. They realize that much of the present advantage, with reference to the Orient, is due to their efforts and sacrifices in the past; and they expect peculiar advantages to come to this region in the immediate future from the movements now in operation on the opposite shores of the Pacific. There is among them much evidence of that abounding hopefulness, that joyous anticipation of the future, which often characterizes vigorous new communities on the threshold of great transformations."

Measured by its linear extent, its continental relation, its situation with reference to the carrying trade, and its position upon the ocean, where the world's future will probably witness stupendous changes, its resources, its production and its commerce are substantial elements in national greatness and national promise.

Here we have found the true distinguishing mark of this Exposition, and in so doing have lifted it out of the former procession of world's fairs into a class by itself. Herein we find justification for devoting this number of the Worcester Magazine so largely to this subject. As one of many passing objects of interest for the summer tourist, it could not claim so much attention. If it were considered simply as the ambitious effort of a single city or commonwealth to fix the world's gaze for a little space upon itself, its display of such creative powers would be worth only a passing notice from dwellers on the hillsides of New England. But viewed as the exponent of a new commercial empire, whose influence in coming years is to touch the commercial and industrial life not alone of the Pacific coast, but equally of the great Mississippi valley and of all the regions east of the Alleghanies, it is deserving of careful and discriminating attention, not alone by the members of the Worcester Board of Trade, but by all representatives of other commercial organizations in New England and throughout our land, wherever the circulation of this Magazine extends.

COURT OF HONOR.

To epitomize an epitome is no easy task; yet this is what one must do who tries briefly to describe what has been here brought together for the delight and instruction of the millions who are to behold and study these exhibits during the coming months. Let us begin with Alaska, to whom we are indebted for the initial impulse of this Exposition, even as to Seattle and Washington for its consummation. Its building naturally occupies one of the commanding sites, and takes its place in the first rank of all the structures. It covers 36,000 square feet, and the whole interior is crowded with a fascinating array of objects, strange enough in their appearance to the citizens of older parts of our country. The most striking effect, as one enters, is produced by the panoramic paintings stretched around the walls of the buildings, and depicting with closest attention to minute details bits of landscape and mining camps. Probably the most at-

OPENING-DAY PICTURES

Section of Natural Amphitheatre—James J. Hill Delivering his Address

tractive thing in this building, however, is the display of nuggets of virgin gold, fresh from the mine; a significant sample of the wealth, $400,000,000 in amount, which has already come back to us from this one source alone. Lest any one should be overcome by the splendor of the sight, these are carefully guarded in a cage, which is lowered at night into a concrete cellar. Nor are the tokens of wonderful progress in the finer things of civilization lacking from Alaska's contributions. The churches of that region have illustrated their work done among the native tribes; the school children of Alaska have sent educational displays that rank with those of the "outside" world, as they there call it; the exhibit of basketry and wood carving by Indian women is valued at many thousands

To the left—Admiral Uriel Lebree, in command of the North Pacific Squadron, U. S. N.
In the centre—Vice-Admiral Uriu, Japanese Navy; Admiral Barclay, U. S. N.
Extreme right—Admiral H. Ijichi, Commander of the Japanese Navy

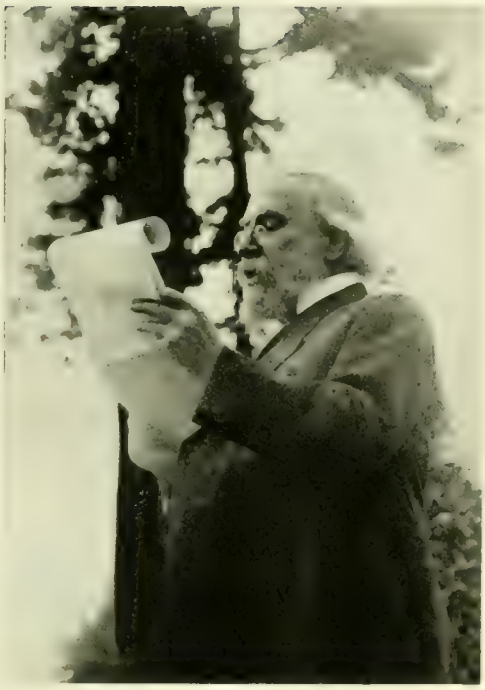
of dollars. And whoever looks at the melons and tomatoes and cucumbers, together with the wheat, barley and oats grown as far north as the valley of the Mackenzie River, will be disabused of the idea that Alaska is an ice-bound wilderness.

Perhaps the exhibit of Japan will attract as much attention as anything on the grounds. In former exhibitions this country has sent specimens of certain aspects of its decorative art. At Seattle, mindful of the exceedingly cordial relations which have ever existed between this city and her oriental neighbors, Japan has set forth with lavish hand a multiform display of her real life. The Japanese Building, embowered in a royal grove of fir trees, lifts its picturesque red gables in a most inviting manner, and is said to constitute the finest specimen of Japanese architecture which has ever been seen in our land. Within its walls are to be seen not only curios of the olden times, but evidences of that nation's wonderful progress in the mechanical arts of the present day. One part of this nation's valued contribution to the fair, unfortunately, cannot be at hand for later visitors, and that is the fleet which was sent across the Pacific, under the command of Admiral Ijichi, expressly to convey the Emperor's best wishes, and to grace the impressive opening exercises.

Whatever else is overlooked, one must not miss the tribute which the government at Washington has paid to this Exposition by the completeness and variety of its illustration of its manifold activities in behalf of the well-being and progress of all its citizens, especially in the newer parts of its domain. At the outset one hundred freight cars were required to convey what was taken from its museums and stores at the national capital to enrich its present exhibits. One leading motive is evidently to show the principal administrative functions of the government, and their educational value in connection with the development of commerce in the countries bordering upon the Pacific. It is making an increasingly large use of "live" exhibits, to the great delight of spectators; for example, it manufactures ammunition and turns money out of a mint, and conducts a model post-office in actual operation. It has established a camp of soldiers within the grounds; it has a life-saving crew drilling daily on the lake near by. It shows models of all the famous battleships, from the earlier to the latest days. And in addition to all this, it has established a biograph room, where daily lectures are given to any who will attend, illustrating with stereopticon and moving-picture machine the actual processes of reclaiming the desert with irrigation, building the Panama Canal, and even the street parade with which a president is inducted into office. Nor may we fail to mention some of the distinctive buildings which represent Canada and the great realm of British Columbia, stretching up to the great Yukon and Mackenzie valleys. Whatever imaginary boundary lines may be drawn across lofty mountain ranges or zigzag through tortuous channels, there is singleness of heart between the dwellers in our Northwest and those who live under the Union jack a trifle nearer the north pole.

THE JAPANESE BUILDING.

It is time, however, to call attention to some of the distinctive structures of Seattle and the State of Washington. We have given the place of prominence in our pictorial display to the Auditorium, not alone because within its walls the Worcester Board of Trade Glee Club is to give seven concerts, but because it is perhaps the most beautiful, if not the most costly, of all the permanent buildings which are to revert to the University. Simple but massive in its proportions, with an interior of great beauty and the finest acoustic properties, it is sure to remain for many years as one of the most pleasing reminders of the big fair. It was so difficult to choose between the exterior and the interior of the Forestry Building that we have offered our readers both views. Nothing can better reveal the wonderful resources of the forests of the Northwest than these massive pillars, retaining much of their native majesty as they stand like stately sentinels, each forty feet high and containing 6000 feet of lumber, and weighing, it is estimated, over 50,000 pounds. Seattle's Forestry Building is larger than Portland's, and it is as impossible



"A BIG MAN, AND —"
JAMES J. HILL DELIVERING HIS ADDRESS.

to compare the two as to contrast a palace and a cathedral; each has a beauty of its own which must be seen in order to be fully felt. The most costly structure on the grounds, though by no means the most impressive, is the building devoted to fine arts. This, which had to be made perfectly fireproof in order to secure the superb set of paintings and other works of art, is to become the Chemistry Building for the University. Next in cost to this is the Washington Building, the headquarters for the State Commission and the destined scene of hospitality for many a function during the fair. Oregon's building is distinguished by its central dome, while Utah has perhaps contributed the most striking of any structure representing a state, in the form of an old Indian pueblo, representing a structure of the Hoppe tribe, and formed of what resemble walled terraces. The interior is bright with decorations of Navajo blankets, and by a striking but pleasing contrast a large part of the exhibits deal with Utah's progressive work in education.

Not only do the states of the great Northwest erect special distinguishing structures, but the counties of Washington have come forward in generous rivalry to show forth the distinctive features of different sections of the State. The names of King, Yakima and Chehalis represent this part of the show, and the special beauty of one, with its surroundings, entitles it to a place upon these pages. Spokane, moreover, felt that nothing but a building of her own could fitly represent her attainments and her ambitions as a county and a city, the two uniting in this undertaking and producing a beautiful specimen of the Spanish mission type of architecture, which, like the larger structure erected by the State of California, blends most beautifully with the general effect of the surrounding groups.

And finally, the Pay Streak! What better name could designate the great amusement section of the fair than this, so significant in a mining region! Here, again, Seattle showed brave originality. Not content with banishing the sale of all liquors to a distance of two miles from the Exposition, she has brought together a combination of amusements which are morally clean and unobjectionable, while many of them are highly instructive as well as amusing. Here one may embark on a boat which vanishes into a dark passage on the bosom of a very real stream, and see much of the pictured scenery of Alaska before he emerges. The Igorrotes are on hand with their straw-thatched village, and also the Esquimaux from the extreme north. Naturally the scenic railway is built to encircle and surmount some miniature Rocky mountains, and a would-be miner may take his pick and actually delve for nuggets of Alaska's gold, while the smallest shingle mill in the world turns out in great numbers souvenir packages of one of Washington's most abundant products. And whenever one wearies of the efforts of fun-makers in this section of the grounds, he may take his way to some of the many rest-places provided freely by the management, and listen to strains of uplifting band music from some of the finest organizations in the land as they float out through forest trees around the beautiful music pavilion.

In spite of all the attractions thus far described, and countless more suggested, in the story of what Seattle has done in the way of exposition building, the editor ventures to assert, and to defend his assertion, that the greatest exposition which invites the easterner to the Pacific coast this summer is not the two hundred and fifty acres on the shore of Lake Washington, but the entire Northwest, whose vastness can be but faintly set forth in any such tiny space. He counted it a privilege to explore those acres, to mingle with the thousands who thronged its streets and buildings on the opening day, and to accept the courteous hospitalities of its promoters and managers in connection with their well-earned festivities at that time. And yet he is confident that none will assent more heartily than they to the statement that the great inland empire of the Northwest, which has produced Seattle and Tacoma, Portland and Spo-

"A BIG TREE."

kane, and many other communities which bulk less in size but are equally worthy of honor and equally sure of future greatness that this entire region viewed as one integral whole is the most significant exposition which the travelers to the Pacific Coast can find. It is significant for what it is to-day; it is even more significant when one glances ahead into inevitable to-morrows.

What is this great inland empire? It is almost exactly four New Englands in area, and one-fourth of the New England of to-day in population. Maine with its 29,000 square miles, and the other five New England States with 32,000 square miles, have in round numbers six million inhabitants, according to the latest and most reliable estimates, or about one hundred to the square mile. Washington, Oregon and Idaho (to which might very properly be added in this discussion portions of northern California, Utah and western Montana) contain in their three commonwealths 245,000 square miles, but only 1,300,000 inhabitants, or five to the square mile. It would seem safe to assume that quite as large a portion of these three states as of New England is capable of habitation; but in order to err if at all on the side of safety, let us assume that one-fourth of this empire of the Northwest will not soon if ever be occupied by inhabitants. If the remaining three-fourths should become as thickly settled as is Maine to-day, there would be nearly four million people where now there are but one and a quarter million.

If the population should rise to the ratio of all New England to-day, over eighteen million would inhabit that empire. Should the prosperity of that region come to equal that of Massachusetts, and thus gather together a like ratio of population over three-fourths of this area, the inhabitants of this empire would number sixty-eight million souls. Is this pictured possibility a mere statistical phantasy, or is it as likely to be realized as that the United States will continue to increase its population for the next century as steadily as during the last fifty years?

It is admitted that the progress of the Northwest for the last few decades has been due not alone to its productive power, but to its broadening commercial relations, as indicated already in the quotation from the address of Mr. Hill. As distributing centres Seattle, Tacoma and Portland have suddenly assumed an importance out of proportion to the numbers or productiveness of the inhabitants of the outlying regions. This condition, however, is soon to pass, if indeed it is not already changed. The only thing lacking in the past has been people, and this lack is sure to be supplied.

WASHINGTON STATE BUILDING

The sanguine temperament of the inhabitants of growing sections of our land is proverbial; and there is nothing more thought-arresting about this great inland empire, as the easterner explores it, than the confident expectations of its present promoters. But have they not a right to their expectations?

In recent years we have been told that our western frontier has vanished forever; that advancing civilization has pushed it into the Pacific Ocean; that available government lands are exhausted, and that the dramatic march of the immigrant of other decades will never be repeated. Such a prophecy has failed to reckon on the new features of irrigation and reclamation, as they have been thus far demonstrated, and as they are to be carried forward in future years by our government on a yet vaster scale. The prairie schooner will never

again be launched on its picturesque voyage over what was once known as the "Great American Desert," but its place will be more than made good by the tourist coach. The present and prospective growth of transportation systems in the Northwest dwarfs by comparison all other railway extension in the land, and makes some of the merger problems of New England look insignificant to our railway magnates who are accustomed to think of our entire national domain as their field of operations. It is a most mistaken and short-sighted view to imagine for a moment that the great resources of this new empire have been more than touched upon the surface; as soon as the newer and saner feeling toward railroad corporations bears fruitage in releasing capital for their needs, the country is sure to have fresh demonstrations of progress in these unfamiliar sections of the West.

YAKIMA COUNTY BUILDING

What has given Massachusetts her present population and her productive and commercial greatness? Her location in the north temperate zone, and in advantageous relation to the markets of Europe by Atlantic waterways; the standards of personal and civic morals and the opportunity for individual initiative which from earliest days has here been found; the progress of mechanical inventiveness and the encouragement of skilled mechanical labor under the highest educational standards; and a spirit of earnest toil and patient thrift,—these conditions may be said to explain why Massachusetts has reached her present pre-eminence in the industrial and commercial life of the nation.

Now let us ask what like conditions are found in these three states making up the northwest corner of our country to produce like results to those attained by us. Climatic conditions greatly favor the Northwest as compared with Massachusetts. Although lying nearer the north pole, its coast line is bathed in no frigid polar current, as is the case with New England, but is blessed with semi-tropical warmth even during the winter months. There is lacking not a whit of the climatic invigoration which has stimulated New England energy, while the sudden and extreme changes of temperature which here distress the inhabitant and hinder agriculture are there unknown. What of the character of the original settlers of the great Northwest? At this point New England should be the last to claim superiority, since she herself has given so largely of her best life to these new states. If there is any advantage in homogeneous native-born stock, no section of our land has more in its favor; the census of 1900 showed that 81 per cent. of the population of these three states were born on American soil, and 56 per cent. of their parents were also native born. Furthermore the next census will unquestionably show the persistence of a like percentage in the added population of this first decade of the new century. "Standards of personal and civic morals and the opportunity for individual initiative?" Here again it would be a delicate and perhaps a dangerous undertaking to institute and press a comparison with the New England of to-day. The tyrannical political boss, the municipal corruptionist and the indifferent eminent citizen, unfortunately, seem to be indigenous to all sections of our national domain; but when the efforts of the last five years to seek relief from these evils are examined, the new empire of the Northwest will have no reason to be ashamed of her progress as compared with any of the New England States. "Educational attainments and ambitions?" From primary grades to state universities these newer sections are lavishing resources with open hands at every point of need; and the seekers for a higher education

show an earnestness and directness of purpose which puts to shame hundreds of the despisers of all serious attainment in eastern colleges, the enjoyment of whose privileges has too often become a fashionable fad rather an equipment for future usefulness. One of these cities, smaller than Worcester, appropriates $400,000 from this year's tax levy for new school buildings; how many New England cities are more generous in this direction?

What has this new northwestern empire which Massachusetts and its sister states have not? Marvelous natural resources; mountains filled with precious ores, iron and coal; majestic rivers which are soon to be opened to larger opportunities for navigation, for freer distribution to aid irrigation, and which also hold untold possibilities of hydro-electric power; forests which surpass anything else now left in our national domain; fisheries of considerable importance; and fertile soils which seem inexhaustible in their richness, and which are revealing ever new possibilities as regards a wide range of crops.

What have Massachusetts and New England that the inland empire of the Northwest has not? A developed industrialism, a large home market, an easy access to the markets of the old world—three distinct advantages. But how long will it be before the Northwest duplicates the first and wins the second and parallels the third? These three commonwealths have within their borders at a conservative estimate as much accessible and undeveloped power as that which is now used in the manufacturing establishments of the entire nation; and what raw materials are missing from their domain may be laid down at their doors by any one of five great transcontinental railway systems which already converge within their territory, to say nothing of others that are on the way. When the Columbia River is opened to navigation from Portland to British Columbia, and the Snake River bears steamboats far into the heart of Idaho, and the Panama Canal is added to the transportation facilities of this region, what barriers will be left that can further check the growth of this empire in population, wealth and all else that constitutes greatness? Add to all this the possibilities of commercial relations with Japan, China, Hawaii and the Philippines, with the continent of Australia as a remoter opportunity, the question really becomes not, "Is it possible for this empire of the Northwest to materialize?" but, "What can possibly prevent it?"

Here, then, are two things no easterner should miss: the splendid epitome of progress of the great Northwest on the beautiful Exposition grounds at Seattle, interesting and valuable; and this great inland empire itself, so largely unknown to our nation because only so recently have the pathways of investigation been thrown open. In order to appreciate the facts, you must see the stored products of the orchards of Washington or Oregon in their artistic and beautiful buildings; and if there can be any greater pleasure for you, it will be to step from your Pullman car some morning next August into the orchards of Weenatchee or Yakima and sample their products. It is one thing to read of irrigation schemes; it is far different to see the processes and stand upon land which a few years ago was worthless and to-day commands a price of thousands of dollars an acre. The great Exposition is a worthy exponent of the new commercial empire; the new commercial empire writes its endorsement across the back of the Exposition's check.

ON THE "PAY STREAK."

The Board of Trade Excursion

Full Itinerary of the Tour to the Pacific Coast of the Worcester Party

AS a result of the Secretary's recent journey across the continent to complete the final arrangements for the excursion of Board of Trade members and their friends next month, the Worcester Magazine is able to present here a much more detailed description of the journey than has yet been published, and to outline some special privileges of proffered hospitality from commercial bodies in other cities. If space permitted, the Secretary would gladly describe in detail all the courtesies rendered him as Worcester's representative and an advance herald of the coming commercial pilgrimage; but he must content himself with a general acknowledgment to each and all of the royal group of secretaries and presidents who received him in city after city.

RAILROADING IN COLORADO.

On Wednesday afternoon, Aug. 4, one special train, and possibly a second, will leave Worcester via the Hoosac Tunnel route. Supper will be served in a dining-car as we are passing through the Hudson and Mohawk valleys. The next morning will find us in Detroit, where we shall doubtless find "life worth living," according to its motto, for the next few hours. The Wayne Hotel will be our headquarters, where, in the evening, the Glee Club will sing in the Summer Casino. Some time during the day we may expect an excursion in the shape of a steamboat ride on Detroit's famous river, by courtesy of the city's Board of Commerce.

Friday morning will find us in Chicago, whose Association of Commerce has kindly offered the members of our Board of Trade guidance during the morning to any places of interest in the business districts, and in the afternoon an automobile trip through the city's boulevard system. Headquarters here will be at the New Brevoort.

Saturday morning the party will be due in St. Paul, with the Ryan as our hostelry. The Commercial Club will guide us to points of interest, and offer a noon lunch to the members of the Glee Club. In the afternoon we shall proceed by trolley to Minneapolis, where a party from the Commercial Club of that city will show us through one of the huge flouring mills, and then take us in automobiles through the city and to Lake Minnetonka, where, after a steamboat ride, we shall be their guests at a dinner at one of the hotels or clubs.

REACHING CRIPPLE CREEK.

Sunday will spent en route for the Rocky Mountains, with possibly a stop for morning worship at the Chautauqua Assembly at Devil's Lake in North Dakota. Early Monday morning we shall cross the "Great Divide," and towards evening enter the great "Inland Empire" proper near Spokane, in which city we shall remain until Tuesday evening. The exact programme of festivities here has not come to hand at the time of this writing, but there is sure to be "something doing all the time."

After another mountain climb, this time over the Cascade Range, Wednesday, one week from the time of leaving Worcester, ought to find the party in Seattle and comfortably settled in the delightful new hotels where Mr. Healy has provided rooms for all on the excursion. The concerts by the Glee Club, in the spacious Auditorium in the fair grounds, begin that afternoon at four o'clock, the second being at eight o'clock in the evening. Friday, "Worcester Day," by vote of the management of the Exposition, will be duly recognized by some features which are not yet wholly arranged, but which are sure to give pleasant opportunity for social reunion of present and past Worcester citizens.

Monday, Aug. 16, will find the party headed homeward via Tacoma, which may possibly be reached by a steamboat trip from Seattle; here we are promised entertainment by the commercial bodies of the city, with a sight of one of the world's biggest sawmills; also one of the huge smelting plants of the Northwest.

Tuesday morning Portland will greet us with roses of even greater beauty than these which are pictured by the engraver's skill. Under the leadership of the Portland Commercial Club, we shall be shown the beauties of this rapidly growing metropolis, a view from whose marvelous Council Crest is well worth a trip across the continent. We shall regretfully bid goodbye to our Portland hosts, and watch the sunset from car windows as we pass up the valley of the mighty Columbia River.

Wednesday will afford continuous views of the great Snake valley in Idaho, and of the immense plains, long thought to be almost barren, but now responding almost miraculously to the work of irrigation, and the hours of Thursday, from 8 a.m. to 4 p.m., will be spent in Salt Lake City, where another flourishing Commercial Club will show us the points of interest, including a trip to the lake, twelve miles distant, and a chance to bathe in its briny waves. The sunset that night will find us speeding toward the mountains of Colorado, which will be in full view as we awaken Friday morning

THE GEYSER FOUNTAIN, COURT OF HONOR

in the Grand River valley, and enter upon what will be the most thrilling part of our journey, the gradual ascent of the backbone of the continent over Tennessee Pass, the descent through Leadville and the Royal Gorge to Pueblo, whence a short run will bring us to Colorado Springs.

One afternoon in a spot where a full week might be desired will be almost an aggravation; but the "Garden of the Gods" will be open to our inspection, the Cliff House at Manitou Springs will provide supper, and in the evening a cordial audience will greet the Glee Club at a concert in the Methodist Church. Opportunity will be given for those who desire to take the famous "Cog Road" to the summit of Pike's Peak in time to see the sunset, with the return trip by moonlight.

A short journey by night will bring our special train to Denver, where for two days we shall find the climax of our mountain sight-seeing, and shall be the recipients of countless courtesies from the Chamber of Commerce of that flourishing metropolis. As at Spokane we shall coincide with the coming of the National Irrigation Congress, so in Denver we shall arrive at the time of the sessions of the Trans-Mississippi Congress. Saturday will bring whatever entertainment may be offered collectively to the party by the business men of Denver, while Sunday will be welcomed as a "day of rest," where each member of the party may choose for himself the disposition of his time.

Sunday, at midnight, will find the party homeward bound, and due in Worcester, after a brief stop in Chicago, on Wednesday noon, Aug. 25.

While all the privileges advertised by Mr. Healy in connection with the regular itinerary will be enjoyed by all from Worcester and vicinity who may be enrolled upon the list, it ought to be understood that some of the courtesies in the line of luncheons, banquets and special trips are being arranged specifically for members of the Worcester Board of Trade and their ladies, a fact which will doubtless show the wisdom for every man on the trip to be properly enrolled in our membership, and entitled to wear the badge, which will be the only credential needed to so many pleasures of the journey. Every member of the party will have free admission to every concert given anywhere by the Glee Club.

It is specially important that all who expect to join this party be duly registered not later than Thursday, July 15. The management positively cannot guarantee accommodations for any applying later, unless by assigning a place surrendered by some one previously registered.

A SAMPLE OF PORTLAND'S ROSES

Editorial Comment

Our A.-Y.-P. Exposition Number.

Through the courtesy and co-operation of the Publicity Department of the Exposition at Seattle, and as the outcome of the editor's recent journey across the continent, our readers find in the present number of the Magazine a striking group of illustrations and an extended estimate of the fair which is to be the goal, next month, of a pilgrimage by the Worcester Board of Trade. If any excuse for this innovation were needed, beyond the pleasure with which our readers will surely study these pictures, it will be found in the broad significance of this Exposition, so well symbolized by the official seal, appearing upon our front cover page. Designed by Miss Elizabeth Hanscom of Seattle, and winning the offered prize of $500, it is strikingly suggestive of the ideals which have inspired the makers of the fair. The words of the artist well interpret its meaning: "The figure to the right typifies the Pacific slope, with right hand extended in welcome and the left holding a train of cars representing commerce by land. The figure to the left represents the Orient, and the ship in her hand represents commerce by sea. The central figure in white is that of Alaska, the white representing the North, and the nuggets in her hands typifying her vast mineral resources. Across the sky in the background is seen the Aurora Borealis, so vivid in the north. At the side of the figure on the right are tall trees, typical of the immense forests of the territory represented by the Exposition. My whole idea in this design was to keep it simple, and still give suggestions of all the essential things to be represented." We trust that the pages devoted to this subject will impress upon our readers the bearings of this enterprise upon commercial and industrial interests as far distant from the Pacific coast as New England and our own city.

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Our Most Dreaded Holiday.

In the ever-increasing rush of modern life a holiday, especially if national in its meaning and observation, ought to come with gifts of unalloyed gladness to all who share its relief from the daily round of labor. By a strange irony of circumstance, the day which we celebrate as the birthday of this nation has come to be dreaded and feared by all thoughtful citizens. These lines are written in advance of the actual advent of "the glorious (?) Fourth;" but some of the occurrences of that day can be set down now with as much certainty as though the occasion were over. As surely as the sun will rise, some hundreds of persons in the United States will lose their lives; thousands more will suffer injuries; millions of dollars will be deliberately burned up in exchange for a brief experience of noise and smoke; and millions more will very likely be taken out of the nation's resources through conflagrations due solely to these expressions of "patriotism." If there is any subject upon which the representatives of commercial interests of a city, banded together in a board of trade or merchants association, might seek to promote reforms, in the name of the common welfare, it would seem to be at this point, where humanitarianism, economic sagacity and respect for individual rights have so much at stake. We believe heartily in the time-honored observances of ringing bells and firing cannon; but we believe also that the makers of the Declaration of Independence, were they alive to-day, would be the first to sign a new document demanding deliverance from the reign of lawless rowdyism which so widely prevails.

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The Line of Practical Reform.

The best way to avoid an insane celebration of the Fourth of July is to supplant the undesirable by something that is worthy of the day and yet attractive to those who have never been offered anything better than the old ways. It is well to adopt all mitigating methods, like the posting of Red Cross cards on homes where there is sickness; and it is sadly necessary for every fire department in the land to be on guard as vigilantly as were the farmers of Concord and Lexington after the tidings spread by Paul Revere; but there is a more excellent way, which our neighbors at Springfield seem to have discovered, and in which we believe their Board of Trade has taken an active part. The four great historical pageants which are proposed for enactment in that city, illustrating Pynchon's original purchase of land from the Indians, the Shays Rebellion, and the workings of the "underground railroad" in anti-slavery days, are sensible and satisfying suggestions for replacing lawless and inhuman acts which so often disgrace communities, both large and small. We are glad that Worcester is to provide, through the efforts of the Knights of Columbus, a great athletic meet in our own city.

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A Useful Function for Our Mayor.

We are pleased to observe that the present Mayor of Worcester is in large demand as a speaker in different parts of our State upon themes which touch civic betterment and good citizenship; and we are glad that he has been able to find time, in the midst of his many tasks, to answer a few of these calls. Beyond question, he is as truly serving and benefiting our city at such times as though he were sitting at his desk in City Hall. No one can question either his sincerity or ability when it comes to discussing such themes, upon which there is to-day a widespread eagerness to hear masters of plain, practical speech. We quote with much pleasure some of his recent utterances made at a banquet in a city in the western part of our State:

> Politics is not the art of getting office; it covers the whole mechanism of our civic lives; it is concerned with all human progress, with every policy that affects the interest of the people. I am optimistic enough to believe that this awakened public conscience is extending to the political life of our cities, and that conditions are to improve, but this won't be brought about by writing essays on uplifting the masses. You can do that till the crack of doom, but that won't do the trick. It is the work out in the open that will count, and nothing else. Good citizenship means to take an active interest in all measures which make for the uplift of the country in which you live, and which you profess to love; and not only to take an interest, but to take a part, and a large part, in the affairs of the town or city which you call home. If we have extravagant, inefficient or bad government in either town, city or state, we have no one to blame for it but ourselves. If we really want better civic conditions, we have got to put in the seed of service, and it must be good seed, and after it is planted it must be cared for, for the enemy sows tares now just as he always has done, and his methods and the time for getting in his work have not been changed.

Reforming the Stock Exchange.

When Governor Hughes appointed a commission of New York citizens to investigate conditions under which business is done in the New York Stock Exchange, there was a widespread scepticism as to the value of such an undertaking. The report of this commission, recently rendered, is admirable in its avoidance of the sensationalism of the muckraker and in its recognition of the fact that true reforms must come from the clearer sense and better practice of the dealers in speculative values, rather than in elaborate and drastic statutory provisions. The report frankly admits evils and wrong conditions; but it puts the first emphasis upon the power and necessity of action on the part of the governors and members of the Exchange itself; not forgetting, however, to add the warning that unless such remedial action is thus secured, it is likely to be attempted by the state as a body, demanding the incorporation of this body and its strict official oversight. When we remember the widespread influence throughout all commercial circles extending from this body of business men, it becomes a matter of universal interest to observe what action will be taken in these premises.

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The Latest Word Upon Conservation.

There are not lacking those in our land who have gone as far as they have dared in open ridicule of the movement looking toward a scientific estimate and careful conservation of the natural resources of this nation. Of course the bitter partisan opponents of the last President were logically compelled to attack any project which he championed. We have noted with much interest the strong utterance on this matter made by Mr. Jas. J. Hill, at the opening of the Exposition at Seattle; made, moreover, at a time when it might have seemed needless or at least inappropriate to have sounded such a note. We quote with hearty commendation some of these utterances, as showing that while the conservation movement may seem to move slowly, it is backed by great statesmen in the realm of commerce and corporate interests, whose views are sure finally to prevail in our national councils:

> The first and most imperative word, I need hardly say, one which the country has come to hear with much respect and not a little fear as to its future, is "Conservation." I put it first not only because it belongs there in the scheme of national policies, but because it particularly needs to be repeated and emphasized among the people of the North Pacific coast. You have been following in the footsteps of your ancestors farther east, who are now beginning, at great cost of labor and wealth, to repair the consequences of errors that still seem to you natural and proper acts.
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> You still possess the principal supply of timber in the United States. Will you take steps to guard it, to prevent waste for the sake of immediate gain to a few individuals, until lumber shall become a luxury and the very poor must huddle in houses of mud or sod, like the peasantry of the old world? If that argument does not appeal, will you consider the economic effect of the future decline and disappearance of what is now and might remain always one of your greatest industries? Will you realize what this country must become when stripped of its forests, the washing away of the soil, the inevitable changes in climate, the devastations of torrential overflow and disastrous drought, the barren bleakness of your mountains and the desolation of your valleys when the forests have gone? If you do, your earnest work for forest conservation will begin to-day.

A Sentimental Appeal that Ought to Fail.

We recently commented upon the slow but steady movement in the courts whereby a notorious violator of honesty in the realms of high finance was finally sentenced to many years of imprisonment by the United States court, after a trial of exceptional character as regarded the consideration paid to the interests of the accused. From that time until now he has very properly been kept in confinement pending the settlement of his appeal or the raising of a large amount of bail, insignificant though it were in comparison with his alleged peculations. We now observe that through the efforts of a devoted wife he is temporarily at large, and that systematic efforts seem to be making through the daily press to transfer the sorrow and indignation formerly felt in behalf of his many victims to a compassion for him in his endurance of the penalty of the law. If any injustice was done him in his trial, we trust it may be remedied; but we want to protest against any adroit and sentimental appeals for his release from the full penalty for misdeeds, on the mere ground that he has in the past handled large sums of money, and is anxious to continue his former methods, or that he has conducted himself with propriety while behind prison bars.

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A Business Administration of the Commonwealth.

At last the Legislature of Massachusetts has been prorogued, after a session crowded with important matters affecting the business interests of the State. From beginning to end there has been manifest one strong and salutary influence, initiating, guiding and consummating legislation. It has proceeded from a chief executive, who, without in any degree usurping the functions of the legislative branch of government, has found ways helpfully to shape conclusions in accordance with a policy of strict economy. As a result the State tax of Massachusetts for the coming year will be reduced by the substantial sum of one million dollars, which means for this city a saving of over $36,000. The difficult questions of a new charter for Boston and adequate State control over the railway situation have also been solved in a way which does credit to Governor Draper. Massachusetts has every reason to congratulate herself upon these opening months of the administration of one of her most prominent business men, and to look forward with confidence to his future achievements as Governor.

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An Important Franchise.

Seldom, in our judgment, has the Board of Aldermen of this city had a more important matter presented for its consideration than the recent petition of the Connecticut Power Transmission Company for a franchise to enter this city and furnish power to as many of Worcester's factories as may be fortunate enough to secure it from them. It is to be regretted that we are not located like Spokane or other cities, by the very banks of some stream with practically inexhaustible power; but the amount which this corporation can immediately furnish this city will be of incalculable benefit, and is the forerunner of future supplies which will add greatly to our industrial strength as a community. In the near future we hope to give our readers a carefully prepared and finely illustrated article upon the works at Vernon and Hinsdale, which are to furnish this supply.

Assured Progress of Worcester's Trade School.

We are rejoiced that after many months of endeavor the movement for an industrial school in Worcester, which owed much to the Board of Trade for its initial impulse, has reached the point where a successful end is in sight. With the money voted, the site unanimously adopted by the Board of Trustees, and the plans for the building selected, we may now expect swift progress and an opening of the school at a date not remote. We recognize the importance of due deliberation in entering upon a project of such large interest to the city; and we give the fullest possible credit to all citizens who have differed from one another for sincerity and conscientiousness; nevertheless, we cannot help feeling that there has been needless delay in this matter; owing to an effort, doubtless well-meaning, to take out of the hands of an able and widely representative governing body matters of detail which should have been left to them from the start, even as now these questions have finally come back to them for settlement. We are glad to believe that from now on there will be united and hearty encouragement of the new undertaking, and a universal support of men who, at considerable personal sacrifice, have been giving and will continue to give their services to this work.

The Value of Commercial Comradeship

The coming excursion of members of the Board of Trade across the continent to Seattle, with visits to one group of cities on the outgoing route and to another group on the return, is in line with a recent tendency among commercial bodies which is worthy of distinct mention. Too often in the past there has been a narrow provincialism animating the residents of any one city, inspiring them with an ardent satisfaction concerning everything that was their own, and a quiet indifference, at the best, to any attainments of their neighbors. This has been mistaken for civic loyalty. To-day a new spirit is showing itself, especially in up-to-date, aggressive commercial bodies. There is a desire to know, rather than to ignore, the aims and efforts of business men in other cities. There is a willingness, and even an eagerness, to get the point of view of those who are elsewhere laboring on identical problems of trade extension, civic betterment and the development of public spirit. Old rivalries die hard; traditions of distrust and petty jealousy sometimes descend from generation to generation; but we can at least see the dawn of a new day as regards the attitude of business men in our commercial organizations toward their fellows who happen to reside in some other municipality.

The most marked token of this new day is in the frequent exchange of visits between groups of business men as representatives of different commercial centres. On his recent trip to the West, the writer repeatedly heard of such visits, either just made or planned for the near future; in one place he was fortunate enough to share the hospitality which one of our great western cities was lavishing upon some forty representatives of Chicago, who, in a special train, were visiting in turn some of the great cities farther west. It was apparent that such visits and such hospitality were common events in that region, and that permanent profit as well as passing pleasure was expected as the outcome. Of the same nature has been the recent visit of a delegation from the Boston Chamber of Commerce to the different cities of Maine.

Worcester is falling into line with this present tendency, and on a scale that is notable. A journey of seven thousand miles, covering three weeks in time, and including a dozen different cities and a great commercial exposition, with some additional opportunities for briefer inspections of interesting commercial or agricultural developments, is an undertaking which will surpass in its magnitude any similar tour during the present season. Its real significance, however, will be found not in the number of places visited nor in the amount of interesting scenes enjoyed, but rather in the amount of genuine fellowship offered and received from the various commercial bodies who are preparing to offer their hospitality to their visitors from the far East.

This comradeship ought to mean more than mere pleasure. We are to come in contact with busy, practical men, who associate the idea of such fellowship with distinct gains for both host and guest in a better understanding of trade conditions and opportunities. Of course, it is not to be expected that definite sales of Worcester products will occur during the time of such visits, but rather that there will come a larger mutual understanding of the conditions and hopes and prospects of cities and sections which may lie far apart geographically, but which need to be bound more and more closely together as our nation unifies itself to meet the competition of its world-neighbors and secure its share of the prosperity which awaits the mastery of the world's unused resources.

We earnestly commend to our readers the detailed itinerary of this journey as elsewhere outlined, and trust that this feature of fellowship in store for Worcester's citizens will receive the attention it deserves from representatives of all our leading industries.

Yesterday, To-day or To-morrow?

Some business concerns live on their yesterdays. The profits of other years, or the beneficent results of organization achieved by past workers reach over to the present hour, and prevent any manifest embarrassment. The reputation of other years serves them for present capital, and with their eyes largely fixed on past glories they move serenely toward the future. To onlookers their progress seems as sure and resistless as that of an onrushing railroad train, and it is as sure as that of a train on an up grade with steam shut off from the driving wheels. A business that depends on past momentum ought to be able to discern its danger.

There are other businesses that live simply in to-day. They have no history to yield them either pride or chagrin. They are expending all their thought and energy upon the problems of each day as it comes. The future? "We will look out for that when it comes; it is enough, and all we can do, to master present-day problems," is their policy and philosophy.

Fortunately for the future of American commercialism, there is another type of business men and business methods. It is described in the leading article in a recent number of System, a periodical that is making itself indispensable to an up-to-date business concern. The gist of the whole matter is condensed into a pithy prefatory paragraph, as follows:

> Unless provision were made for the growth of business, the market, supply of labor, raw material, power facilities and ground space would limit expansion within a generation—in some industries within three years. To keep

open the channels of supplies for future use, business interests are maintaining "to-morrow" departments whose duty it is to anticipate demands as estimated on past records, and to provide for keeping the army of industry supplied with ammunition. How this foresight is resulting in the economical and intensive cultivation of our national resources, and how it is affecting our manufacturing, railroad, retail, wholesale, and practically every commercial interest, is a matter of increasing importance and of possible application to the American business man and stockholder—especially to the business man of the younger generation, who will reap the gain or loss that will accrue.

In a carefully prepared chart the author of this article, Mr. T. J. Zimmerman, has graphically portrayed the progress of this nation commercially in the last four decades of the nineteenth century, and from the discovered ratio has estimated where we shall stand in 1940, a date when the younger business men of to-day will be at the head of affairs. According to this ratio the wealth of this nation, thirty years hence, will be increased from ninety-four billion dollars to five hundred and fifty billions; and its population from seventy-eight to one hundred and eighty-six millions.

The article goes on, with a wealth of illustration, to show how some great industries are planning for increasing to-morrow's business to correspond to this vast enlargement. It describes how provision is being made for supplies of power, raw materials and new markets. Here is one specific example:

An eastern manufacturer of a household article saw more than two years ago that his line was bound to become highly competitive. There were no patents on his goods; small capital was needed to start his business; over-production was inevitable. So he took a trip abroad, started in a very small way a foreign trade by mail, gradually established agencies, expanded his trade.

To-day he does only a foreign business. He is the most prosperous manufacturer in his line. While others are fighting for the profitable home market, he has a non-competitive foreign market all to himself. Yesterday he prepared for to-morrow. To-day he is reaping the profits.

This entire article is both stimulating and suggestive. It has a strong word to speak in behalf of industrial education. It emphasizes the value of experimental work. Above all, it sets forth with convincing clearness the proper attitude toward the winning of foreign markets. Again we venture an extensive quotation from this article:

The sales manager of a wood-working concern stood beside a huge map of the world in his president's office.

"We are manufacturing a competitive product," he was saying. "We are selling in the East and in the middle West. I want to establish two agencies on the Pacific Coast, and I want to start a wedge into the West Indies and South American markets."

The president evidently disagreed.

"But why? Our sales in our present territory are running our factory to its limit. It will take initial capital to establish agencies on the coast; new agencies are never profitable at the start, therefore they will be an expense. And the orders they bring in will necessitate overtime or extensions. These same reasons are ten times stronger for the South American market."

"But we have got to take care of the future and we have got to meet competition," was the answer. "Our competitors are beginning to sell on the coast. American manufacturers, and especially foreign manufacturers, are getting foothold in the South American field. Our present market is not going to take care of our ambitions much longer. And if we neglect the further markets until we need them, it's going to cost us hard cash to break into a new market already pre-empted—a market that we could get a foothold in now at really no additional expense, even if at no profit."

We recognize the unwisdom of laying down hard and fast rules on a subject requiring so much latitude of judgment in individual cases; but we welcome and commend all utterances which emphasize the importance of keeping steadily in view the speediest and surest attainment of this end. We hope in future issues to discuss in detail methods now in local use, and others which may be worthy of study, looking toward Worcester's successful "business of to-morrow."

June Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

A gradual and steady expansion of trade is shown in nearly every line by tests that usually determine records of improvement. Retail trade has been materially stimulated by more seasonable weather and very satisfactory volumes are reported by leading merchants, during the month, by comparisons with a year ago. Manufacturing plants are slowly employing more help, and skilled labor is in demand. The machine-tool manufacturers are gradually returning to normal conditions; textile machinery is in good demand, and leading plants are well supplied with orders.

Corset plants continue to be exceptionally busy, all reporting a record volume of business for the first half of this year, and many manufacturers have largely increased their plants. A general improvement is noted in the textile industry, worsted plants are busy and report large orders, and there is an increasing demand for better grades of woolens.

Local bank clearings for May showed a total of $6,921,341, compared with $5,954,937 in 1908, or an increase of 16.2%. Failures in the county for the first six months of the last four years are as follows:

Date	No.	Liabs.	Assets
	1909.		
January,	10	$37,242	$7,270
February,	9	54,043	8,847
March,	11	46,701	15,656
April,	17	453,787	150,769
May,	12	58,904	26,892
June,	7	15,176	3,150
	66	$665,853	$212,584
	1908.		
January,	17	$86,506	$31,967
February,	8	56,123	6,201
March,	9	52,999	15,485
April,	14	488,293	140,950
May,	3	5,608	2,415
June,	3	233,573	96,250
	54	$923,102	$293,268

Date	No.	Liabs.	Assets
		1907.	
January,	13	$102,313	$35,265
February,	6	60,576	10,978
March,	9	61,679	7,712
April,	12	298,591	141,673
May,	6	32,454	10,370
June,	10	19,843	2,830
	56	$575,456	$208,828
		1906.	
January,	7	$130,850	$29,111
February,	10	23,390	7,791
March,	10	49,949	3,811
April,	7	47,771	6,710
May,	11	35,567	13,906
June,	5	48,796	23,638
	50	$336,323	$84,967

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

R. C. Valentine, Drying Mechanism, No. 923,092.

A drying machine comprising a casing in which are racks driven by a conveyor to carry the material to be dried, these racks being provided with automatic hooks to engage the conveyor, which release the rack when they meet an obstruction and bring the rack to rest. Means are provided for re-admitting at different points in the machine the air exhausted therefrom for further action upon the material being dried.

George H. Davis, Hinge, No. 923,250.

One or more elastic curved plates fastened to one leaf of the hinge for the purpose of adjusting the door.

W. S. Metcalfe, Envelope Machines, No. 923,679.

A machine for pasting the transparent patch over the opening in an outlook envelope, in which a patch is carried from a pile to a stationary support above the envelope blank, and a reciprocating plunger transfers this patch from the support to the blank.

H. C. Williamson, Circuit Closer, No. 924,123.

A rotary contact member adapted to co-operate with a number of stationary contacts, these contacts consisting of cylindrical rollers placed about the axis of rotation with their axes set radially. These rollers are resiliently supported to take up wear and give firm contact. Suitable means are provided to conduct the current from the contact points.

G. H. Haslop, Adjusting Devices for Cutting Dies, No. 924,778.

A cutting die for envelope machines comprising two knives or cutters slidably mounted upon a sealed guide rod and means for clamping them to the guide rod at any point thereon.

V. H. Jennings, Woven Fabric, No. 924,788.

A fabric or webbing having portions of different widths as aforesaid, and provided with a longitudinal thickening or reinforce woven integral therewith.

John O. Hale, Lock for Railway Switches, No. 924,984.

A lock consisting of a bolt or bar pressing against and locking the rail, and the interposition of spring means between the rail engaging ends and the point where the power is applied in operating the same, whereby a flexible tension is exerted on the rail to hold the same in position.

Worcester Quotations

Furnished by Fisk & Robinson, Worcester.

June 25, 1909.

	Bid.	Asked.
BANKS.		
Mechanics National Bank	125	.....
Merchants National Bank	155	.....
Worcester National Bank	202	.....
Worcester Trust Company	250	.....
RAILROAD STOCKS.		
Boston & Albany	229	230
Boston & Maine common	147½	148
Boston & Worcester Elec. common	10	.....
Boston & Worcester Elec. pfd.	52	56
Fitchburg preferred	130	.....
New England Inv. & Sec. pfd.	83	87
New York, New Haven & Hartford	171	172
Norwich & Worcester	210	last sale
Providence & Worcester	.....	275
Worcester, Nashua & Rochester	145	last sale
Worcester Railways & Investment	.....	70
INDUSTRIAL STOCKS.		
Crompton & Knowles pfd.	145	.....
Denholm & McKay common	200	.....
Denholm & McKay pfd.	100	102
Graton & Knight Mfg. common	130	.....
Graton & Knight Mfg. pfd.	113	115
Royal Worcester Corset Co.	165	.....
Royal Worcester Corset "rights"	15	.....
United States Envelope common	50	55
United States Envelope pfd.	111	115
Worcester Gas Light	255	.....
Worcester Electric Light	250	.....
Wright Wire Company common	102	110
Wright Wire Company pfd.	106	.....
BONDS.		
Amer. Writing Paper 1st 5's	85	86
Boston & Wor. St. Ry. 1st 4½'s	98½	.....
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 5's	5½	basis
Marlboro & Westboro St. Ry. 1st 5's	.....	98
Norcross Brothers 1st 6's	.....	100
United States Envelope 1st 5's	101	102
Worcester Cons. St. Ry. 1st 4½'s	94½	.....
Worcester & Marlboro St. Ry. 1st 5's	98	.....
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General.

May 24. Funeral of Benjamin R. Cumming, son of John F. Cumming, who dies as a result of injuries received from falling beneath Lake View electric car.

26. Rev. Dr. Frederic A. Gould, formerly pastor of Grace M. E. Church, goes to the Perryville Avenue Church, Pittsburg.

30. Worcester Consolidated Street Railway Company transports 250,000 people.

Rev. Dr. Henry N. Couden, blind chaplain of the House of Representatives, delivers Memorial Day address at Mechanics Hall before patriotic societies and the public generally.

31. Worcester residents of Polish extraction celebrate 118th anniversary of the proclamation of the Polish constitution.

Henry C. Graton donates $1000 for the free distribution of milk to the poor from milk stations during the summer months by the Medical Milk Commission.

National Convention of Lithuanian Alliance of America opens.

June 1. Mr. and Mrs. Horace H. Bigelow celebrate their golden wedding.

2. Sixty-fifth annual conference of the A. M. E. Church of New England opens at Belmont Street Church, Bishop Alexander Walters presiding.

Richard Healy gives banquet to his help in honor of the fiftieth anniversary of his beginning business.

Worcester Woman's Club elects Mrs. A. B. R. Sprague president; Miss Jean B. McIver and Miss Helen A. Ball vice-presidents; Mrs. Mary C. Dodge clerk; Mrs. Nellie M. Gould corresponding secretary; Miss Alice Gordon Merrill treasurer; Mrs. Hattie H. Streeter auditor; Mrs. Emma D. Bradley, Mrs. Nettie Balch Warren, Mrs. O. W. Turple executive committee. Club votes that members must be over twenty years of age and residents of Worcester County.

Rt. Rev. Mgr. Thomas Griffin, D.D., welcomed back to Worcester by a public demonstration and presented a purse of $2000.

3. Four new buildings, increasing the capacity of Memorial Hospital from 50 beds to 150, and the value of the investment plant from $140,000 to $360,000, dedicated.

4. Announcement made that Fred W. Granger of 235 Park Avenue has been chosen as principal, and Thomas F. Downey of 73 Waverley Street, and Florence A. Donohue of 14 Perry Avenue, as alternates to take examinations for a vacancy in a West Point cadetship in January, 1910.

Lithuanian National Alliance votes $50,000 for building headquarters in New York.

5. Thomas A. Dowd, 35 years old, 44 Houghton Street, thrown from the seat of a wagon on Front Street near the Warren Hotel by a runaway horse and instantly killed.

6. Rev. Dr. Austin S. Garver delivers at Central Congregational Church the baccalaureate before the graduating class of Worcester Polytechnic Institute.

Rev. Edward S. Fitzgerald, '02, of Holyoke delivers baccalaureate at Holy Cross.

Rev. Walton S. Danker preaches to the members of Worcester Light Infantry on observance of company's 106th anniversary.

7. Annual meeting of the Corporation of the Woman's Clubhouse. Mrs. Charles C. Baldwin elected president, and other officers as follows: First Vice-president, Mrs. Ellen F. Rogers; Second Vice-president, Mrs. Luther M. Lovell; Clerk, Mrs. Herbert J. Russell; Treasurer, Mrs. Frank N. Houghton; Directors, Mrs. Henry F. Harris, Mrs. Homer Gage, Mrs. William T. Forbes, Mrs. Alexander H. Bullock; Advisory Committee, Mrs. A. George Bullock, Mrs. Francis H. Dewey, Miss Georgie A. Bacon.

10. Commencement exercises inaugurated at Clark College with banquet at Worcester Automobile Club.

Convention of the Mystic Order Veiled Prophets of the Enchanted Realm opens in Worcester. Visitors guests of Aletheia Grotto. George E. W. Stivers elected Grand Monarch.

12. L. N. F. Baldwin, driving a Stanley steamer car, negotiates Dead Horse Hill in 54 seconds flat at annual hill climb of Worcester Auto Club, fastest time ever made in a race on the hill and lowering his own record of a year ago 1 1-5 seconds. Contest attracts 1500 automobiles and 30,000 people.

Worcester Woman's Suffrage League resumes that title after three years' experience as Worcester Association for Better Laws for Women and Children, and elects Mrs. Edwin H. Marble president; Mrs. A. H. Howland first vice-president; Mrs. A. S. B. Lothrop second vice-president; Mrs. Abbie Howland secretary; Mrs. A. A. Bigelow treasurer; Mrs. Estabrook, Mrs. A. B. Shaw and the above officers, executive committee.

13. Rev. Dr. Charles Brown Elder, pastor of the Church of the Unity, delivers a memorial address on Rev. Dr. Edward Everett Hale, first pastor of the church, who died at his home in Boston, Thursday, June 10, aged 87 years.

Baccalaureate sermon before Clark College seniors by Rev. Ulysses G. B. Pierce, pastor of All Souls' Church, Washington, D. C. Dr. Hale's successor as chaplain of the Senate.

14. Memorial services in honor of late President Carroll D. Wright of Clark College at Clark University library. A. George Bullock presides and delivers an address in behalf of the trustees, acknowledging for them the Wright portrait unveiled after his death. Addresses also made by President G. Stanley Hall of the University, Prof. Prentiss C. Hoyt, Roy M. Cushman, '05, who spoke for the alumni, and Clarence P. Shedd, '09, for the undergraduate body. Prof. R. Mowry Bell reads memorial sonnet.

15. More than 125 applicants for admission to Worcester Polytechnic Institute, largest number in history of that institution.

Board of Trade Glee Club has benefit concert at Mechanics Hall attended by nearly 1500 persons.

16. Dr. Francis R. Lane, of Washington, D. C., elected principal of the Worcester Normal School to succeed E. Harlow Russell, resigned.

Richard J. Healy given silver loving cup by his employees in recognition of having completed 50 years of successful business life.

17. Holy Cross College matriculates 57 students, largest class in history of institution. His Excellency the Governor and many other distinguished men present.

Thirty-one young men receive their sheepskins at Clark College's fifth commencement, the largest number since the first. Commencement oration delivered by Rev. George A. Gordon, D.D., of the Old South Church, Boston.

Marion Colebrook, student at South High school, finishes ten years of perfect school attendance.

Holy Cross College receives gift of $8000 from John H. Halloran of New York as a memorial for his brother, William Halloran, to establish the Halloran scholarship. It is open to all students and includes board, lodging, tuition and private room for four years. College also receives gift of $1000 from the parents of Joseph J. O'Connor, Newburyport, who died while a student, income to be devoted to purse for annual debate of Philomathic Society.

Worcester Republicans gain 23 delegates, from 52 to 75, in Republican State Convention as result of heavy Republican vote in 1908.

Secretary Clarence Saunders Brigham of American Antiquarian Society, Worcester, receives degree of M.A. at Brown University.

At sale of Ayrshires at New England fair grounds 114 cows disposed of for $14,382.50.

Fifty-seventh Regiment has annual reunion at Board of Trade Hall and J. Brainerd Hall, Worcester, elected president for ensuing year.

Dr. Freeman A. Tower, Worcester, new superintendent of Burbank Hospital, Fitchburg, to assume his duties July 19.

Worcester Continentals, guests of Amoskeag Veterans, Manchester, N. H., and win a silver shield for superiority in gunnery.

21. Dismissal service of Rev. Dr. Frank Crane, pastor of Union Congregational Church.

City Affairs

May 22. Up to February 12 Worcester had expended $55,140.66 in abolishing grade crossings.

28. City Engineer Frederick A. McClure engages E. Howard Bourne of Little Falls, N. Y., as head draughtsman to succeed Samuel H. Pitcher, resigned to go into business for himself.

31. Patrolman John F. Casey resigns to accept position with State police.

June 4. Overseers of the Poor ask for $5000 to build extension to Curtis wing at Home Farm.

5. Park Commissioners vote to fit up two tea rooms at the Green Hill Park mansion house, and to have ice cream, cakes and light drinks there for sale.

7. Common Council concurs with Aldermen in appropriating $125,000 for new industrial school and recommends that trustees hold public hearing for the purpose of ascertaining best possible site.

10. Worcester has 2,605,000,000 gallons of water in storage, enough to last 260 days.

14. William R. Wilson, Boston, donates $20,000 to renovate and beautify Maria Gill Wilson memorial chapel at City Hospital.

City draft for May amounts to $328,414.37, of which $43,920.71 was expended on grade crossing abolitions.

15. Prospective tax rate for 1909 announced to be $17 on $1000. Reduction in Worcester's share of the State tax is $37,530; from $206,415 in 1908 to $168,885 in 1909.

16. Industrial School Trustees given hearing to public on location of site for school. Preponderance of sentiment for Armory Square site.

17. Worcester net city debt May 31 $326,220.63 more than one year ago.

20. Municipal cafe opened at Green Hill Park. All refreshments sold at practically cost rates.

22. Industrial School Trustees vote unanimously for the Armory Square site and select building plans of Frost, Briggs & Chamberlain.

Business and Building News.

May 22. Worcester Paper Box Company incorporated with capitalization of $20,000. James W. Grady, president; John F. Harrigan, clerk and treasurer; Harry Posner, general manager. The foregoing are the directors.

24. Curtis Manufacturing Company, manufacturers of men's suitings, resume full time for force of 300 men.

26. Announcement made that Ryan & Keon have been awarded the contract for eliminating the grade crossings on the New York, New Haven & Hartford Railroad between South Worcester junction and the new Union Station.

29. New England Fibre Blanket Company organized with capitalization of $25,000. President, Frank E. Ellis, Boston; Treasurer, Theodore T. Ellis; Vice-president, W. J. Stone, Boston. The foregoing are the directors.

June 1. Merchants National Bank buys Leland block opposite City Hall, and will remodel it for its uses.

2. Columbia Interstate Express Company organized with capital stock of $1000. John Bowe, president; John O'Connor, treasurer, and S. D. Caren, clerk.

7. J. W. Bishop Company awarded contract for building Edwin Gould mansion, corner Fifth Avenue and 75th Street, New York.

Harrison W. Bowker in behalf of himself, Francis E. Bates, Providence, and George J. Shutt of Woonsocket, as trustees for the bond holders of the Rhode Island Dyeing & Finishing Corporation of Woonsocket, buys in that property at foreclosure sale for $15,000.

11. Semi-annual inspection of American Steel & Wire Works by the officers of the company, President W. P. Palmer of Cleveland, O.; First Vice-president J. R. Keefe of Chicago; General Manager C. L. Miller of Pittsburg; General Sales Agent F. A. Backus of Chicago; General Purchasing Agent E. E. Stone of Cleveland and Auditor C. A. Vogt of Chicago.

14. J. M. & C. J. Buckley begin work on $160,000 warehouse, nine stories high, for Boston Wharf Company. Structure on Summer and Melcher Streets, Boston, and to be finished February 1, 1910.

15. William H. Leland & Company authorize construction of $13,000 addition to machining plant on Hope Avenue. E. J. Cross contractor.

Benjamin Cotton buys old Providence & Worcester passenger station on west side of Green Street, and is to remove it. Land retained by the railroad.

17. Worcester's increase in building operations for first five months of 1909 ending June 1, 139 per cent. over corresponding months of 1908, or $960,000. Building operations to June 1, 1908, $708,490; to June 1, 1909, $1,687,318.

18. American Antiquarian Society to have elegant new home, corner Park Avenue and Regent Street. Building will not be dedicated until 1910. It will cost about $200,000, and will be built by J. W. Bishop & Company, Worcester.

Workmen break ground for new Clark College library.

Worcester Necrology.

May 22. Mrs. Mary H. (Garfield) Parker dies at her home, 65 Chatham Street, aged 75 years 3 months 28 days. She was a charter member of Plymouth Congregational Church, the first Worthy Matron of Stella Chapter, Order Eastern Star, a prominent official of the Young Women's Christian Association, a member of the Board of Managers of the Worcester Home for Aged Women, and a director in the Worcester Auxiliary of the Association of the Baldwinville Home for Children.

29. Death of Miss Eldora M. Aldrich, treasurer of the Young Women's Christian Association, treasurer of the Woman's Clubhouse Corporation, treasurer of the Woman's Missionary Society of the First Baptist Church, and member of the Board of Managers of the Temporary Home and Day Nursery. Her age was 62 years 8 months and 13 days. Cause of death, cancer.

Death of Edward E. Johnson, formerly an official of the Fitchburg Railroad, of cerebral hemorrhage, aged 51 years 2 months and 27 days.

June 8. William Henry Brown, retired, formerly prominent Worcester manufacturer of carding machinery, dies at Home for Aged Men, aged 89 years 10 months and 4 days. Death caused by senile debility.

9. Death of Justin P. White, known as the father of candlepin bowling, and one of the oldest promoters of bowling in the United States, aged 70 years and 24 days. He had been interested in bowling 51 years, and was the inventor of the finger hold in the large balls used in the ten-pin game. Cause of death, asthma.

13. John M. Partridge, a native of Paxton and a long-time resident of Worcester, dies at Home for Aged Men, after less than an hour's illness of heart disease, aged 73 years 6 months and 1 day.

16. Charles R. Fellman, veteran tobacconist, dies at his home, 47 Highland Street, aged 73 years 3 months 15 days.

17. Death of Dr. Louis T. Wilson, son of Librarian Louis N. Wilson of Clark University, in Boston City Hospital, aged 33 years.

JOHN PEACOCK

HARRISON S. PRENTICE

Two Recent Deaths

Since the last issue of the Worcester Magazine the Worcester Board of Trade has been called on to mourn the loss of two members: John Peacock, who, at seventy-one, entered into rest June 4 at his home, 13 Benefit Street, of valvular heart disease after a lingering illness, and Harrison S. Prentice, one of the most widely known and successful real estate dealers in Worcester, who passed away Thursday, June 24, at his home on Chestnut Street, aged seventy-two years.

Mr. Peacock was manager and general agent of the Bay State Shoe & Leather Company until it ceased business activity. He was a native of Belmont, Yorkshire, in England, but was brought to this country when a child of two.

After a novitiate in textiles he turned his attention to the manufacture of boots and shoes, to him a much more congenial employment, and he operated probably the first sewing-machine run in a shoe factory in this country. This was in 1860.

Mr. Peacock became foreman of the Bay State Shoe & Leather Company in 1864; in 1871 he was made assistant superintendent, and in 1891 he was constituted manager and general agent. He leaves two daughters, Miss Ida H. Peacock and Mrs. H. Spencer Haskell, and one brother, David.

He had been a member of the Board of Trade for many years.

Mr. Prentice was one of the old, stable, honorable, successful business men for which Worcester is so justly noted. He was born in Worcester Aug. 10, 1836, twelve years before it became a city, and he had not only watched its growth with pride, but he had been responsible for no small share of it. He erected many of the most substantial blocks that grace our public streets, and he built a part of himself and his integrity and worth into every one of them. His services to the city as a member of the building commission that erected our City Hall ought never to be forgotten, for he gave of his time and his energy unstintedly to this project, and the result will be a source of pride to Worcester people continually and in larger and larger measure. Not only is this superb public building an architectural triumph, but thanks to Mr. Prentice and his associates, it was completed inside the appropriation for it. In these days of excessive public expenditure and private business laxity, it is refreshing to be able to pay such a tribute to one who has passed on Mr. Prentice is survived by a widow and two daughters. His loss to the board, particularly to the older members who knew him best, is irreparable.

The Brussels Exposition of 1910

The Worcester Board of Trade is in receipt of a communication from Hon. James M. G. Fay, of the American Consulate General at Brussels, Belgium, calling attention to the International Exhibition to be given in that city from April, 1910, for the six months next ensuing. The exhibition is under the distinguished patronage of His Majesty King Leopold and H. R. H. Prince Albert of Belgium, and it should be of general interest to American manufacturers because of the fact that one of its most important groups will be that devoted to machinery. Four exhibitions have previously been held in Belgium: two in Antwerp, one at Brussels, and the last at Liege, in 1905. These proved so successful that the Belgians have decided to hold a fifth next year, which they assert in completeness and value will outrival all its predecessors. Worcester manufacturers interested in winning foreign markets—and who among them is not?—will doubtless be interested to learn that Mr. Fay's address is 7 Place Jean Jacobs, Brussels, and that doubtless by communicating with him they can obtain such printed matter bearing on the exhibition as is available.

Belgium has not, up to this time, proven a particularly fruitful field for Worcester industry. Whether this is the fault of the Belgians or of Worcester, it is not easy to determine. If the forthcoming exposition is properly handled, it ought to afford our metal tradesmen an opportunity to meet the European manufacturer on his own ground, with a tool that, if it cannot compete in price with the low cost goods of Europe, will excel in quality anything that can be shown there.

WORCESTER BOARD OF TRADE
11 FOSTER STREET
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A Board of Trade Year Book

As soon as was possible after the annual meeting of the Board of Trade, held on April 20, the adjourned meeting was called together for a further consideration of the proposed changes in the by-laws of our organization. This meeting was held in the rooms of the Board of Trade on Thursday evening, May 13, and nearly three hours were spent in a thorough examination of the changes suggested by the committee appointed some months ago, consisting of Mr. George F. Booth, Mr. Winthrop Hammond, Mr. Charles T. Tatman and Mr. Herbert H. Fairbanks. There was an appreciation on the part of all present of the careful work that had been done in this proposed revision, and substantial unanimity of feeling as to its merits, nothing but minor changes being discussed and adopted. It is now included in a booklet, together with a list of the officers, the names of the committees appointed for the current year, and a list of the present members of the Board of Trade, giving their addresses and occupations, which has been sent to all members.

The most marked change in the by-laws affects membership dues, which are now ten dollars for the year, or half that sum for the remainder of the year for any who join the board after November 1st. There has also been added an Executive Committee of five, of whom the President of the board is a member and chairman ex-officio; the other four members being chosen by the directors from their number. The function of this committee is to look after the rooms of the board and its finances, and to assign the work of the various committees pending meetings of the directors. The President is now a member ex-officio of every committee of the board.

Committees at Work

There has been some unavoidable delay in starting the activities of the Board for the present year, owing to the time consumed in completing the revision of the by-laws, which added a number of standing committees; but a most gratifying spirit of readiness for work is characterizing one and another group of members as they come together to undertake specific tasks. The total number of committees is considerably larger than last year; but plans are under way to make each one a genuine working part of our organization, although it will doubtless take until the autumn to arrange the tasks for every one. The special committee on the Seattle excursion has held several meetings and conferences, and has the satisfaction of seeing the success of this venture now assured, the only question, at the time of this writing, being as to the size of the party. The Committee on Publication has held meetings to consider the general policy of the Magazine; also to plan the contents of the publicity booklet which is being prepared for distribution on the excursion, advertisements for which are being secured in gratifying numbers under the solicitations of Mr. Bosworth. This booklet, which is to be heart-shaped, will contain from fifty to seventy-five pages, devoted to general information about our city, and containing pictures of points of interest; also a condensed and carefully edited list of the prominent products of our factories. It is certain to make a great hit wherever it is distributed.

The Committee on Meetings and Receptions has had long sessions and is busily at work in anticipation of some interesting social events in the early autumn. The Committee on Transportation is taking up the matter of better railway facilities, especially in the matter of passenger service between this city and Providence; and is also giving careful consideration to the question of securing some expert help in the matter of traffic investigation to be at the service of Worcester's shippers.

The Glee Club's Benefit Concert

To transport a body of thirty members across the continent and back on a concert tour is manifestly no slight matter; and the Seattle Excursion Committee, while feeling that the presence of the Glee Club was almost indispensable to the pleasure and success of our excursion, has at times felt grave doubts whether this feature could be assured. While some favorable engagements for concerts have been made in various western centres, difficulty of full guarantee of all sums needed has been manifest. It was increasingly felt, however, that the presence of the club would be not alone a pleasure to the many friends of the organization, but a valuable advertisement of our city, and it was believed that there would be a practical response to any appeal which had this specifically in mind. Accordingly, a benefit concert in Mechanics Hall, with tickets set at the price of one dollar, with no reserved seats, was initiated, and under the energetic efforts of some members of the club, especially of ex-Mayor Fletcher and Mr. A. W. Parmelee of the committee, the sale of tickets to this entertainment netted the encouraging sum of over $1200.

Of the success of this concert as an artistic performance, it is difficult to speak too highly. Under the leadership of Mr. Santon, the body of singers responded with perfect unity to all demands made upon it, of whatever character, grave or gay, simple melody or most difficult harmony. The quartette and soloists gave such an admirable account of themselves that the audience departed feeling assured that the musical reputation of our city was safe wherever this organization might be heard. Later returns from some tentative engagements made by the Secretary on his preliminary tour are also distinctly encouraging from the financial viewpoint, and show that there is an eager interest in these distant cities over this feature of the coming excursion.

The New Boston Chamber of Commerce

Our readers will be glad to have the latest news from our neighbors at the Hub, who have at last perfected their new organization and set it in practical operation. We quote somewhat at length from a recent bulletin sent out by this new organization in Boston, which explains with clearness the status of the new body:

The inclusion of three representative organizations in the union, with provision for affiliating many of Boston's commercial bodies, will bring to New England and its metropolitan city those benefits that alone can result from singleness of purpose and co-operative effort.

The cordial approval of this union by representative business and professional men has been demonstrated by the filing, within a period of eight months, of 1097 new applications for membership in the Merchants Association. The elected membership is now 1562, with nearly one hundred on the waiting list. The charter membership of the new Chamber of Commerce, upon the occasion when it formally celebrates the union in June, should be at least three thousand.

The Boston Chamber of Commerce will be, numerically, the strongest local commercial body in the United States, and its constitutional character, organization and policy should elevate it to the highest rank of efficiency. The experience of the past few months has been of the utmost value in pointing out the lines and limitations of organized interest and work and in indicating what may properly be undertaken and accomplished.

An organization of great efficiency and influence is more necessary in Boston than in any other community in this country. The infusion of energy and enthusiasm into the sturdy and stable qualities that have made New England the mother of American progressiveness is possible only through an efficient organism. Every man who believes in New England and is willing to work for the maintenance of her commercial and industrial supremacy is needed to aid the organization that has been created to promote those interests.

The membership of the new body will be individual. Each of the firms and companies in whose names memberships in the Merchants Association have been held will be converted into individual memberships. Every firm or company now in the membership will be entitled to one individual membership without payment of dues for the year 1909; but it is expected that each firm and company will be represented by as many individual members as its standing and importance warrant. The plan of individual membership is the only one that is consistent and equitable, and its adoption is now general among the representative commercial bodies of the country.

From the Field

What Other Boards of Trade and Chambers of Commerce Are Doing

June, 1909, will always be celebrated in the annals of Dayton, O., as the month in which that city proved conclusively that there were exceptions to the rule that a prophet is not without honor save in his own country and among his own kin. The Wright brothers, Wilbur and Orville, known perhaps as the world's greatest aviators, were given a reception in their own home city that rivaled in its warmth and spontaneity anything that they have encountered abroad. The celebration was on June 17 and 18, and was among the most notable, as it certainly was the most unique affair of the kind of the year. The Dayton Chamber of Commerce co-operated largely in rendering the appreciation the success it proved, and its President was chairman of the Committee on Receptions. The June number of Greater Dayton was largely given up to a most interesting history of the Wright family and the achievement of these courageous men.

The Dayton Public Library, for the benefit of the artisans in that city, has issued 5000 copies of a "List of Books of Practical Interest to Men in the Shop," giving access to the works on electricity, machinery, moulding, plumbing, woodworking, sheet-metal and other mechanical trades on the shelves of that institution.

o o o

The Schenectady, N. Y., Board of Trade has adopted as its motto, "Ske-daddle to Schenectady," and has chosen a three-barred flag, the centre purple, the two outer bars orange.

Lowell, Mass., Board of Trade now issues an artistic publication known as the Lowell Magazine.

The Salt Lake Outlook remarks, "The motto of the Worcester, Mass., Board of Trade is 'Become a Booster and Boom Worcester.'" Providence, R. I., claims that "Providence Provides." These are good, but how about "Salt Lakers are Money-makers"?

o o o

The Petersburg, Va., Chamber of Commerce has offered $500 a mile for fifteen miles of country road constructed within a given time, the starting-point to be at the city line. It is presumed that $500 a mile will go farther in Virginia than in Massachusetts building roads.

Bank clearings in Spokane last year were $307,791,482, an increase of $6,000,000 over the previous year.

Scranton, Penn., had an industrial exposition similar to that held in Worcester under the auspices of the Board of Trade, May 1 to 8, and Cleveland had a very large and successful show of the same kind last month.

o o o

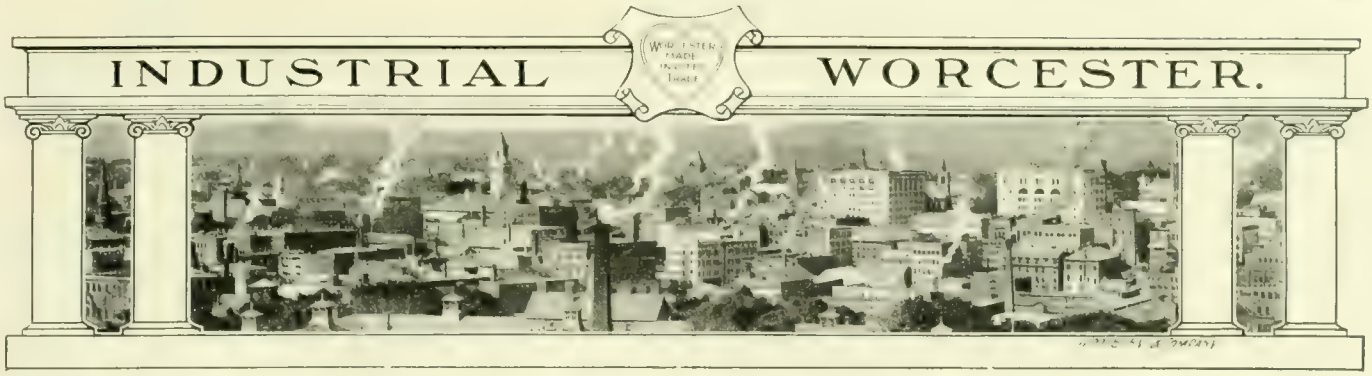
The Wilkes-Barre Board of Trade is in the habit of offering an annual prize for the best essay on the city of Wilkes-Barre. The Journal issued by this Board of Trade is one of the pithiest and most interesting, as it certainly is one of the most comprehensive published in the middle West, and it ought to be of great value to the commercial organization it so faithfully represents.

Thomas E. Kenney of the West Side Board of Trade of Scranton, Penn., is of the opinion that no man who does not own at least $10,000 worth of real estate should be elected a member of the Common Council. He made a motion to that effect at a recent meeting of the Board, but it was not seconded.

o o o

The Portland, Ore., Chamber of Commerce is preparing to receive the representatives of the Japanese Chamber of Commerce who are coming to this country this fall. The Rochester, N. Y., Chamber of Commerce is also planning to entertain these distinguished visitors from the Orient.

The Portland, Ore., Chamber of Commerce is in correspondence with a concern in New York state which is seeking for a location for a factory for the manufacture of paper milk-bottles.



A NEW WHITCOMB-BLAISDELL LATHE.

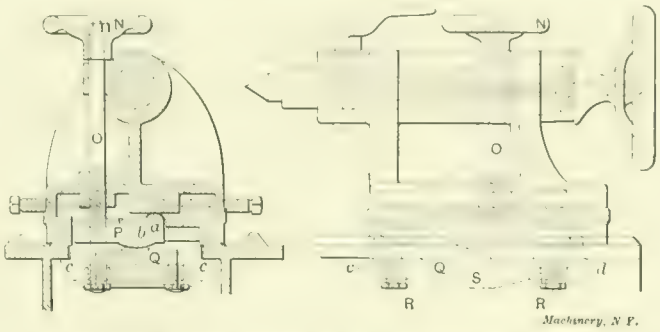
The essential features of the new patent cushioned clutch single-pulley drive lathe built in two sizes, 16-inch and 18-inch, by the Whitcomb-Blaisdell Machine Tool Company, are that it is positive in action and entirely self adjusting, operates without jar or shock, gears immersed in oil, all changes can be made at full speed or under load. The high and low speed frictions are operated by the large main lever shown in the centre of the head stock, from each of which four changes of speed are obtained by the simple operation of the small lever shown at the front end of the head stock, making in all eight changes of speed.

The horse power delivered by the 16-inch drive pulley is constant at all speeds. The starting and stopping of the lathe is either by the shipper rod or either of the levers. This with the quick changes enables the operator to increase the working time to a maximum.

The quick-change gear device is extremely simple, cutting threads from 2 to 60, and turning feeds from 10 to 300; is composed of two nests of gears operated by a newly patented sliding key, which is controlled by a small hand wheel in front of the box in conjunction with the different positions of the two levers at the end of the lathe; all positions for different threads and feeds being clearly shown on the index plate.

The tail is extremely rigid, of the cut-away type, with an extra large barrel to support the spindle.

It has an adjustable friction drive for apron feeds, which has met with instant approval with the trade, and is regarded by many machinists as the most valuable device of its kind that has yet made its appearance. The improvement in its construction lies particularly in the method of adjusting the clutch from the outside. These lathes are now being put on the market and have met with an instant demand.

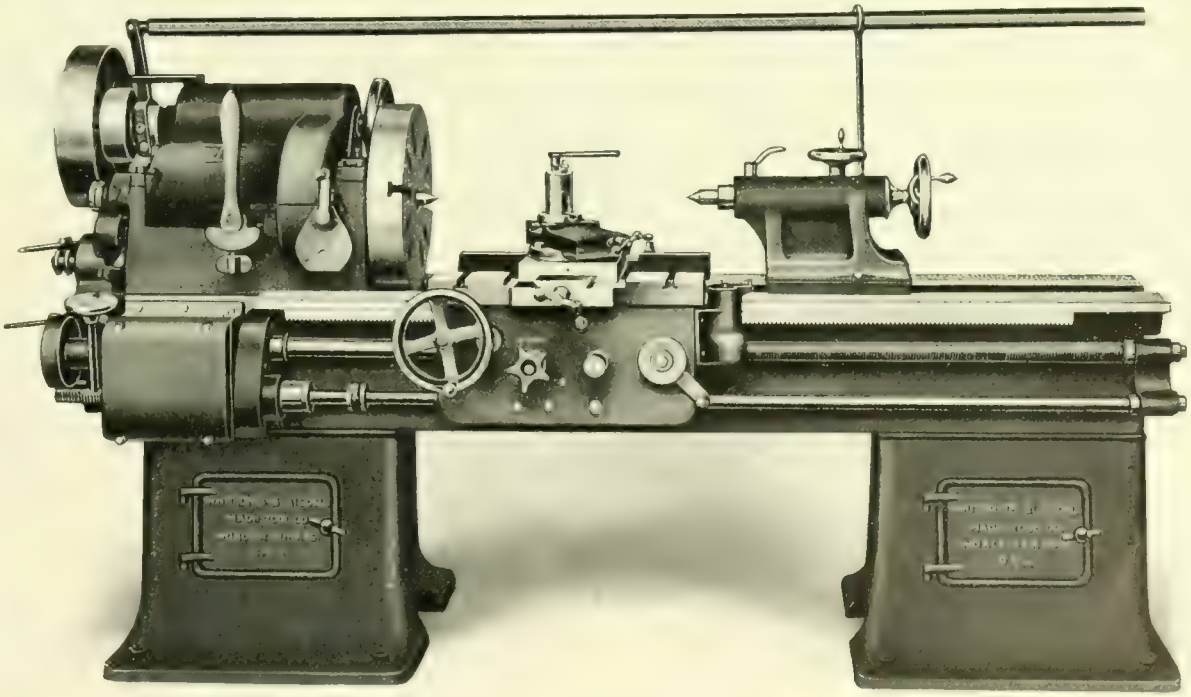


Tail-stock, showing Method of Clamping at the Four Corners with Single Hand-wheel.

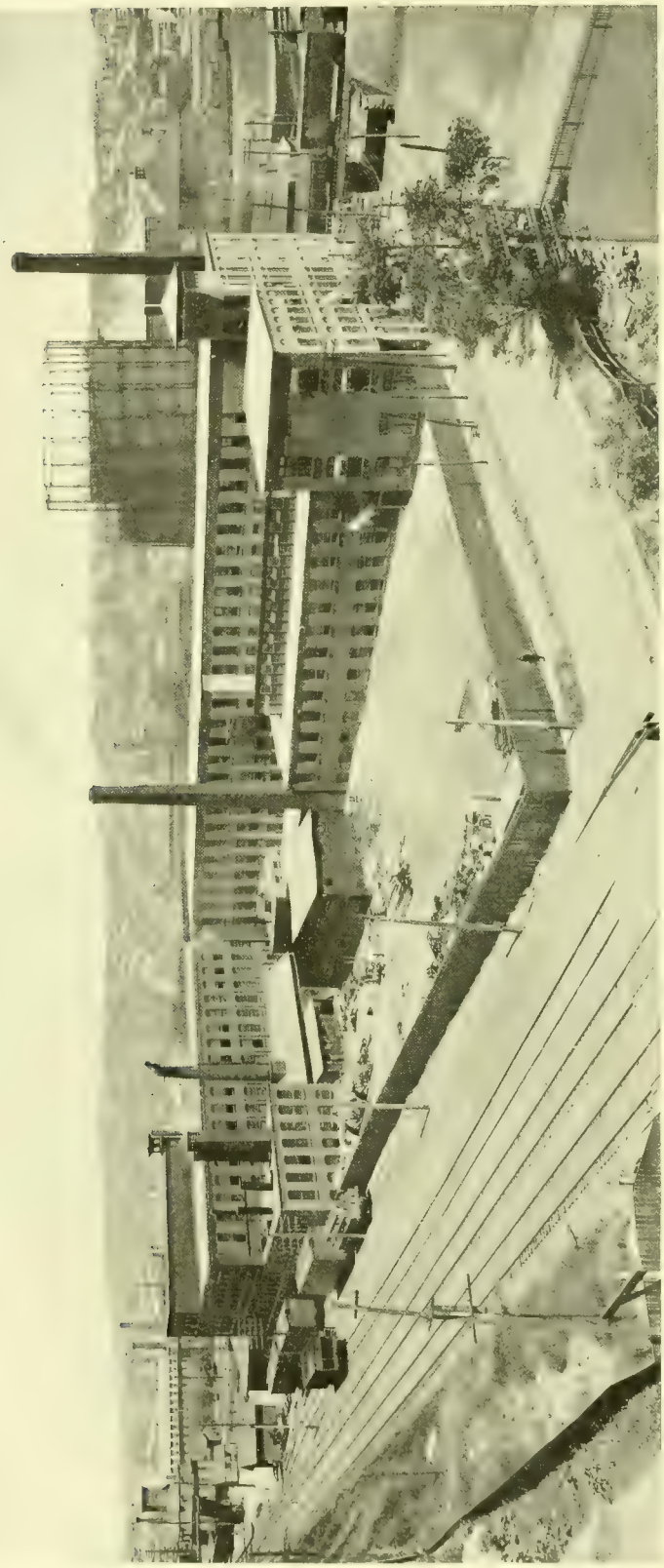
A picture of the Whitcomb-Blaisdell 18-inch patented cushioned clutch single-pulley drive lathe described above accompanies this article as to details of the tail stock.

CINCINNATI'S CONTINUATION SCHOOL.

The Cincinnati Metal Trades Association is moving along practical lines in its plan for "continuation schools," so called, and its committee on education having that matter in charge has



18" PATENTED CUSHIONED CLUTCH SINGLE-PULLEY DRIVE LATHE



WORCESTER WORKS OF THE WRIGHT WIRE COMPANY.
Photographed with the Sky Camera—the new Bird's-eye-view Apparatus—Woodbury & Company.

formed prompt co-operation from the city school authorities in the matter.

F. A. Geier of the Cincinnati Milling Machine Company has maintained in his plant for some time a school of his own; but, realizing that this would be scarcely possible in all establishments, the idea of providing a centrally located building, wherein young people could be gathered from the masses of manufacturing establishments, was advocated. The Board of Education received the ideas of the manufacturers with enthusiasm and offered co-operation willingly. The selection of a building in which the school can be started is in the hands of Superintendent Dyer of the Cincinnati public schools. Young men and boys who are on the payroll of local plants will be sent to this school and instructed in the branches which they ought to understand—to make capable machinists, draughtsmen, etc., and on the employer's time.

Dean Herman Schneider of the University of Cincinnati, who is well known in Worcester, is intensely interested in the scheme and is co-operating with the Metal Trades Association in working for its success. He has this to say on the subject: "The plan proposed injects strength into the very weakest parts of our school system and opens up great possibilities for general industrial education. I consider their action as the most important step so far undertaken in this country for the training of industrial workers. No doubt their action will be followed in a similar way by manufacturers in other fields of industry in Cincinnati, and will lead to the solution of the very vexing problem of giving instruction in efficiency to that great army of young men and women who are forced by circumstances to leave the public schools at an early date. The economy of the scheme presented must appeal especially to the school authorities and tax payers, for the plan contemplates only classroom instruction and not machine instruction, the latter being given in the commercial shops. This, together with the rotation of apprentices on separate half days, will enable the schools to instruct a large number of students in the things they ought to know to make them more efficient, with the smallest possible outlay of money."

The plan proposed by the Worcester Industrial Commission proposes to obviate this by a permanent trade school in which a boy can get both the theory and shop practice in one establishment under a competent set of instructors, rather than in a school and shop both.

THE SKY CAMERA

An interesting Worcester invention is the sky camera, recently perfected by Woodbury & Company, Inc. This camera and apparatus is the invention of John C. Woodbury, the founder and president of this engraving house, and his son, John E. Woodbury, a graduate of the Polytechnic Institute, now in the employ of the company.

For twenty-five years or more Mr. Woodbury, Senior, has been known as an expert in bird's-eye-view drawing, and from his experience in this work has recognized the need for this invention. A drawing of a manufacturing plant may fail adequately to represent the property, or it may misrepresent it, indeed with some draftsmen it has become almost a principle that an attempt at exaggeration must be made. So common has this become that the value of such illustrations has been greatly discounted. It is assumed that a bird's-eye-view drawing of a mill-plant is to some extent a fancy sketch. A photograph makes it im possible to question the truthfulness of a picture.

Then, too, in twenty-five years there has been a remarkable change in the character of mills and manufacturing buildings. Then there was comparatively little attempt at attractive design. Space enclosed and fairly lighted, with stability, was enough. Now the effort to adapt factory and shop buildings to their specific uses and make them conform to the general spirit of improvement in artistic taste, has made such buildings among the most interesting features of our cities and towns. Usually these architectural features are of such a character that it is more difficult to sketch them with complete success than it is to sketch the more marked styles of public buildings, for the same reason that the strongly marked features of Gothic architecture can be sketched effectively much more readily than the more quiet qualities of Grecian or Italian buildings.

Considerations like these induced Mr. Woodbury a year or more ago to begin a series of investigations and experiments for using photography in this work.

It was very soon found that the popular idea of photographing from a balloon or kite could not be depended on for business purposes. In any picture in which buildings are an essential feature the lines must be accurately placed. The vertical lines especially must be correct or the picture becomes very unsatisfactory. This means that the camera must be placed in a correct position and held there. All experiments with photography from balloon or kite have shown that this is not practical. The constant vibration in the air makes it almost impossible to obtain a sharp picture. Out of fifty photographs taken from a balloon, in an experiment made in Philadelphia, but one was tolerably satisfactory and in photographing from kites the proportion is even smaller.

An ingenious German invention has been patented within a year intended to overcome this difficulty in photographing for military purposes. The camera, suspended from balloon, is inclosed in a small globe with the lens looking straight down. In operation, the mechanism which snaps the shutter of the camera releases, with the same impulse, the whole camera from its support. Thus during the moment of exposure the camera is freed from the twitching of the balloon and is falling smoothly through the air to be caught up again by the support an instant later. This invention is understood to be successful for the purpose for which it was intended, but evidently could not be used in general photography.

In order to meet the requirements, the camera must be placed in exactly the desired point of sight and held perfectly in the correct position. The conclusion was inevitable that the camera must be supported from the ground.

The problem then was to make a stand that up to a height of one hundred and twenty-five feet will be so rigid as to hold a large camera still, even in a moderate breeze; to make this stand so light as to be operated easily and safely; and capable of folding small enough to be readily transported.

These problems have been satisfactorily solved and photographs are being made from great elevations that rival in sharpness and clearness the best work from an ordinary tripod.

Bird's-eye-views of buildings are not by any means the only work to which the new camera lends itself. Lakes, parks and farms give peculiarly beautiful effects, as seen spread out from such a height. These photographic pictures have a considerable historic value. One of the rather unexpected attractions of the new work is the beauty of light and shade from the unusual viewpoint. One hardly understands without careful consideration how much more brilliantly ordinary objects are lighted, as seen from above, flooded with the full effect of the light.

The camera is useful, too, in any photography where an unobstructed point of sight is difficult to obtain. Mr. Woodbury explains this by narrating his experience a few months ago at the Delaware Water Gap. Where the river breaks through the great Blue Ridge Mountains is some of the most romantic and beautiful river and mountain scenery in the country. With a photographer, Mr. Woodbury was looking for the most effective single picture for the advertising of the Lackawanna Railroad, but at every desirable point the close-growing forest came down so near to the river that the choice lay only between the overhanging boughs, out of focus in the immediate foreground, or the ugly railroad embankment. With the new camera, and stand swinging it clear from obstructions, the difficulty would have been overcome.

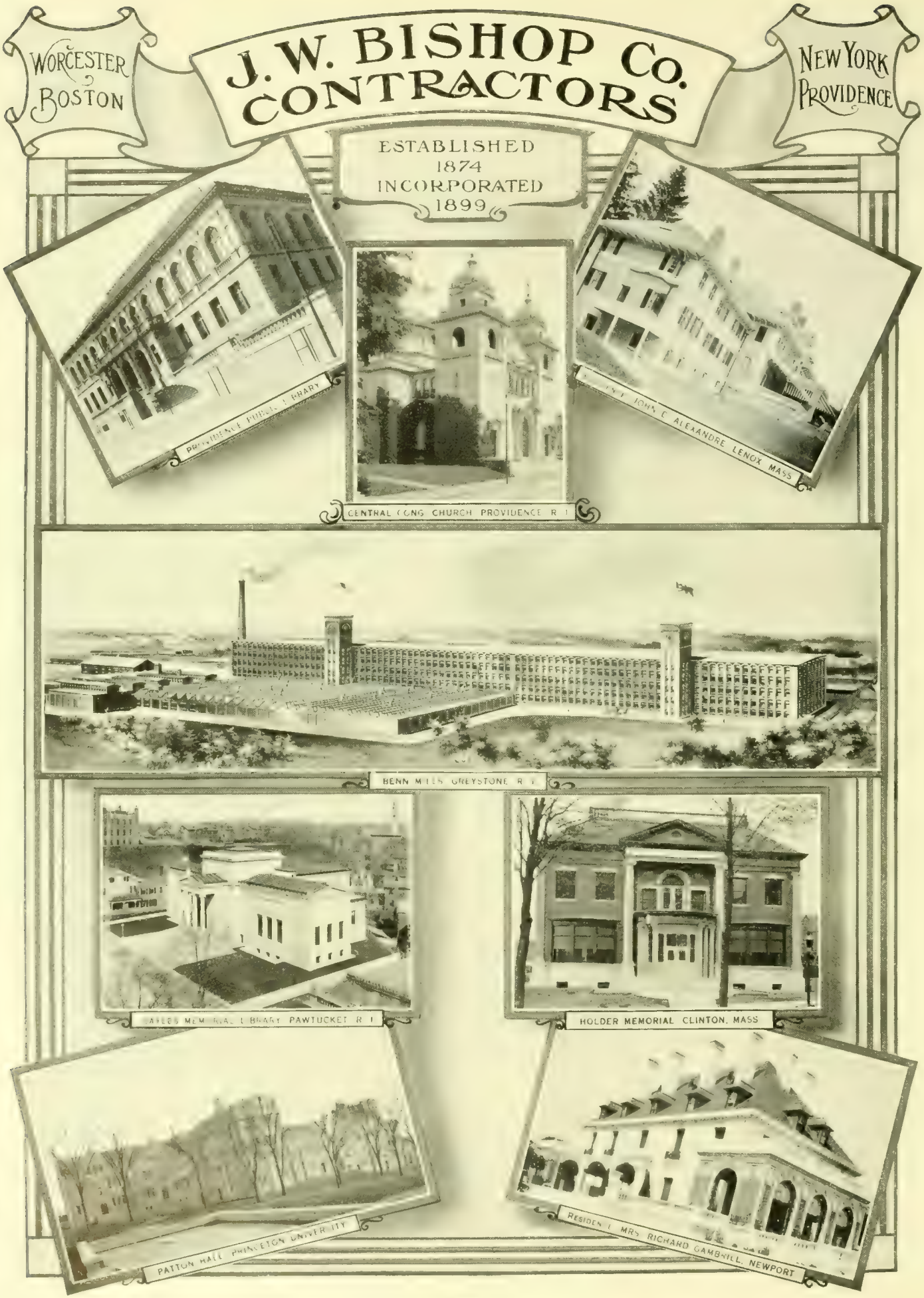
What photographer has not longed for some way to put his camera twenty-five feet higher to overlook some undesirable obstruction, or wished that he could swing his camera fifty feet straight out from some cliff, or mountain side, or over a river to secure the view that he knows is there?

Application has been made for patents covering broadly and in detail the new camera and apparatus. It should prove to be another of the almost numberless inventions that have contributed to Worcester's prosperity.

METAL TRADESMEN IN RHODE ISLAND.

Worcester members of the National Metal Trades Association went to Rhode Island, Bunker Hill Day, as the guests of the Rhode Island branch and had a most enjoyable time. A typical Rhode Island shore-dinner was served at Fields' Point, and later a steamer took the party to Rocky Point, where the Massachusetts boys gallantly allowed themselves to be beaten by their hosts from the land of "What Cheer" in an exciting game of baseball. The day was wound up by a trip around the bay and a supper on the boat.

The officers of the Rhode Island branch who were responsible for the success of the outing were the recipients of many congratulations. A souvenir booklet which was presented the guests will be long prized by reason of its pungency and its wit.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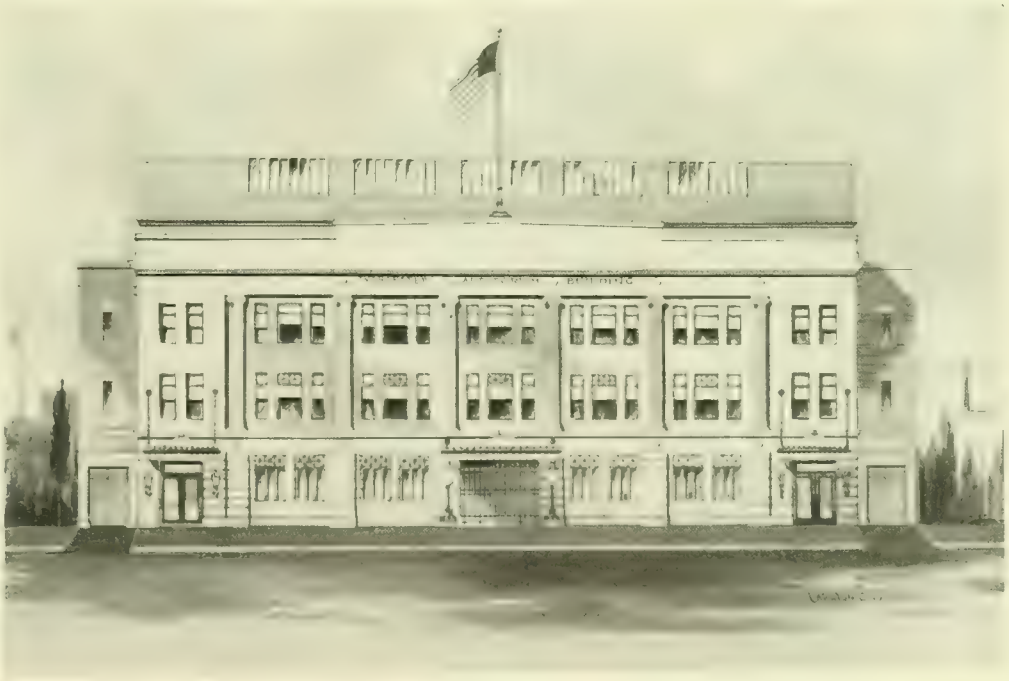

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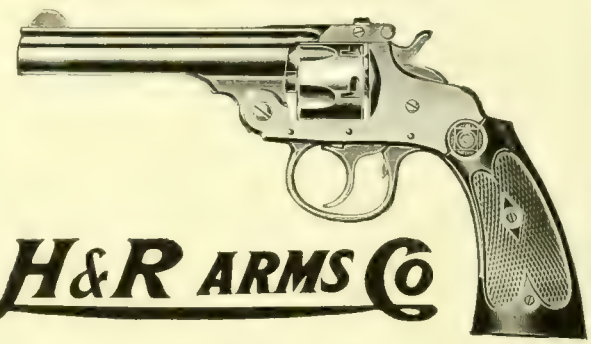

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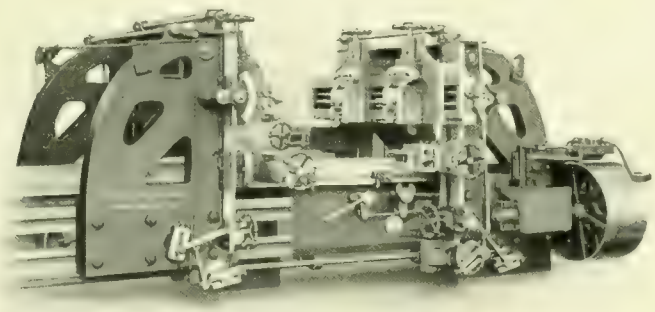

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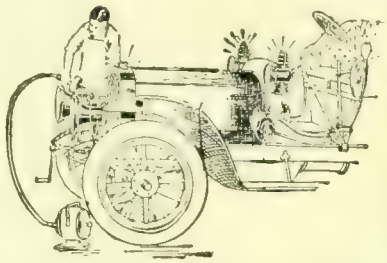

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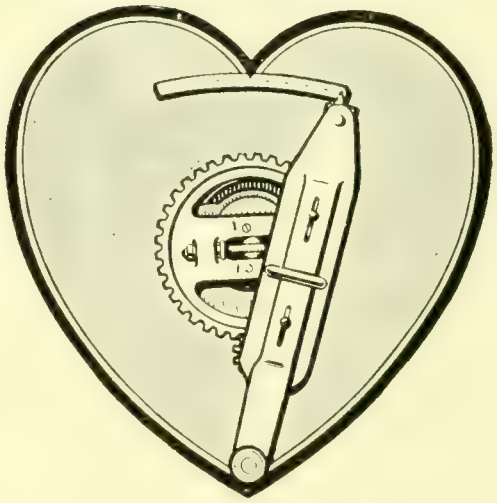

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THE GREAT DAM OF THE CONNECTICUT RIVER POWER COMPANY—600 FEET LONG, 32 FEET HIGH.

The WORCESTER MAGAZINE

A Copper Wire to the Heart of the Commonwealth

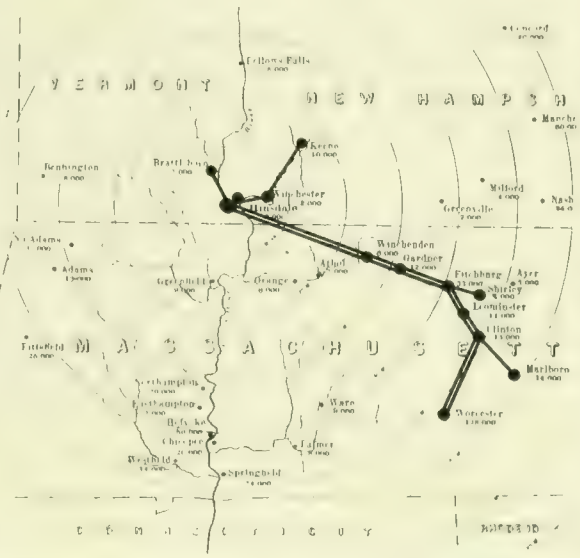
Worcester Gets Hydro-Electric Energy from the Green Mountain State, Sixty-six Miles Away, to Run its Factories

A COPPER wire will soon bring the Connecticut River to Worcester.

The two great assets of New England are her water power and the skill of her people. She has but a small amount of raw materials. The Commonwealth of Massachusetts has never developed an El Dorado. The rockbound farms of this and her five sister states have been fertile in producing great men, but the mines, the far-stretching wheat fields, the corn and the cotton fields are "out West" or "down South."

Worcester stands for skill and for the industries that the trained hand and the educated brain produce. The Connecticut River stands for power, that water power which is the cheapest form of energy in the world. A copper wire sixty-six miles long will, within a few weeks, mate the water power of this greatest of New England rivers to the skill and enterprise of one of the most progressive of her cities.

This means that the "Beautiful" River, as the Connecticut has been called, will continue to offer delightful scenery to the tourist, its beauty not diminished one jot. But the river will add another to the series of contributions it has made to the permanent pros-



MAP SHOWING DISTRIBUTING LINES OF THE POWER COMPANY

HOW THE RIVER FLOODED THE WORKS ONE NIGHT DURING THE EARLY STAGES OF BUILDING.

perity of four at least of the New England states. The world knows no more perpetual form of motion than a waterfall. A copper wire will carry power with less waste than any other medium known to-day.

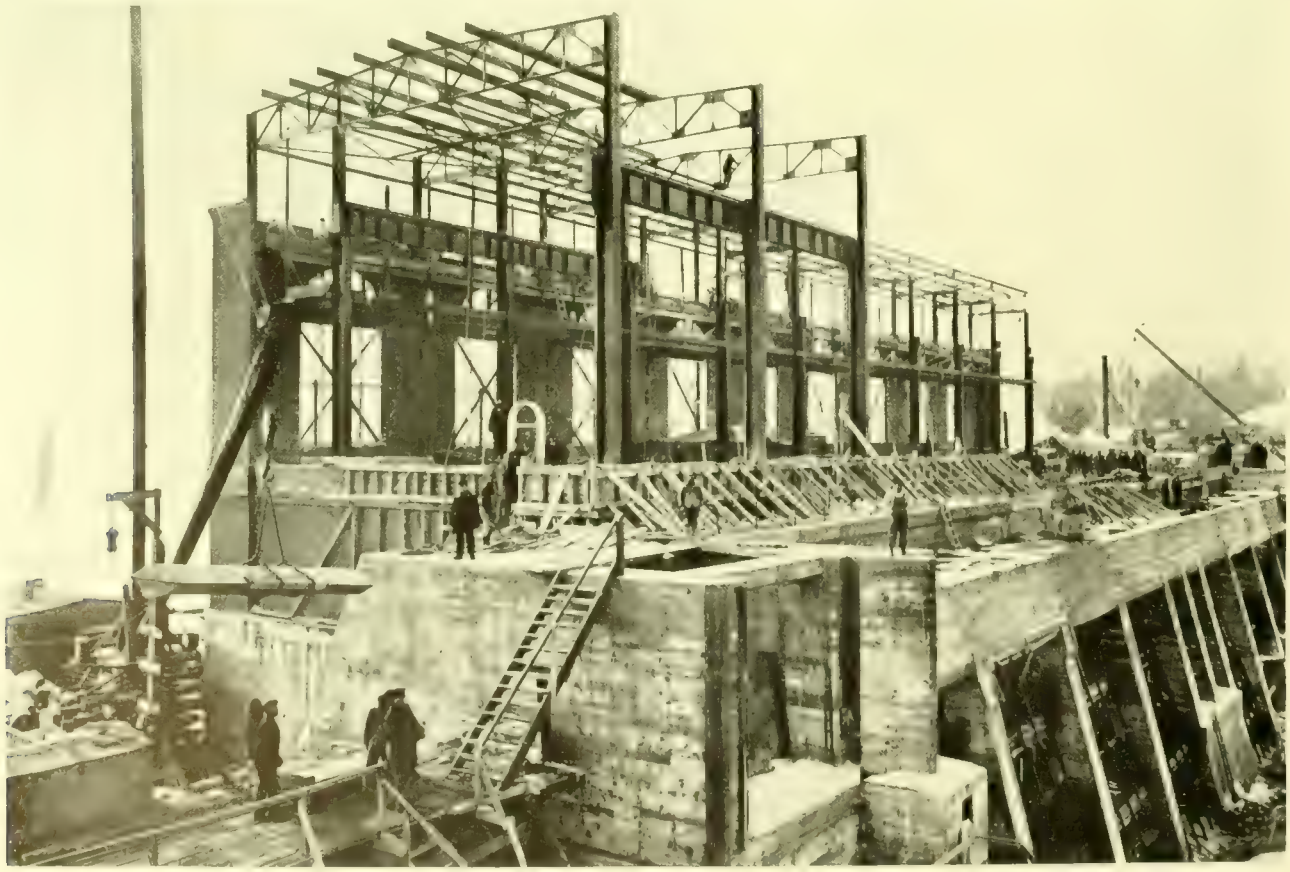
Copper wire and a sixty-six mile jump mean, of course, that the power Worcester may now have is hydro-electric power. Let us follow the wires to the place where it gets the energy it will bring to this city. There are six in all of these heavy copper transmission cables. Now the fact that a copper wire will carry electric power at a high voltage and deposit it at the door of your factory sixty-six miles away at a cost considerably less than steam power produced by coal, means that it is no longer necessary to move to the banks of the Connecticut or any other river in order to get the advantages of that water power. That is what the pioneer work of harnessing Niagara taught New England. The copper wire which will end here in Worcester has at the other end the hydro-electric station of the Connecticut River Power Company. It cost about $3,000,000 to build and equip this enterprise, from which 23,000 horse power, approximately, will be developed.

The towers and wires have been completed from the dam to Clinton. From this latter point they are being erected toward Worcester as fast as linemen can work, so that within a month, it is expected, this city will be reached. The rest of the enterprise is finished.

To get cheap power, heretofore factories have located at the source of the power, therefore the coal regions have become great industrial centres. For a like reason, mills have been built and cities have grown up wherever a wheel could be hitched to a waterfall. Then came the copper wire, with its ability to put power where a factory has shipping facilities of the best, and a home market already developed, and at a cost that is not discounted by the expense of the power that coal produces in the heart of the coal regions of the Keystone State.

Follow these wires that will link the river to the city and you will get to the power-house by way of Clinton, Fitchburg and Gardner. You will find these cables run on steel towers which range in height from 40 feet to 80 feet, depending upon the elevation of the land upon which they are erected. They average about 400 feet apart. In addition to the six transmission cables each of the towers carries a complete telephone circuit and a guard wire. The insulators have a diameter of 16 inches, and a height of 3 feet, and each of them weighs nearly 100 pounds. The towers are built to stay where they are put; they are so braced that only a pull of 11,000 pounds applied to the top of one of them could drag it over.

The power is so carried by the wires strung on these towers as to make two complete circuits, either of which, in an emergency, could carry the entire electric load. Upon a private right of way 100 feet wide these towers stand. All trees and underbrush have been cleared from it, so that soon there will be a clean swath all the way from Worcester to the Connecticut. As you trace these wires and study these towers you will soon come to the sub-stations at Fitchburg, Clinton and Gardner. The object of the sub-stations is to take power from the wires at 66,000 volts and step it down to such voltages as are used in distributing the power at the various points of consumption. At Fitchburg the 66,000 volts are transformed to 6600 volts. Each of these sub-stations is 80 feet in length and 40 feet in width. They are built of steel, concrete and brick, and house



THE BIG POWER HOUSE AT THE DAM SHOWING STEEL AND CONCRETE CONSTRUCTION.

the transformers and other necessary machinery. Finally, these cables bring you to the Connecticut River between Vernon, Vt., on the one side, and Hinsdale, N. H., on the other. Here is the source of power. It is provided by the river, which the bounty of nature has given, and by a mammoth dam and hydro-electric station which the ingenuity of skillful engineers has built.

Study the more superficial aspects of the scene for a while. The waters of the river are tumbling over what would have all the look of a natural cliff were it not for the power-house on the Vermont side. The fall has a length at the spill-way of 600 feet. There is a log way next the power-house and the crest of the dam runs from this chute to the New Hampshire shore. The power-house makes a handsome appearance. It stands on the west end of the dam itself, and is built of concrete with a brick superstructure 250 feet long and 50 feet wide. When the débris, the machinery and the derricks were all cleared away, the ordinary observer would hardly have surmised that the river had actually been widened for the accommodation of this dam, and that a multitude of engineering stratagems had been resorted to in the building and equipment of the big plant.

On the site of the dam a great ledge of rock extends clear across the river. On both shores it merges into out-croppings that provide secure foundation for any structure men might rear. Then there is high land on either shore which gives necessary protection against all the assaults of the descending current. On the east shore the engineers found a quarry from which the builders took all the rock they needed for mixing their concrete. The river ledge ended at what is called Cooper's Point on the New Hampshire shore, and here 400 feet was cut away. This lengthened the space for the dam and power-house to about 1000 feet, and at times of flood this additional length will be of great service in caring for the excess of water.

Question one of the engineers about the building of this dam and power plant and you will learn that 700 men worked twenty hours a day in alternate shifts for a year in order to get it completed in two years. He will tell you of the workmen's suspension bridges which were swung across the river, and how one of them was destroyed one night when the stream went on a rampage; of the building of storehouses, offices, shanties and a hospital; of an electric power plant for lighting, and for moving hoists and cranes; of a saw-mill and a trolley; of a spur track from the Vermont Central Railroad and then of the building of the cofferdam. He will tell of the cofferdam several times filling with ice and water, of the small island which was picked up by the angry waters and carried *in toto* down stream; of the raising by the company of the tracks of the Vermont Central Railroad for a stretch of two miles; of the lifting of the Boston & Maine Railroad bridge at West River, and of the raising to higher grades of carriage roads on both sides of the stream.

In the construction of the dam and power-house there were used 42,000 yards of cement and more than 1,000,000 bricks. In the deepest part of the river the dam at the base is 70 feet in width and 34 feet high above average low water, and 70 feet from the base of the foundation to the crest.

Such statements prepare one to understand the magnitude of the enterprise which has been pushed to a successful consummation by Messrs. Baker, Ayling & Company, bankers, of Boston, who financed the project; by the Connecticut River Power Company; its subsidiary

THE DAM WAS BUILT IN SECTIONS. THE LARGE OPENING NEAR THE CENTRE OF EACH ARCH IS A TUNNEL

corporation, the Connecticut River Transmission Company; by J. G. White & Company, Inc., of New York, engineers, builders and operators; and by M. G. Chace and H. I. Harriman, promoters.

In the power house are eight huge generators and four transformers. The transformers weigh nearly forty tons each, and to move these ponderous implements a great electrically-operated traveling crane is used. The direct current exciters give the crane its moving and lifting powers, and generate also the electricity for lighting the plant. Down below the generators is the thrust bearings room, and below this are the big wheel pits forty feet in depth. Opposite the eastern wheel pit and on the thrust bearings level is the entrance to a tunnel, or foot-way, which runs from the power-house toward the New Hampshire shore through the solid masonry of the dam. A man may pass through this tunnel with six feet of concrete between his head and the water of the river. Thus he has access to a series of ten flood-gates. These are operated by hoists and are designed for use in case of dangerous floods. They will also regulate the level of the river at the dam. Each measures 10 ft. by 7 ft. They move in a steel framework, which is imbedded in the concrete of the dam. These ten gates are capable of allowing to pass 25,000 cubic feet of water. This arrangement of flood-gates is another departure in the building of this dam which matches the arrangements of the power-house by which water passes directly through it to produce power.

To state some of these facts a little more in detail: The power is generated at 2300 volts, each generator having a capacity of 2500 kilowatts, at 133 revolutions per minute. On a vertical shaft in each wheel pit are two turbine wheels, which will be used when the water is at its ordinary level. The two discharge into one draft tube, the one up and the other down. An additional wheel is installed above the two and will be used in case the water should be so high in the tail-race that there is not sufficient head to operate the others at their maximum efficiency. The main gates which admit the water to the wheel pits are of steel and weigh thirteen tons each. These are controlled from the main floor.

The thrust bearings which support the weight of the generators and turbines are on roller bearings that run in a forced circulation of oil. The thrust bearings are kept apart by a film of oil, at a pressure of 400 pounds. The transformers are in big boiler iron "tubs" or cases about 15 feet high and contain 300,000 gallons of oil. A circulation of water keeps them cool. The exciter units run at 190 revolutions per minute, and furnish direct current for the exciting of the main generators and also for the work previously described.

The wires that run from the power-house to the various points of distribution are all of copper except the last span. That span reaches from the power-house to the first of the steel transmission towers, a distance of 1300 feet, in which the general direction of the dam is followed across to the New Hampshire shore. The river made this long span necessary, and bronze wire was substituted for copper in order to get the necessary tensile strength.

The story of the trip of hydro-electric power from the power-house to the various localities where it will be used would be as follows: It is developed by the generators and passes from them by wires, switches and bus bars to the transformer switch and into the transformer cell. It enters this cell at 2300

ONE OF THE SUB-STATIONS—WHERE THE CURRENT IS "STEPPED DOWN" FOR MANUFACTURING PURPOSES—AND A TRANSMISSION TOWER.

volts. It emerges at 66,000 volts. Thence it passes through the walls and to the roof of the power-house, where it begins its trip toward its final destination. Arriving at the various sub-stations it is stepped down to a voltage suitable for ordinary industries, and is at the command of the various consumers. There is also a low tension transmission line, which carries the current up the river to Brattleboro, six miles away. There are small transformers in the power-house which step up the voltage for this line from 2300 to 19,000, and which have a capacity of 900 kilowatts. The large transformers have a capacity of 5000 kilowatts each.

The building of this dam creates a reservoir or lake 1900 acres in extent. It is 22 miles long and varies in width from 600 to 4000 feet. The storage capacity of this lake has been computed to be 200,000,000 cubic feet of water. The river level at Brattleboro is raised thus some 15 feet, and the Hastings Rapids, two miles above the town, become still water. The drainage area of the river at this point is 6300 square miles, which has an average rainfall of 36½ inches.

The company will supply its power to Brattleboro, Vt.; Keene, Hinsdale and Winchester, N. H.; Gardner, Leominster, Fitchburg, Clinton, Shirley, Marlboro and Worcester, Mass. These towns can consume many times the current which the power company can develop. The large market which is available makes it possible for the power company to choose its customers, taking those whose hours of service are best adapted to the character of the development. Contracts have already been closed for power with the following companies: Lancaster Mills, American Steel & Wire Company, Parkhill Mills, Marlboro Electric Light Company, Gardner Electric Company, Estey Organ Company, Brattleboro Electric Light Company, the De Jonge Paper Company, Sampson Cordage Company, and many others.

The following are the directors of the Connecticut River Power Company: George B. Adams, vice-president Greylock National Bank of Adams; G. B. Baker, of Baker, Ayling & Company; Charles C. Fitts of Brattleboro, ex-attorney general of Vermont; Arthur H. Lowe of Fitchburg, president of the Lancaster and treasurer of the Parkhill Mills; John S. Phipps, New York capitalist; J. N. Thompson of Wilkes-Barre, Penn., treasurer of the Wyoming Valley Trust Company, and Jeremiah Smith, Jr., and Philip Young of Boston. Attorney Frank S. Streeter of Concord, N. H., is president, while Charles L. Ayling of Baker, Ayling & Company, and Malcolm Chace of Providence are vice-presidents, and Henry I. Harriman of Boston is general manager.

The Connecticut River has furnished water power before, but this is the first big hydro-electric power in New England. The first of the Connecticut River developments is 100 miles from its source at McIndoes Falls near Wells River. At six points below this the river's easy saunter to the sea is broken by falls. At Wilder, Vt., is a fall which gives 7000 horse-power for a pulp and paper plant. At Bellows Falls 17,000 horse-power is available. Then there are splendid powers developed and admirably used at Turner's Falls, Holyoke, and Windsor Locks, Conn. The other enterprise in the series of six is that of the Connecticut River Power Company.

The vast economic value of the picturesque Connecticut is indicated further by the industrial statistics of the city of Holyoke. That city has 179 factories, in which $37,000,000 are invested, employing 15,000 persons, who receive $6,000,000 a year in wages, and make products which amount annually to $30,000,000 in value.

GENERAL VIEW OF POWER-HOUSE AND DAM FROM DOWN STREAM

I do not know anything which will contribute more to the strength and morality of that generation of boys and girls compelled to remain part of urban populations in this country, than the institution in their cities of playgrounds where their hours of leisure can be occupied by rational and healthful exercise. The advantage is twofold:

In the first place, idleness and confinement in a narrow space in the city, in houses and cellars and unventilated dark rooms, is certain to suggest and bring about pernicious occupation and create bad habits. Gambling, drinking, and other forms of vice are promoted in such a restricted mode of life.

In the second place, an opportunity for hard, earnest, and joyous play improves the health, develops the muscles, expands the lungs, and teaches the moral lessons of attention, self-restraint, courage and patient effort.

I think every city is under the strongest obligation to its people to furnish to the children, from the time they begin to walk until they reach manhood, places within the city walls large enough and laid out in proper form for the playing of all sorts of games which are known to our boys and girls and are liked by them.

Sincerely yours,

WM. H. TAFT

Luther Halsey Gulick,
President Playground Association of America,
1 Madison Avenue, New York City.

Who Shall Have Our Jacks and Jills—Satan or Society?

Worcester Just Awakening to the Possibilities of the Playground and Vacation School Movement as a Means of Combating Hoodlumism and Developing Capacity, Courtesy and Courage in Our Boys and Girls

By William Francis Hyde.

"AIN'T got nothin' else to do."

What is the significance of a remark like the above? Well, briefly, it is the answer of hundreds of our boys, when asked why they are loafing, why they are continually in mischief, why they are constantly hanging around cheap pool rooms, corner tobacco stores and sensational billboards.

Older people who are familiar with the various types of boys and girls, and their naturally good and impulsive natures, will realize quite readily the condition of things which makes possible such an answer as "Ain't got nothin' else to do."

Although our boys and girls possibly might find something to do of a more profitable nature than being in mischief or indulging in annoying pranks and rowdyism, yet it is very doubtful, if they did for a season behave like "grown-ups," whether there would be in it for them any real satisfaction or joy. Their love of excitement, of being a central and moving part of whatever is going on, and their love of conquest would not, if some older people could have their way, find the remotest chance of being satisfied.

WILLIAM F. HYDE.
Director of Vacation Schools.

What has Worcester done in any large or well-organized way to give to its twenty-three or twenty-four thousand school children a chance to become physically well and happy? What has this same city of ours undertaken in the way of giving to our boys and girls, and especially to those in the congested districts, a chance to find a normal, healthy outlet for those primitive feelings and impulses that are as old as the human race itself? Has our city, so plentifully supplied with institutions of learning, so well known throughout the land as the centre of large commercial enterprises, done anything to keep up with the march of progress as shown in the records of her sister cities of approximately the same population and wealth in providing proper, supervised playgrounds for its children?

The word "supervised" is used advisedly, as it has been proved time and again in the past in many of our cities that playgrounds, however carefully laid out and however plentifully supplied with apparatus, have been in the long run, unless properly supervised, but battlegrounds wherein the idea that "might makes right" has triumphed to such a degree that the small children and girls have been practically driven away, and only older boys and men can be found there. Non-supervised playgrounds are almost worse than no playgrounds, as they are breeding-places for a bad and vicious type of individualism which recognizes no rights but its own, and which becomes a menace to the social life of the community.

We have many fine parks which delight the eye, which go a long way in furnishing our adults and children with shady walks, and comfortable seats under the spread of friendly trees, within sight of beautiful flowers. But except in winter, when the ponds are frozen, or in summer when older boys play ball there, these parks do not appeal to any considerable extent to the large number of active, impulsive boys and girls.

Why? Because they can find nothing of a definite nature to do there which satisfies to any appreciable degree their exuberant childish energy, which only needs proper guidance to become the strongest possible factor in the making of as fine and true men and women as this country has ever seen.

Something has been done in Worcester for our boys

SWEDISH GYMNASTICS—LEDGE STREET SCHOOL PLAYGROUND.

"VOLLEY BALL"—BELMONT STREET SCHOOL PLAYGROUND.

BASKETRY CLASS—LAMARTINE STREET VACATION SCHOOL.

and girls in the way of ministering to their physical welfare and happiness, and even if for only a small number, those interested have seen big dividends paid on small investments. Some churches, the Y. M. C. A., the Y. W. C. A., the Boys' Club, the Endicott House movement, the "Garden City," and other and equally praiseworthy endeavors have helped in no small degree to make the boys and girls healthier and happier. But it fell to the lot of a group of practical and interested women in the Worcester Woman's Club to be the first agency, to the writer's knowledge, which made any concerted effort in a large way to bring to the attention of the public a plan providing for the proper directing of childish energy into the right channels. That organization conducted for a number of years during the summer manual training classes in two or three sections of the city;

LAMARTINE STREET SCHOOL PLAYGROUND.

at the Thomas Street school it organized basketry and sewing classes, and installed a sand garden for the little ones. These were called "vacation schools," and as such they are to-day, but with a larger element of play running through them than was planned for in the beginning.

By petition year after year, the Woman's Club brought the matter of vacation schools to the attention of the School Board of the city, and in 1907 their labors were rewarded by the board agreeing to consider their petition, and later asking the city government for $200 with which to run one vacation school. The following year the sum of $400 was granted for the same cause, and with the contribution of $35 by friends, and gifts of materials and supplies from the merchants of the city, it was found feasible to open three schools. The report of the superintendent of schools for the year 1908 gives the number of teachers for that year in the vacation schools as twelve, and an average daily attendance among the children of 605. This summer there was a large increase in the number of children who came to the vacation schools, about one thousand being enrolled, which is only about one twenty-fourth of the total number of school children in Worcester.

The city government appropriated $500 for the work this summer, which, with a contribution of $100 from the Worcester Woman's Club, made it possible to open four centres, one of which was a supervised playground alone. This latter playground, which was in the Belmont Street school-yard, while organized and supervised by the city, owed its incentive and support to the Woman's Club.

WHITTLING CLASS—LEDGE STREET VACATION SCHOOL.

Sixteen teachers and instructors have given painstaking and efficient service in every phase of the work and play during the present summer.

There was a feeling that the boys and girls needed more play and such play as when supervised would tend to bring out the best traits of character, such as sense of fair play, courtesy, forbearance, truthfulness, which would promote good fellowship, and give a livelier appreciation of that great social need, a sense of the rights of others.

To carry out this organized play with enough supervision so that each child should have a fair chance, the summer vacation work was planned to give the play end

"SAND GARDEN"—BELMONT STREET SCHOOL PLAYGROUND.

a large share of the time. All children who wanted to take up some form of handiwork were given the opportunity to do so. With the manual training, the whittling, the basketry, classes in practical sewing and the constructive kindergarten work, there was open to each an opportunity to select some department which appealed to him. The rapid way in which all the classes were filled was gratifying and instructive, and it was with regret that large numbers had to be put on the waiting-list.

To meet the demands of previous years for organized play among the elder boys, an athletic instructor was employed at the Ledge Street school, who taught the boys games, such as basket-ball and captain-ball, and also instructed them in such athletics as were suitable to their age. In connection with the work there, the boys enjoyed a short period each day in Swedish gymnastics, and once or twice a week instruction on how to revive a person taken unconscious from the water. Base-ball and basket-ball teams were formed and games played among three of the vacation schools at Millbury, Ledge and Lamartine Streets. The boys were so eager for competitive sports that a series of athletic meets was planned for Friday of each week, and the events were run off at Crompton Park, amid the wildest enthusiasm among the participants and the spectators.

As this Magazine goes to press the vacation season has not yet ended, but enough has been observed and reported on by disinterested persons to prove in no uncertain way the great value to the boys of supervised competitive sports.

Let us pause to ask our critics one question, after looking at the faces of our boys and girls in these pictures taken in all phases of our work—which would you rather have, what you see there, or a picture of our children running the streets dirty, neglected, forlorn, often in mischief and seldom truly happy and contented?

Sports day by day of so vigorous a nature made it necessary that some provision be made for baths for the boys. The appropriation for the vacation schools being so limited, it was not possible to expend much for this purpose, but for an investment of about seventy-five cents and the use of the schoolhouse hose, there was rigged up a shower-bath, which, although being crude, gave much enjoyment to about thirty-five boys a day. These baths were taken under the eye of the instructor, each boy being required to bring his own towel.

The joyous but intense application of those who took up any form of handiwork was an object-lesson to all who had the pleasure of seeing the children at work, and is a testimony to the fact that play and recreative work ought to go hand in hand.

The one great regret of the present summer is that

OLD AND YOUNG ENJOYING THE SPORTS

100 YARDS DASH—15½ SECONDS—BOYS 12 TO 15 YEARS

JOINT ATHLETIC MEET AT CROMPTON PARK.
LEDGE, LAMARTINE AND MILLBURY VACATION SCHOOLS.

PREPARING FOR THE BASEBALL GAME BETWEEN MILLBURY AND LEDGE STREET VACATION SCHOOLS.

"RESERVED SEATS"
WATCHING THE RUNNING BROAD JUMP

owing to the lack of funds there is little opportunity for the right kind of out-of-door supervised play for the older girls except at Belmont Street.

What lessons have we to learn from the past and how can we profit thereby in planning for the future?

The old adage that "whatever is worth doing is worth doing well" could never be applied to a better or more vital work than that of creating such healthful, beautiful playgrounds for our children as we have in Worcester, and what is still more important, providing true, broad-minded, intelligent men and women of joyous natures to have charge of them.

The past has shown that the child was considered a by-product of social life, and that by our neglect of him a whole train of evil tendencies was left to run riot, to the utter confusion of any well-organized and harmonious social life of the people of to-day. Considering all the vast material prosperity of the past and present, and the great sums of money spent on many and varied projects, it seems appalling that so little thought and attention have been bestowed upon the physical welfare and every-day happiness of the children. They go the way of child-life but once and to-morrow become the men and the women of the world. Would you have the citizens of the future prepared and willing to meet whatever emergency presents itself? Then must you see to it that the growing, impulsive, ever-expanding life of the child of the present is given every means within our city's resources to grow according to nature's laws. Take a trip over on our own east side, and see the crowded conditions at many places, the sordid surroundings, with no open lots for play nearer than fifteen minutes or more from some of the homes. See the children whose birthright ought to be open skies, pure air, green grass, and sheltering trees, compelled to play in dark and noisome alleys, in foul gutters, or small back-yards, carpeted only with dirt, with many times not even a blade of grass or a friendly tree; with the unclean streets as the only place where there is elbow room, and where the teamster's "heart is in his mouth" because of so many children playing there. Is it a wonder so many grow up stunted in body and warped in character?

How different may be the future for children with right surroundings. We have visions of attractive playgrounds, not necessarily athletic fields, but areas five hundred to six hundred feet square, bordered with trees under which are seats for tired mothers, and within whose boundaries are found simple apparatus and sand gardens for the young. There should be open places on the grass where the older girls can play their more vigorous games. For it is recognized to-day as most important that attention be given to the physical welfare and happiness of the girls if the race of the future is to be one of strength and vitality. The city should have enough of these accessible playgrounds for the young, the girls and the mothers, so that no one should be compelled to walk more than five or six minutes to the nearest playground. Each of these small recreation centres should be in charge of a good and true woman in whose nature the play instinct is strong; with the training necessary so to conduct the play that unconsciously the children will be learning many of the ethical lessons of life.

The already existing playgrounds, both large and small, and those which are built in the future, should have some adequate provision made for shower-baths, and at the larger parks there should be the apparatus necessary for conducting organized athletics for all of the boys.

What is of greater moment than an elaborately laid-out park and the expensive apparatus, is a man of high ideals, with a true appreciation of the ethics of sport, and with the training and the ability so to conduct the games that the boys would see in him their friend and comrade as well as their instructor? A comprehensive series of competitive games and sports between different sections of the city, with some fitting recognition of merit to the winners at the close of the summer, would go far towards mitigating the greatly increasing number of annoyances and losses to the public caused by boys who "ain't got nothin' else to do."

These ideas may seem like the dreams of a visionary, but to those who have had their eyes opened to the crying need of effort along the lines already laid down, and who have given their time and their money to further the same, what was but a fancy at first became a fact, and marked and gratifying changes have taken place in the lives of thousands of children of all ages. If one needs an example of what supervised playgrounds have done for a city, the records at Springfield are no less than marvelous, and cities at greater distances tell such wonderful tales of improved conditions and newly-found happiness for both young and old that even the most skeptical must be led to believe in and support the supervised playground movement.

What practical solution is there of the problem confronting the people of Worcester in regard to providing all that is possible for its children in the playground way? First, the formation of a Worcester Playground Association composed of people of every race and every creed, who believe in and are ready to support in a practical way a movement towards giving to the child all that rightfully belongs to him. Second, a careful study of the most advanced "Playground Philosophy." Third, a scheme of co-operation between the Playground Association, the Mayor, the School Board, and the Parks Commissioners, by which could be formulated a plan of supervised playground extension work. Fourth, a demonstration at one of our parks of the entire practicability, along scientific lines, of a perfectly organized and supervised playground.

We wish to close this article with an acknowledgment of our appreciation of the good will and generosity shown by the following merchants towards the vacation schools and playgrounds: Denholm & McKay Company, Barnard, Sumner & Putnam Company, A. S. Lowell Company, Duncan & Goodell Company, Davis & Banister, Wheaton & Bowers, Arthur B. Chapin, Perkins & Butler, Iver Johnson Sporting Goods Company.

We could not close without paying tribute to the Worcester Woman's Club, who, by their interest and contribution, made possible the opening of the supervised playground at the Belmont Street school.

May we not hope to see in the near future the people of Worcester awaken to their responsibility, and with the "Worcester spirit" aroused to action, see our fair city take its place in the front ranks of those cities which love their children, first, last and always, and which, with willing and earnest effort, are doing all that is possible to make them strong and keep them happy.

Editorial Comment

Connecticut Power Transmission Company.

The opening feature in this issue of the Worcester Magazine is an authentic and carefully prepared article on the Connecticut Power Transmission Company. Such an article has timeliness at least to recommend it, and the statements made in it have the merit of reliability as well as interest. The bringing of hydro-electric energy sixty-six miles into this city is an excellent example of the advance made in the last fifteen years in the transmission of high power electricity over long distances. When German engineers about the year 1890 began attempting feats of this kind, the entire electric world was skeptical as to the outcome. With the harnessing of Niagara Falls, and the transmission of the electricity generated by that mighty cataract into the city of Buffalo, where it furnished light, heat and power to the inhabitants, the skeptics were transformed into the most zealous and enthusiastic converts. The development of this special field of electrical engineering since has been rapid and continuous, and has not been confined to any particular section of the country, but for some unaccountable reason the potentiality of New England streams during all this time has not been measured until the Connecticut Power Transmission Company entered upon its great undertaking at Vernon, Vt. Its accomplishments there as here summed up afford a mere glimpse of a Titanic struggle to harness a great river and make it work the will of man, as a farmer would harness a high-strung colt unbroken to the bit.

The details of the proposed franchise that is to be granted the company to operate in Worcester may well be left to the proper authorities to determine. The task is not an easy one, as the Worcester Electric Light Company has valuable property rights and easements here as well as a complete lateral distribution, all of which the State will take into consideration in making its decision.

The Connecticut Power Transmission Company does not come to Worcester, as we understand it, with any intention of ruining any competitor here or elsewhere. It has simply spent its millions in the faith that when it had brought through a copper wire the stored-up energy of the mighty Connecticut to the doors of Worcester, it would be allowed to enter and to furnish power to this city as to all other cities on its lines, in such volume and at such rates as the State, taking all the facts into consideration, felt was right and just. That the ultimate result of this enterprise will be a general lowering in the electrical rates charged in this city, is indicated by the experience of other cities where similar improvements have taken place. In a city that has been so long dependent for its progress on steam coal, which has cost the manufacturer in the vicinity of four dollars a ton by the time it reached the engine room, such an outlook for cheap power means much.

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No Rest for the Weary!

The activities which have crowded the rooms of our organization during the month of July have brought little suggestion of the vacation season. In addition to the regular routine of the office a large amount of labor has been expended upon the preparation and publication of the souvenir booklet to be used for distribution in the various cities visited by the Board of Trade excursion to the Pacific Coast. The hearty co-operation of our public-spirited manufacturers, making possible the printing of this unique book, has been followed by a remarkable display of enthusiastic approval among the members and friends of the Board of Trade, not only in Worcester, but in other cities as they have learned the facts about its publication. We take pleasure in sending a copy of this booklet with every Magazine that is mailed and shall be glad to furnish extra copies, at the bare cost of their preparation, as long as the limited edition lasts. Owing to the labor involved in the preparation of this book, we have been obliged to delay for a little the issuing of this number of the Magazine. The September number may also be a trifle late, in order to give a full account of the experiences of Worcester's representatives on their western tour.

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Worcester's Reduced Tax Rate.

The ability of Worcester to do without license fees from saloons and yet to lower its tax rate from $17 to $16.40 for the present year, while increasing its available income, is due to a variety of causes. The lessened State tax, for which we must largely thank Governor Draper's administration, has been a material help in this direction. Our assessors have also been manifestly faithful and skillful in their work. Beyond all this, however, there has been an undoubted increase of both personal and real property, because of the general prosperity and growth of the city. We are unable to discover the slightest evidence for the charge of partisan opponents of the present administration that this lower rate has been secured by artificial increases of valuation. We are glad to commend this exhibit of Worcester's prosperity, following so closely upon a period of business depression, to all who are looking in this direction for business locations.

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The Charity Circus.

The problem of how to raise funds for our deserving local philanthropies is always a pressing one; and any new and successful method calls for notice. Either Worcester as a city is penuriously disposed toward worthy objects, or else we have not yet learned how to make successful connection between the open pocketbooks of her citizens and depleted treasuries of some of her charitable agencies. The recent Charity Circus, given under the auspices of the Worcester Riding Club, seems to us one of the most admirable efforts yet made for raising funds. In principle it is far preferable to a tag day, a plan which we trust will not again be employed in our city. The quality of equestrian feats displayed by amateur talent would successfully challenge duplication in any city that we know. The burlesque features were carried out with remarkable variety and irresistible humor. The exhibitions of drills by the police and fire departments and artillery boys well deserved the hearty applause they received. As a unique society feature in our city life, this should become a regular event in the calendar of each year. The regrettably small financial results were due solely to the lack of a suitable auditorium, whose necessity in our city grows more and more apparent whenever such an undertaking is made.

Worcester's Contribution to New York.

The selection of Mr. Edward G. Connette, the manager of the Worcester system of street railways, and a director in the Worcester Board of Trade, to take charge of the transportation problems of New York city, is not alone a high compliment to the ability and achievements of an individual, but an indirect commendation of the progress Worcester has made, under Mr. Connette's efforts, to plan wisely and make as rapid progress as was possible for a comprehensive system of trolley connections between the Heart of the Commonwealth and the arteries through which flows its commercial life. With the continually increasing demand upon such systems for enlargement, there is always danger lest we forget what has been accomplished. The gains made by the trolley lines centering in this city since Mr. Connette has been here need only to be gathered together in a comprehensive résumé in order to be appreciated, and to foreshadow what he will do in a wider field.

Coming here four years ago from Syracuse, New York, unacquainted with Worcester or its needs, Mr. Connette has steadily and certainly won his way into the respect and confidence of Worcester people, but more certainly still has he won his way into the confidence and respect of the great masters of American street railway transportation.

In a period of profound business depression, when railway after railway has either passed its dividend altogether or gone into its surplus—if it had one—in order to declare it, Mr. Connette has shown a balance sheet that made glad the hearts of his stockholders.

That the road during this time has suffered physically is perhaps due more to the conditions surrounding Mr. Connette than to Mr. Connette himself. It probably became early evident to him that he could not pay dividends on its high capitalization and keep the system physically at a point where there could be no just criticism made against it. That he has succeeded in keeping the rolling stock at the point he has and still pay dividends, is an evidence of his genius as a railway manager. That the maintenance department of the road has claims paramount to its dividend earning capacity, he may well have believed. Whether the earning capacity of the road warranted the outlays called for is of course another question.

One little known side of Mr. Connette's character and one that makes him extremely valuable in an executive capacity, is his tactfulness in handling his employees. None except those intimately acquainted with the facts know how close New England came last fall to the biggest street railway strike in its history. That it did not actually occur may be said here, on the authority of one who knows, to be due to the wisdom, fairness and reputation for square dealing possessed by Edward G. Connette. The street railway men in Worcester believed in Mr. Connette, and refused to plunge this city into hot water because their brethren in Providence had a grievance against the management there. A less tactful man would have precipitated a crisis that would have cost this city, and eventually all New England, thousands of dollars, if it had not resulted in loss of life.

That he will, as the popular phrase has it, "make good" in New York, no one acquainted with his ability doubts. He was selected out of a great field for a great place. His life work has fitted him to fill it with modesty, with fidelity, and with distinguished success.

The New Tariff Bill—How it Was Made.

The long agony at Washington is over, and the citizens of the country at large, as well as perspiring congressmen, may well give thanks for that fact. We have had a great deal of sympathy for the country during these last few weeks, but very little for the congressmen, who have had to suffer the discomfort of midsummer heat at the capital. It is now proper to review both the manner in which this new legislation has been constructed and also its probable effects upon the business of our city and the country at large. When this extra session of Congress began, the lines of its procedure were laid down with reasonable distinctness, as a result of the campaign platform and pledges on the strength of which the dominant party came into power last November, and also as a result of the investigations of the Ways and Means Committee preparatory to framing the new act. To the dismay of that section of the dominant party which believes in lower duties, some of the leaders in Congress speedily showed an utter disregard of the platform promise of downward revision, and instead of an evidently honest effort to carry out those pledges, the process of revision became a struggle between corporate protected interests to maintain or even increase their previous privileges.

The Speaker of the House of Representatives, where all tariff legislation must originate, has been for many years in favor of a minimum and maximum tariff—the minimum rate being based on the present Dingley schedules and the maximum rate as much higher than that as human avarice could grasp. Fortunately for that section of the majority party which believes in a barbed wire fence rather than a Chinese wall around our custom houses, the bill was drawn by Sereno E. Payne of New York, rather than John Dalzell of Pennsylvania, or Joseph W. Fordney of Michigan, both of them, like the Speaker, extreme high tariff men. Mr. Payne has discharged the delicate and onerous duties devolving upon him with consummate ability. He has through the whole formative period been diplomatic when diplomacy was required, firm when firmness was required, and has gracefully receded when recession was absolutely necessary. He has had not only to encounter the cross purposes and placate the selfish interests of his own house, but has had to meet and overcome the wily statecraft of the Senate leader, Nelson W. Aldrich, backed by all the great power of that body. Fortunately in this struggle Mr. Payne has had the moral support of the President, and while the latter has taken care never to exceed his constitutional privilege, Mr. Taft has made it apparent to the recalcitrant members of both houses that the Constitution conferred upon the chief executive the power of veto, and that while he could neither write a schedule nor fix a classification, he was after all the court of last resort, and no measure could be enacted into law that did not embody his views. Furthermore the majority did not dare risk the danger to the party that would inevitably follow the President's veto. Therefore, thanks to moral suasion, thanks to the force of public sentiment clamoring for a removal of this thorn in the side of business, and, thanks to the terrific heat of a Washington summer, we finally have another tariff bill, and for the first time since the panic of 1907 the country can look forward to an era of prosperity and peace.

The Child Welfare Conference.

The conservation of national resources and the utilizing of productive possibilities in the realm of material wealth have recently won large attention, and ought to continue to receive the earnest study of the leaders in the business world. We note with much satisfaction a recent gathering in this city of distinguished men and women from all parts of our land who propose to work together for conserving and developing the greatest wealth of the United States—the possibilities of its child life. It was almost inevitable that such a concerted movement should begin at Clark University, under the inspiration of one who has gained a world-wide preëminence for scholarly research in this direction, President G. Stanley Hall. Adolescence in all its phases has for many years been a paramount subject in the mind of this distinguished educator. The conference, which began on July 6, also owed much to the efforts of its Secretary, Dr. L. Pearl Boggs.

The following resolutions, signed by the chairman, Prof. Stephen S. Colvin of the University of Illinois, and all his colleagues, W. P. Northrup, Virginia E. Groeff and Edwin Bjorkman, were unanimously adopted at the close of the session as embodying the sense of the conference, and are valuable as a résumé of the proceedings:

We, the members of the conference on child welfare, now in session at Clark University, desire to express our thorough appreciation of the opportunity afforded us of attending this most enjoyable and valuable series of meetings and desire to offer the following resolutions:

"That the time has come, in the opinion of this conference, when all efforts for the amelioration of the conditions of childhood of a charitable and philanthropic nature should be based upon and, as far as practicable, guided by the results of scientific child study, and that only thus the various lines may be given a more scientific, and the workers more professional character.

"That this conference congratulate Clark University upon its leadership in this country in the field of child study in the past, and also upon the new institute just established by its trustees for the collection, diffusion and increase of scientific knowledge concerning children.

"That the scientific work of the national government should be extended to cover the important phases of child research and welfare in order that great practical results which the scientific bureaus of the Department of Agriculture and other existing departments of the Federal Government have attained, may be had also for the important problems of childhood. We therefore favor the establishment of a Federal children's bureau, and respectfully petition Congress to enact in substance the preceding Crane and Parsons bills for that purpose.

"That the thanks of the conference be extended to the trustees of the university, whose wise action made the conference possible; to President G. Stanley Hall, whose leadership and inspiration have been the dominating force in this gathering; to the Secretary of the conference, Dr. L. P. Boggs, and to the members of the Advisory Committee, whose efficient labors have resulted in the admirable programmes; to the press of the city, whose careful and detailed reports have made the proceedings of the conference known to the general public; to Mrs. Arthur Dodge, Miss Susan Tracey, Mrs. Laura Starr, Miss Isabelle Hyannes, Dr. Henry Goddard, and to the various institutions and organizations for their exhibition of illustrative material, which has added greatly to the understanding of the work being carried on by them."

Speaking to the resolutions, both Dr. Hall and Dr. Samuel McCune Lindsay dwelt upon the necessity for the creation of a Federal Bureau to act as a unifying factor and a supplementary agency to anything that private philanthropy or enterprise might do for child life. It is believed that as a result of this conference there will be a marked crystallization of sentiment in this direction.

The officers chosen were: President, Dr. G. Stanley Hall, president of Clark University; Vice-president, Hon. Benjamin B. Lindsay, Denver, judge of the juvenile court in that city; Dr. C. W. Stiles, Washington, D. C.; Miss Patty S. Hill, Teachers' College, N. Y.; Dr. Hastings H. Hart, Russell Sage Foundation; Dr. Livingston Farrand, National Association for the Relief and Prevention of Tuberculosis; Secretary, Dr. Henry S. Curtis; Executive Committee: the president, the secretary, and Mrs. Frederic Schoff, president National Mothers' Congress; Miss Patty Hill, and Dr. C. C. Carstens, S. P. C. C., Boston.

The conference left to the Executive Committee the selection of six additional vice-presidents, an advisory council composed of representatives of organizations working for child welfare, and a treasurer.

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"The Public be Pleased."

This new motto for a public service corporation, enunciated by Mr. William MacAdoo in connection with the opening of the tunnels under the Hudson River which allow passengers from Jersey City to reach Broadway in three minutes, is worthy of far-reaching imitation. It is a most acceptable substitute for the Vanderbilt formula which has been kept alive so many years by the attitude of many public service corporations toward their employees, notably in New York city. The voluntary expenditure of thought, effort and money to make people as comfortable as possible in rapid transit is a paying investment; and it is a pleasure to see such efforts made as a part of profitable business management, instead of being extorted by compulsion from a long-suffering public that has reached the limit of endurance. We venture to suggest that there are other cities than New York, and other public service corporations than the one in which Mr. MacAdoo is the leading spirit, where this motto may well be copied.

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Better Railroad Facilities.

That the Worcester Board of Trade is keenly alive to every detail that makes for better transportation facilities for Worcester people goes without saying. It is keenly interested in the proposition to give Worcester merchants the trolley express privileges that other up-to-date communities enjoy, and it can always be relied upon to insist that the advantages given other cities in any direction by either steam or electric road shall be tendered the residents of the Heart of the Commonwealth. It has discussed in committee, and is still agitating with the proper authorities, the subject of better passenger service on the Providence & Worcester Railroad between this city and Providence, and it has also taken up with the president of the Boston & Maine road the desirability of adding a Pullman to the 8 o'clock train out of this city to Portland. Mr. Tuttle with his accustomed courtesy has promised to look into this matter, and if it be possible to grant it, this convenience will undoubtedly be secured at an early date.

Local August Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Improved conditions present themselves on all sides, and each succeeding week has now become a record of advancing activity, and in many instances the problem of filling orders with dispatch is facing manufacturers. This is especially true in the textile machinery line, where the volume of orders is unprecedented; there has also been a marked and steady improvement in the machine tool and lathe industry, and manufacturers are reporting scarcity of skilled mechanics in this line, and regard the outlook as bright.

Corset manufacturers continue to be very busy, and manufacturers of muslin underwear are preparing for a heavy fall business. The demand is still good for worsteds.

The midsummer trade in retail lines has been of satisfactory volume and fully maintained by customary marked down sales. A general improvement is also reported in regard to payments.

Failures for the month of July show a total of ten (10), with liabilities of $44,148, and assets $12,650; compared with the corresponding month of last year when they showed a total of seven (7), with liabilities of $80,308, assets of $42,950, and in 1907 four failures were reported, with liabilities of $25,341, and assets of $17,670, and in 1906 a total of twelve failures, with liabilities of $28,189, assets of $7,060.

Local banking clearings for the first six months in 1909, 1908 and 1906 were as follows:

	1909	1908		1906
Jan.	$7,415,248	$6,820,800	+8.7%	$7,075,983
Feb.	5,970,095	5,213,048	+14.5%	5,569,739
Mar.	6,836,215	5,748,779	+18.8%	7,784,644
Apr.	6,997,329	6,393,909	+9.4%	7,203,436
May	6,921,314	5,954,937	+16.2%	6,637,346
June	7,467,394	6,229,810	+19.9%	6,307,795

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

Frederick Searle, Composite Stock for Machine Knives, No. 925,661.

A method of making composite stock for machine knives in which a steel edging is affixed to a body or backing of wrought-iron or the like by a V-welded integration.

L. T. Houghton, Holding Means for Jack Spools, No. 925,811.

This consists of a retarding or breaking influence applied to the spool to prevent overrunning thereof as the roving is drawn therefrom, especially when the spool is becoming nearly exhausted.

Alexander Reid, Gate controlling Mechanism for Water-wheels, No. 925,839.

A connecting mechanism between the gates of two or more water-wheels and the actuating power by which these gates are opened or closed by tension rods.

E. J. Dwyer, Blind Lock, No. 925,882.

A latch comprising a support formed of a strip of sheet metal having a long perforation and a short perforation in line therewith, an integral cross bar separating these openings, and of the same thickness as the rest of the support, and a gravity fastening device resting on said cross bar and hanging freely through these openings.

K. M. Lacey, Sewing Machine Guide, No. 926,703.

A guide for the presser-foot to hold and guide the edge of the article being stitched in a direct line with the needle, so as to prevent the latter from running off of or away from the edge.

Worcester Quotations

Reported by FISK & ROBINSON, 311 Main Street, Worcester, Mass.

BANKS.	Bid.	Asked.
Mechanics National Bank	122½	.....
Merchants National Bank	157	.....
Worcester National Bank	202	.....
Worcester Trust Company	300	.....
RAILROAD STOCKS.		
Boston & Albany	228¼	230
Boston & Maine common	.....	149
Boston & Worcester Elec. common	.....	13
Boston & Worcester Elec. pfd.	52	56
Fitchburg preferred	.....	130½
New England Inv. & Sec. pfd.	83	87
New York, New Haven & Hart.	.....	171
Norwich & Worcester	205	last sale
Providence & Worcester	265	275
Worcester, Nashua & Rochester	.....	.....
Worcester Railways & Investment	60	70
INDUSTRIAL STOCKS.		
Crompton & Knowles pfd.	145	.....
Denholm & McKay common	200	.....
Denholm & McKay pfd.	100	102
Graton & Knight Mfg. common	125	130
Graton & Knight Mfg. pfd.	114	.....
Royal Worcester Corset Co.	140	.....
United States Envelope common	50	.....
United States Envelope pfd.	114	115
Worcester Gas Light	257	267
Worcester Electric Light	249	255
Wright Wire Company common	102	.....
Wright Wire Company pfd.	106	.....
BONDS.		
Amer. Writing Paper 1st 5's	.....	87
Boston & Wor. St. Ry. 1st 4½'s	98	.....
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 5's	5¼	basis
Marlboro & Westboro St. Ry. 1st 5's	.....	98
Norcross Brothers 1st 6's	.....	100
United States Envelope 1st 5's	101	102
Worcester Cons. St. Ry. 1st 4½'s	94½	.....
Worcester & Marlboro St. Ry. 1st 5's	98	.....
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General.

June 21. Annual class day of Worcester Academy. Graduates give school a sun dial.

22. Parishioners of Rev. Dr. Frank Crane at Union Church present him with $350 as a farewell gift.

25. Worcester graduates 331 boys and girls from its three high schools.

29. Rev. F. A. Poole of Barre, Vt., called to the pastorate of Union Congregational Church.

Prof. Levi L. Conant, chairman of the Worcester School Board and head of the Department of Mathematics at Worcester Polytechnic Institute, chosen member of the reorganized State Board of Education for one year.

Sixty-three persons take examinations for teachers' positions in public schools.

30. Thomas Flyer automobile capable of running sixty miles an hour purchased for the Worcester Protective Department.

Harrison S. Prentice leaves estate valued at $375,000 to widow, daughter and grandchildren.

July 1. Fire losses for June in Worcester amount to $25,790.45.

Clean milk stations opened at Memorial Hospital, at 95 Water Street, and at Room 7, City Hall.

Ex-senator Joseph B. Foraker of Ohio secured to deliver the Memorial Day address in 1910.

2. Gov. Ellen S. Draper sends Charity Circus management check for $50.

3. Price of ice advanced ten cents a hundred pounds by a majority of the ice dealers.

5. Worcester celebrates Independence Day. But few minor accidents and no deaths.

6. Child's Welfare Conference opens at Clark University to last five days.

8. Corner-stone laid of the new Union Station.

Miss Helen M. King of Montague Street elected teacher of drawing and manual arts at State Normal School.

9. Store clerks have first half holiday of the season.

Inspector Arthur F. Roach appointed by Gov. Eben S. Draper a member of the Massachusetts district police in the building and factory inspection division.

Worcester branch National Metal Trades Association entertain the Boston and Rhode Island branches at Edgemere.

10. Worcester Life Underwriters picnic at Mt. Wachusett, and entertain Governor Draper.

Henry F. McIntire, William J. Heffern, Benjamin H. Clough, Thomas L. Doherty, John J. Dowd, Patrick J. McKeon, James J. Gavin, Michael O'Malley, Walter J. McGauley and John P. O'Hara, letter carriers of twenty years, presented gold medals by the local branch.

Worcester County Republicans have their annual outing at Lake Washacum. Lt. Gov. Louis A. Frothingham speaks.

11. Announcement made that Oct. 15, Worcester County will pay the last of its debt of $400,000, contracted over ten years ago for building Court House.

12. Boston & Worcester Street Railway begins running electric cars to Boston in one hour and forty-five minutes.

Worcester Tuberculosis Relief Association petitions City Hospital Trustees to establish ward with forty beds at that institution for tuberculosis patients.

Republican City Committee votes to have an advisory committee on finance of seven members.

Horace W. Willson, employed by the American Steel & Wire Company for fifty years, presented a gold watch by the officers and office force.

14. Officials of the Worcester Agricultural and New England fairs invite President W. H. Taft to attend the annual exhibition Sept. 6-10.

Herbert B. Belcher elected Superintendent of the Odd Fellows' Home, vice Frederic A. Barbour resigned.

Sixty-fifth annual session of the Sons of Temperance opens at the First Universalist Church a two-days' session with 100 delegates present, representing the principal cities of the United States and Canada.

15. Fifty thousand people witness pyrotechnic display at East Park given by Italian-speaking residents, in honor of the feast day of Our Lady of Mt. Carmel.

Charity Circus for the benefit of Hahnemann, Memorial and St. Vincent hospitals begins two days' engagement. Total receipts about $2,000.

16. Board of Trade arranges for special train to Seattle leaving Worcester, Aug. 4, for the Alaska-Yukon-Pacific Exposition.

Mason tenders to the number of 300 strike for an increase of wages.

Tait Bros. begin shipping 10,000 gallons of ice cream to the United States Naval Squadron at Provincetown.

17. Rev. F. A. Poole, Barre, Vt., accepts call to pastorate of Union Congregational Church.

19. Postmaster J. W. Hunt notified by the department that twenty-six clerks in the Worcester Post-office have had their salaries raised $100 each, due to increased business in local office.

20. J. Lewis Ellsworth, secretary of State Board of Agriculture, appointed delegate to the National Irrigation Congress at Spokane, Wash., Aug. 9 to 14, by President Charles T. Tatman of the Board of Trade.

21. Judge F. A. Gaskill bequeaths $10,000 in trust to Brown University, $5,000 to Worcester Academy, and $5,000 to Worcester Temporary Home and Day Nursery; also leaves $1,000 provisionally to First Baptist Church.

Newton Square Free Baptist Church votes to join First Baptist Church as a branch.

23. Late William Harrington leaves Tatnuck Country Club $1,000; Worcester Boys' Club, $1,000; Worcester Society for District Nursing, $1,000; Worcester Society for Aged Women, $2,000; Worcester Home for Aged Men, $2,000.

Miss Abbie Cronin, former resident of Worcester, found dead in her room, 25 Chestnut Street, Boston. Her age was 35.

28. Mason tenders' strike comes to an end.

City Affairs.

June 21. City Council meets and Board of Aldermen grants hearing to Charles T. Tatman and others who appear for the Connecticut Power Transmission Company, petitioners, to maintain poles in Mountain and Burncoat Streets, and to construct lines in West Boylston, Brooks and Millbrook Streets. Petition referred to Committee on Streets, and the Mayor, City Engineer and Supervisor of Wires.

30. City Treasurer DeWitt Clinton sells $125,000 in twenty-year bonds for the Industrial School and $140,000 in ten-year bonds for street, water, sewer and Beaver Brook land damages. Bonds are 3½ per cent. and were awarded to Merrill-Oldham & Company of Boston at 101.873.

July 1. Gross building operations in Worcester for first six months of 1909, $2,176,578; gross for 1908, $1,017,270; increase $1,159,308, per cent. 114.

14. City Government grants Connecticut River Transmission Company franchise for twenty-eight years, and establishes minimum horse power at fifteen, and approves loans of $125,000 for street construction and playgrounds.

Fred P. Good and James J. Casey of the Police Department appointed inspectors.

Mayor James Logan in message to City Government advocates placing police officers at sixty-five on veteran reserve list, and also recommends dividing city into districts, and erection of new police stations modernly equipped in different sections.

City draft for June amounts to $326,353.07.

16. James C. Coffey, executive officer of the Board of Health, notified that he has been selected as sanitary expert of the State Board of Examiners of Plumbers.

School Department spends $429,778.08 so far in fiscal year, leaving a balance of $216,466.41 on hand.

17. Mrs. Mabel Ranger, clerk in the office of the Board of Health, resigns after five years of service, Miss Anna G. Parrott transferred from the Auditor's office to the Health office and Miss Ethel L. Hingston appointed to the Auditor's office.

Elmer H. Fish, instructor at Worcester Polytechnic Institute, elected Director of the Worcester Independent Industrial School.

19. Net city debt announced to be $5,944,810.83, an increase of $322,173.84 over one year ago.

Water receipts for first six months of 1909, $175,314.94; a decrease of $10,856.60 from corresponding period during 1908.

Worcester water system suffers a loss in six weeks of 289,000,000 gallons due to heavy drains and evaporation.

City buys 12½ acres of land at Quinsigamond for its purification works.

22. City tax rate established at $16.40 for coming year.

Total property valuation for assessment, $133,279,602; total amount to be raised by taxation $2,185,785.47; total number of polls, 39,046.

State tax for coming year, $169,107; county tax, $134,260; city tax, $1,939,495.66. State tax last year $207,627; county tax, $134,260; city tax, $1,871,113.56.

23. Worcester Building Department issues permits amounting to $189,260; largest day's business with one exception, when the $500,000 Union Station permit was issued, this year.

Worcester Necrology.

June 21. Death of Elisha R. Putnam at 89 years 7 months and 10 days, at the Home for Aged Men, of old age.

Death of Ellen M., wife of Dr. Thomas J. Barrett, of cancer, aged 42 years.

Death of Patrolman William H. Mason, at the Worcester Hospital, aged 64 years.

24. Arthur H. Swift, son of Henry D. and Emma C. Swift, dies at the Seaside mission in the island of Jamaica, aged 42 years 1 months and 12 days. Mr. Swift was superintendent of missions for the Friends' Society, and had been engaged in mission work for twenty years.

July 11. Death of Arthur J. Bigelow of Shrewsbury, brother of H. H. Bigelow, while on a fishing trip at Moosehead Lake, aged 73 years 9 months and 7 days.

12. William E. Cates, druggist, former resident of Worcester, dies suddenly of heart disease at Springfield, aged 46 years 1 month and 6 days.

Portland Lovell, lineal descendant of Ezra Beeman, founder of the town of West Boylston, dies at his home, 128 Vernon Street, of old age. He aided in perfecting the invention of the first power carpet loom in America, constructed by Erastus Bigelow, his cousin. Mr. Lovell's age was 75 years 9 months and 7 days.

14. Death of William Harrington, owner of real estate at Harrington Corner, aged 57 years 8 months.

16. Hon. Francis A. Gaskill, judge of the Superior Judicial Court, dies at York Cliffs, Me., aged 63 years 6 months 13 days.

18. Ida Frances (Bond) Dow, music teacher, dies at her studio, 554 Main Street, of cancer of the breast, aged 45 years 1 month 28 days. She was the widow of Albert Dow, and a native of Sutton.

23. Death of Joseph F. Beyer, cane worker, resident of Worcester since 1880, aged 75 years, of erysipelas and pneumonia. He was a native of Switzerland, and leaves one daughter.

William F. Langill, formerly President of Worcester Typographical Union, drops dead in Hotel Thorndike, Rockland, aged 46.

25. Death of J. Chauncey Lyford, principal Sever Street school, lecturer, naturalist, author, aged 55 years 9 months 13 days. Cause of death, peritonitis.

26. Rev. Dr. William R. Huntington, rector of Grace P. E. Church, New York, and rector of All Saints', Worcester, for twenty-one years, dies at Nahant, aged 70 years 10 months 27 days.

Business and Building News.

Norcross Brothers Company, whose bid was $184,000, were the lowest bidders for the construction of the proposed additions to the Hampden County Court House at Springfield. The Norcross Brothers Company constructed the original court house in 1871-72.

Peter Baker, manufacturer of plumbers' supplies, has begun operations on a new factory at the corner of Vine and Bartlett Streets, to be four stories high, with a basement. The structure will be of brick with granite trimmings, and 69 by 98 feet in size. It will be steam heated, equipped with both gas and electricity for lighting, and a power and sprinkling plant will be installed. On completion Mr. Baker will abandon his present plant on Cherry Street.

Bowler Bros., Ltd., are to erect a new bottling shop, 52 by 100, two stories high, on Ellsworth Street. The structure will be of brick with granite sills, and will be erected by J. J. Power.

The excavation and foundation for the new Clark College library is to be done by Norcross Brothers Company. The structure is to be 60 by 143.

The new nurses' home at the Rutland sanatorium is to be constructed by James Miles & Son. It will be 40 by 80 feet in size, two stories high and will have all the modern conveniences.

J. W. Bishop & Company are to erect the new Holmes Manufacturing Company plant at New Bedford at a cost of $350,000. The buildings include a spinning mill, four stories and basement, 534 by 132 feet, of brick; boiler house, engine house, pump houses, picker, etc.

The Richard French Iron Works, 84 Union Street, have purchased a plot of land comprising 45,000 square feet on Albany Street, East Worcester, opposite the Stewart Boiler Works, of H. H. Bigelow, for the purpose of erecting a new plant about 60 by 150 feet, one story high, with crane bay and brood gallery for the lighter tools. New equipment will be required later on, including cranes and heavy machinery. More power than can be furnished by the company's present plant will also be demanded. The change will make it possible for the company to do a very much larger business than at present.

The Temporary Home and Day Nursery, for which excavations have been begun at its new site on Edward Street, is to be a three-story structure, with a basement, in which there will be a large playroom for children on stormy days. This will be on a level with the playground in the rear, with which it will directly communicate. The lot on which the home is situated has a 200-foot frontage on Edward Street, 120 feet deep, and is bounded by Edward, Palmer and Newport Streets. The building has a large, a general and small private dining-rooms, kitchen, pantries and serving-room. There will be a nursery, babies' day room, matron's sitting and bed rooms, and sixteen single bed rooms. There are a diet kitchen, adequate toilet facilities, a balcony screened in that can be used as a sun parlor, an isolation ward and every modern convenience and accessory for such a home. The building, which is to be erected by Edward J. Cross, will be of brick, with limestone trimmings and slate roof, and will cost about $35,000. It is expected the structure will be completed April 1, 1910.

The contract for excavating the new Industrial School building foundation has been awarded to Israel Lavallee for a sum not to exceed $2,155, the Doyle estate, original lowest bidders, declining contract. Work begins at once.

J. W. Bishop Company are to build brick addition to Hope Company factory at Phoenix, R. I., 46 by 72 feet, three stories high, with an elevator tower four stories high, 18 by 24 feet. It will be of mill construction. This concern is also to build a new brick storehouse for the Draper Company, Hopedale, 81 by 200 feet, two stories high, with tar and gravel roof. The new and artistic Boston & Albany station at Milford, of granite, 28 by 75 feet, will be erected by them and will cost $20,000.

Work on the American Antiquarian Society building on the lot bounded by Park Avenue, Salisbury and Regent Streets will be begun at once, the contractors, J. W. Bishop Company, having started excavating already. The plans call for a structure in the form of a Latin cross 130 by 100 feet, with the top resting on Salisbury Street. Here will be the main entrance, consisting of a portico of marble pillars two feet in diameter and twenty-five feet high. The building will be capped by a low and impressive marble dome. The structure will have a large rotunda flanked by reading rooms, while at the rear will be the steel book stacks rising to a height of four stories. The building will be of fire-proof construction, and will be built like the Congressional Library at Washington, with a view to its being germ-proof as well. Marble, steel and brick are to be the materials used. The lot on which the building stands has many possibilities for the landscape gardener.

R. L. Morgan Company Book $350,000 Order.

The American South African Commerce Company of Johannesburg, South Africa, has ordered 100 motor trucks from the R. L. Morgan Company of this city. It is claimed this is the largest order for motor trucks ever given. The cars are to be used for hauling ore and all other heavy supplies across a twenty-five-mile stretch where mule and cattle labor is now employed. The long treks across the hot lands of South Africa are death to all draught animals, the region being infested with multitudinous forms of insect life fatal to cattle unless they have become immune. The new form of locomotion has therefore been welcomed with open arms in this whole region. The trouble has been heretofore, however, that no truck manufactured was powerful enough or would carry load enough across these vast plains and uplands to make it worth while to discard the cheaper and uncertain animal draught.

The American African Company's United States headquarters is at Allentown, Penn., and the order was given the Morgan Company after a personal investigation of the merits of the Morgan truck by Gen. Samuel Pearson, late of the Boer army. Lewis M. Crittsinger, formerly of the Chalmers-Detroit Automobile Company, is now purchasing agent of the R. L. Morgan Company, and F. W. Jaques of the Pierce Automobile Company, Buffalo, is in charge of the cost and production work. The South African order reaches a gross of about $350,000.

Advance in Steel Wire.

Announcements were sent out July 24 by the American Steel & Wire Company to its agents of an increase of $2 a ton in the price of steel wire products, to take effect immediately. The price of steel wire was reduced on May 1, and it was recently announced that the return to schedule would take place Jan. 1, 1910. The advance thus anticipates the expected raise by five months. The officers of the company have announced that this increase will not be effective on existing contracts for future delivery save in instances where such a contingency had been specially provided for. The American Steel & Wire Company, including its Worcester branches, is a subsidiary of the United States Steel Corporation.

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
U.S.A.

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Clerk of the Corporation, WILLIAM H. SANFORD. *Auditor*, H. WARD BATES

An Auditorium for Worcester

At the meeting of the Executive Committee of the Worcester Board of Trade, August 3, one of the principal items of interest considered was the subject of a new auditorium in this city, a matter that is being agitated at the present time as a result of efforts that are being made by private enterprise to secure a suitable arena for indoor sports. There is a very large athletic contingent among the younger men of Worcester. The Y. M. C. A. gymnasium, Worcester Academy, Worcester Polytechnic Institute, Holy Cross and Clark Colleges, as well as many private clubs, are constantly swelling the total of those interested in sporting events so called, and in the ranks of these live, active young fellows, who exemplify the beauties of a sound mind in a sound body, can be found the leaders of the next generation of our civic and business life.

That these young men in the playtime of their existence should have a suitable athletic home where they can enjoy clean sport amid suitable surroundings goes without saying.

In the opinion of a large number of the members of the Mechanics Association, Mechanics Hall is unfit for polo contests, basketball games and similar athletic events; this entirely aside from any possible danger in the event of a panic. And yet Worcester with its 150,000 people demands sports of this sort, as it forcibly demonstrated last year. It may be argued that interest in polo will die out. While that is true it is also true that when it does, some other indoor sport will take its place.

There are, however, one or two other aspects of this case more consequential still. There is at the present time no large modern convention hall east of Madison Square Garden, New York. The use of Mechanics Hall for exposition purposes last year only served to expose its limitations for such intentions. There is, therefore, apparently no place to-day in New England, located on the ground floor, capable of seating 4000 or more people, or suitable for exposition purposes that is at all modern in its appointments, the only structure of that sort that Boston boasts being quite out of date.

Taking all these facts into consideration the Executive Committee decided to refer this whole auditorium subject to the Committee on New Enterprises, which will investigate the project in all its bearings, and will listen to the statements made by those who have been at work so faithfully and determinedly in the matter for the past few months, and will then report its findings to the full Board of Directors.

It is asserted by the gentlemen who are desirous of building this auditorium that if they can secure the necessary financial assistance to enable them to erect a suitable structure here, they can make Worcester a convention city, attracting here bodies from all over New England who are anxious to secure a place large enough in which to meet, to the consequent benefit of hotel keepers and the merchants generally.

It may be said in closing that in the Cleveland auditorium, where an industrial exposition was held this spring under the auspices of the Chamber of Commerce, there were 300,000 paid admissions in two weeks, the receipts were $120,000 and the expenditures $90,000, leaving a balance of $30,000. It would seem if such an auditorium was built here, its availability for both conventions and expositions might well be considered by possible investors.

The gentlemen who have been at work crystallizing sentiment in the direction of such a structure have had tentative plans drawn of the proposed building, and a reproduction of the front elevation as designed by the architects adorns the cover of this issue of the Worcester Magazine.

The Real Value of the Trip to Seattle

No false impression should gain lodgment in the mind of the public with reference to the genius of the Seattle excursion under the patronage of the Worcester Board of Trade. This is no mere holiday trip by a party of Worcester men and women, neither was it designed primarily to exploit the glee club, excellent organization as that is. It had behind it the very real and practical purpose of making the people of the great West better acquainted with the wonderful diversity of Worcester's manufactured products.

It was said twenty years ago by one who knew that Newark, N. J., alone among American cities exceeded Worcester in varied industries. To-day the claim is made that no city in the Union makes a more varied line of goods than the manufacturers in the Heart of the Commonwealth.

Not all the people of New England know this Fewer still in the Central States know it. West of Chicago, Worcester is a name; a place on the map.

The visit of the Worcester excursionists to Seattle will educate them as to the prosperity and progress of the great West, but it will also educate the great West as to the prosperity and progress of Worcester. The 15,000 heart-shaped booklets that the excursionists have taken West with them will, when they are given out, be 15,000 missionaries preaching the gospel of the industrial supremacy of this city. From this trip and from this gospel thus preached, Worcester manufacturers and Worcester as a whole will this year and in the years to come reap an exceedingly practical harvest in the shape of real money.

The trip in its spectacular features will attract attention from Massachusetts to Washington, and will give the Board of Trade a reputation for enterprise that it could not otherwise attain. Even Boston, while it has discussed such an excursion, has not yet made up its mind to essay it. If publicity alone was the object in view, the trip would pay big dividends. It may be said on the best possible authority that there is behind the excursion something far more essential and practical than mere display—the determination to enlarge our domestic market and increase the volume of Worcester-made goods consumed in the rich and rapidly developing western section of this country.

Off for Seattle

List of Those Who Are Visiting the Alaska-Yukon-Pacific Exposition and the Cities en Route

The Seattle excursion, under the patronage of the Worcester Board of Trade, started from the Union Station in this city, Wednesday afternoon, Aug. 4, at 2 o'clock, in its own special train, on its long journey across the continent. Hundreds of friends gathered at the depot to cheer the Worcester boomers on their way westward, including his Honor the Mayor, President Charles T. Tatman and Vice-president E. M. Woodward of the Board of Trade, Ex-president George F. Brooks, Secretary Donald Tulloch of the Metal Trades Association, and representatives of other civic and commercial bodies. The Glee Club sang its "How d'ye do" song and just before the party started, a group picture was taken of everybody by Official Photographer Wohlbrück. It was certainly a vociferous and halcyon occasion, and reports that come back say that the celebration is proving one continuous performance. A full story of the trip will appear in the September Magazine, copiously illustrated. These went:

Hon. Edward F. Fletcher, ex-mayor of Worcester, president Reversible Tube Cleaner Company, chairman of the Alaska Yukon Pacific Excursion Committee of the Board of Trade; Hon. J. Lewis Ellsworth, secretary of the Massachusetts State Board of Agriculture, delegate National Irrigation Congress, Spokane, Wash.; Hon. John W. Mawbey, register of probate; Mr. Louis H. Buckley, assistant general manager United States Envelope Company, president Worcester Common Council, director Worcester Board of Trade; Mr. F. S. Blanchard, Blanchard Press, director of the Worcester Board of Trade, delegate to National Irrigation Congress; Mrs. Blanchard; Miss H. Blanchard, Boston; Mr. Thomas Prince, of Reed & Prince Manufacturing Company; Mr. Caspar W. Brown, secretary Worcester Metal Goods Company; Mr. George C. Gilmore, foreman Whitney Manufacturing Company; Mr. D. W. Fletcher, Ayer, Mass.; Mr. Raymond Fletcher, representing the Worcester Telegram; Mr. and Mrs. Henry Brannon; Mr. A. C. Munroe; Mrs. Jennie H. Winans; Mr. Duane B. Williams; Miss Bessie Williams; Mr. J. H. Bennett; Mr. James Athy; Dr. George Reid; Dr. A. K. Yoosuf; Mr. E. W. Durgin; Mr. W. S. Abbott; Mr. Frans A. Stenberg; Mr. Louis L. Israel; Mr. Henry J. Comtois; Mr. and Mrs. Thomas MacDuff; Mr. and Mrs. G. A. Grosvenor; Miss C. Matthews; Mr. F. R. Smith, Mr. J. H. Smith, Leominster, Mass.; Mr. and Mrs. A. R. Jones, Danbury, Conn.; Mr. J. Tatro, of Millbury; Mr. John B. Hamel; Mr. Bertis H. Adams; Mr. James F. Powers, of the Gazette; Mr. Stuart Winch, Templeton, Mass.; Mr. W. L. Whittaker, Westboro, Mass.; Mr. John Jandron; Mr. T. J. Counihan; Mr. and Mrs. L. E. Dickinson, Whitinsville, Mass.; Mr. L. S. Walker, West Boylston, Mass.; Mrs. J. F. Bicknell; Mrs. A. R. Holt; Mrs. Martha Oestman, Boston, Mass.; Mrs. Minerva A. Bailey, Barre, Mass.; Miss F. Scott; Miss M. Scott; Mrs. J. Faulkner; Mrs. George Beane; Miss C. H. Darling; Miss M. B. Fitz; Mrs. E. J. Humphrey; Mrs. C. A. Hall; Miss M. L. Taylor; Miss O. White; Mrs. A. J. Clough; Miss C. N. [illegible]; Master William Sewall; Mr. M. P. Banning, West Boylston, Mass.; Mr. O. H. Bailey; Mr. G. W. Bent; Mr. W. F. Cashen; Mr. H. J. Hass; Mr. C. E. Hitchcock; Dr. A. J. Harpin; Mr. A. J. Hackett; Mr. H. A. Kimball; Mr. L. C. Midgley; Mr. J. T. Russell; Mr. W. M. Rogers; Mr. W. B. Smith; Dr. G. A. Sleeper; Mr. B. B. Snow; Mr. W. S. Knowles; Mr. W. R. Bliss; Mr. H. R. Pearsons; Mr. C. R. Forbes; Mr. Will Gray; Mr. Paul Mossman; Mr. J. E. Oakes; Mr. T. G. Greany; Mr. G. W. Anderson, Mr. C. L. Bancroft, Mr. F. A. Bancroft, Mr. F. C. Lachmund, attachés of the American Steel & Wire Company; Mr. W. I. Brown, of Josiah Brown Gear Manufacturers; Mr. H. E. Comtois, draughtsman Morgan Construction Company; Mr. R. G. Jeffrey, foreman Reed & Prince Manufacturing Company; Mr. W. W. Marsden, attaché Whitney Manufacturing Company; Mr. E. A. Santon, director of the Board of Trade Glee Club, draughtsman Crompton & Knowles Loom Works; Mr. H. C. Robinson, president Board of Trade Glee Club; Mr. John L. Sewall, secretary of the Worcester Board of Trade; Mr. John E. Goggin, representing the J. F. Healy excursion agency; Mr. Theo. C. Wohlbrück, official photographer.

From the Field

A Symposium in Paragraph Form, Showing What Live Commercial Bodies of the United States are Undertaking at the Present Time

L. D. Taft of the Montpelier, Vt., Board of Trade proposes to have that organization finance a guaranty fund for the purpose of bringing new industries to the Vermont capital. It is proposed to have every one of the 250 members of the board purchase at least one or more shares of stock in this fund. The money for these shares will be paid in as the directors call for it, and the parties to whom loans are made will pay interest on them during their life and then return the principal to the fund. The return to the stockholders through this form of enlightened selfishness will benefit both themselves and the city, and will have a tendency to make Montpelier a mecca for manufacturers hunting sites.

Springfield, Mass., is to have a board of trade clambake Sept. 15 at Riverside Park. Provisions are to be made for 500 this year as against 400 fed one year ago.

The real estate dealers of Superior, Wis., met July 8 and took the preliminary steps for organizing a real estate exchange, a proposition that has frequently been broached in Worcester.

The Chicago Board of Trade is considering the feasibility of building a new home to cost $4,000,000, to cover 30,000 square feet of land and to be constructed the full height allowed by the city ordinances, twenty stories—200 feet.

The Richmond, Va., Chamber of Commerce has just gone from the old flat rate of $10 membership dues per member to a sliding scale ranging from $10 to $200. At the beginning of the fiscal year 1908 the chamber had 546 members paying $10 each. It now has 695 who contribute $18,327.24. The change has resulted in vastly increased efficiency. Richmond, which has about 90,000 population, is therefore paying about $30 per year per member for the privileges of the board. The city has bank deposits of $33,707,452 against Worcester's $72,000,000. The manufacturing business last year was $79,807,693, and it had a jobbing trade of $65,555,216.

The West Virginia Board of Trade is to consider the subject of celebrating the fiftieth anniversary of the State's admission to the Union June 30th, 1913. The board has just begun publishing a bulletin of its doings.

The New Orleans Board of Trade has not quite 500 members.

Lexington, Ky., is anxious to get new industries, particularly furniture factories, boot and shoe shops and cotton mills, and its Commercial Club met July 9 to "boost" the program along. Addresses were made by many prominent citizens, including one by the Mayor, whose subject was "The Condition of our Streets and my Policy for their Improvement."

The Board of Trade of Dansville, N. Y., is interested in putting a new fountain in place in one of the public parks of that city. It has had circulars printed detailing Danville's industries.

The Grand Forks, N. D., Commercial Club secured the presence of the State Barbers' Convention there by

procuring them a suitable hall in which to meet July 20 and 21. The Dakota barbers propose to establish a wholesale house in that State for the manufacture of barbers' wares and the Grand Forks people hope to land it.

The Oregon Railway & Navigation Company is fighting an attempt made by the Portland Chamber of Commerce to secure a further reduction in rates on the main line and branches of that road to points east of The Dalles, and asks for an abatement of the complaint petitioned for on the rather remarkable ground that the Portland Chamber is in contempt of the order of the United States District Court restraining the enforcement of the order of the Railroad Commission of April 22, 1908, pending decision of the appeal of the railroad company to that tribunal. Further, the O. R. & N. Company alleges the Chamber of Commerce does not seek to fix the rates locally in Oregon, but that its purpose is to regulate the interstate rates to points in eastern Oregon, Washington and Idaho and other eastern points, with the view to avoiding the effect of the order of the Interstate Commerce Commission in the Spokane rate case, which, it is claimed, is in favor of eastern jobbers and to the detriment of Pacific seaboard jobbers.

Erie, Penn., is to have the vice-president of the United States as the principal speaker at its Chamber of Commerce banquet in October.

Baltimore's Chamber of Commerce is considering seriously the question of establishing a traffic bureau with a trained freight traffic manager in charge, an official it does not now possess.

The Jacksonville, Fla., Board of Trade is booming the proposition to erect an auditorium in that city to seat 5000 people, and has also started a publication known as the Jacksonville Board of Trade Bulletin, which is both newsy and enterprising.

The Davenport, Iowa, Commercial Club has appointed a committee to look after improving the river front in that city.

The Harrisburg Board of Trade has launched a scheme for a combined street railway waiting-room and public comfort station in that city to cost not less than $30,000. In order to get the matter properly before the citizens the board has voted to raise by subscription not less than $1000, to be spent in obtaining comprehensive plans for the treatment of Market Square, where it is proposed to install the improvement. The situation in Harrisburg seems to be somewhat akin to that in Worcester with reference to trolley waiting-room facilities, and the plan there is to handle the matter in a very broad-gauge way.

The Exposition Committee of the Scranton, Penn., Board of Trade proposes to go to New York for the express purpose of demonstrating the superior qualities of "Made in Scranton" goods to the export trade of the metropolis. A personal canvass is to be made of all the jobbers, buyers and exporters in order to boom the things made in Scranton.

The Gloucester Board of Trade has just gotten out an elaborate and interesting souvenir handsomely illustrated and full of entertaining facts told in a popular way about its great fishing, canning and granite industries. Its attractiveness and desirability as a summer resort are also depicted through the medium of half-tone and letter press. No one who has ever visited Gloucester, partaken of its generous hospitality, witnessed the marvelous dexterity of the workmen in its canning factories, listened to the picturesque yarns of its old salts, or seen old ocean crash on its mighty rocks and ebb and flow on its tuneful sands, needs to be told that the booklet gotten out by Secretary Edward K. Burnham is distinctly worthy of perusal and preservation.

The Freeport, Me., Board of Trade has secured the introduction of the Tuesday half-holiday into Freeport.

The Transportation Committee of the Norwich, Conn., Board of Trade is trying to secure the restoration of the Boston train which formerly arrived in that city at three o'clock in the afternoon. There is now no connection in Norwich from Boston by train between 11.43 and 7.10.

Pittsfield, Mass., has the Board of Trade fever.

The Northampton Board of Trade is discussing the erection of electric arches across its Main Street. The cost to the merchants would be sixty cents a year a front foot.

The Indianapolis Commercial Club has adopted a charities endorsement plan similar to that recently put in operation by the Worcester Merchants' Association, and only such charities as it endorses will its members support.

The Lowell Board of Trade in connection with citizens generally is endeavoring to secure the repaving of Merrimack Street, one of the principal thoroughfares of that city, before the Labor Day automobile celebration.

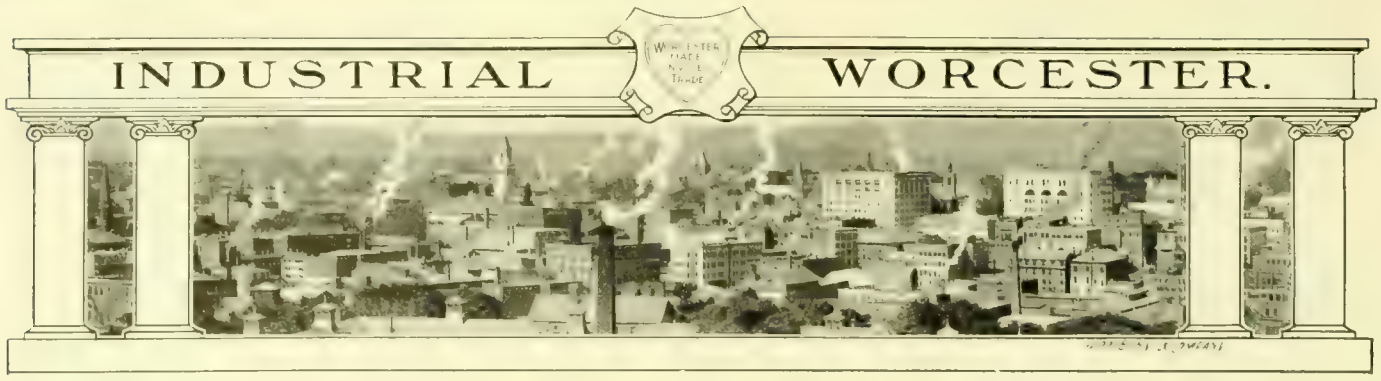
The New Bedford Board of Trade is up in arms over the proposition to have the "grand review" after the coming "war manœuvres" in this State at Fall River. New Bedford claims to be the natural location for such a review, inasmuch as New Bedford and Boston are to be the bases for the respective armies. The New Bedford Board of Trade claims New Bedford is not only the proper site from a strategic standpoint, but is entitled to recognition because of its industrial prowess. The claim is made by the President and Secretary of its Board of Trade that in population and industrial activity the growth of New Bedford is "second to no city in New England." It is also asserted over their signature that "it is conservatively estimated that the increase in New Bedford valuations this year because of the industrial activity will be nearly $25,000,000."

L. G. Monroe, secretary of the Spokane Chamber of Commerce, has received reports from 167 wheat-raising points in Washington, Idaho, Montana, and Oregon, to the effect that the wheat crop this year will be between 62,000,000 and 63,000,000 bushels. The crop will be worth more to the growers than in 1907, when the record yield was harvested. Prices are higher for all grades of wheat, ranging from $1.15 for blue stem to 95 cents for the reds.

The Rochester, N. Y., Chamber of Commerce favors the erection of a city hospital for the care of tuberculosis patients as opposed to a county hospital which is being advocated by the authorities in that State.

The Whitman Board of Trade has a shoe factory on its hands and recently received an offer to sell the plant for what it cost, and refused it.

The Wilmington, Del., Board of Trade has taken up the playground movement in earnest, and has organized a playgrounds association, with the purpose of securing a playground in every ward in that city. Annual dues have been fixed at twenty-five cents, and it is hoped to secure a large membership at that figure.



THE NEW LOMBARD-LANDRY LOOM.

The textile world both in this country and Europe is profoundly interested in the claims made for the new Lombard-Landry woolen and worsted high speed loom illustrated herewith for the first time in any American publication.

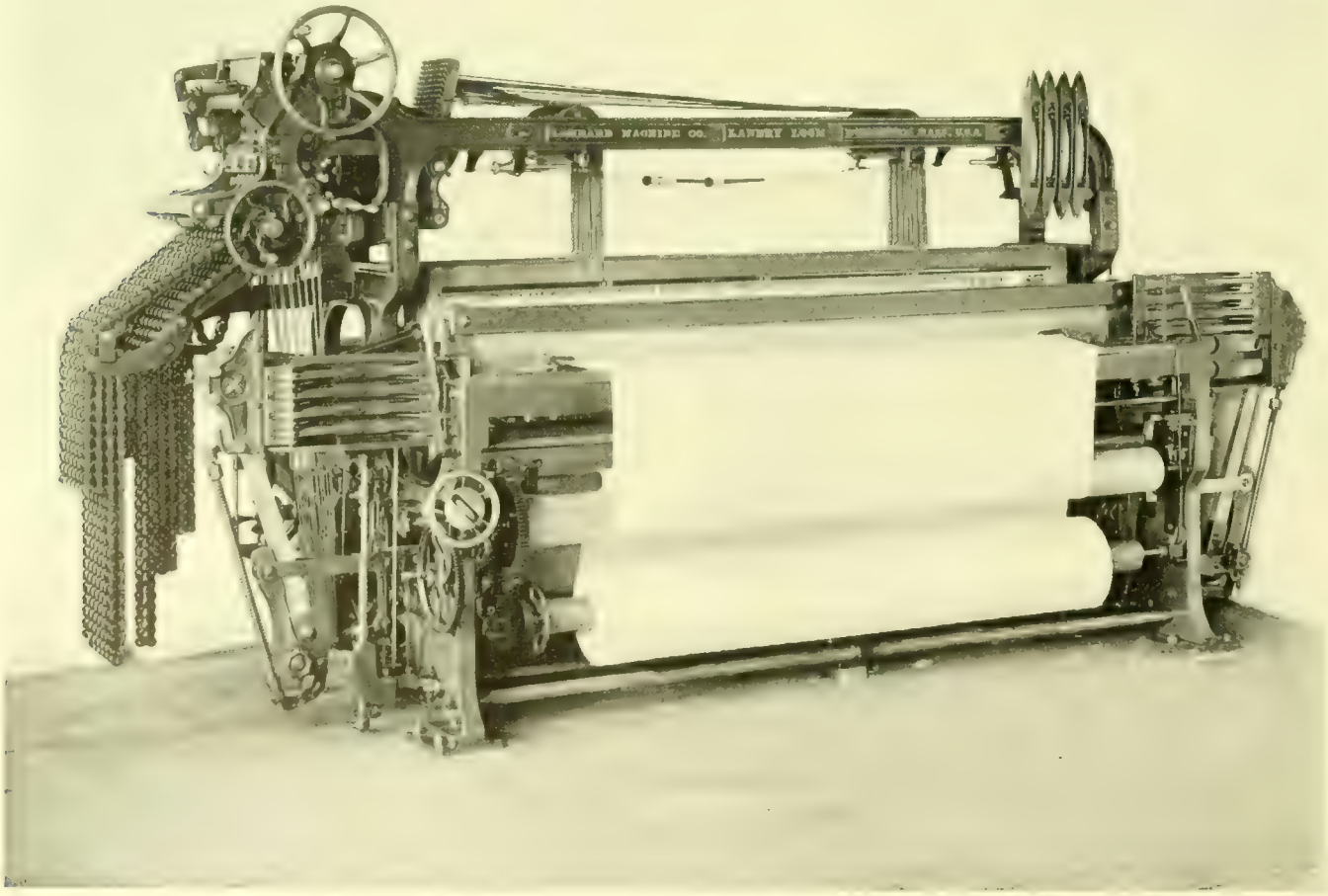
This loom, which is the product of the inventive genius of Louis H. Landry, has been designed by W. S. Southwick, late of the Draper Manufacturing Company, Hopedale, as depicted in the accompanying engraving. Patents have been allowed on all the essential parts of the machine, and the makers are preparing to put the looms on the market at once.

In brief it can be said that the Lombard-Landry loom has been designed to run at 15 to 20 per cent. higher speed than other looms of the same class. This means a more substantial construction of the parts wherever an increase of vibration or strain might be produced. While the builders feel that the loom's capacity for increased production is the most important from the worsted and woolen manufacturers' point of view, the simplicity of the working parts, coupled with their arrangement of easy access, will, they say, be greatly appreciated by the loom fixers, and reduce materially the cost of repair parts to the manufacturer.

The loom is of the closed shed type, and is operated by a new harness motion. The harnesses are opened by means of a pair of oscillating blades which are driven from the head shaft, the upper blade raising the harnesses and the lower one dropping them. The harnesses are evened up by a rocker arrangement, which is governed by an eccentric on the above-mentioned shaft.

The box motion receives its power through eccentric gears from the main head shaft. It has a positive lock, and all the parts can be easily reached for adjustment. The box rod is provided with a releaser which acts automatically whenever the picker catches in the box, relieving the box-motion parts of extra strain.

The pick motion is arranged outside of the loom frames, where it is easy to adjust, and is driven by a pick ball which is attached to the crank shaft, the pick coming directly under the crank shaft box, thus securing a firm pick. The usual cam shaft has been discarded, thus allowing room for a warp of about 50 per cent. larger capacity. The weights usually em-



THE LOMBARD-LANDRY LOOM.

ployed to produce friction on the warp beam have been replaced by a spring on a new automatic let-off motion, the tension of the spring being controlled by a feeler which follows the warp.

The main driving clutch is of friction type, having two metal faces produce the bite, the advantage over leather-faced clutches being a quicker release and not affected by oil. The main driving gear is so arranged as to be easily removed or re-set in any one of three annular positions.

The take-up motion is provided with a pocket for the handle, so designed as to make the practice of pumping impossible. A simple provision is also made for letting back a large amount on the cloth roll quickly and with ease.

The lay and crank shaft are connected by a strongly constructed and easily adjustable arm.

The hand wheel is provided with means of readily obtaining a reduced speed when desired, thus demanding less strength in shifting the harnesses for picking out.

It may be said in passing, as an argument in its favor, that in the introduction of the Lombard-Landry loom there will be no disorganization of the present weave room. Although the warp beam on the new loom has a flange great enough for 50 per cent. more yardage capacity than the ordinary loom, the beam, harnesses and reeds of other makers may be used on the Lombard-Landry without any alteration.

The mechanism of the loom is made accessible by placing most of the working parts, which are well protected by guards, outside of the frame.

GEORGE H. VARS.
President and Treasurer American Narrow Fabric Co.

The depreciation account in this type of loom is not so great, it is claimed, as in any of its competitors, owing to its doing away with vibrating gears, and the perfect adjustment of all the wearing parts.

The loom is intended to weave both woolen and worsted cloths, but its principal features apply to all fancy looms.

The Lombard Machine Company, which has begun the manufacture of these looms, is one of the oldest manufacturing enterprises in Worcester, dating back to 1823. Its business for over three quarters of a century has been making cards and preparing woolen and worsted machinery. There is hardly a mill in this country in which some evidence of its workmanship cannot be found. The capital stock is to be increased from $25,000 to $100,000, and its plant at the corner of Stafford and Heard Streets is to be materially enlarged this fall, and preparations made for manufacturing these looms on a large scale. The officers of the concern are Channing Smith, president; Herbert F. Gould, secretary; Chauncey H. Goodwin, treasurer.

AMERICAN NARROW FABRIC CO.

Trade marked goods possess a value equal to that possessed by any other goods of the same grade, plus identification. Thousands of crackers were made before Uneeda biscuits were put upon the market, but at a recent celebration of a great Philadelphia publicity house which exploits these goods, it was declared that

SECTION OF MAIN WORK-ROOM AMERICAN NARROW FABRIC COMPANY, WHERE HOSE SUPPORTERS, SHIELDS, ETC., ARE MANUFACTURED

the coined word "Uneeda" had been worth more than a million dollars to the cracker trust. Sapolio, the President suspender, Spearmint chewing gum, Campbell's soups, Heinz pickles, Worcestershire sauce, Onyx hosiery, Douglas shoes, the Empire State express and a thousand other titles, will readily recur to the minds of every thinking person who peruses this article.

The effort to obtain publicity nationally and internationally nowadays may be compared to a vast throng of venders in a market place all shouting at the top of their voices the excellence of their wares. In such a bedlam one must have a unique cry indeed in order to produce an impression on the onlooker's ears and pocketbook.

OFFICE—AMERICAN NARROW FABRIC COMPANY.

No detail of business success is so absurdly and grotesquely mismanaged as the publicity end. Indeed, it may be said that this alone of all the details of business success still remains vast, mysterious, insoluble. Quacks and shysters have been driven from every other profession under the sun but the advertising profession. That field, and that alone, still offers a remunerative harvest to the faker and the fraud.

As a result of conscientious effort on the part of a few far-seeing advertising men, and natural shrewdness and a determination to make their money count for as much as possible by some manufacturers, there have been evolved one or two basic principles in advertising that all business men have now adopted.

One of these, and the most essential, is the discarding of half a dozen different sub-titles for every grade and type of goods made by a concern, and the adoption of one generic term covering them all; and then focusing public attention on that one word or title or trade-mark.

The American Narrow Fabric Company of this city is the latest concern to adopt this wise course, and hereafter all its specialties will bear the coined name "De Vars," and special emphasis will be laid on that name, and a designated trade-mark, in order to identify them both with the superior product sold at rock bottom figures that this concern turns out.

The American Narrow Fabric Company, while one of the new manufacturing concerns of Worcester, is officered by as efficient and thoroughly trained body of men as is connected with any Worcester business. It was founded not quite three years ago by George H. Vars, its present president and treasurer, and began operations at 17 Hermon Street with four girls.

Mr. Vars believed from the start if he was to command any portion of the world's market permanently, it must be through the superior character of his goods. He therefore set about surrounding himself with trained brains—men skilled and successful in their various lines with a history that augured well for the future.

C. J. Hazelton is vice-president and superintendent, and is one of the most efficient manufacturers of these lines in this country.

The experience Mr. Hazelton has had in one branch of this industry is matched by Mr. Charles A. Lations, the head of the suspender department, in another. For fourteen years Mr. Lations has made high grade suspenders, and he says the "De Vars" excels in quality and finish anything he has heretofore put on the market.

The three specialties made by the concern are the American Maid hose supporters, the Pinon dress shield and the De Vars suspender. The concern also makes for export the daintiest and most expensive corsetaires known to the American trade. These are, many of them, adorned with gold buckles and inlaid with precious stones, and are gotten up absolutely regardless of expense.

The volume of business compelled the removal of the company, soon after its formation, from Hermon Street to 15 Union Street, and from four hands the business has grown in less than three years to over 200. The stock is turned over rapidly, and a consignment of $30,000 worth of raw material is nothing unusual for the concern to handle. The stock used has rubber for its base, and the company expresses sincere regret that no Worcester manufacturer has as yet established this industry here. The freight haul is, however, a short one, and as they utilize every particle of the raw material, even securing two cents a pound on the scraps from the making room, they handle their output very economically and to excellent financial advantage.

The concern has sought from the start to make distinctive goods. Its hose supporters are not only strongly made, but are fashioned very attractively, while the "De Vars" suspender is made in the latest and most exclusive styles. It is built strongly too, wears easily, and is made to sell at the same prices as characterize other high-grade suspenders, albeit it possesses an individuality all its own. No cheap suspenders of any kind are made by this concern.

The Pinon dress shield is another specialty that the company is just putting on the market, that is destined to produce a veritable sensation in the dry goods world. This shield is the first dress shield ever made so constructed that it can be permanently fastened into a garment without sewing into the shield itself. The Pinon is made with a linen insert between the two wings of the shield, in which are two safety pins that can be fastened into the sleeves without disturbing the shield itself in any degree. Every other shield made has had to be sewed in, and no matter how careful the seamstress, the lining was penetrated somewhere, nine times out of ten, and the shield rendered pervious to moisture.

There is no rubber used in the Pinon shields, but they are absolutely impervious to perspiration, and can be easily ster-

SECTION OF ASSEMBLING AND LOXING ROOM OF SUSPENDER DEPARTMENT—AMERICAN NARROW FABRIC COMPANY.

SECTION OF SEWING-ROOM OF SUSPENDER DEPARTMENT—AMERICAN NARROW FABRIC COMPANY.

ilized by immersing in boiling water a few seconds without affecting either service or shape. It is believed that there is a fortune in this feature of the company's business alone.

Its workroom, illustrated herewith, is a model of what such a room should be, and the sanitation and hygiene that characterize its establishment have elicited the highest praise from Dr. Melvin G. Overlock, the health inspector for this district.

This is no mean honor, and is one point in the superiority of "De Vars" made goods that will be constantly appreciated by a public that is more and more refusing to purchase sweatshop products, and demands absolute cleanliness and purity in everything that it eats, drinks and wears.

The company now utilizes 16,000 feet of floor space, just ten times its original area, and last year did a gross of $251,000. It keeps twelve salesmen on the road, and is beginning to build up a fine export business, its goods being of a grade and texture calculated to appeal to the particular trade on the continent. The concern, which is now capitalized at $25,000, is to double its capital stock at once in order to take care of its increasing business. The officers of the American Narrow Fabric Company are George H. Vars, president and treasurer; Carl J. Hazelton, vice-president and superintendent; E. G. Bemis, secretary.

WORCESTER PRESSED STEEL PULLEY COMPANY.

The Worcester Pressed Steel Pulley Company, a new industry, has just been started by Worcester capital and enterprise to manufacture a patented split belt pulley made entirely from pressed steel.

The Worcester Pressed Steel Pulley Company has applied to the Commissioner of Corporations for a charter to manufacture and deal in pressed metal pulleys and other transmission machinery. The first meeting was held July 26th, in the offices of Vaughan, Esty & Clark, who are completing the necessary formalities. This will be a close corporation under Massachusetts charter. Capital stock, $100,000.

Board of Directors: John W. Higgins, president and treasurer; Daniel G. Langlands, vice-president; Robert S. Littlefield, secretary; Arthur P. Higgins, Anders G. Anderson.

The new corporation is closely allied with the Worcester Pressed Steel Company, who will manufacture the new pulleys in their plant at Barber's Crossing, for which their present equipment and experience are admirably adapted.

The pulley was invented by Daniel G. Langlands of Boston, who is President and Treasurer of the James H. Roberts Company, dealers in pulleys and power transmission machinery, who will act as selling agents for the Worcester pulley.

Secretary Robert S. Littlefield is also of Boston and Vice-president of the James H. Roberts Company. The other officers are associated with the Worcester Pressed Steel Company.

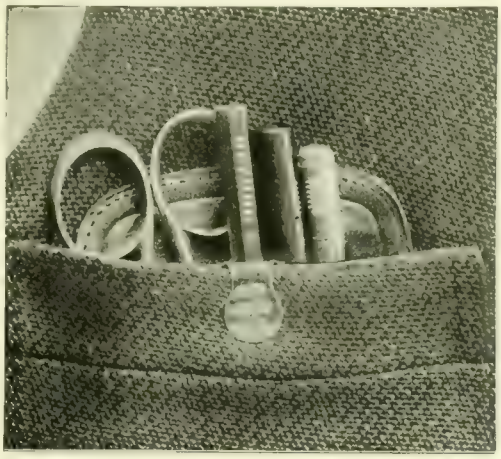
Four patents issued and pending have been acquired by the new company, and others will be applied for to protect thoroughly the several novel features of the new pulley. The Worcester pulley has no separate spokes as have other cast, wood and steel pulleys, but the sides are pressed steel discs shaped in on a cycloid joined to the rim without rivets; in fact, the new pulley can be made without a rivet. The pulley is held on the shaft by two gibbed keys which pass through clamping yokes inside the pulley. There are no projections to catch, and no opportunity for accident by conflict with spokes or projecting clamps while the pulley is revolving. This feature is particularly valuable to textile mills who are bothered by the lint and dirt gathering inside the spokes of the present pulleys and scattering dirt or increasing the fire risk by the presence of this fine explosive lint. The Worcester split pulleys are cleanly because they can be cleaned off with a brush while revolving, without danger of accident. It is claimed that these pulleys will run truer than other pressed steel pulleys because they are made complete in press tools and not assembled or built up by hand. They are lighter in weight than any other wood or pressed steel pulley on the market, and stiffer against distortion by accident or overload.

All sizes will be made eventually, and the smaller sizes are now being produced by the Worcester Pressed Steel Company.

Erection of a new building to take care of this and other growing needs of the Worcester Pressed Steel Company has been started adjacent to the present factory near Barber's Crossing. New equipment has been ordered, and a press received which is the largest of its kind built. It has a capacity of 1,000 tons through 18 inches.

THE NICHOLS PENCIL POCKET.

The Nichols pencil pocket, manufactured by Nichols & Willis, 22 Dayton Street, this city, a picture of which accompanies this article, is claimed to be the most practical pen and pencil holder now on the market. It is not so unsightly as a clip and fits easily in any pocket. It is made with an inside spring



which holds pencils and pens firmly, and is manufactured in two sizes to fit either shallow or deep pocket. It is put out in various colors such as dark brown, russet and black, and is sold at a popular price. It is packed for dealers in a neat cardboard box, and is sold by the dozen or gross.

A NEW WESTERN TRAIN FOR WORCESTER.

In addition to the present schedule of passenger trains on the Boston & Albany Railroad, beginning with August 15, the Twentieth Century Limited, hitherto operated only between New York and Chicago over the New York Central lines, will run between Boston and Chicago, reducing the time from this city to nineteen and one-half hours. It will leave Boston at 1 p.m. and Worcester at 2.02 p.m., arriving in Chicago at 8.30 the next morning. This will enable a business man to have practically a working day here, and do business in Chicago the next day; and leaving there at 2.30 p.m., be back here at 10.50 a.m. the third day. Passengers will be carried in Pullman coaches only. The train will be luxuriously equipped, and on that account, and because of the fast time, an extra fare charge will be made. The saving of time for business men will be greatly appreciated; and it is hoped that the patronage from this city and connecting roads will be sufficient to warrant the continuance of the experiment.

A NEW WINSLOW ICE SKATE.

One of the first offerings in ice skates for 1909 is the No. 49 ice skate for women, which the Samuel Winslow Skate Manufacturing Company, of Worcester, Mass., have just placed on the market. It is attached to the shoe by means of a full heel strap and lever clamp; the runner is curved, plain beveled, not chamfered or polished, but handsomely nickel-plated, and all in all is a thoroughly up-to-date product. The Winslow Company are now distributing among the trade one of the most attractive ice skate catalogues ever published. All the models are plainly illustrated by large half-tone cuts, and each is described in a very intelligent manner. The book comprises thirty-six pages, with very unique cover designed by F. L. Stoddard, one of the most celebrated American artists depicting Dutch scenes. A copy of the catalogue should be obtained for future reference, and it may be had upon request.

MILLS WOVEN CARTRIDGE BELT COMPANY'S NEW LOCATION.

The Mills Woven Cartridge Belt Company has removed from 51 Union Street to the new Spencer Building, Inc., Webster Street. The company in its new quarters will have 25,000 square feet of floor space on three floors. The building is of brick mill construction, and is admirably adapted for the company's present needs and future development.

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The WORCESTER MAGAZINE Illustrated

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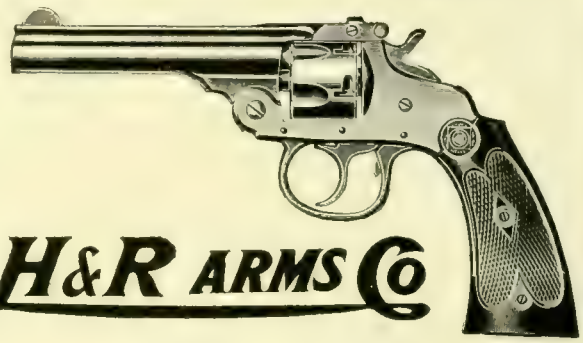

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Worcester, Mass.

Made in Worcester.

THE WORCESTER MAGAZINE

VOL. XII. SEPTEMBER, 1909 No. 9

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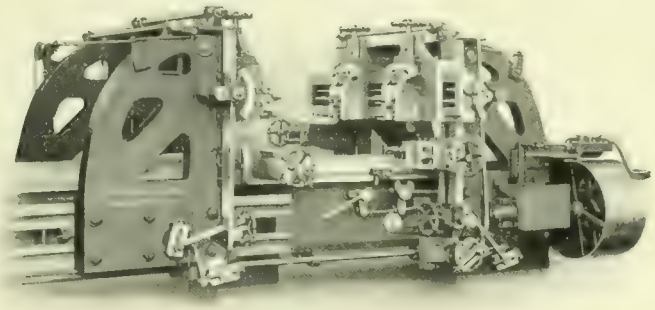

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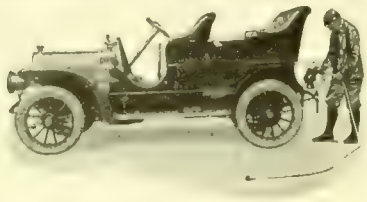

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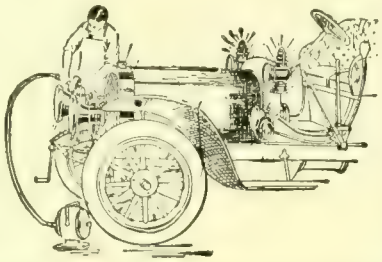

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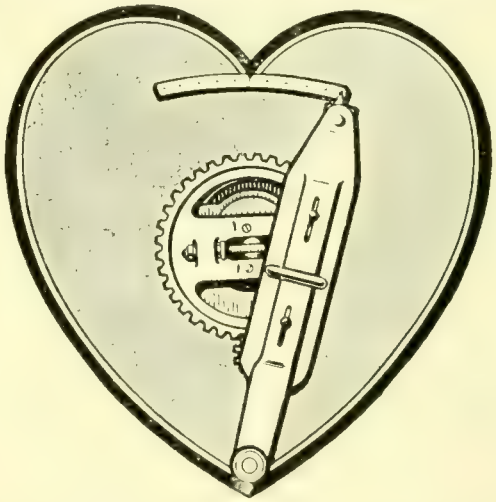

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Jonas G. Clark

FOUNDER OF CLARK UNIVERSITY.

The WORCESTER MAGAZINE

Twenty Years of Clark University

The Fruition of the Dream of Jonas G. Clark Achieved at Last in World-wide Recognition of the Institution he Established—An Epitome of the Founder's Career—An Appreciation of the Master Mind he Selected to Conduct his School to the Place Deserved for it Amid the Seats of the Mighty, and a Resume of the Notable Exercises that Have Characterized its Vicennial

"ON earth there is nothing great but man; in man there is nothing great but mind." If this aphorism, credited by Sir William Hamilton to another eminent philosopher, was not the great first cause behind the mental processes in Jonas G. Clark's brain when he conceived Clark University, which this month celebrated its twentieth anniversary, it certainly epitomizes what he evolved and sums up in a phrase the genius of the institution he founded.

A university for research work, established with an endowment of $2,000,000, built not by the executors of a millionaire according to their more or less diverse notions, but by the man himself—active, shrewd, far-seeing, and determined to carry his ideals into effect, was a novelty in this country as well as in Europe twenty-two years ago, when Mr. Clark began his creative work.

Victor Hugo once remarked that every time you open a school you close a prison, but Mr. Clark was not satisfied with merely closing prisons; he desired to found an institution here which should enlarge the very frontiers of thought itself, and penetrate that vast terra incognita that still lies uncharted and undiscovered beyond the ken of the bravest and most indefatigable explorers of the mind.

It is doubtless true of this institution, as of many another, that Clark University is not now and never has been appreciated at its true worth in Worcester itself. Had the university been evolved slowly and by degrees, after a century or more of preparation, the people of this city would have appreciated the unique and masterly service rendered them through Mr. Clark's beneficence; but springing into being as it did full-armed, complete in all its departments, the equal of anything in America, and a rival indeed of even the greatest of the foundations abroad, the process of birth appeared so simple and so easily comprehended that the actual labor of the founder was discounted at the time and has never been sufficiently understood and appreciated since.

However small may be the appreciation here of its scientific eminence, and however vague the popular conception of its scope and attainments, Clark University has, nevertheless, attained in its brief twenty years of life an international reputation and authority of which any city and any age, and any school, might well be proud. This can safely be attributed to two causes:

As has been well said: "Jonas G. Clark stood for open ports in every soul, for a free ocean in every mind, and a limitless sky over all, and he was morally sure that those who sailed by the stars and not by coast lights would at last reach the harbors of truth." To this end he established Clark University, to use his own phrasing, "without any religious, political or social tests;" and he begged the friends of the university fervently to pray that "in its administration, selection of officers and admission of applicants for place, it shall be kept free from this baneful influence." This was one cause.

And the second cause is like unto it.

The institution has had from the start a president as great as the founder. Known throughout civilization as an original thinker, as an enemy of error and a friend of truth, G. Stanley Hall embodies as fully as one man can the ideal Jonas G. Clark had in establishing this institution. Clark University was not started to defend existing theories, but to confirm them when true, and explode them when false; and in this campaign President Hall has proved a tireless and inspiring captain. It can be said without fear of contradiction that as a result of the harnessing together of these two personalities, one dead and the other living, a scientific institution has been evolved in Worcester which enjoys a reputation in Europe altogether out of proportion to the amount of money at its command and the number of years it has been in existence.

Jonas G. Clark, the founder of Clark University, was born Feb. 1, 1815, in the town of Hubbardston, a farming community nineteen miles from Worcester, with a population at the present time of about 1200. Rev. Calvin Stebbins, in his Founders' Day address on Mr. Clark, remarked that when Oliver Cromwell was sounded by the agents of Henrietta Maria as to his ambitions, he declared that "no man ever climbs so high as the man who does not know where he is going." Of Jonas Clark's career these words are true as Holy Writ.

His father was a husbandman and Jonas toiled in the field at the plow, milked the cows, cut the wood, fed the stock, hunted, fished, trapped, and, in general, did the chores about the place. He went to such schools as the town afforded, and spent his boyhood in a clean, sensible, hard-working fashion. He early learned lessons of thrift, energy and independence. He was told that the last trait was a corollary of the two former, and that it usually succeeded and seldom preceded its fellow virtues; he was told that if a man was to have money when he was old, he must make it and save it while he was young, and that one hundred cents made a dollar, no more, no less. These lessons he acted on until his dying day. Some men have accused Jonas G. Clark of being a hard man, but it must be taken into consideration that he was brought up in a hard school. The modern advocates of socialism would have been confined in a mad-

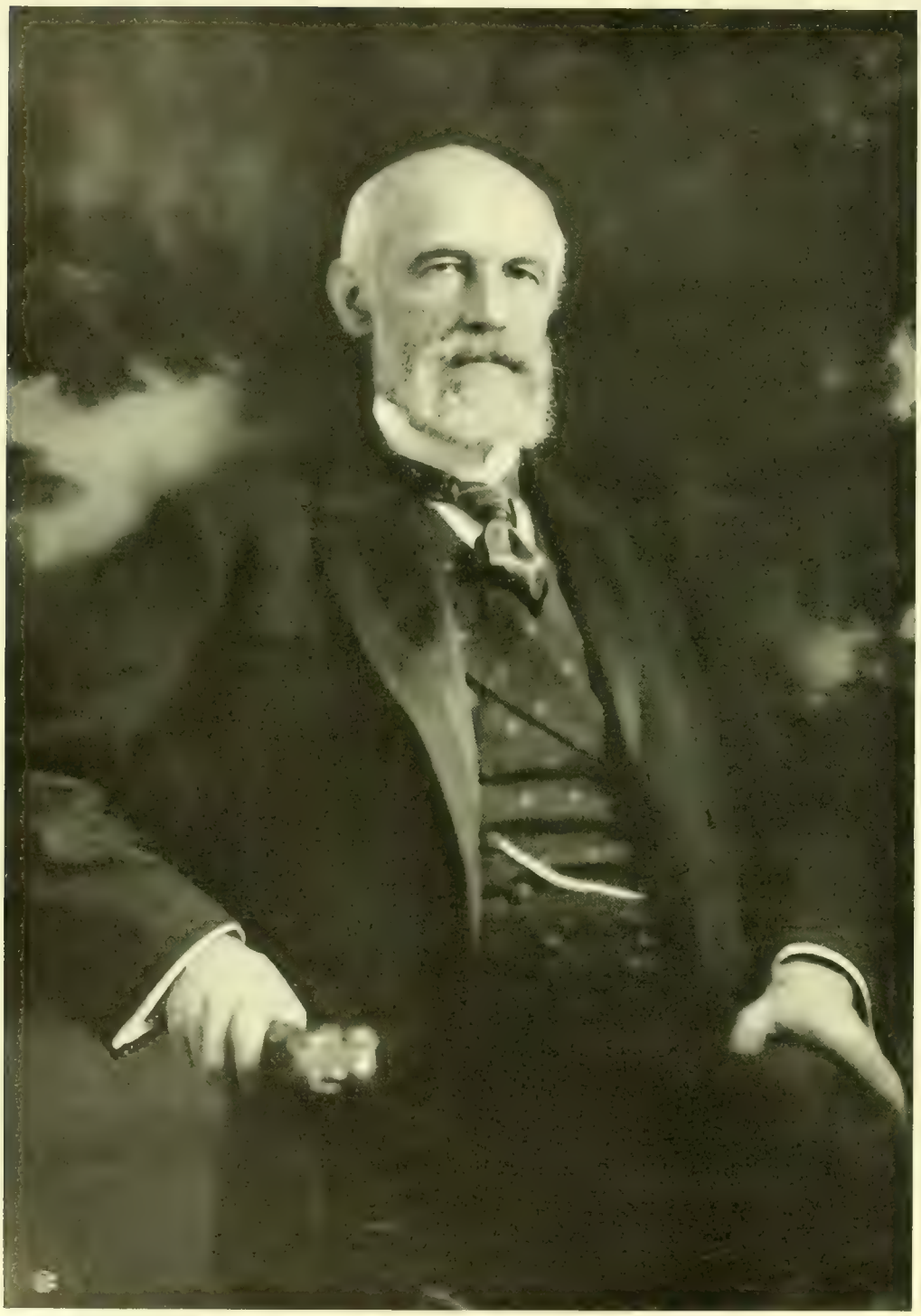


PHOTO BY CHEELEE & BISHONG

DR. GRANVILLE STANLEY HALL
President of Clark University

Prof. George Trumbull Ladd, LL.D.[1]

Prof. Theodore W. Richards, Harvard University.

house in Hubbardston in 1815 had they dared to put forth such utterances as they do to-day against the sacred rights of property. Money was hard to get eighty years ago in New England; and it was treasured accordingly. That Jonas Clark made money as a boy in such a community, trapping, picking berries, and in the few other ways open to him, was an earnest of what he would do and did do in a larger field and under more favorable circumstances.

He was always long-headed and forehanded. He worked on the farm until he was sixteen, and he worked hard, and then went to learn the carriage-maker's trade, and worked harder. He mastered that craft in all its departments, and at twenty-one was in business for himself. A few months before he was two and twenty he married Susan Wright of Hubbardston, with whom he lived more than sixty years, and to whom he was indebted for no small share of his success.

From 1835 to 1845 money was exceptionally scarce in the country places of New England, but the people had plenty of timber and were ready to buy carriages in exchange for chair stock. The people of Boston wanted chairs and had money, and so Mr. Clark sold carriages to the farmers, and with the chair stock which he obtained in exchange, he made chairs for the Boston people, for which he was paid in real money.

He found that more money could be made manufacturing tinware and he immediately sold out his carriage and chair business and went into general hardware, opening a store in Milford and another in Lowell, which he continued until 1851.

By this time the gold fever was at its height and Mr. Clark sold out his stores and began shipping staples to California, finally in 1853 going there himself. At first he shipped nails and furniture across the continent, but eventually he turned his attention entirely to furniture, supplying the wholesale market of the Pacific coast for some years.

In 1860, with his accustomed sagacity and ability to see around the corner, he disposed of his stock in trade and invested his capital largely in land and sailed for Europe. He soon returned and proved a tower of strength to the Union cause in that State while the war lasted, assisting in raising $200,000 for the Sanitary Commission in 1864 in San Francisco alone.

Dr. Jokichi Takamine.[3]
President of the Nippon Club, New York

Mr. Clark was as essentially a trader as was the late A. T. Stewart or the late Marshall Field, and he was equally shrewd in his real estate investments. His holdings in San Francisco and vicinity netted him large sums. After the war he came to New York, and May 5, 1881, he sold John D. Rockefeller nine lots of land on Fifth Avenue and 72d Street for $425,000, which cost him in the neighborhood of $250,000. This is one of the few times in his history when John D. Rockefeller met his match in a real estate deal.

Like all men gifted with an imagination, Mr. Clark was a firm believer in railroads. He was a prominent factor in the development of the New York, New Haven & Hartford Railroad, and he owned a large block of its stock. He realized from the outset that the future success of the transportation lines in New England, as elsewhere, depended on consolidation rather than competition, and acted accordingly.

Before Mr. Clark left California he was a very rich man—a merchant prince in fact—and after he came to New York, he added largely to his already great fortune. And yet he did not consider himself rich. Once being asked in the mining vernacular "if he exhausted the pocket he was working in California," he replied, "I had just begun to make money; if I could have had ten years more I should have been a very rich man." Mr. Rockefeller doubtless estimates his much greater wealth in much the same fashion. The panic of '73 passed Mr. Clark by unscathed. Indeed, his fortune during the reconstruction period, instead of shrinking, actually increased by leaps and bounds. He was a large investor in government securities during this entire period, and his faith in the republic bore golden fruit. In 1875 he disposed of his residence on Fifth Avenue, but desiring to maintain a home in the metropolis he purchased another on 72d Street, near the Lenox Library, which, on his removal to

[1] Yale University, lecturer on "The Japanese Administration in Korea."
[2] Lecturer on "Review of Recent Advances in Thermochemistry."
[3] Lecturer on "The Relations Between Japan and the United States."

Worcester in 1881, he sold for half a million dollars.

The impressive granite mansion which he erected that year on Elm Street in this city, and in which he lived not quite twenty years, is still pointed out to visitors as one of the sights of Worcester. Like its owner, it is more substantial than ornate and, unlike much of the gingerbread architecture of the nineteenth century, appears as if it was erected not for time but for eternity. On coming here he immediately began investing in Worcester real estate and built some of the leading business blocks of the city.

When the thought of founding a university first took shape in his brain, no man can tell; but that it germinated there for many years is absolutely certain. During this period he went frequently abroad and he gave the leisure of eight years to the study of the conditions surrounding the establishment of the great foreign universities. Not only were the leading seats of mediæval learning visited — Salermo, Cordova, Montpelier, etc.—but Alexandria, Jerusalem, Constantinople, Athens, Memphis, Thebes and Heliopolis as well. The original and practically obliterated centres of academic life were explored and their records collected and studied.

Armed with this material and determined to bring into being an institution here which should, in his own language, be "dedicated to science, letters, art and human progress in their best and more valuable forms," he gradually, during the periods from 1882 to 1887, acquired eight acres of land located on Main Street, about a mile from the centre of the city, and on this spacious area, Oct. 22, 1887, he laid the cornerstone for the first of the buildings which was to body forth the new aspirant for wisdom's honors.

ERNEST FOX NICHOLS[1]
President of Dartmouth College

Associated with him as trustees in the work of inaugurating the university were the following eight leading citizens of Worcester: Hon. Stephen Salisbury, A.B., LL.B.; Hon. Charles Devens, LL.B., LL.D.; Hon. George F. Hoar, LL.B., LL.D.; Hon. William W. Rice, A.B., LL.D.; Joseph Sargent, A.B.; Hon. John D. Washburn, A.B., LL.B.; Frank P. Goulding, A.B., and George Swan, A.B.

These gentlemen all took a keen interest in the erection of the new structure, but not so keen as Mr. Clark himself, for it is said that every day as long as his strength permitted, he mounted with the workmen as they finished one floor after another, to obtain visual proof that his ideas were carried into execution, and that the building was erected as the good old-fashioned phrase has it —"upon honor."

Finally, the building was done. Plain almost to ugliness, but substantial, rugged in its simplicity and lack of ornamentation, but built to stand, this structure to-day, after years of service, is a model of workmanship and permanency. It is 204 by 114 feet, four stories high and five in the centre, thoroughly heated and lighted and ventilated. Built of brick, with granite trimmings, and finished throughout in massive oak, it contains no less than ninety well-appointed rooms, the whole facing a beautiful common of twenty-five acres named in honor of the institution, University Park. The structure is crowned with a tower, in which is a clock with three six-foot illuminated dials presented by the citizens of Worcester.

Besides this main building a chemical laboratory was also set up, containing sixty-eight rooms. This edifice was erected in the form of a main body, three stories high, with two wings, one to the east, four stories high, and one to the southwest, two stories high. Some idea of the stability of this structure can be gained from a knowledge of the fact that the building, which is of brick, has outer walls two feet thick and even the partition walls are from twelve to sixteen inches through.

Other buildings have from time to time been added. Jan. 14, 1904, a new library building was thrown open with suitable exercises in the Art Gallery, which has a seating capacity of over 500, and which on that occasion was crowded to the doors. This building, which cost $125,000, has a floor area of a little over 25,000 square feet, and contains thirteen rooms. It has a capacity of fully 200,000 volumes, and its value to the university it

[1] [illegible] Medalist, American Academy Arts and Sciences, LL.D., Clark University, 1909. Lecturer on "Radiation from Gases Heated by Sudden Compression."

Prof. Harlan P. Beach[1]

Carl Barus, Ph.D., LL.D.[2]

Prof. J. E. Buchie[3]

Dr. Archibald C. Coolidge[4]

is impossible to overestimate. At the time the building was thrown open, Librarian Louis N. Wilson stated that the permanent funds of the library amounted to $600,000. The building is a handsome brick and stone structure in the Gothic form, and an ornament to the city.

Within a little over a year a dining-hall for the students has been erected, and as the exercises in honor of the close of the second decade of the university's life are going forward, the builders are at work on still another structure, in which will be inaugurated the child welfare movement, so far-reaching in its scope that no man can now measure its possibilities.

Solid and substantial as are the buildings of Clark University, they are but the shell masking the actual institution itself. The concept of Mr. Clark and his associates was to provide plain but permanent structures, in which men who sought in good faith and honesty of purpose to pursue the study of science in its purity, and to engage in scientific research and investigation should have immediately available every facility which money can command in the way of apparatus and appliances.

To lead in this work, Granville Stanley Hall, another Massachusetts man, the son of another Massachusetts farmer, born in Ashfield, this State, in 1846, who had risen to as great eminence in the world of letters as Mr. Clark had in the world of finance, was chosen. Dr. Hall, when he was summoned to Worcester, was at Johns Hopkins University, to which institution he was called in 1881 as a full professor of physiology and pedagogy. That appointment by its recognition of the scientific possibilities of psychological study and its further recognition of pedagogy as entitled to a place in a university curriculum, marked a new and memorable departure in American education. Dr. Hall did pioneer work at Johns Hopkins for eight years, but he merely laid the foundation there for the greater triumphs that have been his since coming to Clark, Johns Hopkins' only great rival in research work on this continent.

He had had excellent preparation for his new position. As a student at Williams College, from which he graduated in 1867, he had been fortunate enough to fall directly under the influence of Mark Hopkins, that intellectual giant, from whom he obtained his first lessons in physiology and philosophy. From Williams he went directly to Union Theological Seminary, where, for a year, his mind was under the sweet and liberalizing spirit of Prof. Henry B. Smith. Two years in Germany followed under such masters as Zeller, Kuno Fischer, Dorner and Trendelenburg. Had he had the definite purpose in view of preparing himself for the presidency of Clark University during all these years, he could not have laid a better foundation for such a career as has been his. Germany then as now was the great reservoir of scientific thought, and it would be difficult, if not impossible, to estimate the importance of the period he spent at the feet of these masters. It is not too much to

Dr. Elmer Ellsworth Brown[5]
United States Commissioner of Education

Ira Remsen[6]
President of Johns Hopkins University

[1] M.A., F.R.G.S., Yale University. Address on "Christian Missions in China." [2] Professor of Physics, Brown University; ex-president American Physical Society. Lecturer on "Hardness in Steel in Relation to Temperature, Viscosity, Conduction, Thermoelectric Power, Magnetization and Time." [3] Brown University. Lecturer on "The Acids of the Phenyl-Propriolic Series and their Condensation to Naphthalene Derivatives." [4] Professor of History, Harvard University; Vice-President East Asiatic Club. Address: "China and World Politics." [5] Conference Chairman, Department of Pedagogy. [6] Programme Lecturer on Organic Chemistry.

claim that the splendid reputation Clark University enjoys abroad is due to the reflection the university gives and has always given of the solid virtues of the Germanic seats of learning—a reflection due to the determination on Dr. Hall's part to make of Clark an institution which should stand as high in America as Leipsic and Heidelberg do in Europe.

Returning to this country, he graduated from Union Theological Seminary in 1871, and the next year was called to Antioch College, Ohio, as a professor, remaining there four years. Antioch was a small college, and Dr. Hall not only taught but often preached, and even served as chorister and organist for the institution.

In 1876 he went to Harvard University as instructor in literature, but after a year there determined to explore more thoroughly the field of comparative psychology, and for this purpose went to Europe a second time, where he passed three years in scientific study, attending many lectures, doing much laboratory work, and being more or less intimately associated with Helmholtz, Ludwig, Wundt, Brown-Sequard, Exner, Charcot, and many other investigators scarcely less eminent.

He returned to Harvard in 1880 as lecturer on contemporary psychology, and it was at this time that in a series of twelve lectures to teachers, under the auspices of the university, he struck the keynote of his whole after life.

His presentation of pedagogical theory and practice was then recognized as the most authoritative and exhaustive that American educators had up to that time been privileged to listen to. This debut was followed by an investigation into the "Contents of Children's Minds on Entering School," which was the first distinct movement in child study in this country and out of which has grown the profound and widespread interest in the very foundations of education that is now, thirty years later, about to be crystallized in the institution of which he is the honored head.

PERCIVAL LOWELL[1]
Professor of Astronomy, Flagstaff, Ariz., Observatory

In 1881 Dr. Hall went to Johns Hopkins, and in 1888, when Mr. Clark decided to establish here the first institution in this country to be devoted exclusively to university (post-graduate) work, he was selected as the fittest man for its head. A year in Europe, visiting for the third time its great seats of learning, followed, and then Dr. Hall took up his life work.

After careful consideration by the trustees of Clark University, it was decided to begin with graduate work only and in the following five departments:

1. Mathematics.
2. Physics, experimental and theoretical.
3. Chemistry, organic, inorganic, physical and crystallography.
4. Biology, including anatomy, physiology and paleontology.
5. Psychology, including neurology, anthropology and education.

President Hall was surrounded by a faculty worthy of the founder and his ideals, and the institution entered upon its career under roseate skies.

There have been dark hours in the twenty years that are now drawing to a close, but never for a moment have the trustees faltered in their decision taken at the very outset that while "ability in teaching shall be held of great importance, the leading consideration in all engagements, reappointments and promotions shall be the quantity and quality of successful investigation." Thanks to this policy, the institution to-day enjoys a reputation for thoroughness in research work second to none in this country, and the contributions that its students and professors have made to the sum total of human knowledge have entitled it to a place in the scientific world entirely out of all proportion to its age and equipment.

Every college and university in the land, indeed the whole teaching body, is under a debt of gratitude to this small university, scantily endowed in comparison with the great European foundations and still in its infancy in point of years and experience.

With a dozen colleges within a radius of a hundred miles doing graduate work, the plainest logic of events suggested transplanting to this home of culture the spirit of Johns Hopkins, and eliminating from this one institution college work altogether. This was the first thought in Mr. Clark's mind, but as his life drew to a close he felt more and more strongly the necessity for adding an academic department. This was finally done after his death, May 23, 1900, provision having been made by him to that end, and the college department has proven in this short period admirably adapted to the purposes for which it was designed.

During its comparatively short life this university has been instrumental in training well nigh 500 special and 2000 general students, professors or other special academic instructors, while its literary output has been most prolific for so small an institution, numbering not less than 40 volumes and 2400 monographs, besides editing five scientific journals.

Only graduate students, or those of equivalent attainments, are admitted to full membership in the university, except in rare and special cases.

At present no entrance examinations are required; but by testimonials, diplomas, personal interviews, or written specimens of work, the authorities must be satisfied that the applicants have scholarship enough to work

[1] Lecturer on A[illegible]

to advantage, and zeal and ability enough to devote themselves to their chosen field. The methods of the university are too costly, and its energy and funds too precious, to be spent upon those who are not well trained, promising and in earnest.

It is desired that candidates entering any of the nine departments shall have, besides a knowledge of the other subjects commonly taught in colleges, a reading knowledge of French and German. The degrees conferred are Masters of Art and Doctors of Philosophy.

The regular publications pertaining to the university and connected unofficially with the departments are the American Journal of Psychology, established in November, 1887; the Pedagogical Seminary, established in 1891, which is edited by Dr. Hall, and the American Journal of Religious Psychology, which was begun in 1904. There is about to be added a fourth critical journal, to be known as a Review of Reviews of Primitive and Dependent Peoples.

At the present time the faculty comprises sixteen members, and the work of the university falls under nine general departments: mathematics, physics, chemistry, biology, anthropology, psychology, pedagogy, economics, and sociology and history.

Dr. Hall has always been surrounded in a professorial capacity by men of the highest type as teachers and investigators, and it is probably true that the institution was never more thoroughly equipped in this direction than to-day.

A catalogue containing the names of the men who have achieved eminence in this country in the last twenty years in research work would abound with the names of those who are to-day, as teachers and demonstrators, doing splendid service in the cause of science in this institution; many of them, too, at salaries far less than they can obtain at more liberally-endowed rivals.

The conferences in connection with the twentieth anniversary celebration for discussions of questions connected with the teaching of physics in school, college and university have been illuminating to the scholars in attendance and have attracted to the university many of the leading minds of this great field.

Highly distinguished chemical investigators are contributing actively to the success of the occasion, and it is a matter of supreme gratification that the subject matter of their lectures is to be collated and published by the university later, and thus preserved in permanent form.

The great subject of biology, with which the conference opened, has been treated in an exceedingly interesting and vital manner and the resultant critical symposia will be most helpful to all students.

The high place taken in the realm of psychology by Clark University has, naturally, made this institution a Mecca for the men interested in this, perhaps, the most important study of modern times. The university has been fortunate in securing the presence of such an authority as Dr. Stern of the University of Breslau, managing director of the Institute of Applied Psychology, in Berlin. His lectures on topics in fields in which he has been a pioneer have been thought-arresting and thought-compelling.

Conferences dealing with the teaching of psychology as a professional subject in schools for the training of teachers have been presided over by Prof. Guy M. Whipple of Cornell University and Prof. Carl E. Seashore of the University of Iowa, and have amassed a large volume of matter that is not only immediately available but will be more and more appreciated by instructors as the years go by.

The lectures on psychiatry by Dr. Sigmund Freud alone have been of tremendous value.

Two very eminent European educators and authorities, Dr. Leo Burgstein of Vienna and Dr. C. G. Jung of Zurich, Switzerland, have contributed masterly material to the information already in existence relative to pedagogy and school hygiene.

In addition, four conferences—two on school hygiene and two on pedagogy—have brought out a large amount of new thought and illustration that will contribute materially to a reconstruction of much of the teaching of the later science, and will help crystallize the valuable facts already in existence with reference to the former.

Dr. Elmer E. Brown, United States commissioner of education, had charge of the conference on "The Opportunity and Need for Scientific Research in Education," and among those participating were Dr. W. C. Bagley, professor of education of the University of Illinois; Prof. Paul H. Hanus, professor of the history and art of teaching at Harvard University, and Professor Paul Monroe, professor of the history of education in the Teachers' College, Columbia University.

Dr. Thomas M. Balliet, dean of the School of Pedagogy, New York University; Dr. Edward Franklin Buchner, professor of education, Johns Hopkins University; Dr. Anna J. McKeag, professor of pedagogy at Wellesley College; Dr. James E. Russell, dean of the Teachers' College, Columbia University, and Dr. J. R. Street, dean of the Teachers' College, Syracuse University, participated in the conference on "Education as a College Subject."

In a research conference in the field of school hygiene were gathered such well-known authorities as Dr. R. C. Cabot, professor of clinical medicine at Harvard; Dr. C. Ward Crampton, director of physical training, New York city; Dr. Henry H. Goddard, director of Psychological Research Training School, Vineland, N. J.; Dr. Willard S. Small, principal of the Eastern High School, Washington, D. C.; Dr. H. P. Walcott, chairman of the Massachusetts State Board of Health, and Dr. Guy Montrose Whipple, professor of education, Cornell University.

A conference devoted to the place and importance of school hygiene in the curriculum of schools for the training of teachers, brought out Supt. William E. Chancellor of the Norwalk, Ct., schools; Dr. James Huff McCurdy of the International Y. M. C. A., Springfield, Mass.; Dr. E. C. Moore, superintendent of schools, Los Angeles, Cal.; Prof. Myron T. Scudder, professor of education, Rutgers College; Dr. Thomas A. Storey, associate professor of physical instruction, College of the City of New York, and others equally eminent.

In the department of history, to which special attention is being paid as we go to press, contributions are being made by men thoroughly versed in the fundamental facts with reference to the great world movements in India, the Philippines, Korea, Japan and China. This field, possessing great popular interest as it does, and magnetizing the thought of the nation today as it has never done before, has been illuminated by a flood of light poured on it by persons in possession of first-hand information and capable of dispelling all the misapprehension and much of the existing popular ignorance and bigotry with reference to the Oriental races. This feature of the anniversary alone warrants all the expenditure it has involved.

The anniversary exercises came to an end with a very remarkable series of meetings devoted to the Eastern question on Sunday, Sept. 19.

Starting Across the Continent

The Worcester Board of Trade Special Train and Excursionists, Worcester, Mass., August 4, 1909

An Experiment in Publicity

Incidents and Outcome of the Worcester Board of Trade Excursion to the Pacific Coast

Seven Thousand and Twenty-Seven Miles of Railroading in Special Pullman Train, Unmarred by Accident, Replete with Revelations of the Vast Riches of Our Nation, Enlivened by Characteristic Hospitalities from Great Commercial Organizations in the Central West and Northwest

TWO dominant features mark the present forward movements of commercial bodies. The first consists of efforts to get together in united action for promoting common interests. On a large scale this is illustrated in the endeavor of the Department of Commerce and Labor, in our national government, to bring into closer association industrial centers and their representative organizations; in a smaller way it appears in the present movement to unite New England's commercial forces in both defensive and aggressive efforts for the common good of this distinct section of the country. This feature of modern progress depends for its success upon a closer comradeship and better mutual acquaintance among the commercial bodies of different cities and sections of our land.

The second feature of the hour is the endeavor for greater publicity in connection with the work of commercial bodies and the cities they represent. Amid the countless varieties of advertising, city advertising is coming to hold a distinct place. As an art and as a science it is in its infancy; but it is rapidly passing from the stage of experiment. No longer does the alert, ambitious city trust solely to internal means of growth; it recognizes the strong competitions of city with city, section with section; it searches far and near for the most promising way in which to make known its peculiar advantages and resources; and by calling the widest possible attention to what it has to offer it seeks to build up its population, its business and its wealth.

The recent excursion to the Pacific coast was an experiment in city publicity. Nearly a year ago the earliest action was taken by the Board of Directors in the appointment of a committee to consider the wisdom of attempting such a tour across the continent, with the Alaska-Yukon-Pacific Exposition as an objective point. Correspondence with the officials of the approaching fair in Seattle called forth expressions of deep interest in such an excursion; and early in the year the details of routes and railroad arrangements were placed in the hands of Mr. J. F. Healy. Through his courtesy the Secretary was enabled to make a preliminary trip to the Pacific coast last spring, and thus met personally the executives of commercial bodies in the various cities which it was proposed to visit; also to be present at the opening of the Exposition, June 1, as a guest of the management. This advance tour clearly showed the great interest which had been awakened throughout the larger cities of the Northwest in such an unprecedentedly ambitious undertaking of a commercial body; and the generous offers of hospitality which came on every hand were an ample encouragement to carry out a plan which had already attracted such large notice from all the press upon the Pacific coast. It was evident that in the acceptance of waiting courtesies, and in the new social acquaintances which were thus proffered to Worcester's business men, there were opportunities for extending a favorable knowledge of our city's industrial characteristics too valuable to be neglected. Accordingly, the months of June and July were occupied in perfecting the details of the trip and enrolling members of the excursion, to which residents of neighboring towns in Worcester County were made eligible; and on the fourth day of August one hundred and one pilgrims, the exact number of those who crossed the Atlantic in the Mayflower to colonize New England, started upon their journey across the continent.

In the central West, trade excursions covering several days or even weeks are no novelty; but in such instances the personal solicitation of orders for goods is a prominent feature of the journeys. In this case no provision whatever was made for such ventures in immediate trafficking. Instead, the effort was made to cover the largest possible number of places where hospitality could be accepted, and where Worcester's representatives could both see and be seen, and where the two special features relied upon for publicity could be made most effective.

The first of these features was the "Heart of the Commonwealth" booklet, thoroughly described in our last issue, and sent with that number of the Magazine to every subscriber. It is a simple matter to print a descriptive circular or pamphlet; it is quite another matter, as many commercial bodies know by experience, to get such printed matter circulated where it will accomplish its mission. A ton of literature reposing in some dusty storeroom is worthless; a hundred pounds that actually reaches some promising destination has a value which cannot easily be computed. It was the purpose of this excursion, from its very inception, to utilize the opportunity for first exciting the interest of distant cities in Worcester through the personal presence of her representatives, and then to make the most of that interest for the systematic distribution of a unique and thoroughly artistic publication, which should present in picturesque and pointed way the things which the business world of to-day needs to know about the varied industries and the many distinctive excellencies of our city. In several instances, these booklets were taken with the excursionists to the rooms of commercial bodies, and personally delivered; but quite largely use was made of Moulton's National Distributing Agency of Cleveland, and its local branches in different cities, the secretaries of commercial organizations kindly preparing in advance lists of representative business men, which were given to local distributors, who, on the day following our visit, carried a copy of the booklet to each man at his place of business. Two and a half tons of these booklets occupied a substantial space in the special baggage car when the train left Worcester; and when, on the evening before the return to Worcester, the last score of booklets was distributed in an Ohio town, it was realized that an amount of effort and energy not easily estimated had been put forth in reducing the fifteen thousand copies of the original supply to zero.

The second special feature relied upon for effective

publicity was the presence and music of the Board of Trade Glee Club. Most trade excursions which go forth from cities into surrounding territory hire bands to make their music for them. Worcester enjoys the unique distinction of maintaining within the ranks of her Board of Trade a chorus of male voices of exceptional quality, thoroughly unified by long and arduous practice, and capable of a wonderful variety of both solo and chorus singing. While the excursion was by no means organized for the purpose of exploiting this fine musical organization, large reliance for expected publicity was put upon this important portion of the party; and it is a matter of gratification that from beginning to end the Glee Club never failed to make good wherever they were called upon, surpassing the expectations of their friends as well as continually surprising the new audiences who listened with delight to their splendid songs. In view of the fact that Worcester's fame as a musical centre is no slight part of her reputation, it was peculiarly fitting that such superb exhibitions of music should come as one of the incidents of the general programme of publicity.

In venturing upon any detailed story of this excursion, one must resist the temptation to dwell upon the social fellowships of the party, whose mutual acquaintance grew so delightfully as the days passed, and is to be celebrated by an annual reunion next summer. Nor does space permit detailed mention of the natural scenery and varied types of industrial and commercial effort and achievement which rewarded study at each step of the way. For the purpose of this article emphasis should be laid upon the broadening acquaintance with Worcester's personality and products which came with every new experience of hospitality, in that unprecedented series of receptions from some of the leading commercial bodies of the land.

The morning of the second day from home found the party taking breakfast in the palm garden pavilion of the Wayne Hotel, on the banks of Detroit's wonderful river, which boasts of the largest traffic of any waterway in the world. Secretary Charles B. Sawyer of the Board of Commerce in that city was early on hand with cordial greetings and guidance immediately to the steamer chartered for the occasion and kept at the service of the party till well past the noon hour. A goodly number of his fellow members with their wives and daughters were also upon the boat, and proved most entertaining hosts and hostesses as they pointed out the various objects of interest as the voyage progressed. Music was furnished by a fine orchestra; the Glee Club made its first appearance, and brief speeches from representatives of the two organizations gave expression to the feelings of the party. A noonday collation served on the balcony of the Casino in Detroit's noble island park brought the morning to a delightful end.

In the afternoon the members of the party were left to their own devices for further exploration of the city where "life is worth living," and in the evening the Glee Club made its first formal appearance as the chief attraction at the Casino. The conditions were not favorable for the most finished artistic performance, but the audience was from the start exceedingly cordial; and the critical expressions from many of Detroit's music lovers who had been attracted by the club were appreciative in largest measure.

Friday, Aug. 6th, was another red-letter day as regards surprises from western hospitality. No sooner did the party step from their Pullmans at the Union Station than they found themselves literally "in the hands of their friends" of the Chicago Association of Commerce. President Skinner, Vice-chairman Hicks of the Trade Extension Committee, with Chairman Stillman of the Executive Committee, and many others, were waiting to escort their guests to taxicabs, which speedily transferred the party to the Auditorium Hotel. During the remainder of the morning individual guides were ready to pilot groups of visitors to points of interest, Marshall Field's and the Art Museum being favorite destinations.

At the noon hour came one of the most notable entertainments offered Worcester's representatives during the entire trip, a collation served most elegantly in the famous "Gold Room" of the Auditorium Annex, which has seldom before been opened in the daytime for any guests. No more heartfelt and forceful words were heard at any time during the excursion than those uttered by Mr. T. Edward Wilder, the personal friend of Mayor Logan and his associate on the Board of Trustees of the Worcester Tech, who served as chairman of the special reception committee for the day. Here again the Glee Club sang, alternating with the selections from the orchestra and at one time rendering the "Chicago Hymn" with fine effect, under the leadership of its author and composer, Mr. Angus S. Hibbard. From the tables all made their way to the waiting array of automobiles, each decorated with twin banners bearing the words "Chicago" and "Worcester"; and with the special representative of the Chief of Police in the pilot car to see that the speed did not exceed sixty miles an hour, a never-to-be-forgotten tour of the entire park and boulevard system of the city, covering forty-four miles, was taken.

If there were any sections of the city along the route that were unaware of this visit of eastern guests, it certainly was not the fault of our generous hosts.

Saturday morning found the party speeding along the banks of the Mississippi, approaching the Twin Cities. The first man to appear on the platform of the St. Paul station was Mr. W. L. Seeley, the indefatigable secretary of the Commercial Club, who continued his attentions to the party until the last good-bye was said. Immediately after breakfast a reception was awaiting us in the spacious rooms of the club, where ex-Mayor Fletcher found a new ally in speech-making in the person of Mr. John B. Ratigan, who was spending the summer in St. Paul. Again a line of autos was ready, which transferred guests and hosts first to the famous Auditorium, the gift of St. Paul's individual citizens to its equipment as a leading convention city of the Northwest. Here we were shown the mechanical appliances by which a compact theatre accommodating 3000 is changed in a short space of time into an auditorium where a national nominating convention or a three-ring circus can be made equally at home, a sight which by contrast reminded all Worcester people of home conditions. A further auto tour through boulevard and park brought the party to the noble State Capitol, whose beauties and richness could be only partially shown in the brief time available. The Glee Club boys were banqueted at the Commercial Club, and all the party left early in the afternoon for Minneapolis, charmed with the hospitalities of the surprisingly large number of St. Paul's substantial citizens who could be assembled at a midsummer week's end to greet eastern strangers.

The Washburn-Crosby flouring mills and the falls of St. Anthony were the first significant objects which Commissioner W. G. Nye and his associates of the Minneapolis Commercial Club offered for inspection. Later followed a trolley trip through the city and out to Lake Minnetonka. Through the kindness of General Manager Warnock of the Rapid Transit system, two cars never before used, and christened the "Worcester cars," were assigned to our party. On the shore of the lake a transfer was made to steamer, which soon brought the party to Big Island Park, where supper was served. A special steamer then received the tourists and their hosts for a twilight voyage. Opportunity was here given for some excellent speech-making, including highly appreciated remarks from Mr. Warnock, who explained in detail the developments of lake and shore, which have given Minneapolis such a resort as Minnetonka. The voyage ended at Wayzetta, to which point our special train had been transferred during the day from St. Paul, with a palace observation car added by the Great Northern management to complete the delights of the tour across the continent.

Sunday morning dawned clear and cool, after heavy showers during the night. The city of Devil's Lake, N. D., was reached at nine o'clock, and a three-hours' stop allowed the party the pleasure of a side trip to the Chautauqua grounds at the lake. The various churches in the city transferred their services to the auditorium here, and the citizens and the Worcester pilgrims, together with campers at this summer resort, joined in a religious service. Sunset found the Worcester special close to the western boundary of North Dakota, and in sight of some of the great irrigation plants on the Missouri River, whose north bank fixed our route.

It is uncertain whether increased trade will come to our city from Monday's two-hour stop in the Blackfoot Indian Reservation at Browning, Montana; but it is probable that no one in the entire population, nearly all of whom were at the station, will soon forget their Worcester visitors; nor will they in turn fail to remember the novel sights there offered them. Through the special efforts of the government agent, Mr. C. A. Churchill, and the sending out of mounted messengers over the entire reservation, which is sixty miles square, nearly two hundred Indians, laying aside their ordinary civilian garb, donned for the occasion the old-time war-paint and feathers and fantastic head-gear; the spectacle as they came riding across the prairie to meet the party was one not soon to be forgotten. The late afternoon and early evening brought the train down from the altitudes of the Rockies, whose summit was passed about noon, into the beautiful Kootenai valley, and into some thriving towns in western Montana, where Worcester booklets as well as Worcester tourists found cordial reception at the brief stops made.

COLLATION IN "GOLD ROOM," AUDITORIUM ANNEX, CHICAGO

The early sunlight of Tuesday, Aug. 10, found our train parked by the rushing Spokane River, in the heart of the "Power City." With thousands just leaving Spokane after their quest for lands from the drawings for government allotment, and with other thousands crowding every hotel in attendance upon the National Irrigation Congress, it might have seemed that the city's business men would have found scant time for noticing a few score of eastern tourists. On the contrary, a goodly delegation from the Chamber of

Commerce were promptly on hand, before breakfast was disposed of, to adorn each Worcester man and woman with a badge on which was printed a full itinerary of the day's pleasures; and it required a good-sized ribbon to include them all. A trolley trip around the city; a visit to the Chamber of Commerce; a luncheon in the superb "Hall of the Doges" in the Davenport restaurant; the introduction of the Worcester party to the Irrigation Congress, and the singing of the Glee Club at an opening session; and the reservation of seats in the grandstand for seeing the striking industrial development parade,—these were the various parts of the collective programme, while many more individual opportunities and attractions were enjoyed by different members of the party, including a twilight excursion up the Spokane valley to Cœur d'Alene City, Idaho, on one of the swift trolley trains of the Inland Empire electric system. The "Key to Spokane," presented by President Goodale to the Worcester delegation, now adorns our rooms at Foster Street, and the courtesies from Secretary Munroe and Assistant Secretary Dresher need no visible token to keep them fresh in memory.

MOUNTED INDIANS AT BROWNING, MONTANA

Wednesday morning, Aug. 11, saw the summit of the Cascade Mountains left behind, and soon the broad expanse of Puget Sound gave proof that the Pacific coast was really attained. Just before the noon hour the journey across the continent ended at Seattle's Union Station, and in the place of the throng at the Worcester station who said goodbye, there appeared quite as large a number of both old and new friends to offer congratulations upon the splendid success of the excursion and greetings at its western terminus. We wish we could mention by name every representative of city government and Exposition, Chamber of Commerce and Commercial Club and New England Club, and especially every former resident of Worcester and vicinity who was present to make all the party feel at home in Seattle. The courtesies there begun extended until the hour of the party's departure. On Friday the Chamber of Commerce provided a sight-seeing trolley trip for the entire party, ending with a reception and luncheon at the rooms of the Commercial Club, at which Worcester and Seattle spell-binders vied with each other in brilliant oratory. A water excursion on Puget Sound was arranged by the New England Society, and Rev. F. J. Van Horn, formerly of Worcester, invited all New Englanders in the city, past and present, to an appropriate Sunday evening service in his church. The most significant event, the celebration of "Worcester Day" at the fair, is described fully in a later article. During their stay the Glee Club sang eight times on the grounds of the Exposition, once in the natural amphitheatre, to audiences which would aggregate over ten thousand persons; and there was but one verdict of praise and delight from all listeners. It is not within the province of this article to add to the appreciation of the Exposition which appeared in the July number of this Magazine; but it is our pleasant privilege to allude to the many courtesies received from representatives of the management of the fair, in various departments. In the absence of Mr. Josiah Collins, the head of the department of special events, Messrs. Stuart, Weston and Louis W. Buckley, were ever ready for any service in their power; and Mr. James A. Wood and Mr. R. W. Raymond were unfailing in their attentions and especially helpful to the secretary in all matters which came under his charge, the latter gentleman giving special and greatly-appreciated assistance in completing the distribution of Worcester booklets among the crowds in attendance. This was a privilege accorded no other organization during the entire fair, and its value in assisting the campaign of publicity was of the highest worth. A delightful noonday collation was also tendered to the committee in charge of the excursion, including the leaders of the Glee Club and state and county officials in the party.

"You will like Tacoma," was the legend confronting our eyes even upon billboards in Seattle; and on Monday, Aug. 16, the party embarked on the swift steamer "Indianapolis" for the picturesque sail of Puget Sound to the city at its extreme end. The careful preparation which had been made in correspondence for this visit bore fruits in a reception of remarkable cordiality and hours of entertainment crowded with delightful sight-seeing. The sawing of a log eight feet in diameter and the visit to the great smelter, together with the beauties of wooded park and supper in the pavilion by the water's edge in the splendor of a marvelous sunset, were among the things that will be long cherished in memory. Best of all, however, was the entertainment in the Temple of Music in the evening, by the Orpheus Club, a musical organization similar to our Glee Club, and the New England Club of Tacoma. It is safe to say that our singers never sang under more inspiring conditions nor to an audience that was roused to a higher pitch of

enthusiasm. In no place visited was there a larger participation by local business men in the hospitalities than in this city, all commercial organizations uniting in one A.-Y.-P. Exposition Committee, which, under the leadership of Mr. John H. Williams as manager, has been extending like hospitalities to all visitors in Tacoma during the present season.

August 17, Portland! The last day of the united party's experience was one round of pleasure. No hostelry more delighted our members than the Hotel Portland, with its superb equipment and fine cuisine. The trolley trip around the different sections of the city, with views of luxuriant roses and all varieties of flowers, ending with the wonderful ascent to Council Crest, twelve hundred feet above the Willamette River, was one of the unique experiences of the entire excursion. In spite of the fact that the Commercial Club was looking after the comfort of the American Association of Farmers' Institute Workers, of which body Mr. J. Lewis Ellsworth of our own city was the presiding officer, and caring for several other organizations meeting coincidently in Portland, the largest possible attention was given our party, under the personal direction of Mr. Tom Richardson, the manager of the club, and its President, Dr. Wetherbee. Exceptional privileges were again accorded the party, in the shape of a luncheon served at noon in the large dining-hall of the club, and the admission of the ladies into the large parlors of the club. Here, as elsewhere, the booklets were received with much pleasure and appreciation.

Tuesday evening saw the separation of the excursion, about one-third of the party leaving for California, while the remainder set their faces eastward, passing through the beauties of the Columbia valley at the sunset hour, and spending the next day among the hills and valleys of eastern Oregon and Idaho. The first delay of trains experienced in the entire trip up to that point greatly shortened the party's stay in Salt Lake City; but its energetic Commercial Club, under the personal leadership of its veteran President, Mr. W. J. Halloran, crowded an unprecedented amount of pleasure into the few hours at his disposal. The excursion to Saltair, on the shores of the Great Salt Lake, with the opportunity of experimenting with bathing in its waters, was highly appreciated.

The party passed through the Royal Gorge between cloudbursts which preceded and succeeded its trip, arriving at Colorado Springs too late to fill the Glee Club's Friday evening concert date. Saturday was given up to conquering the lofty top of Pike's Peak with the kindly assistance of the famous cog-wheel road, and to exploring the wonders of Williams Cañon and the Garden of the Gods. This change in itinerary prevented the Chamber of Commerce in Colorado Springs from extending courtesies which they were anxious to offer.

Denver brought a fine closing climax to the party's experiences of sight-seeing and friendly intercourse with kindred bodies. As only Sunday remained before the homeward journey, no efforts at showing the city were made by the Chamber of Commerce to the Worcester party as a whole, but many individual courtesies in that direction were tendered during the day, and at the hour of the regular evening meal at the Albany, a committee from the Chamber of Commerce took charge of proceedings, and in an informal but most delightful manner brought in a few friends, including ladies, to listen to the Glee Club's songs and join in brief but hearty speeches expressive of good fellowship, in which the most prominent were remarks from Mayor Speer and Governor Shafroth.

It has been impossible to mention in this brief sketch the names of many in various cities to whom the Worcester Board of Trade owes and would gladly express a debt of gratitude for acts of kindness extended to its members during this memorable journey, even as it has been needful to omit many of the pleasurable details of a trip which was so free, for the most part, from unavoidable minor vexations of long journeys. A word of heartiest appreciation is due Mr. J. F. Healy and his courteous and capable representative, Mr. J. E. Goggin, for the admirable manner in which the business side of this excursion was handled from first to last. As the conclusion of the whole matter, we believe it may safely be said that as an effort of representatives of Worcester to see a large portion of our country which is destined to have increasing trade relationships with us, as an opportunity for cultivating delightful personal relations with officers and members of commercial bodies in other cities, and as an attempt to bring the knowledge of our city's life and products and possibilities into wider notice, this excursion of August, 1909, must be regarded as a marked success, worthy of imitation by other bodies interested in the aims which led to this effort.

THE INDIANS AT CLOSE RANGE

Worcester Day at Seattle

A Delightful Social Function with Significant Speeches

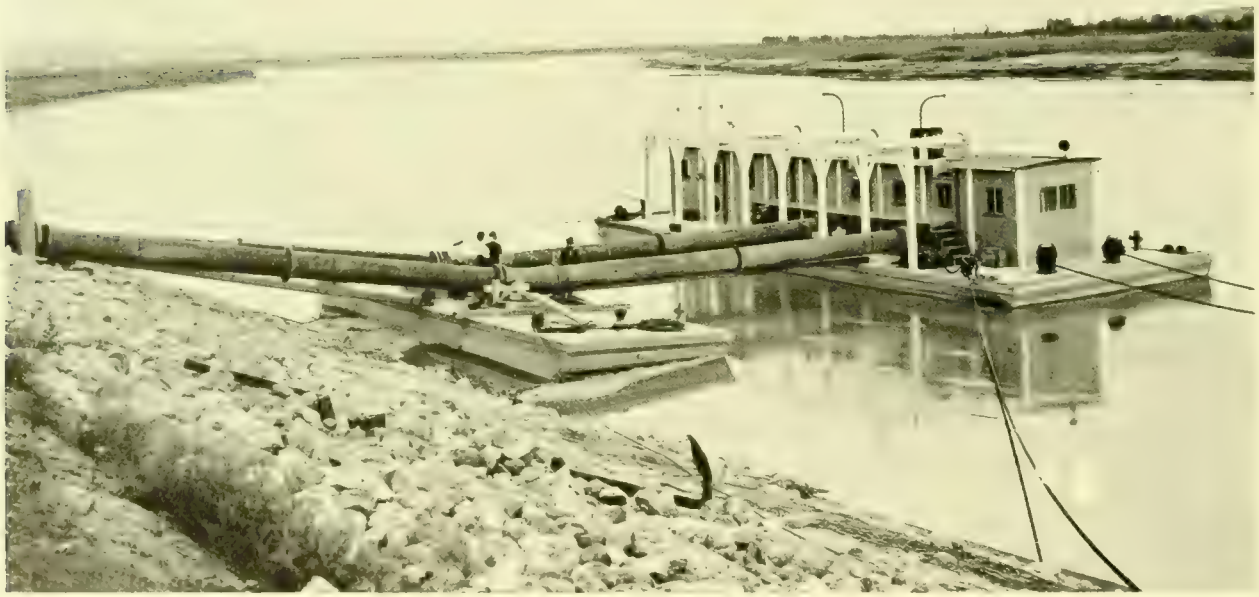
NOT only did Worcester attain the distinction of sending to the Alaska-Yukon-Pacific Exposition an organized excursion traveling the greatest distance covered by any such party, but she was also honored by the official designation of Thursday, Aug. 12, as "Worcester Day," being the only eastern city to receive such recognition. Owing to a misunderstanding as to this date, and the failure of an important letter from our office to reach its Seattle destination, there was an incompleteness in the preliminary arrangements which would have seriously interfered with the success of the celebration, had it not been for the untiring efforts at the eleventh hour of Mr. John J. Sullivan and Mrs. Peter Bettinger of the New England Club, and some of their associates. To them is due the credit for the preparation and issuance of invitations and other arrangements for the highly successful gathering at the Puritan Inn on the Exposition grounds, Thursday evening at six o'clock, where nearly two hundred sat down together at a collation. In this number were included the Glee Club and most of the Worcester delegation, together with many members of the New England Society and invited guests from the state and city, the Exposition directorate and the commercial bodies of Seattle, to whom the Worcester Board of Trade, as the hosts on this occasion, desired to offer some recognition of the courtesies accorded their representatives.

Between the courses the Glee Club was ready with interludes of song, which were highly appreciated both by the banqueters and the regular patrons of the Inn, who had been transferred to the broad verandas and shaded lawns. A special favorite was the following original contribution for the day, written by Mr. John T. Russell of the Glee Club, and sung with gusto to the tune of "Marching Through Georgia":

We come from good old Worcester town, a city far away,
We're bound to be her loyal sons, whatever you may say,
We'll sing her praises loud and strong and spread her fame each day
At the A. Y. P. Exposition.

Chorus:

Hurrah, Hurrah, we're from old Worcester town,
Hurrah, Hurrah, the city of renown.



IRRIGATION PLANT, WILLISTON, N. D.

The place will ring, where'er we sing we'll bring the rafters down
At the A. Y. P. Exposition.

Our city's famous for her trades and many works of art,
The varied manufactures that are made within "The Heart,"
She's also noted for the homes from which we had to part
For the A. Y. P. Exposition.

We've found a royal welcome waiting all along the line;
The jolly rides and banquetings have certainly been fine,
Fond memories around our hearts forever will entwine
Of the A. Y. P. Exposition.

Ex-president Dummitt of the New England Club called the guests to order, and introduced as the toastmaster of the occasion Mr. John F. Murphy, a former Holy Cross boy, who is at present prosecuting attorney for the city of Seattle and King County.

The genial countenance and fine personal presence of Seattle's chief executive was warmly greeted as he rose to speak, and gave utterance to the following sentiments:

Mr. Chairman, ladies and gentlemen of Worcester, and of the New England Club of this city: It is a long way from Cape Cod to Cape Flattery; it is a long way from Worcester to Seattle; but you have found your way here, and you are meeting in this far distant city the friends and neighbors you knew so well in your New England home.

It is certainly an honor to be present on this occasion and speak a word of greeting to you who come from the grand old Commonwealth of Massachusetts. We are a young city in this Northwestern country. As I was saying to some of the people from Worcester, we are now in our thirty-eighth year of organized municipal government, and have in that time made a progress which must seem remarkable to those of the older cities of our eastern commonwealths. The West is a land of enterprise and push, it is the home of opportunity, its cities are splendid with promise; and permit me to say, it is the people of New England who are making our grandest citizens. It is truly said that there is no friend like an old friend and no greeting like his welcome. As old friends and new then, I take pleasure on behalf of the city of Seattle of welcoming you to our midst.

At this point Mr. Murphy read the following telegram from His Excellency Gov. M. E. Hay, whose absence all deeply regretted:

Olympia, Wash.,
Aug. 11, 1909.

J. J. Sullivan, chairman,
Puritan Inn, A. Y. P. Exposition, Seattle, Wash.

Your invitation found on my desk upon my return. Too late now to accept on account of previous engagement. I feel that the closer this government is kept to the traditions, landmarks and teachings of our pilgrim fathers the safer is this nation. Kindly accept thanks of Mrs. Hay and myself for invitation.

M. E. HAY.

The next speaker was presented as a representative of the A. Y. P. Exposition as its Vice-president, and also as delegated to extend greetings from the Seattle Chamber of Commerce, ex-Governor John H. McGraw, who spoke as follows:

Ladies and gentlemen, particularly the ladies and gentlemen from Worcester: It is my pleasure and honor to say a brief word of greeting and welcome on behalf of the Seattle Chamber of Commerce as well as on my own behalf, and on behalf of the Alaska Yukon Exposition. We are glad indeed that you are with us. We believe your presence here will be of advantage to you and of advantage to us; we therefore bid you a most cordial welcome, and we extend to you an invitation to remain with us as long as you can. I presume, however, that some of you at least will return to Worcester, and to such I would say that when in your own city or in the region of your city, you find a young man dissatisfied with the opportunity confronting him there and bent upon changing his location, do not for a single moment hesitate to advise him to come out and try his fortune in our marvelous Northwest. Given a sound mind in a sound body, honesty, energy and industry, and every door of opportunity swings open to the young man here.

WILLIAMS CAÑON, MANITOU SPRINGS

I believe that those of you who have never before seen the region this side of the Mississippi, and particularly that portion of it this side of the Rocky Mountains, will agree with me when I say they have never before been fully out-of-doors in their own country.

I am sorry you cannot continue your journey to Alaska and see that marvelous country to the north of us, but whether you see Alaska or not, I want to congratulate you on having seen this part of our great country, from which you will carry home enlarged ideas of the vastness and greatness of our country, and become if possible better and nobler citizens of this magnificent and beloved country.

An address of peculiar interest followed from one who was formerly an honored resident of our city, Judge Joseph Shippen:

Ladies and gentlemen of the beautiful and enterprising city of Worcester and the grand old Bay State:

In the absence of the President of the Commercial Club of Seattle, the eloquent Mr. Revelle, it is my pleasure on behalf of that Club to give you its welcome to Seattle.

We are glad to see the New England Club rejoicing with this Board of Trade from Worcester; and it gives me especial pleasure to address you in welcome, for I knew Worcester of fifty years ago. My brother was a clergyman in that city, succeeding Dr. Everett Hale, as pastor of the Unitarian Church there. I have fished in its lakes, and have sung in its Glee Club. I had the pleasure of teaching in the old high school on the side hill of Worcester. Worcester of to-day has grown out of my knowledge; but I recall yet some of the grand names of former years, such as Thomas and Levi Lincoln. I recall also the honored name of George Frisbie Hoar, and Worcester has now honored herself by honoring his memory with a statue. I do not intend to dwell on past recollections, but I remember your valleys and your hills, and the name and fame of Worcester is justly spread through all the land. It was once said at a time when the country was distraught in a great crisis that we would settle the matter by leaving New England out; to which Henry Ward Beecher made his famous answer that "you might as well try to leave the cold out of New England." We are one great country and for that reason we are glad to have you come and see what we are doing in this far-off portion of the continent.

Rev. Francis J. Van Horn, pastor of the Plymouth Congregational Church in Seattle, being called upon, responded briefly, including in his remarks the following passages:

I have been side-stepping one question for the last three years, and have become exceedingly agile in getting away from that question: "Well, how does Seattle compare with Worcester; do you like it better in the West?" I am going to answer that question by saying that in some respects Seattle has a little the advantage from my viewpoint. "Some men achieve greatness, some have greatness thrust upon them, and some are from New England." I was not born in New England. I only achieved that greatness when there came to me the honor to be pastor of the First Church of Worcester with two centuries of history behind it, commonly known as the Old South; and when I came to the new West to work, there came to me the conviction which has grown during the past three years, that however we may laugh at the habits of New England, if we were to take out of the church life of this city, and out of the moral force of this city, the best things of New England, including the strict conscientiousness of New England—if we took those things out we should be poor indeed. I rejoice that I was permitted to live in New England, I rejoice in its memories and give thanks for what New England has been and done for the people of this country.

The last speaker in behalf of our Seattle friends was Mr. John J. Sullivan, who responded with eloquence and deep feeling to the sentiment, "The Tie that Binds."

Mr. Toastmaster, Fellow Townsmen of Worcester, Honored Guests, Ladies and Gentlemen:

It is like water in a dry and thirsty land to see the faces of men and women we knew and respected in the old home city: men and women who come to us directly from our friends; men who are our friends; men and women who are identified with the city we delight to call by the sweet and beautiful name of home.

For, after all, ladies and gentlemen, I think, between ourselves, we may admit that out here we of the coast still feel like pioneers. We still feel like a new people in a new land and feel bound yet by ties of love and affection to the city of our birth and the homes of our fathers.

No crisis in the history of our country has ever found the men of Worcester reluctant to respond. No call to arms had to be sounded twice in the streets of our historic city. And, Mr. Toastmaster, not only in the stirring times of war has our city distinguished itself for patriotism and enthusiasm, but also in the quieter times of peace she has set forth to all the world an example of civic righteousness and example of good government.

And so, my fellow townsmen, when you return to your fair city and have said all the kind things about Seattle you have thought of, convey to our friends at home this message: That there is within our hearts still the tie that binds us to the Heart of the Commonwealth; that for some of us there is a loving parent back there still praying for us ere he rests his head to sleep; and for others a fond mother, resting beneath the hills of New Worcester, the thoughts of whom bring back fond recollections of our childhood days. And so there still remains the tie that binds; and as our forefathers thought of their homes across the waters of the Atlantic, so we, their children on the Pacific coast, think of our old home far across the rugged peaks of the Rockies, and the tossing cornfields of the great valley of the Mississippi, beyond to the sacred hills of dear old New England.

In bringing the feast of oratory to a close, Mr. Murphy called upon the Secretary of the Worcester Board of Trade to respond to the various greetings. Mr. Sewall's remarks, in part, were as follows:

Mr. Toastmaster, and friends from Seattle and from Worcester: A large task is laid upon me, to acknowledge briefly the gratitude and appreciation which the members of our party feel in largest measure for all these greetings and courtesies which have been coming our way since we first stepped off our train at your Union Station. We are especially grateful for the efforts of some of our friends upon this Committee of Arrangements who have made it possible for us to be the hosts on this occasion, and yet be relieved of the care for preliminary arrangements. It is a pleasure thus to be able to greet these friends of the New England society, as well as these representatives of the management of this great exposition, and of the commercial organizations of this city, and to listen to the cordial words of your Mayor and the Governor of this State.

In spite of the lateness of the hour, I feel that I must speak one word for the city which has called forth such hearty words of affection from you who dwell here, and which is dear to us who have traveled so far from it. We appreciate the greatness of the achievements of those who are building these great cities of the Northwest; but we are not in the least ashamed of Worcester; of what it has been, is now, and is destined to be in coming days. We take sincere satisfaction in being able to contribute so much capital and so many efficient workers for a city like this, and yet have plenty left to maintain our own progress and prosperity. I wish I had time to tell you of the great variety of things which we are making, and which you are using daily in your homes and offices; but we have brought you one hundred and one samples of the best product which we produce in Worcester—our men and women. Some people may think that Worcester is a bit slow and unprogressive; and she certainly has never suffered from over-boastfulness about her excellencies; but if any other city has gathered together as large a body of excursionists as this, and sent them as far as we have come, they have not been speedy enough to pass us on our route, unless it was when we were asleep. We are glad that we are here; and we are glad that we are going back to Worcester with the memories of all the kindnesses we have been everywhere receiving on this trip. If we find any discontented people in Worcester we shall not advise them to emigrate to this or any other city, but to take hold with us in appreciation of the privileges that lie about us at home, and help us in our efforts to make Worcester a city where no one shall be discontented with his surroundings or prospects.

Once more we thank you.

THE "WORCESTER SPECIAL" TRAIN IN CASCADE MOUNTAINS

A Problem in Public Welfare

By U. Waldo Cutler

The streets of our city are freed from the nuisance of the open saloon, we dare hope for many years to come. The fight which drove it out was a brave one, creditable to the public-spirited participants, whether by voice, financial support, or vote. This worthy effort demolished the old, untidy, unwholesome structure; what are we building up to take its place?

The desire for social relaxation at the close of the day's work is perfectly normal and right. A large number of people, men and boys particularly, cannot possibly find or make this reasonable social life in the lodging-house or in such a home as falls to their lot. The only possible thing for them to do after supper is to go out somewhere. In mild weather I suppose a lonely but healthy man can loaf about the streets till bed time, but the police do not wish him there, and in cold or storm such exhilarating social life as street corners afford is an impossibility. The Worcester Boys' Club is a resource for the boys of its neighborhood; Endicott House also has in view certain limited social needs; and, besides, there is the solemn calm of the Public Library. The Y. M. C. A. does not close its doors at so circumspect an hour as does the library, but it will give cold welcome to the poorly-clad, perhaps uncouth toilers who make up such a large proportion of our citizenship, especially if the annual fee is unpaid, and these are not the kind of folk sought or expected at present by that ambitious club. At the cheap restaurant they are expected to move on as soon as the bill is paid. Even the church doors are closed except for an hour or two on one evening a week, when the "social meeting" is in progress, and even if these people were to force their way in, the churches would not know how to adapt themselves to their needs. Except for these few quite proper and edifying resorts, there seems to be no provision whatever for the social interests of the masses of hand-workers that crowd our sidewalks at the opening and closing hours of the mills and shops.

What will you very respectable citizens, comfortably slippered at your smug fireside, have these lonely fellows do, while you are enjoying your peaceful evening in your well-appointed home? Books are an added resource for you, while your family are perhaps away at the bridge party. But an untrained mind, lodged in a body wearied by the monotony of a day's routine of toil, cannot apply itself profitably or pleasantly to literature.

As a further consideration, the preachers tell us there is something sacramental in eating and drinking socially. At any rate, there is something evolutional in it, and our psychic development began with the quest for food. In hours of relaxation many men almost instinctively come together with knees under a table, and in our philanthropic endeavors we must take into account this instinct. Doing away with the saloon is only the negative part of the process. Without something in its place, the saloon in all its baseness will return, or else seven other spirits worse than the first will take possession of the empty, swept and garnished quarters.

At present there is no real substitute for the saloon, and no real effort, so far as my observation extends, to find or invent one. The rich, the educated, can provide for their social needs according to taste, but have we no privilege or responsibility with reference to those others whose social salvation is very closely bound up with our welfare? Has philanthropy ever fairly tried to provide wholesome meeting-places for men, where for a nickel or two an evening's brightness and warmth and cheerful companionship and perhaps a little suitable nourishment can be bought? To adapt such a resort to the needs of any given neighborhood would require careful study of local conditions, but until we have attempted something along this line of constructive temperance reform we need not fold our hands quite so complacently, as we contemplate the "famous victory" which expelled the saloon.

It is heartless to rejoice greatly over the downfall of the saloon till we are ready for the harder task of social upbuilding. It is almost ridiculous to hold a big banquet at a dollar a plate in honor of the closing up of the only place where the man with only his nickel to spend can join with his fellows in social ways. Money and argument flowed freely for the necessary work of pulling down the old. Is there no money, no energy, no inventive thought left for the absolutely essential task of planning and raising the new structure?

Worcester is not greatly concerned to carry its temperance reform forward upon constructive lines, and as a consequence of this apathy we may get all the saloon reëstablished as a social power, unhealthful, immoral, degrading though it is. For all we care, the twenty-five thousand, or more, untrained workmen of our city may continue to walk the streets, loaf in the parks, stand aimlessly along the curbstones,—twenty-five thousand "hands," whose work or whose ambition or whose pocketbook furnishes no incentive to a more profitable use of leisure hours, twenty-five thousand promising candidates for saloon honors in "wet" years, twenty-five thousand opportunities unused for constructive philanthropy. No proper social resort is really open to them, nobody but the saloon-keeper seeks them, few who call themselves lovers of their fellowmen are giving any intelligent study to this matter of wholesome environment for the leisure of those who have no real home or worse than none. There is no institution or movement that at all fills the void that, harmfully, was occupied by the saloon; that, helpfully, is occupied in England by the British Workman's House.

Many will ask such people "why not brush up your coat, why not give up your dirty street-corner smoking, why not go to the evening school, why not till your home garden, why not save your nickels and start a savings-bank account, as others have done, and so have earned for themselves comfort and cheer and social enjoyment of a truer sort?" But given no money but day's wages, no ambition beyond the current job, no prestige of family or friendship, no exhilaration and overflow of energy from abundant food and zestful associations, there is little incentive toward self-improvement.

And yet, in self-defense, society must regard the needs of the unaspiring, the thriftless, the discouraged, the diseased in body, mind, or morals, the foreigners uninstructed in our speech and our ideals, and find some way to put new life into them. Perhaps there is need in Worcester of some agency as yet unknown to us, to meet this rather new occasion, perhaps some system of neighborhood centers, such as Rochester has so wisely established, and are finding favor elsewhere also in connection with the fuller utilization of the school houses. It was said at a recent charities conference that the most important of all our social problems is that of public recreation. After referring to this fact, Mr. E. J. Ward, in an interesting article in a recent number of the "Survey," goes on to say, "Except for the special needs of

little children, every argument which holds for supplying public outdoor recreation for use in the daytime, applies with greater force to the need of supplying wholesome recreation facilities for evening use indoors." He recognizes the social centres, like those of Rochester, of which he is the supervisor, as a development of the "little red school house back home." The old-time district school house, unpopular as it has grown of late, was indeed a true rallying place for all neighborly interests, —social, educational, religious, philanthropic, political. The church was often too far away, it was too large and cold and awesome, too lacking in convenience, to serve as a gathering place for all the less formal, week-day purposes. In the corner school house were held the singing school, the spelling match, the Christmas festival (if any was allowed), the religious or civic revival meeting,—all sorts of gatherings for promoting local welfare or happiness. It served as just such a social centre as we should like to see started in many neighborhoods of our city, where, of an evening, light, warmth, friendly cheer, counsel, instruction, recreation for body and mind might be had by all classes, according to local need. Such a resort could in no way be compared to the saloon in its fundamental purpose or spirit, but, rightly started and tactfully and intelligently carried on, it might serve as a most wholesome substitute for it in many sections, and bring new life and courage and ambition into neglected lives. Such a movement should be made to develop itself rather spontaneously out of local conditions,—the local betterment society, the esprit-de-corps of the local teaching force, the neighborhood mothers' meeting or sewing-circle or grange, or else should at once be made to attach itself to neighborhood interests, and so to find its support as largely as possible from newly discovered local talent. It must be democratic in its spirit, recognizing mutual needs, common interests. It cannot be superimposed by benevolently disposed people in starched shirts, who condescend to administer moral or intellectual remedies for what they conceive to be social disorders; it cannot be worked by political aspirants, ambitious for self-advancement. Courses of lectures, "improving" clubs will follow in time—may even be effective now in favored sections, but there is good chance of failure in any movement directly from without toward "improvement." People of the class here considered do not yet greatly wish to be "improved." They want incentive for self-expression, for relaxation through pleasant activity of body and mind; they want social life among themselves, and such opportunities as, tactfully guided, sympathetically planned, inconspicuously restrained from harmful ways, will incidentally become highly "improving." The place to start from is where the man is now. Philanthropy must find the man where the saloon-keeper seeks him, and set him to climbing up for himself. It seems to us almost cruel when we think of it—it must seem almost maddening to the unaroused, unschooled, resourceless thousands, when they realize that the only means of social enjoyment they as yet know how to use has been removed, while no effort is made to put anything in its place. The school house belongs to all the people. Why not teach all the people the way to enter into their privilege? Such a social centre would give idlers some decent place to go to, weak wills the prop of heightened purpose, unaroused faculties a quickening electric shock, vacant minds something to think about, and so set a back-fire to the conflagration of evil, ever ready to reduce society to ashes, while at the same time it would quietly introduce a new incentive to try for a better to-morrow.

"The War as I Saw it"

The Confessions of a Would-be Soldier Who is Still Unreconstructed and Firmly Convinced that Boston Has Not Yet Been Taken

By Roger Geer

The recent war manœuvres attracted great attention inside, outside and alongside Massachusetts before they started, while they were in progress, and since they were brought to a more or less inglorious conclusion.

The general excitement over the question when a soldier was hypothetically dead or merely half shot has been materially augmented since the close of hostilities by two causes: one the very positive statement that General Bliss won and the other equally positive statement that he didn't. To this somewhat difficult question to settle satisfactorily to the perfect delight of all the parties concerned might be added another topic which is still being jointly debated more or less angrily throughout central Massachusetts, to wit, namely: Will or will not the war game be repeated another year, and if so will the troops trample down the corn-fields of Worcester County instead of those possessed by the hardy yeomanry of Puritan land?

Far be it from me to precipitate any controversy as to who did and who did not win the battles of Bryantville and Hanover Four Corners. I do not desire to set myself up as a warrior bold. On the contrary, I am what is known as a peace-at-any-price man. I have one qualification, however, that some of those at least who have most heatedly argued that Boston was taken do not possess—I was there. I saw all the engagements. I shared all the hardships. I conversed with the officers and the men. I killed as many of the enemy as they did of me. And I live to tell the tale.

It may be said that I am prejudiced in favor of the Massachusetts militia against the invaders and if it is so said, I deny it. I am a partisan to the extent that I believe there is no finer body of National Guardsmen anywhere than our own body of volunteer soldiery, and among them all there are no better men than the men of Worcester, whether in the war of 1909 or the war of 1861. If it had been true that our boys had been outgeneraled, whipped, annihilated or even driven from their position before Boston, all the arguments that Rufus Choate himself could put up wouldn't have convinced the public that General Pew won.

Such a result would have been a Gibraltar against which the partisans of the Massachusetts soldiers would have dashed their eloquence in vain. That the city of Boston was being defended by a strong, well-organized force of men greater than that possessed by the enemy confronting it, and that it was in a position from which it would have been difficult, if not impossible, to dislodge it when the hostilities came to an end, is as certain as anything can be. So, at least, I saw it.

That the militia, the citizen soldiers, of the old Bay State, in these manœuvres, again proved themselves brave, resourceful, tireless, and perfectly capable of defending the capital of the Commonwealth, is my sole contention. And I base it on these facts:

A war game entails all the sufferings of real war, except death, serious injuries and actual famine. The men seldom get a stomach full of food. The rations they do get are not appetizing to the ordinary man who is accustomed to good food at home. Hardtack and beef made as pleasing to the appetite as the company cooks can

make them are not just what an ordinary mortal likes, and a week of them is quite enough at a time. And sometimes these rations don't come regularly. Mixed with marches in rain, mud and dust of twenty miles and more a day, crawling through wet underbrush and swamps and getting sometimes one meal from daylight to dark is not just what a man would choose in his normal senses.

The men slept in shelter tents, barely long enough to cover the head and feet of men of usual height. Those who are extra tall had the pleasure of seeing, or rather feeling, their feet sticking out the end. Shelter tents are all right in good weather, but with two days of solid rain and then one shower in eight days, an average is created that is anything but good. The men bunked two rainy nights following wet days with rubber blankets spread on the ground and rolled in a woolen blanket, which was wet, with their clothes on. There was no sun Monday and Tuesday to dry them out. Friday night there was a thunder-shower. In many cases the water ran in brooks all around the tents and frequently covered the place supposed to be the bed.

Still the National Guard is looked upon by the ordinary citizen as a lot of "tin soldiers," with no real reason for existence. There is another side, however. Not only do the men serve for $2 a day, with their food charged from that, but what little is due them, between $2 and $3 for the week, they usually turn over to their companies. All during the year it costs money to be a National Guardsman. Small amounts go this way and that, and especially severe is the tax upon commissioned officers.

The National Guard is recognized by the regular army as an important auxiliary. As such it gives men good military training and makes them good shots with the rifle. It instructs them thoroughly in the school of the soldier, too. Still, taking everything into consideration, the militiaman pays high for the privilege of being ready to be shot to death in advance of his fellow citizens. His patriotism comes high, but is seldom appreciated.

On Saturday, the 14th of August, 1909, General Bliss and his 9000 troops, comprising the first and second companies Signal Corps, 22d Regiment of Engineers, first, second and third batteries field artillery, 7th Regiment of infantry and 14th Regiment of infantry, New York National Guard; New Jersey Troop of Cavalry; one battery, field artillery, one troop of cavalry and two regiments of infantry from Connecticut National Guard, and two regiments of colored infantry from District of Columbia, made landings near New Bedford and prepared to meet General Pew's forces. These troops were augmented by four troops of the famous 10th Colored Cavalry under Maj. Charles H. Grierson.

One of the transports conveying the red army was seven hours late in landing at New Bedford, and the troops were slow in moving out of that city. General Bliss, therefore, was unable to make the point he had planned. This fact was brought to the attention of Major-general Wood and his staff of umpires and they decided to grant General Bliss eight hours' leeway to take his positions. This was done without consultation with General Pew, and at five o'clock in the afternoon he was informed that the war game was to be delayed eight hours.

Under the rules of the game each army might move toward each other as early as midnight Saturday, but after they came in contact with each other no advance was to be made or positions changed except between the hours of 5 a.m. and 1 p.m.

In this case General Pew had all his orders transmitted to move against the red army promptly at midnight, and his objective was to have been the reds' base of supplies at Acushnet.

At 9.30 o'clock Sunday morning General Bliss' base of supplies at Acushnet was guarded by twenty-five men, and had the war game started at midnight, as planned, General Pew would have rushed a sufficient force there in automobiles and taken it, ending the game right then and there, as it is conceded that no army can live without its stomach.

The delay of eight hours compelled General Pew to wait until eight o'clock before making any hostile move, and did not allow time to reach Acushnet.

The most serious aspect of the change was that it necessitated General Pew's completely redrafting his orders and altering all his plans. He was forced to develop a new plan of defense instantly, while General Bliss could follow out his plans as previously arranged.

Thus the blue army, stationed across a twenty-mile front from Taunton to Plymouth was only able to make a dash to Taunton River and blow up the bridges on that stream. The front of the blue army at eight o'clock Sunday morning extended northeast from Taunton through Bridgewater, West Bridgewater, Halifax, Middleboro and Plymouth. Outposts were established along that front so that it was impossible for any army to advance undetected. The red army here had an advantage, as General Bliss could advance in a solid body, while General Pew had to spread his forces along a ten-mile front. Being on the defensive he had to protect every avenue, and when the proper time came mobilize his forces for a battle to settle supremacy. This meant long hikes daily for the blue forces, as the men were obliged to march miles for outpost duty and other miles back to their camps.

Saturday General Pew's headquarters were at Osceola Pines, about midway between Halifax and Bridgewater. General Bliss' were at New Bedford, and his base at Acushnet, eight miles from New Bedford, with a small guard until Sunday morning.

Sunday General Bliss advanced in one body from New Bedford to Acushnet, and the next day to the vicinity of Lakeside Park, moving his base there because of better water facilities. Meanwhile, General Pew kept sending his outposts farther down toward the red army, and at Middleboro Tuesday the armies came into touch with each other. Monday night had been a rainy one and Tuesday saw a fierce northeast storm, and in this the men were drenched, but there was no postponement on account of the weather.

Early Tuesday morning red and blue soldiers were captured and recaptured at Middleboro, as the town was occupied by men of both armies. A battle occurred at Middleboro green about ten o'clock, preceded by skirmishes between advance guards and outposts, in which the blues were outnumbered and driven back. In the battle the 6th Regiment had one battalion of men, and against it were pitted two battalions of infantry and three troops of the 10th Cavalry as infantry. Though the blue force had a good position at the bridge it was driven back to cover of the woods, and in a double flank attack the battalion was surrounded and driven back a half mile. In this engagement the blues lost 155 men, captured 35; reds lost 106 men, captured 53, including the skirmishes. Twenty-five of the thirty-five men the blue

army captured were members of the band of the 8th Regiment, taken with seven guards at the camp vacated by the regiment early in the day. Getting the band and guards the reds lost about twelve men.

About noon that day another battle occurred at Porter's farm, where the blues had a position on the crown of a hill, controlling the advance of the red army on either side. The blue force on the hill included a battalion of the 8th Regiment and B Battery, field artillery supported later by parts of the 6th Regiment and two machine guns.

The red army was approaching without flankers and suddenly found a battalion of infantry between a crossfire from the battery, with the infantry supports firing point blank. The reds' advance was stopped temporarily, and the invading army retreated to the base of the hill. The reds lost here 160 men and 3 officers, the blues 175 men and 4 officers.

This stand of General Pew's, though not strong, was enough to convince General Bliss, who had his entire force in Middleboro, that General Pew would give battle if necessary. He accordingly withdrew his forces into Middleboro, and Wednesday advanced along the road to Halifax, crossing the Nemasket River and also the Minnetuxet.

At Halifax the blues made a stand with the coast artillery as infantry, parts of the 1st and 2d Corps of Cadets, B Battery and two machine guns. The blues drove the reds back a half mile at this point with a loss of 150 men and 2 officers, while the blue army lost only 22 men. Another battle at Sherwood farm, on the Plympton road, cost the red army 65 men and 1 officer, and the blue army but 11 men. At the same time as the battle at Grover's Corner, the blues encountered a regiment of red infantry at Monponsett Pond, and lost one section of C Battery. The 9th Regiment lost 25 men here, while the reds lost 75.

This ended the fighting for Wednesday, and Thursday General Bliss made his great effort to get around General Pew and off to Boston. Starting from the vicinity of Halifax, where he camped the day before, he divided his strength, sending a Connecticut regiment, some District of Columbia troops and a New York battery to Bryantville to attract General Pew's attention there, while he and his main body circuited Monponsett Pond and made straight away for Boston by way of Hanover Four Corners and Hanover Heights along the main road.

General Pew deployed two battalions of the 6th Regiment and B Battery, and two machine guns at Bryantville and gave the impression that he had his main strength there. In the battle that resulted the reds lost 1850 men, while the blues lost but 95.

Word reached the war correspondents at Bryantville that General Bliss had only made a feint at Bryantville to attract General Pew's attention there, while his main body slipped around the lakes to Boston. This sounded reasonable, and immediately the telephone office was filled with Boston and other newspapermen notifying their officers that General Bliss had won the war game and was on his way to Boston without interference.

On this critical day General Pew's force was weakened by a decision of the umpires, ruling out the 5th and 8th regiments for going into camp fifteen minutes late the day before. The regiments were ordered not to move until 6.30 o'clock, one hour and a half after the usual time for beginning manœuvres.

This put Pew at a serious disadvantage, but at 6.30 o'clock he started his men for Hanover Four Corners and Hanover Heights to control the main highway to Boston. This fact was not known to newspaper men, so the natural conclusion was that General Bliss had outgeneraled his opponent.

Suddenly, and without creating suspicion, General Pew withdrew all his forces from Bryantville, except one battalion of the 6th Regiment, which was left to give the appearaance of still continuing the fight. He transferred his forces to Hanover Four Corners and Hanover Heights, where he hurled his entire strength against General Bliss, losing 150 men at the Four Corners to the reds' 100.

By this time General Bliss' main body had come up and confronted General Pew's force at Hanover Heights, where he had practically his entire strength mobilized. His entire infantry, cavalry and artillery were assembled along the side of the main road and at the top of a hill, and across the main road to Boston, extending to the North River, which is deep and impassable, with no bridges for fifteen miles.

General Bliss attempted to break through General Pew's line by a cavalry and infantry charge at 12.50 o'clock, and for twenty minutes pounded the line. He was unable to make headway, and at 1.10 o'clock the umpires ruled that the blue army had held its position.

General Bliss' entire army was now at Hanover, and General Bliss was at Hanover, too, while General Pew's entire strength faced him along the only road open to the Hub. On General Bliss' right, within a quarter of a mile, was the North River. He had to fight or run, and his force was smaller than General Pew's, who had the advantage of position. In the last engagement at the heights General Bliss lost seven troops of cavalry, which charged across an open field against a line of infantry in the woods. His cavalry was subjected to fierce artillery and machine gun fire, while his infantry was practically annihilated by the covered blue infantry. The red army lost 350 cavalry and 700 infantry at this point with 15 officers, while the blues lost but 250 men.

General Bliss was a half mile from the engagement at Hanover Heights and at one o'clock gave out a statement to the newspaper men at Hanover Centre on how he won. This statement was sent broadcast over the United States, giving the impression that he actually did win.

At that time General Bliss knew that the game was ended, while General Pew was counting on the closing engagements Friday. Until five o'clock that afternoon General Pew did not know the game was finished and would not give out an interview until that hour.

With his position and strength General Pew's friends and the friends of the citizen soldiers generally contend that General Bliss would never have got by General Pew's defense. Bliss' evident course would have been to fall back to Hanover Centre, cross the North River on the east, and take the road to Hingham, a loss of nearly ten miles. General Pew could have headed him off all along the route and pressed him with terrific losses to the coast.

At the close of the war the reds had lost 21 officers, 3561 men and 53 captured. The blue army lost in all only 5 officers, 893 men and 75 captured.

General Bliss had 9000 men at the beginning of the game and General Pew 7000. The red army's full strength at the end of the game was 5370 against General Pew's 6027, with the blue army in possession of the best position.

That is the history of the war of 1909 as I saw it.

The Worcester Music Festival

The Worcester Musical Festival for 1909 promises to be as interesting and enjoyable as any of its predecessors. It will open Wednesday evening, Sept. 29, and will close Friday evening, Oct. 1. During this time there will be five concerts, two afternoon and three evening, and the programmes all are calculated to appeal to music lovers and the cultured classes generally. The fifth concert, Friday evening, bringing the festival to a close, will be rendered notable by the presence of a distinguished group of singers, who will be heard in a programme that has been carefully selected from among the most beautiful works of Weber, Saint-Saëns, Verdi, Tschaikowsky, Mozart, Massenet and Elgar.

The Worcester Musical Festival has, of course, for many years been noted for its chorus work quite as much as for the solo artists who appear from season to season. This year the chorus will be heard in an old but always welcome masterpiece, Mendelssohn's "Elijah." It is exceedingly appropriate that this work should be produced this year, it being the centennial of Mendelssohn's birth. Then, too, as the programme so well remarks, with the single exception of Handel's "The Messiah," there has not been another oratorio which has so successfully withstood the test of time.

The trend toward the reverential and the sublime, indicated so surely in the work dedicated to the great prophet, statesman and singer of the ancient world, with which the programme opens, permeates the whole choral effort that follows. The offerings are Liszt's "Missa Solennis" and Berlioz's "Te Deum." Abbe Liszt wrote many beautiful things, but perhaps none among them all voiced his better self more truly than "Missa Solennis." It has the spiritual quality necessary to express the holy office and its lofty and inspiring theme seems to lift composer, singers and listeners alike. Berlioz's "Te Deum" is no more familiar to music lovers, but its imaginative power and appeal can be relied upon to rouse enthusiasm. Neither of these works has been frequently given in this country, and their presentation here should attract critics from many cities as well as the great music-loving public.

The artists for 1909 include Mrs. Corinne Rider-Kelsey, soprano, who enjoys the friendship of many Worcester people, and who is perhaps to be more warmly welcomed since her recent Covent Garden success than ever before. She will be heard in "Elijah" and in the artists' night programme. Great interest is manifested also in Mlle. Jeanne Gerville-Reache, the leading contralto of this year's festival. The press has prepared the public for a singer of the first rank, and the festival management declare that there will be no disappointment when her voice is heard. Mlle. Gerville-Reache is a French woman, and for two years has been the leading contralto of the Manhattan Grand Opera Company. She has a dramatic presence, and her success in the opera of "Samson and Delilah" indicates that her future in the operatic world is to be a most brilliant one. Worcester people are awaiting with a great deal of interest the appearance of this gifted songstress.

Mr. Oscar Seagle of Paris, a baritone and a pupil of Jean DeReszke, will be heard on Wednesday evening at the opening concert when he sings the part of "Elijah," coming to this country particularly for that purpose. The claim is made that Mr. Seagle is the greatest exponent of this majestic figure on the stage to-day.

Mr. Reed Miller will sing the tenor part in "Elijah." This is his first appearance in Worcester, but he comes highly recommended, as does Miss Christine Miller of Pittsburg, contralto, who will be heard in the same oratorio.

Mr. Frederick Weld, who will be heard in Liszt's "Missa Solennis," has a baritone voice of remarkable range, its compass being sufficient to enable him to essay a part which is written for a bass singer. The management state that because of his exceptional technique, his excellent enunciation, and his remarkable dramatic force, he was singled out for this important solo part of the famous mass.

College men will be interested in the fact that Mr. George Harris, Jr., who is one of the tenors of the festival this year, is the son of President Harris of Amherst College. Mr. Harris is but twenty-five, and he makes his American debut at this festival. He is said to be a lyric tenor of much more than usual ability and considerable dramatic expression.

Miss Margaret Keyes, contralto, and Miss Laura Combs, soprano, are both of them widely known as oratorio singers of rare ability. Tina Lerner is to be the attraction from an instrumental standpoint, and the assistant conductor of the festival will be Mr. Gustav Strube, a violinist and conductor of the first magnitude, who has had ten years' experience in charge of the "Pop" concerts, Boston. Mr. Strube composed a violin concerto, which was played at the Worcester Festival in 1897, and also composed two symphonic poems which are to be played at the festival this year.

In addition to the regular concert programme there are to be the usual rehearsals. The first public rehearsal will be Monday evening, Sept. 27, by the chorus. Tuesday morning and afternoon there will be orchestra rehearsals and Tuesday evening the chorus will rehearse. On Wednesday morning, Wednesday afternoon, Thursday morning and Friday morning the orchestra will rehearse. Some of the soloists will probably rehearse at most of the rehearsals, after Monday evening.

Season tickets are limited to 700, and these will be offered for sale at auction Tuesday, Sept. 21, at 10 a.m., with a choice of the hall, except seats reserved for the press and guests of the Association. Season tickets exclusive of premiums will be $5, $6, and $7.50, and will be sold Wednesday and Thursday, Sept. 22 and 23. Single reserved seats will then be placed on sale. The programme:

Wednesday evening, Sept. 29, "Elijah." Soloists, Mme. Corinne Rider-Kelsey, Miss Christine Miller, Mr. Reed Miller, Mr. Oscar Seagle, chorus and orchestra.

Thursday afternoon, Sept. 30, Symphony Concert. Soloists, Mlle. Jeanne Gerville-Reache, Mr. Frederick Weld.

Thursday evening, Sept. 30, Liszt's "Missa Solennis" and Berlioz's "Te Deum." Soloists, Miss Laura Combs, Miss Margaret Keyes, Mr. George Harris, Jr., Mr. Frederick Weld, chorus and orchestra.

Friday afternoon, October 1, Symphony Concert. Soloists, Miss Tina Lerner, pianist; Miss Margaret Keyes, contralto.

Friday evening, Oct. 1, Artists' Night. Soloists, Mlle. Jeanne Gerville-Reache, Mme. Corinne Rider-Kelsey, Mr. Oscar Seagle, chorus and orchestra.

Editorial Comment

Our Leading Article

In assigning the leading position in our general reading columns this month, we have, without hesitation, given precedence to the story of Clark University's history and doings, rather than to the description of a notable undertaking of our Board of Trade, in which we know all similar bodies will feel a special interest. Wherever the facts are known and weighed concerning the purposes and actual achievements of the journey of our representatives to the Pacific coast, there is clear recognition of its success and valuable contribution to the ends sought at present by up-to-date commercial organizations. The progress of a school of scientific research, on the other hand, may seem somewhat alien to the present problems of successful commerce and manufacture. Such an idea, however, is superficial and wrong. In the present development and distribution of the wealth which lies stored in crude form around us, exact knowledge lies at the basis of all successful endeavor. We believe that Worcester as an industrial centre owes more than it has ever admitted to its supply of educational institutions and to the appreciation of such advantages which have been produced and stimulated by their presence. In any such view of our city's distinctive advantages, Clark University deserves a pre-eminent rank.

A Notable Success

The officers and directors of the Worcester County Fair are to be heartily congratulated on the recent exhibition held on their grounds in Greendale in conjunction with the annual New England Fair. Leading the autumn procession of such events in this vicinity in point of time, they have also set a high mark in the matter of abundant attractions and admirable management. The hoodoo which has seemingly pursued this organization in past years as regards weather seems to have been effectually broken; four perfect days, with cloudless skies, proved a great help in rolling up a record attendance and financial profit. The great attraction was Captain Baldwin's airship, which was able to make four flights, to the delight of all spectators. We believe that the progress of the last two years indicates that the work of enlargement is to go on year after year, making this annual event more and more a feature in Worcester's calendar.

Something Worth Discovering

At the date of this writing it appears that at least one, and perhaps two, north poles have been discovered and appropriated by American explorers. It is something of a relief to have even another Sampson-Schley controversy, which now seems impending, displace tariff discussions in the daily press. We sympathize with the sentimental satisfaction over every victory of persistence and pluck when pitted against great obstacles, and we shall welcome any new contributions to scientific knowledge which may accrue from recent explorations; but we confess to a deeper interest, just at present, in explorers who, in increasing numbers, are beginning to hunt for factory sites in Worcester, and in being able to chronicle their success.

Opportunity for Peacemakers

In these days when commercial bodies are giving so much attention to the promotion of international peace, consistency would seem to suggest that they turn their attention to such scenes as those recently witnessed in the manufacturing district of Pittsburg, in connection with what the New York Evening Post terms "a disgraceful civil war." Of course there can be nothing but condemnation of lawlessness; but it is impossible to forget some of the antecedent conditions in the lives of these turbulent folk. The "Outlook" suggestively recalls the following facts, reported in that careful and comprehensive Pittsburg Survey made by the Sage Commission:

> An altogether incredible amount of overwork by everybody; wages so low as to be inadequate to the maintenance of a normal American standard of living; absentee capitalism; immigrants with low standards; the destruction of family life; typhoid fever, and industrial accidents, both preventable, but costing in single years in Pittsburg more than a thousand lives; archaic social institutions;

and very pointedly reminds its readers that these things exist among industries that have received immense industrial advantages through high protective duties, on the plea that the conditions of American labor must be kept at a high standard. We specially commend the following editorial note from the Boston Herald:

> The McKee's Rocks strike in Pennsylvania cost nine lives, serious injuries to hundreds, and a monetary loss of $1,000,000 to participants, the State and the public. Two individuals are not permitted to settle their differences by a fight in the street, menacing life and property of others, and disturbing the public peace. Such malcontents are deemed law-breakers, and the authority of the State intervenes, arrests them, fines them for their offense and forces them to settle their differences, if at all, under the law. What rights have corporations and labor unions, contrary to the public peace, which are denied individuals?

The Journeyings of One Booklet

If any one is sceptical as to the reception of the publicity bookets, distributed through the recent excursion to the Pacific coast, the following letter may afford an indication of the interest awakened. It was written by the president of one of the leading lumber companies in the Northwest to a business man in Worcester, and accidentally came into our hands. It reads as follows:

> Under separate cover we are sending copy of pamphlet issued by the Worcester Board of Trade, advertising your city on the occasion of their recent visit to the various cities of the Pacific northwestern states.
>
> Your city has been much benefited through the visit of the excursion of your Board of Trade; and there has never been a more enterprising group of "hustling boosters" visit Seattle than that excursion sent from Worcester. In fact, they acted so much like a group of Seattle enthusiasts that we felt like annexing all of them; and hope we may succeed in at least gathering in a part of them before many years.

This is interesting testimony as to effect produced by the recent excursion upon the business men of the cities visited, and it is the more convincing because incidentally given.

A Pullman Car for Portland

One of the efforts of our Railroad and Transportation Committee, as mentioned in our last Magazine, has been to secure the addition of a parlor car to the morning train to Portland via Nashua. After proper action by the committee, the matter was taken up with the President of the Boston & Maine. The following letter has been received, which explains the situation for the present season, and gives us reason to hope for this added accommodation next summer:

Boston, August 16th, 1909.

Mr. John L. Sewall, secretary Board of Trade, Worcester, Mass.

Dear Sir: I have carefully gone into the matter suggested in yours of 30th July, of supplying a Pullman chair car on the eight o'clock train from Worcester to Portland by way of Nashua.

We should be glad to comply with your suggestion, but unfortunately the assignment of Pullman cars made to this company at the beginning of the summer season has not been sufficient to meet the demands for parlor car seats; and as it is impossible for us at this time to secure additional cars from the Pullman Company, we find it impracticable to put a parlor car on the Portland train, as you suggest, without robbing some other train where the demand is in excess of the supply.

I think, however, that we shall be able to arrange this matter next year so as to supply the car.

Yours truly,

LUCIUS TUTTLE,
President.

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Clark University's Vicennial

The vicennial celebration of Clark University, Sept. 6-20, has drawn to that institution many of the most distinguished scientists on this continent. From abroad have come several men who have achieved lasting eminence in the field of research. Adorned in its chosen colors of emerald-green and white, and with its class rooms decorated with the flags of Great Britain and Germany, the red, white and blue of America, and the tri-color of France, the institution has symbolically bodied forth its own personality and its international intellectual character.

One of the most delightful features of the anniversary celebration has been the return to the university of five former members of the Clark faculty: Professors Michelson, Bolza, and Whitman, now of the University of Chicago; Professor Franz Boas of Columbia, and Professor Henry S. White of Vassar. The names of these men are writ large in the early annals of Clark University, and in the decennial address delivered by President Hall ten years ago he paid high and splendid tribute to them all. It must have been a source of profound satisfaction to Dr. Hall to have them about him once more while he received the congratulations of the scientific world upon the achievements of Clark University, the institution whose foundations they, with him, so brilliantly laid.

The haste with which the exercises have necessarily been conducted, the tremendous scope of the problems discussed, the profundity of many of the utterances, and the lack of popular interest in the topics on the programme, have contributed to minimize, for the time being, the effect upon the world of this conference. As the years go on, however, and the scientific facts here presented become collated, published and digested, the importance of this anniversary will be more generally understood and appreciated.

In the field in which Clark University operates there is in the true sense no such thing as time. As an institution it deals primarily with the infinite and with the creations of Him to whom a thousand years are but as a day. A decade is but a session at school to its scientists, and the two weeks in which these learned men have met to compare notes, is but the recess in which they relax for a moment or two before entering once again on the serious work of life. That Clark University during this play time has been able to bring together such a company of men engaged in thinking God's thoughts over after Him, in every realm of life and light, is a matter for congratulation and honorable pride to every lover of Worcester.

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Artistic Merit Deserving Encouragement

The unison of music and art, and the high place both take in the life of Worcester, is no better exemplified anywhere than in the announcements of the Worcester Music Festival, which are being issued for 1909 as we go to press. For the last three years, in order to encourage Worcester designers and artists, the Festival Association has offered two purely nominal prizes for excellence in cover designs to be used in connection with the Musical Festival programme. The first year fifty-four such designs were offered, the second year twenty-five, and the third year fifteen. The design awarded the first prize in 1908 has been pronounced by competent and disinterested judges the equal of anything shown in any art students' club exhibition in this country. The designs this year, though fewer in number, are several of them drawn with a sympathy and insight, a felicity of expression, and a sureness of touch that are unusual, to say the least.

It has been known for some time by those interested in the artistic side of Worcester life that our art colony here has been doing work that ranked with the very finest anywhere in this country, and the experience of the Music Festival management would seem to buttress this view. The amount of money at the command of the festival management for such purposes is extremely limited and in no way repays the artists for the labor they so liberally bestow on their creations. It would seem as if here were an opportunity for some liberal-minded citizen of Worcester to immortalize himself and incidentally encourage art by an endowment to be donated to this specific purpose. Music has for years taken a high place in the social life of Worcester, and it has been munificently supported by our wealthy people. Ought we not to extend a helping hand to its twin sister among the arts, especially when such splendid promise is shown?

The cover designs submitted for 1909 will be on exhibition at the Board of Trade rooms until the festival opens, and will repay critical examination by the members of this organization, many of whom will, we trust, discover here the visible signs of a genius so deserving of practical recognition and so well calculated to return splendid dividends upon its encouragement.

August Trade Conditions in Worcester County

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

August is generally one of the most inactive months of the year in mercantile affairs, although the expansion and steadily-increasing volume of business have not been interrupted.

The daily average of August bank clearings for the country showed 31.4% better than in 1908, and 6% better than in 1906. The demand for textile machinery continues strong, and manufacturers of machine tools and lathes report further gains. The volume of business among corset manufacturers is unprecedented, and further expansion has been arranged for by large additions and new plants.

Failures in the county for the month show a total of ten (10), with liabilities of $92,634 and assets of $35,-344 compared with 1908, when they showed a total of seven (7), with liabilities of $9288 and assets of $2514, while in 1907 there were two (2), with liabilities of $22,260 and assets of $9510, and in 1906 there were eleven (11), with liabilities of $52,901 and assets of $32,545.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney

J. R. George, Rolling Mills, No. 926,863.

A rolling-mill consisting of a series of pairs of rolls, forming the reducing portion of the mill, these rolls being arranged in sections one above the other and connected by semi-circular repeaters, by which the rod is conducted from each section to the succeeding one.

A. G. Anderson, Method of Making Ball Cups, No. 927,311.

A process for making flanged metal cups, consisting in forcing a portion of the wall thereof longitudinally toward the open end of the cup by a scraping action, so as to form a rudimentary flange, and subsequently subjecting the latter to the compressed action of dies.

G. I. Rockwood, Automatic Sprinkler, No. 927,430.

An automatic sprinkler consisting of a sprinkler head carried by a swinging pipe connected to a supply pipe. A fusible link supports the swinging pipe, which is so jointed to the supply pipe that the water is shut off when the pipe is held by this link, and free to flow when the link melts and allows the pipe to swing downward.

E. F. Stenman, Skirt Measuring Device, No. 927,819.

A skirt-measuring device consisting of a ring having slidably overlapped ends and holding clips carried by each end and movable therewith.

A. C. Higgins, Method of Making Aluminous Material, No. 929,219.

The method which consists in fusing an aluminous material in an electric furnace at a temperature substantially above the state of quiet fusion, and sufficient to prevent substantial segregation of impurities, and cooling or chilling the resulting product into a pig or mass.

E. A. Hartz, Wire Heddle, No. 930,857.

A wire heddle for loom harnesses having an eye formed of two wires spread apart and twisted together above and below the eye, one of these wires having a continuous and integral loop in the plane of the eye, and located entirely within the periphery of the eye.

Worcester Quotations

Furnished by FISK & ROBINSON, Worcester
September 8, 1909

BANKS	Bid	Asked
Mechanics National Bank	125	
Merchants National Bank	162	
Worcester National Bank	202	
Worcester Trust Company	300	
RAILROAD STOCKS		
Boston & Albany	230	231
Boston & Maine common	150	151
Boston & Worcester Elec. common	13	
Boston & Worcester Elec. pfd	54	
Fitchburg preferred	130	
New England Inv. & Sec. pfd	83	90
New York, New Haven & Hartford	170½	171
Norwich & Worcester pfd	208	
Providence & Worcester	270	274
Worcester, Nashua & Rochester	145	last sale
Worcester Railways and Investments	62	67½
INDUSTRIAL STOCKS		
Crompton & Knowles pfd	150	
Denholm & McKay common	200	
Denholm & McKay pfd	100	103
Graton & Knight Mfg. common	130	
Graton & Knight Mfg. pfd	115	116
Royal Worcester Corset Company	140	
United States Envelope common	53½	55
United States Envelope pfd	112	113
Worcester Gas Light	260	265
Worcester Electric Light	252	255
Wright Wire Company common	102	
Wright Wire Company pfd	106	110
BONDS		
Amer. Writing Paper 1st 5's	88	89
Boston & Wor. St. Ry. 1st 4½'s	98	
Crompton & Knowles 1st 6's	4½% basis	
Crompton & Knowles deb. 5's	5¼% basis	
Marlboro & Westboro St. Ry. 1st 5's		98
Norcross Brothers 1st 6's		100
United States Envelope 1st 5's	101	104
Worcester Cons. St. Ry. 1st 4½'s	95	
Worcester & Marlboro St. Ry. 1st 5's	98	
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General

July 30. In head-on collision in Millbury, between two electrics, on Worcester & Blackstone Valley electric road, sixteen persons injured, Motorman Leroy J. Leggee, a W. P. I. student, seriously.

Thermometer registers 100 degrees and over, in centre of city. Humidity makes day almost unbearable.

Announcement made that General Manager E. G. Connette, of the Worcester Consolidated Street Railway Company, has been chosen as Transportation Engineer of the Manhattan Street Railway.

Announcement made of the mysterious disappearance of Philip Little, of the firm of Prentice & Little, artist and designer.

E. D. Ward begins operations on three additions to Crompton & Knowles Providence plant, to cost $40,000.

J. W. Bishop Company awarded contract for building $98,000 mill in New Bedford.

31. Albert W. Darling, mechanical engineer, Graton & Knight Manufacturing Company, severely injured by a blow on the head from a baseball bat, while playing in an amateur contest at Georgetown, Me.

Aug. 1. July rainfall amounts to 1.25 inches, smallest total for many years.

Stamp sales at Worcester Post Office for month of July, $31,-217.66, against $30,269.50 for July, 1908, a gain of $948.16.

Limited express trips on Springfield trolleys inaugurated: time, three hours.

Express rates on perishable goods increased from thirty cents to forty cents per one hundred pounds.

Worcester port of entry receives 5506 packages during July, valued at $70,103, upon which duties were levied of $14,966.

3. Rev. Dr. William R. Huntington, late rector of Grace Church, New York, and formerly rector of All Saints', Worcester, leaves $1000 for the benefit of the poor and sick of the latter parish.

Announcement made that E. J. Cross has been awarded contract for erection of brick structure, 100 by 140, for Worcester Cold Storage & Warehouse Company; cost, $15,000.

4. Board of Trade party, 101 strong, leaves for A. Y. P. Exposition, Seattle, Wash.

6. Francis L. Foran, 19 Pattison Street, valedictorian St. John's School, class of 1909, wins new Halloran scholarship at Holy Cross College.

Goldman & Schultz, manufacturers of shirtwaists and wrappers, join the manufacturers' agreement to care for employees afflicted with tuberculosis at Rutland Sanitarium for a period of thirteen weeks.

Consolidated Street Railway authorized to issue twenty-year bonds to an amount not exceeding $3,182,000. Of this amount $2,260,000 is for refunding purposes and the remaining $922,000 is to meet floating indebtedness.

8. Canton Worcester, patriarchs militant, starts on eight-day trip to the maritime provinces.

9. Stanley P. Taylor, taxicab driver for Daniel A. Harrington, killed in an automobile collision in Shrewsbury.

11. Ice-house belonging to Walker Ice Company, Jefferson, destroyed by fire, ruining 10,000 tons of ice, valued at nearly $20,000.

14. Norcross Brothers awarded contract to erect $100,000 extension of Whittall carpet mills.

17. Franklin Square Garage Company, incorporated with capitalization of $35,000; Archibald R. Davis of Oakdale, president; B. Harold Swan, 145 Oliver Street, Boston, clerk, and William T. McCarthy of Brookline, directors.

19. Rainfall of 2½ inches in 60 hours; twice what fell during entire month of July.

28. Retiring General Manager E. G. Connette, of the Worcester Consolidated Street Railway, presented a set of solid gold cuff links, set with diamonds, by employees of the road.

Ex-Street Commissioner Wright S. Prior removes with his family to Denver, Col.

30. Estimated that 75,000 people witness fire works at East Park, provided by Italian residents in honor of feast day of St. Vitaliano.

City Affairs

Aug. 1. Councilman Frederick Midgley, candidate to succeed President Lewis H. Buckley of the Common Council, who declines re-election.

Number of arrests for the month of July, 447.

Building statistics in Worcester show increase for seven months, ending July 31, 1909, of 121.6 per cent. over corresponding period in 1908.

City draft for July amounts to $338,287.69.

Increase in net city debt for first seven months of 1909 over corresponding period for 1908, is $306,251.20.

3. Mayor James Logan recommends construction of water basin at Home Farm for use in case of fire.

17. Street Committee recommends city begin work repairing Harding, Madison and Hermon Streets, calling for outlay of $260,000, due to eliminating grade crossings.

21. Announcement made of prospective removal to Hartford, of Councilman Leon Rice Partridge of Ward 8, creating vacancy in that ward.

22. Street Commissioner George C. Moss calls for the names of 100 laborers from Labor Register William B. Connor, for work on the streets.

24. Bailie Shaw Maxwell, senior magistrate of Glasgow, Scotland, guest of Mayor James Logan.

Worcester Necrology

Aug. 2. Charles S. Goddard, retired shoe manufacturer, dies at his home, 33 Irving Street, of heart disease, aged 78 years 5 months 7 days.

Edwin M. Crane, a veteran of Company F, Fifty-first M. V. M., dies at his home, 29 Merrick Street, of chronic Bright's disease, aged 73 years 7 months 8 days.

15. Selima B., wife of Adolphus Lattrell, of Winchendon, dies at St. Vincent's Hospital, of pellagra, aged 32 years 7 days. Disease unusual one in this section.

20. Augustus C. Prouty of Barre drops dead at residence of sister, Mrs. H. M. Parent, 32 Dix Street, aged 82 years.

22. Dr. Henry S. Knight found dead in bed at his home, 15 High Street. Dr. Knight was a member of the School Committee, and his age was 55 years 10 months 28 days. He leaves a widow and one son.

Notes from the Field

Believing that the presence of weeds is responsible for the prevalence of hay fever, the Columbus, O., Board of Trade is to co-operate with the city authorities in ridding the yards of that city of these pests.

The Tuscaloosa, Ala., Board of Trade is working with the railroads in securing a new $25,000 station there.

The Jacksonville, Fla., Board of Trade now has over 600 members and is booming that city as an ideal place for home seekers.

The Sioux Falls, South Dakota, Commercial Club has secured a lady to visit its members who are in arrears and request them to pay up. She will also collect the monthly dues. This organization is looking for a secretary.

The Cumberland, Md., Board of Trade is booming that city by means of advertising literature printed on the backs of envelopes sent out by its business men. Over 100,000 such envelopes have already been printed.

The Omaha Commercial Club hopes to secure a population for that city of 200,000 by 1910 by annexing all the suburbs.

The Vergennes, Vt., Board of Trade contemplates issuing a souvenir booklet of the Champlain Tercentenary held there July 3.

Allentown, Pa., Chamber of Commerce has adopted as its slogan, "Dwell here and prosper."

The Hartford Business Men's Association had the officers of the Springfield Board of Trade as its guests at its annual outing at Riverside Grove last month.

The Sacramento Chamber of Commerce is to raise a $10,000 fund to boom that city.

The Merchants & Manufacturers Association of Baltimore, Md., is endeavoring to secure for that city two concerns capitalized at more than $1,000,000. One is from New York and the other from Massachusetts.

WORCESTER BOARD OF TRADE
EACH FOR ALL ALL FOR EACH
11 FOSTER STREET
WORCESTER MASSACHUSETTS
U.S.A.

Officers.

President, CHARLES T. TATMAN. *Vice-President*, EDWARD M. WOODWARD.
Secretary, JOHN L. SEWALL. *Treasurer*, ALBERT L. STRATTON.
Assistant Secretary, HERBERT N. DAVISON.

Directors.

FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL
CLARENCE W. HOBBS, JOHN J. POWER, HERBERT H. FAIRBANKS,
JOHN W. HIGGINS, EDWARD J. CROSS, WILLIAM WOODWARD,
WINTHROP HAMMOND, CHARLES E. HILDRETH, LOUIS H. BUCKLEY,
WILLIAM FORSBERG, CHARLES T. TATMAN, ARTHUR C. COMINS,
VICTOR E. EDWARDS, CHARLES L. GATES, MARCUS L. FOSTER,
ARTHUR W. PARMELEE, EDWARD M. WOODWARD
Clerk of the Corporation, WILLIAM H. SANFORD. *Auditor*, H. WARD BATES

Chairmen of Standing Committees.

Advisory: RUFUS B. FOWLER
Delegation: CLARENCE W. HOBBS.
Building Laws: EDWARD J. CROSS.
Education: JOHN W. HIGGINS
Foreign Trade: VICTOR E. EDWARDS.
Insurance and Fire Protection: JOHN J. POWER.
Legislation: WILLIAM FORSBERG.
Manufactures: CLINTON S. MARSHALL.
Meetings and Receptions: ARTHUR C. COMINS.
Mercantile Affairs: WINTHROP HAMMOND.
Municipal Affairs: CHARLES L. GATES.
New Enterprises: WILLIAM WOODWARD.
Publication: GEORGE F. BOOTH.
Public Health: ARTHUR O. YOUNG.
Statistics and Information: MARCUS L. FOSTER.
Taxation: HERBERT H. FAIRBANKS.
Transportation and Railroads: EDWARD M. WOODWARD.

Any member of the Board of Trade having matters requiring consideration by any of these committees is asked to communicate directly with its chairman.

"Smile and Push"

It is in some respects unfortunate that the vacation months follow so soon after the annual meeting of the Board of Trade, the choice of its executive officers and the selection and notification of its various committees; it thus comes to pass that a considerable portion of the year slips by before the majority of our committees are able to meet and fairly enter upon their work. This means that during the remaining seven months of this year of the Board of Trade, all must get together promptly and push the work vigorously, as an offset for the summer season, during which the workers are so largely scattered. While the last few months have been a time of unusual activity in several departments, and while some of the committees have made distinct progress, we are now at the point where "a long pull, a strong pull, and a pull altogether" will show speedy and gratifying gains. Agitations over the tariff are out of the way. Confidence and optimism pervade the financial centres of the land. Locally the prospect for prosperity was never better. The dull times of a year ago have vanished, and factory wheels are humming merrily.

In one of the cities visited by the recent excursion, the chief slogan of its commercial body is, "Smile and push!" We believe there is no patent on this motto, and we heartily commend it to all our readers in Worcester, and wherever our Magazine now finds its way. It is a vast improvement on "Growl and knock." Try the new motto!

A Notable Japanese Delegation

At a special meeting of the Directors, held on Thursday, Sept. 2, the coming of the Japanese Commercial Commission to this country was taken up, and after careful consideration it was unanimously decided to extend to them an invitation to be the guests of the Worcester Board of Trade in connection with their stay in New England. The coming of this party to our country is a significant event, testifying to the desire among commercial circles in that empire for closer trade relationships with the United States, which of course carries with it the guarantee of abiding peace between the two governments. The party, numbering thirty-nine in all, left Japan August 19, and arrived in Seattle September 2. For three days they were the honored guests of Seattle and its exposition; and after visiting Tacoma, Portland and Spokane, they started on their eastbound journey, which will bring them, according to their present schedule, into Massachusetts about the middle of October.

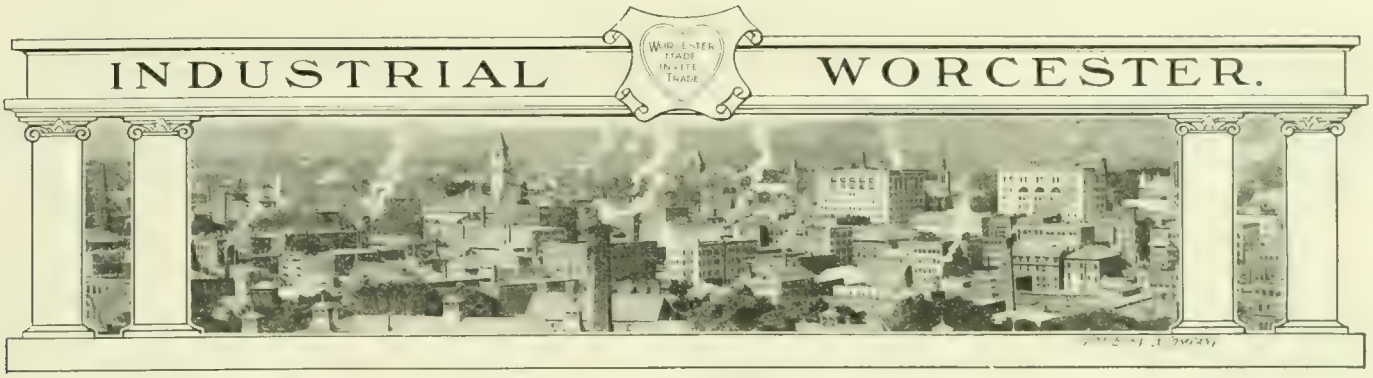
While Worcester was not in their original itinerary, some encouragement was given by the representatives of the commercial bodies in the Northwest that arrangements could be made for them to visit the one manufacturing city of New England which is preëminent for the variety of its products. Beyond question this encouragement was given as a result of the impression made by the Board of Trade excursion to those cities that are taking charge of these Japanese visitors, and a perusal of the literature there distributed. This visit is a return of one made by leading representatives of Seattle, Tacoma, Portland and Spokane to the Island Empire not long ago. Not only are these Japanese to be personally accompanied in all their eastern tour by members of these western commercial bodies, but the expense of their journeying has been largely provided by liberal gifts from these commercial bodies.

While the strongest motive for promoting such a visit is to be found in the hope of immediate stimulus for export and import among the cities of the Pacific coast, it is reasonable to believe that all manufacturing centres in our country might share in larger or lesser measure by making themselves and their products familiar to these visitors from the orient. Apart from any such direct gains there is profit as well as pleasure to be expected from entertaining such guests, and thus establishing personal ties of friendliness which shall reach not only across the continent but to the other side of the globe.

At the date of this writing no response has been received to the invitation forwarded by mail and reenforced by a telegram, sent from this office; but we hope to make public at the earliest possible moment the acceptance of our invitation.

Looking for Factory Sites and Space

This office has been pleasantly busy in recent weeks trying to give assistance to firms, both local and from other places, who are seeking opportunity for new locations; and we hope soon to be able to chronicle some additions to the number of our present enterprises. In all such endeavor, however, we are hampered by insufficient information as to vacant space for manufacturers. For nearly a year we have been trying to keep on file this information, on blanks specially prepared for this purpose, and freely offered to any who will fill them out. The data thus collected have proved serviceable in several instances; but it has been found difficult to keep the files up-to-date because of the leasing of space and a failure to notify us, that the property should be withdrawn from our files. We also feel confident that there are other owners of space who have not made known to us what they have for rental or sale. We therefore repeat a request made previously, that all parties having land suitable for manufacturing to sell, or floor space to sell or lease, will either call or send for our blanks, and allow us to put on file the facts connected with their property.



HIGH-GRADE STRAW MATTING AUTOMATICALLY WOVEN

Worcester can now boast of another industry of which it holds the monopoly in the United States. This is the automatic manufacture of high grade straw matting, an enterprise controlled by Dr. Julius Garst, and located in the Sawyer building, at the corner of Beacon and Hermon Streets.

Hitherto all our mattings have been produced by China, Japan and India, and manufactured on hand looms, requiring two or three operatives on each machine. The Garst loom, of which Mr. H. E. Rathbun, of this city, is the principal inventor, needs but one operative for two machines. The picker selects the straws one by one from the bundle, and places the ends against two rollers for conveyance through a groove in the reed to be woven into the fabric.

For a long time the inventors were confronted with the difficulty of crimping the straw without heavy breakages in the material. This has at last been overcome, and a patent taken out on the device. What threatens to be a more serious handicap to Dr. Garst's success is the new Payne tariff law, which reduces by 65 per cent. the tariff on the high grade type of matting he is making.

The entire output of the factory at present is consumed in the manufacture of fancy suit cases. The matting, however, is designed as well for wall coverings, upholstering furniture, and for the conventional floor coverings.

NEW ENGLAND AUDIT COMPANY

The New England Audit Company of Springfield, Mass., has opened an office in the State Mutual building in this city, and Mr. Frederick J. Hillman, president of the company, will be at the Worcester office for consultation one day each week. Mr. H. Lennox Bray, who is the company's senior staff accountant, will be in charge of the Worcester office. During the past year the company's business has increased more than one hundred per cent., and clients in Tennessee, Colorado and Canada have availed themselves of the company's services. The increased demand for the services of production engineers and factory systematizers is being met by a department devoted to that branch of service exclusively, under the direction of a thoroughly competent engineer and cost accountant. Mr. Hillman is one of the newly elected members of the Worcester Board of Trade. He has been prominently identified with the Springfield Board, and he will undoubtedly prove, in his individual capacity, as well as through his corporate connection, an exceedingly valuable member of this board as well.

WORCESTER'S BUSINESS COLLEGES

In an industrial civilization such as characterizes Worcester, the part played by its commercial educational institutions is necessarily most important. It is absolutely essential in our great manufacturing and mercantile establishments that the office force should be well-trained, competent, accurate, and thoroughly familiar with all the modern labor-saving devices, such as adding machines, the mimeograph, the multigraph, etc., to say nothing of the typewriter.

Any great modern business would break down immediately if its staff of stenographers and bookkeepers were unreliable, no matter how excellent its output. Under the circumstances it is a matter of congratulation that Worcester boasts so many strong practical, splendidly equipped business colleges. Comparisons between them would certainly be odious. They can each claim to be the first among equals, and to be worthy of the city in which they are located. Hinman's Business College, located at 11 Foster Street, will hereafter be known as the New England Business Institute, and starts out on its new career this fall, with a thoroughly remodeled office, and a most competent teaching force. The Worcester Business Institute at 476 Main Street, Charles B. Post, manager, is a sound, solid and successful institution, with a splendid record behind it for services rendered. It fits men and women in a practical way for a business career. Becker's Business College at 98 Front Street has a long and enviable reputation for doing good work, and its pupils have filled with marked ability the responsible positions to which they have been called. The Tyler Business College on the top floor of the Slater Building is the outgrowth of a school founded in the most modest way twenty-five years ago by Mrs. Edna Tyler, and which has now grown to proportions where it ranks as well nigh a public institution, with courses for every form of business life, and attracting pupils not only from this city, but from all over the country as well; ranging in age from twelve years to forty, and from a grammar school graduate to one enjoying a university degree. The Worcester Magazine can commend all of these institutions heartily.

WELFARE WORK IN A BUSINESS COLLEGE

That anything as altruistic as welfare work should be attempted by a business college is a good deal of a departure from ordinarily accepted standards, but the Tyler Business College is inaugurating such a department in its quarters in the Slater Building, and expects to have it in full working operation by the first of next month. The need for such an innovation is said to be due to the number of outside students residing at points so far distant from Worcester that it is impossible for them to go home to lunch and return in time for the afternoon session. Inasmuch as the necessity of providing them a suitable place where they could eat their mid-day meal outside of the school room was apparent, Mrs. Tyler decided to lease another room and fit it up for their use. The next step of course was predicated on those that had preceded it. If the room was good enough for pupils from outside the city to eat their luncheon in, it was good enough for those inside the city who cared to utilize it for this purpose to do so.

Accordingly she purchased a large table and suitable linen, china, etc., to set it, and will set up a gas-stove on which the noon-day coffee can be brewed. Furthermore arrangements have been made with a caterer who will supply lunches to any who are not thus equipped, at a purely nominal figure, and it is expected that on stormy days particularly, this feature of the rest and refreshment room, as it is called, will be gratefully appreciated.

The room in addition to its other equipment is to be fitted up with forty sanitary lockers for the use of the individual pupils. Each locker has its own separate key, and in it can be hung the clothing, books or any other article that it is desired to keep inviolate. It is the intention ultimately to put in sixty of these lockers, but only forty are now being installed. The whole undertaking will be completed so that the room can be formally thrown open for the students' use the first of the month.

The entire expense of the experiment is borne by the management. A charge of twenty-five cents is made for a key to the room, but when the pupil finishes his or her course and returns the key the money is refunded. The cost of the coffee, if the use of the room proves as popular as it is expected will be the case, will probably be divided among the pupils pro rata. In any event the amount involved is very small, probably not over five cents a week for each pupil.

WILLIAM A. EMERSON

No additional charge is made to the pupil on account of the installation of this room. The cost of fitting it up is borne wholly by the management, precisely the same as is the cost of the other eight rooms that the college has fitted up on the top floor of the Slater Building. A teacher will be in attendance through the lunch hour, precisely the same as through the study hours, to maintain order.

MOTOR TRUCK SAVES HORSE'S LIFE

A novel method of transportation for disabled horses was recently demonstrated when the Morgan five-ton motor truck conveyed the race horse Hal Ensign from the trotting park at Woonsocket, R. I., to Maynard, Mass.

Hal Ensign, the racing stallion, while on the track at Woonsocket, lost his footing, and falling, snapped a bone in his left foreleg. After the limb had been set in a plaster cast by a veterinary, request was telephoned to the R. L. Morgan Company at Worcester for use of one of their powerful trucks. This up-to-date way of moving the horse to its home quarters in Maynard came as a relief from the many changes incident to getting to the station and taking train, it being politic to move the animal as little as possible. The truck was reversed into a two-foot hole, dug for the purpose of lowering platform, and a broad gangway constructed. After the racer was aboard a staging was built on the truck around the animal to steady him. To save discomfort to the injured horse a slow run was necessary. Distance the horse rode approximated seventy-five miles. It will be gratifying news to all horsemen that the injured racer is on the road to recovery.

COES WRENCHES

Wrenches intended primarily for heavy duty in engine room and railroad work have been added to the long line put out by the Coes Wrench Company. A steel handle wrench made in sizes from 4 to 21 inches is extremely useful. As the handle is of metal the tool is impervious to water, heat or steam. The handle shell is a semi-steel casting of special material, internally supported so that it cannot be crushed, the construction being patented. Besides this there has been a change made in the screw, the thrust or downward pull coming upon a hardened steel ball, the slot in the bar which previously held the head of the screw having been done away with. This adds to the strength of the bar fully 30 per cent. Repeated tests by the railroads in both North and South America have vindicated the claims made for this wrench as to its superiority, durability and practical character.

The key model wrench is another type that is being further developed. Originally made in one size, 28 inches, it is now made in four sizes, the largest of which is 72 inches long with jaws 12 inches long, the tool having a weight of 165 pounds. The intermediate sizes are 36 and 48 inches, opening respectively 6¼ and 9½ inches. These wrenches are made with an eye in the handle to take a hook or to attach safety cord or chain falls. These wrenches replace a vast number of special tools, and are invaluable in the engine room.

The company has also presented a new special 12-inch wrench, known as the Auto model, the extreme thickness of this wrench being ⅝ of an inch.

EMERSON'S HISTORICAL POST-CARDS

William A. Emerson of this city has issued a new collection of historical post cards, all of them devoted to Worcester and Worcester interests. They comprise fifteen different cards, and embrace pictures of old landmarks, and other interesting subjects arranged in groups on each card, showing the improvements and changes made in the past fifty years or more.

For more than twenty-five years Mr. Emerson has made such illustrations a distinguishing feature of his historical booklets, but he has never gotten together a collection with which he expresses more satisfaction than this.

The difficulties of collecting rare and uncommon pictures for work of this kind are necessarily many, but the results in this case have fully justified the use of time. Since their issue in June, hundreds of sets have been sent as souvenirs to those who have gone from Worcester. An order from one person for a dozen sets to send to as many different friends abroad has not been unusual, and many have added the complete set to their collection. Mr. Emerson has designed these cards attractively from an artistic standpoint, with the needful amount of descriptive reading which adds to their permanent educational value.

THOMAS' REGISTER

Thomas' Register of American Manufacturers and First Hands for 1909-1910 is now at the Board of Trade rooms. It is intended for the use of buyers and others, classified so that the user is enabled instantly to find the names, addresses and ratings of all the manufacturers of, or source of supply in any line desired; 1,600 pages, 200,000 names, 45,000 articles and kinds of articles.

It is used by the government at Washington, by the American consular service throughout the world, and by manufacturers and merchants in the United States.

The WORCESTER MAGAZINE Illustrated

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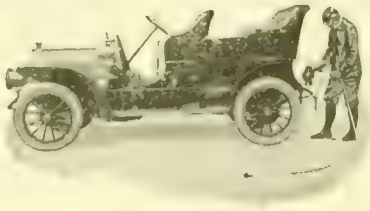

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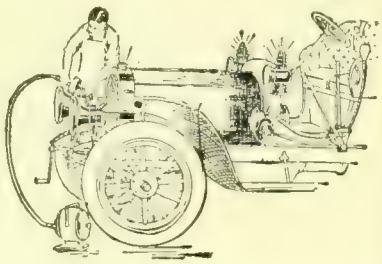

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The WORCESTER MAGAZINE

The Awakening Orient

The Call of New Political Obligations and Commercial Opportunities

By Hon. Chester Holcombe

CLARK University has done itself great honor and rendered the city of Worcester and the entire nation a quite incalculable service in its inauguration and conduct of the recent conference upon affairs in the far East.

It was emphatically a series of meetings for hard, practical work and close study, all the more valuable by reason of that characteristic, and those who, like the writer, were invited to Worcester to give to others such special information as they were supposed to possess, were probably far from being the smallest gainers of those present in lines of knowledge where they were assumed to be expert. For it appears to be a wise and beneficent law of humanity that he who gives always gains in and by the giving. And at Clark University it was emphatically a matter of exchange in which all were gainers, and the officers of this institution were equal benefactors to all.

Those who have been long familiar with and hence deeply interested in our relations with the nations of the far East and the easy possibilities of their enormous development to the mutual advantage of West and East alike, have long desired such meetings as those at last inaugurated at Worcester. And they are to be pardoned if, at moments of impatience over the apparent lack of all interest upon the part of the American people in that larger half of the world which lies beyond the Pacific Ocean and the consequent loss to ourselves,—they are to be pardoned if they denounce such indifference as inexcusable if not criminal. In point of fact, it is only within comparatively a few recent years that the business men of the United States have begun to interest themselves in the commercial and political geography of that part of the world which lies without the limits of our own country. With an immense area of our own growing and developing with most astonishing rapidity, our men of affairs have allowed their energies and abilities to centre far too exclusively upon their own and immediate interests, and have failed to look ahead and to realize that their own successes and consequent rapidity of expansion must inevitably and speedily bring them into touch, which in commercial affairs means rivalry and competition, with the business men of other parts of the world. It is safe to go a step farther and assert that until very recent years, while perhaps sufficiently conscious of our own strength, we showed little inclination to assert our own manhood among other nations, and hence were only dimly recognized as one, and an important one, among the families of nations.

Our own awakening to the realization of our proper position as one of the leaders among the leading nations of the world, and the coincident discovery of the same fact by our associates and rivals, came with a shock probably quite as severe and surprising to ourselves as to those same rivals, who had long been accustomed to patronize us, but hardly to take us at all seriously. It came as a Christmas gift, and President Cleveland will aways deserve the credit and the honor of having awakened the American people to the consciousness of their proper place in the world, and of having engaged us, at last, in the study of international geography. The startling announcement was all contained in a few words, not more than a line or two, which formed part of a special message sent by the President to Congress December 17th, 1895. The words were as simple as they were brief, yet they stirred all Europe and America. They especially shocked Earl Salisbury, the British Secretary of State for Foreign Affairs, and produced from him an exceedingly prompt reversal of certain language of which he had earlier made use.

It is quite impossible within the narrow space allowed me to deal however briefly with the numerous and important results of that diplomatic incident. Taken as a whole, they resemble nothing, perhaps, so much as a sudden and totally unexpected evolution into national manhood, as has already been suggested. It has broadened our nationality, given an added weight and importance to the exercise of the ballot by all American citizens, since it has pushed them immediately to the front of international responsibilities represented by hosts of important questions which we cannot escape if we would, yet concerning which, until recently, our people had known nothing and cared less. Only too long the powers of Europe had been quite content to manipulate all such questions to their own satisfaction, haggling, bartering and quarreling over them among themselves, and only too willing to forget or ignore any possible interest or right which we might have in them. And why not, since we had apparently abandoned and relegated to them all of our own responsibilities, opportunities and duties in the world as a whole? Why should they not make gain while we slept? Be such gain and the peculiar methods by which it has been acquired in the past by our European

associates right or wrong, justifiable or capable of no better classification than as national highway robbery, it was only what we have had every reason to expect, and for which we cannot escape our share of responsibility.

It is not, however, to be assumed from anything that has been or will be said in this article, that the men of this nation in assuming our legitimate, even a leading position among the nations of the world, are to claim our share of plunder from other and unfortunate plundered and extinct nationalities as a due mark of our power and prominence. Nor are we even to stand quietly at one side and satisfy the national conscience by a simple refusal to share the property plundered from and by others. As a free and independent nation we have our rights of advantage and profits from other like nations, be they larger or smaller than we, as they have the same from us. And the robbery and plunder of a nation with which we are upon terms of amity and commerce is a robbery of us against which we have the right and duty of protest, or which we may resist by force if, as a nation, we see fit so to do. All of which is stated not so much upon ethical principles or a foundation of morality as upon simple rules of fair dealing and common justice among business men. It is an indisputable fact that nations which take advantage of their own superior strength and ability to rob and wrong the weak are guilty of inexcusable wrong, not only to those who are their immediate victims, but also towards all other nations which are interested with their victims commercially, and are really the enemies of mankind at large, and should be dealt with as such. It is indeed not easy to discriminate them from pirates and slave dealers.

HON. CHESTER HOLCOMBE.

While the fact may not be readily recognized or admitted, yet the world is full of examples, hidden under various pretexts and excuses, of high-handed outrages perpetrated upon the weaker nations by the strong. Not to specify particular instances which cannot fail to be plain within the sight and knowledge of my readers, let the following quotations serve to illustrate further what is meant, and indicate the spirit which determines the policies of many of the leading nations, all so-called Christian, of the western world, in their treatment of the powers of the far East. A leading London newspaper, discussing the Chinese question a few years ago, declared: "It is not at all the question what China may decide to do with itself, but what the leading powers of Europe may decide to do with China." In other words, China was to be allowed no voice in the determination of its own future fate. The writer was once a fellow-passenger upon a railway train in Japan with four diplomatists then representing leading European governments at Tokio. In the course of general conversation the writer remarked that a certain line of joint action upon the part of China and Japan would best serve to develop those countries into great nations. Whereupon the representative of one of the leading powers of Europe promptly replied: "But, Monsieur, it is not the policy of my government to permit the development of either China or Japan into a first-class power." To which the other European diplomats as promptly echoed a unanimous assent: "Certainly not, Monsieur."

It is time now, in more senses than one, to give special attention to matters which seriously affect our commercial interests in the far East. To state it more particularly, whatever may have been the failures of the past and the excuses for them, our men of business as individuals, our boards of trade, chambers of commerce, and other like organizations can no longer hold themselves excusable if they fail to inform themselves thoroughly of existing conditions, of the importance and the demands of our trade with eastern Asia, or if they neglect to bring all available influence to bear to remedy vicious legislation, amend defective treaties, and to correct abuses and errors of practice, any of which at any point tend to affect injuriously our commerce. All of this applies with peculiar force and pertinence to that greater part of the nation which lies to the east of the Mississippi River and extends from the Great Lakes and Canada line to the Gulf of Mexico. Business men throughout that vast area ought to make a more searching and personal study of the condition of our commercial relations with the far East, especially with China, which includes Manchuria, and with Korea; to watch more closely our diplomatic policy in those countries, and, through our senators and members of commerce, to hold far closer control of all national legislation and treaty negotiation which have to do, however directly or indirectly, with our trade.

It goes without saying that this should include the subject of all Asiatic immigration to this country. It is a fact beyond dispute that, to a very large extent,

the difficulties in the way of improved commercial relations with the far East and a rapidly growing volume of business are largely political in their character. And no argument can justify the present conditions of these matters. A very large percentage, probably not less than ninety, of American exports to China and other parts of eastern Asia are produced east of the Mississippi, and an equally large portion of Chinese and other imports from eastern Asia to the United States are destined to points within the same great area east of the same great stream, within which, it must be added, an equally large proportion of the wealth, intelligence and voting population of the nation is to be found. Yet the decision of our national policy upon legislative questions which most vitally affect our honor as a nation and our good relations with the two most important powers in the far East, and hence directly touch our commerce with them, has, in the past, been practically abandoned to the dictum of that portion of the nation which has comparatively no interest in our Asiatic trade, and there controlled by an element of the population which, it must in justice be said, does not represent the intelligence or the most responsible portion of the community. In saying this it is not intended to indulge in sweeping denunciation of any class of the nation. But it is claimed that the people of the eastern portion of the nation have a right and a duty in these matters which have been sadly neglected, and that, for their own sakes and in the interests of the entire nation, they should remedy their own remissness.

In a similar way, other questions concerning our trade in Manchuria, as affected by the present attitude and policy of Japan and Russia towards that Chinese province, should receive a careful study at the hands of the business men and commercial organizations of this nation. And this question largely interests New England, from whom it has been a large buyer of cotton goods. The question of our diplomatic relations with Korea, which "hermit nation" the United States had the honor, at its invitation, of inducting into the family of nations, needs a thorough study and investigation in order to determine, among other points, what changes our relations, political and commercial, have undergone since Japan has assumed the right of suzerainty if not entire mastership over that resentful and hostile kingdom. These are but samples of many important questions which, in the political and even now in the commercial interests of the nation, ought to be investigated and fully solved. Studies of them cannot fail to be most fascinating and valuable, and to the Board of Trade of Worcester they are most earnestly commended.

The Far-East Conference

Summary of Conclusions

By Professor George H. Blakeslee

"The problem of the Pacific is the greatest problem now before the American people." This statement from the verbal instructions just given by President Taft to his recently appointed Minister to China, Hon. Charles R. Crane, reveals the underlying reason for the conference upon the far East. It is because the situation in the lands the other side of the Pacific is of immediate and far-reaching importance, especially to the United States, that the Department of History in Clark University decided to hold a series of meetings in connection with the second decennial celebration of the university, which should bring together those who could speak with authority upon the various aspects of the problem, and by their papers, addresses and discussions aid in bringing about a more general and sympathetic understanding of far-Eastern conditions.

It is not too much to say that a large majority of the persons now in the United States who can speak with real authority upon the far East took part in the conference. Of the forty-five who delivered addresses or wrote papers eleven are authors of well-known works upon the Orient; thirteen are, or have been, government officials in the far East; ten are college or university professors in the United States, while nine have held positions in the higher educational work in India, China and the Philippines, and eleven have themselves taken a fairly conspicuous part in influencing the recent history of the different countries across the Pacific.

PROF. GEO. H. BLAKESLEE

To summarize the many addresses delivered by these men would be an impossible task; there were, however, at least three dominant lines of thought which seemed to run through nearly everything that was presented to the conference. These were: (1) that Asia is now passing through a period of rapid and fundamental changes; (2) that these changes will be of profound importance to the United States, not only involving the question of its moral, political and commercial supremacy abroad, but even affecting its industrial prosperity at home, through the control or the loss of the increasingly important Oriental trade; and (3) that the United States, both for its own interest as well as for the sake of the countries of Asia, should take a prominent part in guiding these changes, especially in China, so that they may bring about a final and equitable settlement of the far Eastern problem.

India was the subject for the first day of the conference. From all that was said it is evident that the century-long colonial policy of Great Britain is to-day breaking down in India; that the people are profoundly and growingly dissatisfied with English rule; and that in recognition of this serious situation, Lord Morley has granted to the natives extensive privileges of local government, which many believe must be the beginning of concessions which will eventually give India as much freedom as has Canada or Australia at the present time.

Korea, with its independence destroyed, is being rudely shaken into new life by the conquering Japanese. The value of their recent reforms was dwelt upon by Dr. George Heber Jones of Seoul, Korea, and by Professor George Trumbull Ladd of Yale University. The Hon. Horace N. Allen, however, the last diplomatic representative of the United States to the independent kingdom of Korea, emphasized rather the acts of oppression and bad faith committed by the Japanese, and expressed his belief that their occupancy of the country was merely temporary, and that the time would come when they would be entirely driven from the peninsular.

The Philippine policy of the United States, it was pointed out at the conference, marks an epoch in the history of the government of far Eastern dependencies. It aims neither at exploiting a dependent people, as most colonizing states have done in the past; nor at ruling them permanently, in their interest but against their wishes, as England believes she is doing in India and Egypt; nor in allowing them to run wild, as the Anti-Imperialists would do; but it aims to develop them gradually until they are fully prepared for true constitutional self-government. Three of the American officials who have been prominent in helping to carry out this policy spoke upon different aspects of the Philippine problem: these were Dr. W. S. Washburn, recently Director of the Civil Service; Mr. J. W. Beardsley, recently Director of Public Works, and Hon. W. Morgan Shuster, recently Secretary of Public Instruction. The splendid work done by such men may be judged from the typical fact that in a number of the provinces in the islands the American administration, by the introduction of pure drinking water, has actually cut down the average death rate fully one-half.

The addresses upon Japan, which were limited to a discussion of the relations between that country and the United States, all expressed a strong faith in the abiding friendship of the two great nations. Dr. Honda spoke of the recent period of mutual suspicion as "a nightmare of the past." Dr. Asakawa declared: "The Japanese-American relations in China have all the appearance of returning to the normal state of manly competition and sympathetic criticism." Dr. Takamine, the president of the New York Nippon Club, paid a tribute to the work of the conference by pointing out that, since misunderstanding is the great cause of hostility between states, "there is nothing so effective in enhancing the friendly feeling between two nations as a correct knowledge of each other."

It was China upon which was focused the keenest interest of the conference. The situation there was generally recognized as of paramount importance; one speaker declared, "The fate of China is the problem of the East and the problem of the world," and another said, "It is not exaggerating to say that issues focused upon the fate of China constitute the greatest international problem with which the world now has to deal." Twenty-three papers and addresses discussed nearly every phase of the situation, such as foreign relations, local government, education, commerce, currency and missions.

It was pointed out that during the past couple of decades China has passed through more rapid and far-reaching changes than during the previous thousand years; that these changes are still taking place, and that in their outcome is involved the future of all Asia.

The interest of the United States in this situation was strongly emphasized, especially in that aspect of it which concerns the maintenance of China's territorial integrity and the "open door" for trade. Mr. John Foord said: "The place which the United States occupies in the world and the place which it should occupy in future ages are equally challenged by every step made toward the dismemberment of China. The policy which dictated the construction of the Panama Canal is meaningless if it be not accompanied by a correlated policy in eastern Asia." Mr. T. F. Millard declared: "American statesmen and people may shrink from participation in the eastern question, but it inevitably will intrude upon them, and it is bound up in the fate of China. This great empire will be the storm centre of the forthcoming diplomatic struggle and the scene of any international conflicts which failure of peaceful adjustment will provoke. As the Monroe Doctrine invokes the United States to interfere should stronger nations aggress upon Central and South American states, so may a strong Pacific Ocean policy invoke its aid to preserve China." Judge L. R. Wilfley spoke in the same vein: "To raise the standard of living in China," he said, "to the average standard of the United States would be equivalent, so far as our markets are concerned, to the creation of five Americas. . . America owes it to herself to dominate the trade of the Pacific, and the fate of this undertaking will be determined by the fate of China. If China should be divided up and apportioned to the western powers, our country will play a small part in the development of the trade of the countries bordering upon the Pacific."

To arouse interest in China and the far East, and to create a more general understanding of the conditions in that part of the world, have been the chief aims of the conference. That this is a work of national importance may be seen from a quotation of Mr. Crane's address: "President Taft," he said, "has it in his mind as well as in his heart that the attention of the people of our country should be given to the far Eastern situation, that they should turn their faces to the Pacific, and study out what is the best policy for the United States to adopt in the far East."

The results of the conference show that these aims have, in a measure at least, been realized. The sessions were well attended, not only by people from the city, but by a number from a distance; the addresses were fully reported in the local papers, and were given to a wider public through the Associated Press dispatches, and the extended articles in a number of the weekly publications; while requests for the printed proceedings have been received from many parts of the country. The leading addresses and papers, which will soon be issued in book form, will still further extend the influence of the conference.

Imitation, however, is one of the surest tests of success, and intimations have already been received that two other universities may wish to continue the work which Clark has inaugurated. In view of the general enthusiasm of those who took part in the meetings, and of the wide attention which they have attracted and the interest they have aroused, President G. Stanley Hall has practically decided that this conference upon China and the far East shall be but the first of a series of annual gatherings which shall each year bring to Worcester a number of the authorities upon the far East, who will give addresses upon the most recent and most pressing phases of the great problems of the Pacific and the Orient. Beyond all question the relations of the United States to the Orient, during the next few decades, are to be increasingly intimate. This is no longer an open question, to be argued on the grounds of expediency; it is an accomplished fact. To adjust these relations requires the disseminating of all possible light from all available sources. The gathering of experts upon this subject in annual conference in our city will prove of greatest service. If this can be done, it will give to Worcester the same position relative to the situation in the far-East, which is universally conceded to Mohonk, in regard to questions of international peace, and the status of dependent peoples.

Dr. Thomas H. Gage

By Leonard Wheeler, M.D

FIFTY-TWO years ago Dr. Thomas H. Gage began in Worcester his work as a general practitioner of medicine—a family doctor, a vocation that is fast becoming historical as the field of medical knowledge necessarily becomes broken up into specialties. This calling of the village doctor placed the worthy follower of it in a position in a community perhaps as influential as any whatsoever—as influential as that of the squire or the minister. The counsel of the doctor was sought not only in illness but in the hygiene of both body and mind, in the education of the children, in the disposition of property and all the important and confidential matters of life. A good, strong, judicious man in this capacity was an important element in the successful life of the old New England community. Dr. Gage was typically all this in Worcester for many years. His broad, wise, healthy judgment was felt in the family, in the school, in the church and in the business of the town. He was long the leading medical man of the whole region around. He was constant in attendance at meetings of the medical societies, and filled their various offices as they naturally came to him, with the rather rare devotion that puts public duty before private interest. In this way he had great influence among the doctors, and it was largely through such influence on his part that the exceptionally harmonious character of the personal relations in the medical profession of this community, long recognized as existing, is due.

DR. THOMAS H. GAGE

Dr. Gage's life was remarkably interesting and full, though spent almost entirely in Worcester. He was born at Waterford, Maine, in 1826, and came here to practice when he was thirty-one years old. His education had been interrupted by the death of his father

and consequent lack of means, and he could not go to college. However, his desire was to follow in his father's profession, and he succeeded, graduating at the Harvard Medical School in 1852. Then came a year as house officer in the Massachusetts General Hospital, than which few years in a man's life can be more interesting. Three years were spent in practice in Sterling, and one as assistant in the Worcester Insane Hospital.

When Dr. Gage came to Worcester it had a population of 20,000. He became a part of the rapid and interesting development of this large town into the present city of almost seven times that population. In many directions he was not only a part but a leading factor. In the field of his education, for instance, he became a trustee and treasurer of its university. In its religious life he was a continuously active supporter and officer of one of the most influential churches. In its charitable life he became president and chairman of the executive committees of its two largest hospitals and the Massachusetts Hospital for the Insane. In its professional life he was its leading physician, and in its business life medical director of the Life Insurance Company, and a bank director. Even in its military life he had a share, serving for a period as surgeon during the Civil War.

Dr. Gage's life was a singularly well-rounded one. Of strong constitution and physique, and of such moral quality as has a "relish for what is decent, just and amiable," he passed long years of health with no lack of work—two of the most important elements of human happiness. Of wealth he had enough for his purposes. He succeeded in reaching the goal of his reasonable ambition, for in his sphere he was an unquestioned leader in his locality.

He lived to see his children grow up, each well established and an honor to his name. At the last his mind was clear and calm and his physical suffering not prolonged. He knew many hymns and was fond of repeating them. One verse of a favorite hymn of Addison, which was read at his funeral service, expresses much of his peaceful spirit and of his attitude toward this world and the next:

> Ten thousand thousand precious gifts
> My daily thanks employ;
> Nor is the heart a cheerful heart
> That tastes these gifts with joy.

A Central Bank

By Alfred L. Aiken

President of the Worcester Institution for Savings

ALFRED L. AIKEN

Inspired by the disastrous panic of 1907, the Federal Government is at the present time seriously engaged in an effort to revise satisfactorily the laws governing the currency, and governmental finances connected with it.

Students of banking as a science, as distinguished from simply a money-making business, had long before 1907 recognized the unsatisfactory and unscientific nature of our banking and currency laws, but the country at large, and many bankers as well, needed a painful awakening to bring them to a realizing sense of their utter inadequacy for our national needs.

The financial upheaval in the autumn of 1907, when a large number of banks, solvent ones, were obliged practically to suspend specie payment, supplied the necessary stimulus and a great hue and cry was raised for an immediate change.

The Aldrich-Vreeland Bill, providing for an emergency circulation, was passed by Congress, and the fears of part of the community at least were allayed. But intelligent Congressmen and bankers recognized in this a mere makeshift, entirely unscientific and of at least doubtful utility, and as a result Congress appointed the National Monetary Commission, consisting of nine members of the Senate and nine of the House, to investigate the whole matter and report.

This was an excellent beginning, but better still, the situation aroused general public interest in the matter, and as a result, among intelligent bankers, there has been a great deal of careful study of conditions and remedies.

For some years, many bankers have felt that the real remedy lay in a great central bank that should act as the custodian of the government's funds and should be the sole bank of issue. The people had not forgotten, however, the history of the first and second United States banks, and the central bank idea was far from being popular.

At the present time, as a result of greater knowledge of conditions, the central bank plan is growing in favor and is being strongly advocated by such men as Mr. A. B. Hepburn, president of the Chase National Bank of New York; Mr. George M. Reynolds, president of the Continental National Bank, and Mr. George E. Roberts, president of the Commercial National Bank, both of Chicago.

In this connection an article in the current number of the Century Magazine by Mr. Hepburn, and a speech made this month by Mr. Reynolds before the American Bankers' Association, are worthy of careful reading.

The problems involved in the central bank scheme are manifestly many and great. All are agreed that the bank should be large, say with a paid-in capital of not less than $100,000,000, that its stability may be, so far as possible, assured and that the dividends thereon should be small and limited to, say, four per cent.

As to the ownership of the stock, opinion is divided as between a pro-rated ownership by the national banks of the country and a popular ownership through public offering of the stock. The former seems the safer, as it would be compulsory and would prevent the accumulation of stock through direct or dummy ownership in the hands of a few private holders, as would be possible under almost any plan of popular ownership.

The operating control of the bank should be vested in a board of managers, small enough so that it should not be unwieldy, and of such tenure that a majority of the board should hold over the possible encumbency of any radical chief executive or Congress. How this board should be chosen, whether by Presidential appointment, subject to confirmation by the Senate, or by vote of the stockholders, or by a combination of the two methods, is an open question.

As to its functions, it should be the depository of the funds of the Federal Government and should, through branches, supersede the present system. It should also be a reserve depository for the national banks of the

country, but should not receive accounts of individuals or corporations; it should be the sole bank of issue, except, and the exception is a most important one, that banks at present issuing circulating notes should, so far as possible, be safeguarded against loss resulting from the liquidation of holdings of Government bonds. Such banks might be permitted to keep their circulation up to the amount outstanding at the time of the opening of the central bank until the bonds securing it should have matured and been paid at par.

That this may be clear, it should be understood that under the present laws, banks must deposit Government bonds with the Federal Government to secure their circulating notes. Owing to a more favorable circulation tax on notes issued against the 2%'s of 1930, these are the most profitable as a basis for circulation, and an entirely artificial demand, apart from their investment value, has thus been created for them. The result is that between six hundred and seven hundred millions of these bonds are to-day owned by our national banks, bought at an artificially high price far beyond that for which they would sell as an investment. These bonds have sold as high as 109½, and are to-day selling at 100¾. As an investment, measured by the current prices of foreign securities of a similar character, they would sell at from 75 to 80. The manifest injustice of compelling banks that had bought "governments" as a basis for circulation, to liquidate them in the investment market at a loss of from twenty-five to thirty points, is too great to be considered and no legislation compelling this would be conceivable. It is obvious that some equitable method of taking care of existing conditions is one of the serious problems of any scheme of currency revision.

The question of the security behind the notes of a central bank is another much discussed question. The consensus of opinion insists on a large coin reserve and such paper as the bank should be allowed to discount.

As to the loans of the bank, it has been suggested that it should rediscount for the banks short time commercial paper, and the notes of firms and corporations with satisfactory endorsements. In this connection, the following quotation from the speech of Mr. Reynolds, before referred to, seems admirable.

"I feel sure we all agree that a short-time credit created in the actual conduct of business, which represents a real transaction between two or more solvent concerns and which bears a solvent endorsement in addition, is the credit which is most desirable, as it is a credit which will be first redeemed, since a completion of the transaction through which it was created automatically retires the obligation.

"I would then restrict the discounts of the central bank to short-time credits of this character, those which would run, say, not to exceed ninety days; I would make the bank a bank of discount for the national banks of the country; and if it would be necessary to do so to enable it to employ its funds, I would allow the bank to accept discounts from the public, but it should not receive deposits from the public. Whether or not the right of discount should be extended to State banks also, is only a matter of detail and is not important from the standpoint of a discussion of the plan of a central bank."

It must be understood that the foregoing is not a discussion of the central bank problem, nor does it presume to offer new or personal views on the subject, but is simply a brief and, of necessity, crude outline of some of the plans under discussion at the present time, and is presented in the hope that it may suggest to some a further investigation of the subject.

Commercial Commissioners from Japan.

We present the following list of members of the special party from Japan who are soon to visit our city; calling special attention to the wide variety of occupation and business represented in this large group of men, each one of whom is specially assigned to some particular theme of investigation:—

DOI, MICHIO,
President Osaka Electric Lighting Co.
President Osaka Chamber of Commerce.

FUJIYE, NAGATAKE,
Director of Ceramic Experiment Station, Kyoto.

HARA, RINNOSUKE,
Contractor and Builder, Tokyo.

HARA, RYUTA,
Chief Engineer Yokohama Water Works

HIBIYA, HEIZAYEMON,
President Kanegafuchi Cotton Mill Co.
Vice-president Tokyo Chamber of Commerce.

HORIKOSHI, ZENJURO,
Exporter, Tokyo.

MADAME HORIKOSHI.

ISHIBASHI TAMENOSUKE,
Member House of Representatives.
Journalist, Osaka.

ITO, MORIMATSU,
Owner of Dry Goods Store, Nagoya.

IWAHARA, KENZO,
Managing Director Mitsui & Co., Tokyo.

IWAMOTO YEINOSUKE,
Broker, Osaka Stock Exchange.

IWAYA, SUYEO,
Literary Editor, Hakubunkan Publishing Co.
Lecturer on Literature in Waseda University, Tokyo.

KADONO, T.,
Vice-president Nagoya Chamber of Commerce.

KAMINO, KINNOSUKE,
Member Nagoya Chamber of Commerce.
Banker.

KANDA, BARON NAIBU,
Professor Peers' School, Tokyo.

BARONESS KANDA.

KOIKE, KUNIZO,
Broker Tokyo Stock Exchange.
Member Tokyo Chamber of Commerce.

KUMAGAE, DR. T.,
Physician Imperial University, Tokyo.

MACHIDA, TOKUNOSUKE,
Cotton and Silk Merchant.
Trustee of Tokyo Chamber of Commerce.

MATSUKATA, KOJIRO,
President Kobe Chamber of Commerce.
Shipbuilder.

MATSUMURA, TOSHIO,
Assistant Mayor of Osaka.
Special Member Osaka Chamber of Commerce.

MIDZUNO, K.,
Consul-general at New York.

MADAME MIDZUNO.

MINAMI, DR. TAKAJIRO,
Professor in Northeastern Imperial University.
Doctor of Agricultural Science, Tokyo.

NAKAHASHI, TOKUGORO,
President Osaka Shosen Kaisha (Steamship Co.).

NAKANO, BUYEI,
President Tokyo Chamber of Commerce.
President Tokyo Stock Exchange.
Member House of Representatives.

NEDZU, KAICHIRO,
Trustee Tokyo Chamber of Commerce.
President Tobu Railway Co.
Member House of Representatives.

NISHIIKE, NARIYOSHI,
Secretary Kyoto Chamber of Commerce.

NISHIMURA, J.,
President Kyoto Chamber of Commerce.
Textile Merchant.
Member House of Representatives.
OI, BOKUSHIN,
President Sulphuric Acid Co., Osaka.
Member House of Representatives.
OTANI, K.,
President Yokohama Chamber of Commerce.
Exporter and Importer.
Member Upper House.
SAKAGUCHI, HEIBEI,
Silk Merchant, Osaka.
SATAKE, SAKUTARO,
President Tokyo Electric Lighting Co.
Special Member Tokyo Chamber of Commerce.
Member House of Representatives.
SHIBUSAWA, BARON EIICHI,
President Dai Ichi Bank, Tokyo.
Chairman of the Commission.
BARONESS SHIBUSAWA.
SHITO, A.,
Director Silk Conditioning House, Yokohama.
SODA, K.,
Banker.
Member Yokohama Chamber of Commerce.
TAKAISHI, SHINGORO,
Secretary Osaka Chamber of Commerce.
TAKATSUJI, NARAZO,
Director Kanegafuchi Cotton Mill Co., Tokyo.
TAKI, KUMEJIRO,
Manufacturer of Fertilizer, Kobe.
Member House of Representatives.
MADAME TAKI.
TAMURA, SHINKICHI,
Exporter and Importer, Kobe.
WATASE, TORAJIRO,
Proprietor Tokyo Plant, Seed and Implement Co.
ZUMOTO, MOTOSADA,
Proprietor of "Japan Times," Tokyo.

In management of the party:

CONSUL GENERAL K. MIDZUNO, in charge.
T. KATO, Secretary.
M. KAWASAKI, H. KOZUKA, Assistant Secretaries.

American Representatives, from the Associated Chambers of Commerce of Pacific Coast:

J. D. LOWMAN,
President Associated Chambers of Commerce of the Pacific Coast.
President Seattle Chamber of Commerce.
C. H. HYDE,
Tacoma Chamber of Commerce.
CHARLES STALLMAN,
San Francisco Chamber of Commerce.
O. M. CLARK,
Portland Chamber of Commerce.
H. Z. OSBORNE,
Los Angeles Chamber of Commerce.
C. HERBERT MOORE,
Spokane Chamber of Commerce.

Representing the United States Government:

ROGER S. GREENE,
Consular Service, Representing Department of State.
JACKSON S. ELLIOTT,
Representing Department of Commerce and Labor.
PROFESSOR JOHN PAUL GOODE,
University of Chicago, Representing Department of Commerce and Labor.

HONORARY COMMERCIAL COMMISSIONERS FROM JAPAN.

Editorial Comment

Contents of this Number

The closing themes of the vicennial celebration at Clark University furnish two of the leading articles of this number. The interest manifested in the programme of the Department of History, under the direction of Prof. George H. Blakeslee, was widespread and great, both in our own city and elsewhere. We are fortunate in being able to present so clear a summary of the positions taken by the distinguished speakers as that contained in Professor Blakeslee's article, and in prefacing it with so practical an application of the whole matter to the possible action of Worcester's business men. Hon. Chester Holcombe has spent thirty years of his life in the service of the United States legation in China, being acting minister during nine years of that period, and having the honor of negotiating with Korea the first treaty into which that country ever entered; and his words should carry great weight. Mr. Aiken's illuminating discussion of a central bank is timely, in view of the present drift of sentiment in monetary circles.

Our Japanese Visitors

Worcester and her Board of Trade are to be peculiarly honored and favored by the approaching visit of the Honorary Commercial Commissioners of Japan, in the course of their tour through the United States. Landing at Seattle the first of September, they have been accorded most remarkable receptions by the chambers of commerce of the Pacific Coast, who have made these distinguished foreigners their personal guests for the entire journey, with the financial assistance of some of the large transportation companies.

At first their itinerary failed to include our city, but after the visit of the excursionists from Worcester to Seattle, personal assurance was given from Mr. J. D. Lowman, president of the Seattle Chamber of Commerce and of the United Chambers of the Pacific Coast, that if it were possible, the "Ideal Industrial City" should be added to the list. It is now decided that, barring unforeseen events, the delegation will leave Boston on their special train at midnight, Monday, Oct. 25, reaching here an hour later. They will breakfast in their dining cars, and be ready for an inspection of our city by 9 o'clock. They will be obliged to proceed on their journey westward about noon, hence only a very limited amount of sight-seeing can be afforded them.

Through the kindness of the Congregationalist we are enabled to show the faces of the principal members of the Commission.

Our readers will also be interested in some of the special subjects of inquiry, to some one of which each of these individuals is specifically assigned: banking, foreign trade, cotton and silk trade, agriculture, stock brokerage, ship-building, building and contracting, car manufacturing, electric power, municipal administration (including charitable institutions), education, medical science, chambers of commerce, dry goods and department stores, machinery, American tariff, warehouses, newspapers and publications, transportation and city traffic.

The Boston Chamber of Commerce Banquet

We have called attention from time to time to the steady progress of the consolidation movement among commercial bodies at the Hub, both because in itself alone considered it is a remarkable transition from some conventional characteristics of Boston, and because in its relations to Worcester and every other city and section of New England it holds beneficent possibilities which few as yet realize. A joyous celebration of the consummation of hopes and endeavors came at the recent banquet in Boston's largest auditorium, where the President of the nation was an honored and most acceptable guest, making the happiest possible introductory speech on the threshold of his long tour across the continent. It was a gracious and significant thing for the Boston organization to make room at the crowded board for so many representatives of other bodies; no less than eleven Worcester gentlemen, representing the Merchants Association and the Metal Trades Association, as well as the Board of Trade, were granted opportunities for sharing the festivities. The Worcester Magazine, in behalf of its entire constituency, offers its heartiest congratulations and best wishes for the constant growth in numbers and power of this great central commercial body of New England.

The Presidential Tour

At the time of this writing, President William H. Taft is in the midst of his journey to the northwest and other portions of the national domain. We believe no appropriation of Congress will call forth heartier approval from the people at large, or do more for the common welfare, than the sum set apart for the traveling expenses of our chief magistrate. All who have seen the "Taft smile" and felt the clasp of that "glad hand" must rejoice that their pleasurable impressions are to be so widely extended, and that so many thousands of their countrymen are to meet the President. He is worth meeting as a manly man; and it is also worth while to have such a journey made in order to make personal and real that intangible thing which we call "the government of the United States." In common with all other interested citizens, we are following his speeches from day to day. We need not always agree with all his positions, nor do we regard his earnest efforts to harmonize dissenting views in his own party, on the subject of the tariff, as likely to produce the effect which he has a right to desire; but he has found the best kind of forum for expressing frankly and fully his convictions and policies; and no right-minded man can fail to honor and respect him therefor. We are sure that he will greatly strengthen his further administration by the geniality and frankness with which he has taken the people into his confidence.

The New Tariff Commission

A small—exceedingly small—crumb was grudgingly granted by Congress instead of the full loaf which business interests almost unanimously demanded, in the shape of a so-called commission of experts on the future adjustments of tariff duties. The President is seemingly determined to make the most possible out

of the three men whom he has called together to advise him in the application of the maximum and minimum sections of the recent act. He has made wise selections in the three men—one from Connecticut, one from the West and one from our own state. Mr. James B. Reynolds, for four years Assistant Secretary of the Treasury, is peculiarly well-equipped with both theoretical and practical knowledge in this broad realm.

We have little doubt as to the ability with which these three men will do their work. We believe President Taft will respect their advice; but so long as the national Senate and House are under the domination of their present lords and masters, we are exceedingly sceptical as to the attention paid the wisest counsels of the most competent commission. The remedy, however, is in the hands of the business men of the nation, if only they have the courage and determination to use it.

A Good City in Which to Locate

The recent report of Mr. F. E. Williamson, our city auditor, is one which it gives us great pleasure to quote when talking, as we have several times recently, with representatives of concerns looking this way for a business location. After putting an absurdly low valuation upon our public grounds and reckoning all liabilities, our assets are over twelve million dollars in excess. With a falling tax rate, now $16.40, an increasing valuation of both real and personal property, and a rising borrowing capacity under the strict laws of Massachusetts, we have inducements to offer newcomers which far outweigh free factory sites and cash bonuses in communities less favored in general financial strength and sagacious business management of municipal affairs. Of course the "fly-by-night" brigade are unmoved by such considerations, but they may very properly be left out of the account. In the long run such advantages as Worcester has to offer will make effective appeal to the right class of new enterprises seeking location.

Lighting the Streets of Worcester

We note with pleasure the recent progressive movement of the Merchants Association to inaugurate the ornamental lighting of the main business streets of this city; and we greatly regret the legal obstacle which is now blocking progress. All who were fortunate enough to visit western cities on the recent Board of Trade excursion will vividly recall the splendid spectacles of illuminated streets in such cities as Tacoma and Denver as well as in Seattle. It is a reflection upon the pride of some of our eastern centres of culture and art that they are so belated in the appreciation of the practical value of beauty as one of a city's assets. We believe heartily in all statutes which provide needed precautions in the location of electric wires; but it seems proper to inquire why it is necessary to have special state legislation, depriving Worcester of privileges which countless other cities in the land freely enjoy. If they are able to utilize safely "more light" to the great benefit of their merchants and to the universal pleasure of all beholders, it would seem that Worcester's electricians might be trusted to decorate an illuminating arch without imperilling the lives of those who would like to admire it. We believe that no electric sign should occupy any location in violation of state law or city ordinance; but where there is conflict between such locations and certain statutes, we think it is worth considering carefully whether it is not wiser to change the ordinance than to remove the electrical display.

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No Cause for Alarm

During the trying months of 1908, Worcester manufacturers, in common with those of many other cities, suffered from a reduction of productivity; and in some quarters this has led to a despairing wail to the effect that this city has reached the zenith of her prosperity and is about to enter upon a period of decline. Unfortunately there are always some who look and talk upon the dark side. We in the East are rather prone to criticise some of our western friends who boast so loudly of their prosperity, and sometimes seem to us to exceed the facts in the case; but it is at least an open question whether an over-hopeful statement is not better than a needlessly gloomy forecast.

In the present case, we want to assure our readers that there is no cause whatever for alarm about Worcester. We who here went through those trying months naturally felt the strenuousness of those times; but other cities fared as badly, and some far worse. For example, during the year 1908, according to the annual report of its Chamber of Commerce, Cincinnati suffered a decrease of one hundred million dollars in its manufactured products, which was not confined to any one specific industry or to any one business. Bank clearings were nearly ten per cent. less than in 1907. Clothing receipts fell off thirteen per cent., coal receipts fifteen per cent., vehicle receipts twenty per cent., lumber receipts twenty-four per cent., while the sales of pig iron were forty-seven per cent. short. Even whiskey production decreased thirty per cent. The only gains shown were in food products. The bank clearings of Worcester only fell off ten per cent., and in all her manufactured products she fully held her own as compared with the showing made by the Queen City. Cincinnati has nearly three times the population of Worcester, but she certainly seems to have suffered much more proportionately than our own city.

Comparisons are sometimes odious, and possibly they may seem so in this instance; our only reason for making them is to assure our Worcester manufacturers and the public generally that there is nothing disheartening or exceptional in the fact that we fell behind in our gross output during 1908. In the long run, as President McKinley so well said, we all rise or fall together; and the recovery that Cincinnati will show during the present year in every line of endeavor will be duplicated by Worcester's statistical tables. A baseless pessimism is as foolish as an ill-founded optimism, and vastly worse in its practical effects. For fear that some have forgotten the motto we quoted a month ago we repeat it in this connection—"Smile and push!"

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An Issue of Principles

We trust that the unpleasant controversy which had begun to centre around the personalities of Secretary Ballinger and Mr. Pinchot has been brought to an end by the President's elaborate justification of his Cabinet officer, and his assurance that he has intended no reflection upon a man who with ability and disinter-

estedness has given himself unselfishly to the great task of forest conservation. The spectacle of a man of great wealth turning aside from its mere enjoyment and devoting himself to an arduous public service for the mere love of usefulness is not so common as to be despised; and in many ways the country could ill afford to lose either the example or the efforts of Mr. Pinchot. Beyond doubt, this controversy is destined to increase rather than lessen, but in the realm of contending principles rather than combative persons. It is a commonplace platitude to say that the progress of conservation shall follow lines laid down in the law of the land. The deeper question is now before us: Are the present laws just and fair, or are they calculated to favor the few to the disadvantage of the many? Are the men set in high places to administer these laws thoroughly transformed from partisan counselors for great corporations to fair-minded administrators for the equal good of all? The satisfactory answer of such questions as these is vastly more important than any adjudication of personal quarrels.

We assume that all must welcome the wonderful achievements and marvelous increase of wealth represented by such a successful work as that of the Gunnison Tunnel, opened by the President during his recent visit to Colorado. The creation of $15,000,000 worth of the richest agricultural land out of worthless desert vindicates beyond dispute the propriety and imperativeness of governmental aid to such irrigation projects, and the importance of providing ample resources for the completion of work now under way, as suggested in the ten million bond issue proposed by President Taft. But however heartily we accept these positions, we should also as firmly insist upon others which are in consonance and not contradiction with these, as admirably put in a recent editorial utterance of the Boston Transcript:

> To conservation as a general principle we may all give acquiescence, but it must be remembered that it is necessary for its success that it should be carried out in consonance with the law and the soundest constitutional interpretation. There are legal questions yet to be decided which must modify any comprehensive scheme in practice. It must be settled conclusively whether the United States has any other jurisdiction over navigable rivers than that involved in the preservation of navigability. A decision is needed also as to the right and power of the United States to recoup itself by charges for any improvement it makes in water power, once it is granted that it has authority to develop industrial value of streams within its jurisdiction. These questions may not be lions in the path of conservation, but they are among the considerations that should give pause to suggestions for increasing the funded debt of the United States to extend it.

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The Conservation of Human Life

The October magazine number of the Outlook is unusually rich in articles of interest to business men who are intent upon the wider movements in our land which make for its enrichment. The colossal attempt of Los Angeles to bring a water supply two hundred and forty miles across the Mojave Desert and under the coast range of mountains; the "Price of the Loaf," a most thorough and illuminating tale of the world-problem of the wheat supply; and the entrance of the Federal Government into the work of rescue in the coal mines, where 30,000 men have been killed in the last thirty years,—all these articles are worthy of special commendation to the readers of this Magazine. We rate as of highest interest and value, however, "The Social Engineer in Pittsburg," and wish we could republish it in full as a supplement to this Magazine, as setting forth in such masterly fashion the problems which beset our modern industrialism. In spite of certain exceptional conditions in Pittsburg, the discoveries of the "social engineer," or, in other words, the outcome of the Pittsburg Survey, made by the Sage Foundation workers, ought to be read and pondered by employers of labor in every large or growing industrial centre of the land.

We specially call attention to a subject prominent in this sketch: the loss of human life in industrial accidents, and the assessment of the economic loss involved, not upon the great corporations, but upon the widows and orphans of the surrounding communities, who are least able to bear it. Without quoting in detail the article's analysis of the causes and responsibilities for the annual loss by accident of five hundred lives in the Pittsburg district, we present one or two extracts concerning economic adjustments which are thought-compelling:

> When we made an analysis as to where the economic cost of these accidents fell, it came home to us with terrific force that the permanent method to keep down the accident rate would be to make killing and injury come higher to the employer. For instance, take three men who were disabled for life during the three months studied—one of whom lost an arm and a leg, one of whom was paralyzed, and four of whom will walk on two crutches the rest of their lives. Our figures showed that, of these men, one received $365, one $125, one $30, and three no compensation. . . There are employers to be found in all parts of the country, no doubt, who treat their disabled workmen handsomely; but the common law in different states is much the same, and the standards on which the general run of employers meet their responsibilities in industrial casualties may well be reflected by this Pittsburg study, which for the first time interpreted the situation in terms of wage-earners' families in the aggregate.

Worcester is remarkably free from accidents in its many industrial establishments; and the conditions under which its workmen toil and live are happily in the greatest contrast to Pittsburg. This general subject, however, is of vital importance to every industrial community. The value of human life, not simply from a sentimental and humanitarian viewpoint, but from an emotionless calculation of wealth-assets of a community—and the conservation of life because of this value, exactly as we are trying to conserve wasted forests or streams,—this is a department of economics which is worthy of attention and study.

In this connection we call special attention to the second smoke-talk of the season, to be given by Dr. William H. Toleman of New York City, upon "Sanitation and Safety Appliances," in connection with a movement for a national museum of such appliances to be permanently maintained in New York City. This lecture, amply illustrated with the stereopticon, will occur on Wednesday evening, October 27, in the course of a two-months' tour in which Dr. Toleman will present this subject before commercial bodies in all parts of the East. In view of the progressiveness of our manufacturers in all matters relating to the well-being of their employees, we are sure this address will excite deep interest.

Railroad Sidings and Reasonable Terms of Operation

An Important Issue Now Pending Before the Massachusetts Railroad Commission

By E. M. Woodward, Chairman of the Railroad and Transportation Committee

SINCE the beginning of the present Board of Trade year, this committee has been called together several times to consider subjects of great interest to the merchants and manufacturers of this city, most of which are still in our hands as unfinished business, on which reports will be made in due season. One matter, however, has arisen which seems worthy of being brought at once to the attention of all the members of our Board, and perhaps to a wider constituency of New England's patrons of railways. Early in the summer the Walker Ice Company, through its Treasurer, Maj. L. G. White, appeared before our body and discussed with us the matter of its siding connections with the Boston & Maine Railroad. It appears that a side track was built as long ago as 1848 on the property now occupied by that company on Thomas Street. The land belonged to the original owners, who purchased ties, rails, etc., and paid all the expense of laying the same. When the Walker Ice Company came into possession of this property some years ago, they found this siding a part of their property, connecting with what was then a line of the Fitchburg Railroad; and as from the earliest times, the railroad company continued to operate the siding without charges or any restrictions. Later came the consolidation of the Fitchburg with the Boston & Maine; and in 1905, when the side track needed repairing, the new proprietors of the main line insisted upon the signature of a contract before they would make the repairs, which were at the expense of the ice company, or operate the siding. After much inconvenience to their business through delay, the company submitted and signed the contract, which released the railroad from all their statutory and common law liabilities for claims arising from personal injuries sustained by any one from the movement of cars upon the siding, or from any damage by fire caused by sparks from engines when moving cars at that point. After two years the Walker Ice Company decided to abrogate this contract, as by its terms they were allowed to do, on the ground that they were no longer willing to risk liability from accidents to passers-by on the highway from the movements of trainmen who were frequently reckless and over whom they had no means of control. For a time negotiations continued as to a renewal of the contract, two alternative and less drastic forms being offered; but upon continued refusal to sign any document which accepted the liabilities placed by law upon the railroad, the Boston & Maine management finally, about the middle of last July, ceased to place cars upon the siding, to the great inconvenience and detriment of its owners, and still persists in that position.

This is not a new case in the history of the Transportation and Railroad Committee of this Board; once, at least, in recent years, another railroad running through this city made a like demand for a similar contract; but when our organization took a firm stand with the owner of the siding, the railroad receded, and has not since repeated such demand. Our committee therefore advised that if in the present instance the Boston & Maine road held to its position, an informal conference be held with the Massachusetts Railroad Commission, and their friendly offices be invoked to adjust matters. This advice was followed; with the result that at least five or six such conferences were held, but without any relief being granted by the railroad. It thus became necessary for the ice company to institute complaint and appear at a formal hearing, which was set for Friday morning, Sept. 24.

At this hearing our Board was represented by the Secretary, Mr. Sewall; and a large number of business men, who realized the importance of this matter, were also present. In the absence of Mr. D. O. Ives of the New England Traffic Bureau, his assistant, Mr. W. H. Chandler, was present and took careful note of the proceedings.

At this hearing the railroad began by denying the jurisdiction of the Commission over the case, owing to a phrasing of the statute in which the word "operation" was omitted in connection with a mandatory order. This point was argued, and decision reserved by the Commission. An effort was then made to define clearly the issue, and in order that each side might bring in witnesses, an adjournment was taken until Tuesday, Sept. 28.

At this second session the Commission still reserved judgment upon the point of mandatory jurisdiction, it being agreed that such points lay within their general recommendatory powers. The entire afternoon was spent in the examination of witnesses for the Walker Ice Company by its counsel, Ex-attorney General Herbert Parker. He first called to the stand Vice-president and General Manager Barr, of the Boston & Maine road; and for nearly two hours questioned him as to the policy and practice of the road in reference to sidings, and the expense of their operation. Mr. Barr claimed that private sidings were frequently unprofitable to the road, but were operated "as a sop to the public." As regards the terms of their operation he admitted that some sidings were operated with no contract whatever, and with no payment for services made or demanded; but further declared that a process of evolution was going on whereby every owner of a siding was hereafter to be required to sign a contract in form similar to the last one presented to the Walker Ice Company. When questioned as to the relative cost of taking a car of coal from a southern line and putting it upon the Walker Company's siding or upon a railroad siding for general delivery, Mr. Barr at last was reluctantly brought to admit that he could not state that the one was more expensive than the other, nor could he mention any element in the difference of such cost.

Mr. White next took the stand, and related the history of the case from his point of view. While there were two competing roads passing his place, he never had any difficulty over the switching of his cars. His realization of the injustice of his first contract came in connection with observing the experience of the Bigelow Company at Clinton, who under a similar contract were compelled to pay damages for personal injury to a claimant who recovered first from the railroad. Mr. White stated as his objection against the present form of contract the fact that it would make his company liable not only for damages to their own buildings by fire, but for any extension of that fire to other buildings,

even if half of the city might be involved. He was willing to assume the fire risk for his own property, which he could insure, but not for all other buildings which so closely surround his premises.

As the afternoon was drawing near a close, an adjournment was taken until Monday, Oct. 11, at which time the railroad will present any further evidence it may desire, and the arguments will be heard.

In view of the vital importance of this case to every owner of a side track in Worcester, and in view of the apparent purpose of the railroad to resist all efforts to modify this contract, short of a decision of the United States Supreme Court, it would seem that this case should be most carefully watched by our committee and by our business men generally. It has therefore been thought best to call to our assistance the entire body of Directors, also the Advisory Committee, giving us some fifty members of the Board of Trade who can consult together and come to some agreement as to the course to be pursued. We are also to be aided by the presence of Mr. D. O. Ives, of the Traffic Bureau of the Boston Chamber of Commerce, in whose broad judgment and experience we may hope for light upon the present case; also Secretary C. Henry Hathaway of the Springfield Board of Trade. This meeting is to be held Thursday, Oct. 7, the date of the publication of this number of the Magazine.

It is the judgment of those who have been closely watching this case that a change of policy, not alone on the part of the Boston & Maine road, but by all New England roads, is seriously contemplated, whereby just as many of the statutory liabilities of these roads as possible will be thrust upon the patrons of the road. We therefore advise our readers to watch carefully the progress of this case, as it may throw much light upon what the business men of New England may have to expect in coming days, and for which they ought to prepare themselves in due season by carefully concerted action.

The Commercial Travelers' Magazine

Encouraged by their successful venture into the publishing field last year, the Worcester Commercial Travelers' Association is planning for a second issue of their magazine, which promises far to surpass the attractive and enjoyable number appearing in connection with their last banquet.

We have been shown by Mr. Herbert L. Adams of the committee the striking cover design, in which the old stage-coach, the locomotive, the flying-machine and the salesman's grip blend most artistically.

The table of contents shows that the interior of the magazine will hold its own with the handsome cover—an exceedingly palatable menu for the literary bill-of-fare being spread before the eye.

The Worcester Magazine will have a hearty welcome for this number when it appears, and trusts that its advertising pages may prove as satisfactory to the management as its literary features are sure to be for the readers.

Among the articles of special promise we note that one is to appear from the pen of James H. Collins of New York, author of "Human Nature and Salesmanship"; also one from J. Walter Thompson on "Advertising and its Relation to the Commercial Traveler." There will be much interest in what Mr. E. P. Shaw, Jr., will have to say on "What the Trolley Has Done for the Commercial Traveler."

The magazine is due to appear early in December.

A Gathering Worth Attending

Within a few weeks there is to assemble in annual conference two national bodies whose deliberations will be of special interest to commercial organizations, the National Municipal League and the American Civic Association. The purpose of the one is the improvement of municipal government; the other lending its efforts to the æsthetic side, to the making of life in city, town and country in every way more desirable. It points the way to beautification and better sanitary conditions, to harmonious groupings of public and semi-public buildings; to good taste in architecture; to the establishment of parks and playgrounds; to shade trees and grass plots; to the abolition of offensive signs and billboards. In short, its mission is to promote cleanliness, refinement, health, virtue and happiness by every means at hand.

For several years past these two great national organizations, so harmonious and yet so distinct, have been meeting annually in conjunction, with excellent results.

They will do so again this year, the place being Cincinnati and the time the third week in November, beginning on Monday, the 15th, and ending the following Saturday.

The first draft of the programme shows that every part of the country will be represented by public officers and municipal experts and that the whole field of political reform and civic improvement will be covered.

The Worcester Board of Trade holds a membership in each of these bodies and is entitled to delegate representation. It is earnestly hoped by our Directors that some member may be found who can plan to be present at this gathering; if so, President Tatman is authorized by vote of the Directors to issue credentials to such persons.

A Pleasant Appreciation

Some exceedingly gratifying responses have come back to this office from the various commercial bodies to whom the Directors sent votes of thanks for courtesies extended to the Board of Trade excursion to the Pacific coast. We quote a single one, which serves to illustrate the permanent feeling of friendliness which is one of the many valuable results of our experiment in publicity; from Mr. Edward M. Skinner, president of the Chicago Association of Commerce, under date of Sept. 15th:—

> We feel that the pleasure of meeting the ladies and gentlemen from Worcester, the privilege of being with them even so short a time and the opportunity of entertaining you even in such modest measure place us under obligation to you. We were especially gratified in the thought that you desired to stop off at Chicago. The automobile ride gave an opportunity for our members to come more closely in touch with your members; and the many favorable remarks made of the acquaintances thus formed show conclusively that the day will be one long remembered by our members.

We can assure our Chicago friends that our recollections of our stay in their midst will be quite as lasting and delightful as the memories to which this letter so kindly refers.

Current Events

Personal and General

Sept. 1. Four new letter carriers appointed by Postmaster Hunt to go on duty Sept. 16. They are John M. Kinnery, John J. Seagrue, Charles J. Olson and Thomas F. Hartnett.

Librarian emeritus Samuel S. Green, of the Public Library, returns from his eighteenth trip to Europe.

Stamp sales at Worcester Post-office for the month of August, $30,209.89, a gain of $3,702.22 over corresponding month one year ago.

Pauline, 15-year-old daughter of Mr. and Mrs. Felix B. Oliver, drowned while bathing in Patch Pond off June Street.

Henry Chase Page of Springfield assumes the duties of General Manager of the Worcester Consolidated Street Railway, succeeding Edward G. Connette, who has accepted the position of Transmission Engineer of the Manhattan Street Railways.

2. Announcement made that Rev. Bernard J. Feeney, S. J., of Georgetown, has been made assistant to the Prefect of Studies, Rev. James A. Mullen, S. J., at Holy Cross College.

Anniversary banquet of the Single-taxers in honor of the birthday of Henry George.

Worcester Board of Trade Directors vote to invite the Japanese commercial delegation, now touring the United States, to visit Worcester.

The Thirty-sixth Regiment, M. V. M., at its annual reunion, presented $500, in memory of Col. Thaddeus L. Barker, Fitchburg, who commanded the regiment a part of the time it lay in front of Petersburg, Va., during the Civil War.

3. Announcement made that Odd Fellows' Home has been given $2,000 by the late William Marble of Cambridge.

Tayne, eight-year-old daughter of Mr. and Mrs. William Hamalin, 52 Esther Street, fatally burned in a bonfire kindled by boys in the neighborhood.

Worcester National Bank receives a consignment of 50,000 of the new Lincoln pennies.

Judges of the cover designs submitted for the Worcester Music Festival programmes award first prize to Miss Angela A. Goddard of Spencer, and the second to Philip Lyford of Worcester; honorable mention, Miss Emily B. Waite, 396 Bloomingdale Road, Worcester. Committee of award, Mr. Philip J. Gentner, director Worcester Art Museum; Mr. Charles S. Hale and Mr. Frank J. Darrah.

Jury in the case of Ralph Harding, charged with murder in the second degree, the victim being Constable Albert E. Miller, killed at Oxford Heights, on the night of June 20, bring in a verdict of not guilty.

Rev. Charles H. Tilden, member of the Dewey Street Baptist Church, ordained to the ministry there.

4. Clark College entrants for the current year number seventy-three, largest class since the college opened.

Stone & Berg Lumber Company of Worcester organize with capital stock of $30,000, par value $100. August M. Berg, president; Walter J. Stone, treasurer and clerk, and John T. Brierly, director.

6. New England Fair opens with one of the largest crowds in its history.

Prof. D. B. McMillan of Worcester Academy, who accompanied Commander Peary to the Arctic regions in August, 1908, wires Dr. Abercrombie of the Worcester Academy that Peary reached the pole April 6, 1909.

The twentieth anniversary of Clark University celebrated by a series of conferences opening to-day and lasting until the 19th inst.

8. In the presence of 400 persons, 19 of whom are policemen, Emma Goldman lectures on the lawn of Rev. Eliot White's residence, after an unsuccessful attempt to get a hall in which she can speak.

Both the church and parish of Piedmont Congregational Church extend unanimous call to Rev. Henry Stiles Bradley of St. John's Methodist Church, St. Louis, to succeed the Rev. Dr. Willard W. Scott as pastor.

Prentice Brothers Company employees elect H. L. Keith president of their mutual aid society. The organization has $1,100 in the treasury.

The Twenty-fifth Regiment, M. V. M., re-elects Gen. A. B. R. Sprague president of its veteran association at the forty-fourth annual reunion.

9. Dean Rufus S. Bentley resigns from Clark College.

10. Announcement made that E. J. Cross, contractor, has been awarded the contract for building the engine house, lumber shed, store house, paint shop, transfer table and passenger repair shop, one story high, and 480 by 110 feet, for the Fitchburg Railroad, at East Fitchburg.

Andrew, 18-year-old son of Mr. and Mrs. Frank A. McKinstry, crushed to death while setting an eight-inch belt on its pulley, at Norton Grinding Company plant.

As a part of its vicennial celebration, Clark University confers honorary degrees upon many distinguished scholars participating in the exercises.

11. Announcement made that Norcross Brothers Company has been awarded the contract for building the new child study institute buildings at Clark University.

Worcester Hay & Grain Company incorporated with capital stock of $15,000; par value $100. Thomas R. Fitzpatrick, president; Jay Cook, Jr., clerk; Harry V. Prentiss, treasurer.

New England League championship won by Worcester Baseball Club for the fourth consecutive time.

13. Crompton Mutual Relief and Benefit Association elects Harry E. Waite president and Ulick M. Burke treasurer. It has 169 members and $1,500 in treasury.

14. Big Taft banquet given by Boston Chamber of Commerce attended by following Worcester men: Mayor James Logan, Congressman Washburn, M. J. Whittall, Hon. E. A. Cowee, President Charles T. Tatman, Vice-president E. M. Woodward, Director Louis H. Buckley, Ex-presidents Geo. F. Booth, H. W. Goddard and B. F. Curtis of the Board of Trade; President E. E. Dodge, Secretary E. B. Clapp and Treasurer Elwood Adams of the Merchants Association; and President Charles E. Hildreth of the Worcester Branch of the National Metal Trades Association.

Worcester & Southbridge Street Railway Company and the Hartford & Worcester Street Railway Company by unanimous vote approve purchase of franchise and property of the Hartford & Worcester Company, by the Worcester & Southbridge Company. The Worcester & Southbridge Company agrees to pay $175,000 to the selling company, not exceeding such sum as railroad commission shall deem to be fair value.

Freshman class at Holy Cross College numbers 128.

E. J. Cross, contractor, to build two brick factories 40 by 175 feet, two stories high, for the Viscoloid Company, Leominster; also two storage warehouses 60 by 175 feet, two stories high, for the same concern. Contracts call for about $45,000.

Announcement made that Howe Paint & Color Works have given contract for erecting brick building 38 by 43 feet, one story high, at its plant, to E. J. Cross, contractor.

Dr. James P. Porter, professor of psychology, Clark College, elected dean, succeeding Rufus C. Bentley, resigned.

John Moonoogian, 24, member of the firm of Moonoogian Bros., confectioners, falls from second story of building, being dismantled, at 99 Madison Street, and striking on fence, sustains fractured spine, dying in an hour.

Jury in case of William T. Walsh, charged with the manslaughter of Stanley Taylor, as a result of so-called joy ride at Shrewsbury, disagree.

Entering class at Worcester Academy numbers 260, 30 more than ever before.

J. M. & C. J. Buckley, contractors, to build $80,000 warehouse at 132-134 Summer Street, Boston, for the Francis A. Foster Company. The structure is to be eight stories high.

Y. M. C. A. reports present membership as 1,443, a gain of 16 in three months.

Worcester Trust Company and Carrie E. Harrington each file bonds of $350,000 as trustees of the estate of the late Chauncey G. Harrington.

Ralph R. Harding, acquitted of manslaughter charge in Oxford Heights case, sentenced to reformatory on breaking and entering charge.

Hon. Marcus Morton of Newton appointed successor of late Hon. Francis A. Gaskill as judge of the Superior Court.

15. Entering class at Worcester Polytechnic Institute numbers 175, largest in its history.

Worcester Gas Light Company re-elects Charles D. Lamson, president; James P. Hamilton, treasurer; and Charles D. Lamson, A. G. Bullock, Francis H. Dewey, Albert Wood, Samuel B. Woodward and Thomas B. Eaton, directors.

United States Envelope Company Directors elect these officers: President, Charles H. Hutchins, Worcester; First Vice-president and General Manager, Hon. James Logan, Worcester; Second Vice-president, G. Henry Whitcomb, Worcester; Third Vice-president, Robert W. Day, Springfield; Secretary and Assistant Treasurer, Wilfred M. Warfield, Springfield; Assistant General Manager, Louis H. Buckley, Worcester; Executive Committee, James Logan, Worcester; W. O. Day, Springfield; and L. H. Buckley, Worcester.

16. George A. Gaskill elected a director of State Mutual Life Assurance Company, succeeding Judge Francis A. Gaskill, deceased.

Clark University confers additional degrees upon distinguished scholars present at vicennial exercises.

17. Henry K. Swinscoe, promoted to position of assistant superintendent of the south works, American Steel & Wire Company, presented with case of gold and illuminated address, by 500 officers and employees of the corporation.

The Twenty-first Regiment, M. V. M., has its forty-fourth annual reunion and entertains Clara Barton, the daughter of the regiment.

18. Hon. Charles R. Crane, the new United States Minister to China, speaks at the Clark University conference.

John Wheeldon, retiring superintendent of the American Steel & Wire Company, south works, who has been transferred to the New Haven works of the company, given a chime clock and a gold watch, chain and charm by employees.

Automobile containing Representative and Mrs. Norman H. White, Brookline, runs over and kills John Edward Bourgeois, 7 years old, on Shrewsbury Street.

19. Rev. Dr. H. S. Bradley of St. Louis accepts call to Piedmont Congregational Church, to take effect October 1.

20. Forty thousand people witness fireworks display by the natives of Foggio, Italy, at East Park.

Public School Principals' Club elects these officers: President, Miss Emma A. Porter, Ward Street School; Vice-president, Wilfred E. L. Todd, Lake View School; Secretary, Miss Mary Drake, Adams Square School; Treasurer, John B. Crowley, Bloomingdale Road School; Executive Committee, Arthur G. Lewis, Belmont Street School; Miss Jennie L. Dearborn, Freeland Street School; Miss Cora A. Baldwin, Chandler Street School.

21. Dr. Edmund Clark Sanford elected President of Clark College to succeed the late Hon. Carroll D. Wright.

John H. Pickford nominated for Senator in First Worcester District by Republicans, Daniel E. Denny in Second. Representatives nominated in their wards: Clarence W. Hobbs, Jr., John P. Holmgren, Louis H. Grenier, Louis E. Feingold, John B. Belanger, Oscar C. Hammarstrom, Harrison J. Conant, Arthur M. Stone, George A. Reed, Robert M. Washburn.

Honorary thirty-third degree conferred on Charles E. Davis and Henry L. Green, at the ninty-seventh annual session of the Supreme Council, A. A. S. R., Boston.

22. Democrats nominate Edward A. Harris as senator in the First Worcester District, and make the following representative nominations: Thomas F. McGoverin, Cornelius J. Carmody, James H. Mellen, Michael A. Henerbery, Joseph S. McDonough, Peter J. McLoughlin, Henry M. Shaughnessy, John F. H. Moore. No candidates nominated in Wards 2 and 10.

Francis H. Dewey elected treasurer of Clark University Corporation, vice Dr. Thomas H. Gage, deceased.

Representative Norman H. White of Brookline held in $1,000 bonds on charge of manslaughter in connection with Shrewsbury Street automobile accident.

23. Hearing before the Railroad Commission at Boston, on petition of the Walker Ice Company, asking an order requiring the Boston & Maine Railroad to operate the Ice Company's siding on reasonable terms.

City Affairs

Aug. 30. City Treasurer DeWitt Clinton receives from the Board of Assessors the tax warrant for the fiscal year 1909-10, amounting to $2,282,527.52.

Sept. 1. Police records show 299 arrests for drunkenness during August, against 219 in July, 205 in June and 230 in May.

Voting lists posted contain the names of 23,855 persons eligible to the franchise.

August draft on the treasury $246,604.25.

Total expenditures for the School Department during August, $11,389.74; total for nine months of the fiscal year, $449,475.15.

7. At a public hearing at City Hall to protest against the terms given the Connecticut River Transmission Company by the Board of Aldermen, the Worcester Electric Light Company announces material reductions in its charges for power and light.

10. City Treasurer DeWitt Clinton opens bids for $125,000 Worcester city 3½ per cent. bonds, of which $50,000 for playgrounds run 20 years, and $75,000 for street construction run 10 years. The 20-year bonds bring $101.27 and the 10-year bonds $100.27. Both awarded to Perry, Coffin & Burr of Boston.

17. Worcester's assets announced by City Auditor F. E. Williamson to be $22,509,171.12; liabilities, $10,178,572.87.

20. Total net debt of the city announced by City Auditor F. E. Williamson to be August 31st, $6,581,382.69, an increase of $306,433.12 over corresponding period one year ago.

Worcester Necrology

Sept. 1. James McLeod dies at the home of his son, 33 Dewey Street, of old age, aged 91.

2. Edmond C. Chatelain, 30 years old, dies at City Hospital, as result of accident at Norton Grinding Company, the chains of a travelling crane striking him in the face, crushing it in.

3. Patrick Henry Smith, for twenty-four years a conductor on the Fitchburg division of the B. & M. R. R., dies of Bright's disease, at his home, 14 Larch Street, after an illness of several months. His age was 55 years 10 months and 10 days.

Deacon Edward Jerome of the Old South Church dies, aged 65 years 10 months and 19 days. For many years he was a faithful employee at the Crompton-Knowles Loom Works.

7. Reuben H. Southgate, for many years a dealer in shoe findings, but retired since 1888, dies of old age, at his home, 85 Salisbury Street, aged 75 years and 9 months. He leaves a widow and one son, Louis Warren Southgate, of the firm of Southgate & Southgate.

Albert Young, a resident of Worcester for forty years, dies suddenly after being removed from the Lombard Machine Shop, aged 60 years 10 months and 3 days.

8. Charles D. Shurn, proprietor of a tobacco store at 700 Main Street, dies of typhoid fever, aged 20 years 2 months and 5 days. He had been ill only six days. He was a member of the class of 1909, South High School, and was very well known socially.

11. Charles Gallagher, late of the D Company, First Regiment, Rhode Island Light Artillery, dies at St. Vincent's Hospital, of apoplexy, aged 76 years.

John H. McMullin, for twenty-three years an employee of the Worcester Consolidated Street Railway, and for the past two years superintendent of shops, dies at City Hospital, of Bright's disease, aged 53 years 2 months and 28 days.

12. Candace S., widow of Geo. P. Kendrick, dies at the home of her son, Edward H. Kendrick, 11 Westland Street, of old age, aged 89 years 2 months and 27 days.

14. Pauline, wife of Willard S. Taylor, dies at the family residence, 20 West Street, of uræmic poisoning, aged 26 years 5 months and 23 days.

17. Death of Dr. Thomas Hovey Gage, at his home, 50 Pearl Street, of heart disease, aged 85 years 3 months and 25 days.

21. Death of Edwin C. Beals, aged 80 years and 10 days, at the home of his daughter, Mrs. Charles E. Squier, 243 Lincoln Street, of a complication of diseases.

23. Miss Lucy Chase dies at Memorial Hospital, of old age, aged 86 years 9 months and 22 days. She leaves one brother, Charles E. Chase; one sister, Sarah E. Chase, and a half-sister, Mrs. J. Russel Marble.

Death of Mrs. Adaline N. Fuller, wife of Samuel H. Fuller, a charter member of George H. Ward Relief Corps, of heart disease, aged 75 years.

Local September Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Local conditions have responded readily to the general improvement in the industrial and commercial situation, and there is every indication of a full return to normal conditions and a brilliant outlook for the future. Scarcity of skilled labor in some lines has the tendency to curtail operations.

The demand for seasonable merchandise is reported good in retail lines.

Manufacturing plants throughout the county are making preparations for a largely increased volume of business. Machine tools, lathes and textile machinery plants report heavy orders. Corset manufacturers also are handling an unprecedented volume.

Local bank clearings for August show a gain of 12.2 over the corresponding month of a year ago, and a gain of 9.2 over the corresponding month in 1906, before the depression. Failures in the county for the first three-quarters of the last four years are as follows:

1909.

	Failures.	Liabilities.	Assets.
January,	10	$37,242	$7,970
February,	9	54,043	8,847
March,	11	46,701	15,656

May,	12	58,904	26,892
June,	8	19,676	7,150
July,	10	44,148	12,650
August,	10	92,634	35,344
September,	7	38,530	19,450
		1908.	
January,	17	$86,506	$31,967
February,	8	56,123	6,201
March,	9	52,999	15,485
April,	14	488,293	140,950
May	3	5,608	2,415
June,	3	233,573	96,250
July,	7	80,308	42,950
August,	7	9,288	2,514
September,	10	57,833	16,537
		1907.	
January,	13	$102,313	$35,265
February,	6	60,576	16,978
March,	9	61,679	7,712
April,	12	298,591	141,673
May,	6	32,454	10,370
June,	10	19,843	2,830
July,	4	25,341	17,670
August,	2	22,260	9,510
September,	3	7,200	2,000
		1906.	
January,	7	$130,850	$29,111
February,	10	23,390	7,791
March,	10	49,949	3,811
April,	7	47,771	6,710
May,	11	35,567	13,906
June,	5	48,796	23,638
July,	12	28,189	7,060
August,	11	52,901	32,545
September,	3	19,301	10,645

Worcester Quotations

Furnished by FISK & ROBINSON, Worcester, October 1, 1909.

	Bid.	Asked.
Mechanics National Bank	125	.....
Merchants National Bank	162	165
Worcester National Bank	205	.....
Worcester Trust Company	300	.....
RAILROAD STOCKS.		
Boston & Albany	232	233
Boston & Maine common	149	last sale
Boston & Worcester Elec. common	.....	12
Boston & Worcester Elec. pfd.	.....	54
Fitchburg preferred	132	133
New Eng. Inv. & Sec. pfd.	83	85
New York, New Haven & Hartford	172	last sale
Norwich & Worcester	210	last sale
Providence & Worcester	267	275
Worcester, Nashua & Rochester	145	last sale
Worcester Railways & Investment	62	70
INDUSTRIAL STOCKS.		
Crompton & Knowles pfd.	147½	
Denholm & McKay common	200	.....
Denholm & McKay pfd.	101	102
Graton & Knight Mfg. common	130	.....
Graton & Knight Mfg. pfd.	115	116
Royal Worcester Corset Co.	140	.....
United States Envelope common	54	55
United States Envelope pfd.	112	113
Worcester Gas Light	260	265
Worcester Electric Light	260	300
Wright Wire Company common	102	.....
Wright Wire Company pfd.	106	.....
BONDS.		
Amer. Writing Paper 1st 5's	87	88
Boston & Wor. St. Ry. 1st 4½'s	98½	100
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 6's	5¼	basis
Marlboro & Westboro St. Ry. 1st 5's	.....	98
Norcross Brothers 1st 6's	.....	100
United States Envelope 1st 5's	101	.....
Worcester Cons. St. Ry. 1st 4½'s	94½	
Worcester & Marlboro St. Ry. 1st 5's	98	.....
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

A New Ally in the Battle for Fair Express Rates

For many months Worcester shippers have experienced a growing exasperation over the express rate situation, and have also felt increasingly their helplessness to remedy extortionate charges. From the first we have been convinced that what a single city like our own could not effect by any local agencies may be taken up in conjunction with other cities with success. Accordingly we have welcomed the formation of the New England Traffic Bureau, in connection with the Boston Chamber of Commerce, believing that it was to be what its name implies, an ally to all New England shipping interests in their efforts to have fair treatment from common carriers.

We are glad to report definite and early efforts on the part of this new organization to fulfill its ideals. The matter of express rates is one important item of its work; and we take pleasure in devoting some space to showing our readers how it is beginning its work.

On August 19 last the following letter was sent by Mr. D. O. Ives to the managers of the different New England express companies:

Dear Sir: The Chamber of Commerce has received very many complaints from its members with reference to certain rates contained in the express companies' new classification number 19. As a result of these, a conference has been held, at which were authoritatively represented the following interests: produce, fruit and vegetables, breweries and mineral waters, oysters, bread, milk and cream, and ice-cream. Attention was called to the following statement of facts:

It is estimated that these changes in the rates on returned empty packages will, alone, cost the shippers and consumers of the necessities of life in New England a sum of money surely in excess of $100,000, and probably several times that amount, judging from such estimated figures as we have been able to obtain.

The Chamber of Commerce is convinced that the effect of these advances will inflict a serious injury to certain individuals and firms, and that they will tend to increase the cost of living throughout this section. We therefore request that the express companies reconsider this matter and restore conditions in exis-

tence under classification number 17. In asking this we are fully aware of the fact that there are inconsistencies and omissions in number 17 which ought to be corrected, and we should be very glad, indeed, to meet with officials of the express companies and discuss any modifications or changes which seem to be desirable, as we do not wish to take an arbitrary position, or insist upon any radical action that cannot be supported by argument and reason.

This letter, signed by the Manager of the Bureau, is a model in its method of approaching the points at issue; far more so, in fact, than one of the replies which it was the privilege of the writer to see. The result of these inquiries will best appear in the quotation in full of another letter, this time sent by Mr. Ives to the Secretary of this Board, in common with other commercial organizations:

Dear Sir: The Boston Chamber of Commerce has received many complaints from its members protesting against the advance in rates on "empty carriers," as provided for in "official express classification No. 19, effective August 1, 1909," which governs in New England territory as well as in practically all other sections of the country.

An effort has been made to secure a conference with the express companies, in order that this organization might show them the injustice of some of these new rates, and obtain relief where it is needed. The express companies have not complied with our request, but reply to the effect that we are mistaken in our deductions, and that the new classification is a reduction instead of an advance in rates—that they are giving the additional service at a loss.

The Chamber of Commerce purposes presenting the case to the Interstate Commerce Commission as well as to the Massachusetts State Railroad Commission, and asks that you give an expression of your views on the subject, and state if your organization is willing to send a representative to a meeting which we shall call to consider the subject.

The basis of our complaint is that by gradual changes in the wording of the rule covering returned empties, the express companies have so changed the rates that in the last few years a material charge has resulted where the service was formerly performed free, and the express companies by this new classification are forcing their wagon service on many of their patrons, and making a charge for it much in excess of the amount for which the owner of the packages can perform the same service.

Will you not kindly investigate the matter and advise if you can be represented at the meeting, which will be called at an early date.

This matter, which will in due time receive definite action by the Committee on Railroads and Transportation, is first made public in this way, in order that the Chairman, Mr. E. M. Woodward, and the other members of the committee, may receive from our shippers the actual facts so far as our city is concerned. It is claimed by some representatives of the express companies that the new arrangement is for the convenience of their patrons, and at their desire. If any wish for wagon delivery of empties, at the cost of one-half or more of the sending charge, they ought to be accommodated; but if others prefer to call at the company's office for their empties, it would seem that a free wagon delivery should not be forced upon them at the expense of burdensome return rates upon the railroad. We assume that our Board of Trade will be represented at this coming meeting; and we therefore urge upon our shippers to make known their wishes in this matter, either at this office, or in direct communication with the members of the Railroad Committee.

The Spokane Rate Case

In common with the representatives of other New England cities, our Board of Trade was represented by its Vice-president, Mr. E. M. Woodward, who is also Chairman of the Transportation and Railroad Committee, at an interesting and important meeting in Boston, held in response to the following call from the New England Board of Transportation:

An emergency meeting is hereby called, to be held in the Chamber of Commerce committee room on Friday, September 17th, at 11 a.m., to discuss the proposed basis for making rates to Spokane, Washington. If the principles involved in the basis submitted by the western lines are established, rates from seaboard territory to Spokane, and many other western points will be made by adding to Chicago rates the full local from point of shipment to Chicago, thus discontinuing the many blanket rates at present in effect.

The following examples are typical of the disastrous effect this basis would have on the commerce of New England:

		Boston	New York	Chicago
Fish, dried and salted,	Present	$1 71	$1 71	$1 70
	Proposed	1 44	1 44	1 14
Cartridges,	Present	2 03	2 03	2 03
	Proposed	1 73	1 73	1 38
Rubber hose,	Present	2 10	2 10	2 10
	Proposed	1 78	1 78	1 43
Drugs,	Present	2 00	2 00	2 00
	Proposed	2 25	2 25	1 75
Books,	Present	2 25	2 25	2 25
	Proposed	2 17	2 17	1 67
Carpets,	Present	2 70	2 70	2 70
	Proposed	2 57	2 57	1 82

A hearing is to be held at Spokane on September 29 (which may determine finally the basis on which these rates are to be made), and it is very necessary that prompt action be taken to prevent such radical discrimination against industries of this section. We therefore urge you to be present at our meeting on the 17th, in order that the subject may be fully discussed and some plan adopted whereby New England's interests may be protected.

Yours very truly,

D. O. IVES,
Manager Transportation Committee.

A previous meeting had been held in New York city, attended by representatives of commercial bodies in the Central Atlantic States, at which the situation was thoroughly reviewed and the following resolutions adopted:

Whereas, In what is known as the Spokane rate case, a preliminary decision was rendered Feb. 9, 1909, by the Interstate Commerce Commission, reducing rates on certain commodities and classes from Chicago and St. Paul to Spokane, without attempting to change the relative adjustment or abolish the blanket rates existing east of Chicago; and

Whereas, Said decision further invited the Northwestern railroads subserving said territory to submit a revision of their general tariff rates affecting said territory; and

Whereas, Said proposal has been submitted and in effect, while reducing rates from St. Paul and Chicago to Spokane, withdraws the blanket rates heretofore accorded to all territory east of the Missouri River into Spokane and adds to the reduced rates from St. Paul and Chicago the locals from all eastern points to Chicago; and

Whereas, That result necessarily establishes an acute discrimination against eastern manufacturers and jobbers in favor of those of Chicago, St. Paul and territory west thereof; and

Whereas, Such adjustment is contrary to all the previous practice of said railroads, and would injuriously disturb the commercial relations existing for the last twenty years between the East and said western territory, in many important lines of trade; and

Whereas, Hearings in similar cases before the Interstate Commerce Commission are set for Reno, Nev.; Phoenix, Ariz.; Salt Lake City, Utah; and other points, and it is altogether likely that the decision of the Spokane case will be accepted as a precedent for rates in the entire inter-mountain territory.

Resolved, That, in our opinion, the proposal of the Northwestern railroads for a revision of the tariff schedules in the Spokane rate case, professedly in conformity with the preliminary decision of the Interstate Commerce Commission, will, if approved by the Commission, result in serious and, in many cases, disastrous discrimination against jobbers and manufacturers in territory east of Chicago, in favor of the manufacturers and jobbers in Chicago territory and west thereof.

Resolved, That, in our opinion, the mercantile and manufacturing interests in the eastern territory should unite in formal appearance in the Spokane rate case, at Spokane, on and after September 29, 1909, in opposing the adoption of said proposed basis and in watching and protecting the interests of the East in any other or further developments in said litigation.

Resolved, further, that appropriate effort be made to secure a hearing before the Interstate Commerce Commission, preferably at Washington or New York, in said litigation before the same be closed.

This emergency meeting, called in Boston on September 17, was well attended, and after full and careful consideration of the matter adopted the following resolution:

Resolved, That it be the sense of the gentlemen present that the Boston Chamber of Commerce, through its New England Board of Transportation, take the strongest and most energetic action possible, in connection with other New England organizations, to oppose the proposed Spokane freight rates, by attendance of delegate or delegates at proposed hearing at Spokane on the 29th inst., or at a later meeting in the East, which should be demanded by the Boston Chamber of Commerce and similar eastern bodies before final decision is reached.

Owing to the shortness of the time it was impossible to assemble the full Board of Directors to consider this subject, but our Executive Committee, on Wednesday, Sept. 22, adopted the following resolutions, copies of which were at once forwarded to the Boston Chamber of Commerce, and to the Interstate Commerce Commission at Washington:

Resolved, That in behalf of the interests of Worcester shippers to the West, we heartily endorse the recent action of the Boston Chamber of Commerce of Sept. 17th last, in reference to the Spokane rate case, also the resolutions recently adopted at a meeting of representatives of eastern commercial organizations held with the New York Merchants Association.

Resolved, That we protest against the proposed schedule of Spokane rates as involving unjust discriminations against shippers from Worcester in favor of shippers from the central West.

Resolved, That in view of the vital importance of this case to shippers from the Atlantic States, we urgently request that a hearing on this matter be held in the Interstate Commerce Commission in New York city before any final action is taken.

We have devoted the space necessary for fully presenting these facts, because the importance of the subject to all eastern shippers is at once apparent. Whether or not one is at present a large shipper to Spokane or any of these intermediate points, it is manifest that this may at any time in the future become a vital matter. It is one more illustration of the importance of vigilantly guarding the traffic conditions of New England from open or subtle attack from the central western section of our land. The fact that Spokane also sees the importance of maintaining without discrimination her opportunity to buy goods in the East on as good terms as in the central West, is also very significant.

We also desire to call attention, through this detailed correspondence, to the helpfulness of the new Transportation Department at Boston to all Worcester shippers. When one observes the way in which cities in other sections combine for their common interest in endeavoring to manipulate freight rates, it is manifestly time for all the manufacturing centres of the New England States to pool their issues and stand firmly for their interests. In such a stand all must look to Boston as the rallying point. It is a matter of congratulation for all of Massachusetts and northern New England that this new agency in the Boston Chamber of Commerce is now at hand, so admirably equipped for serving the common good. Nathan Bijur, Esq., is looking after the interests of New York and New England at Spokane, where at the time of this writing the hearing is in progress before the Interstate Commerce Commission. We hope to give in the next issue of the Magazine some report of the outcome of this case.

The New Bradley Car Works

One of the best pieces of news in Worcester's industrial world that has recently appeared is the announcement that the car works of Osgood Bradley & Son are to be re-established in Greendale, in the north part of our city, on a scale commensurate with the notable history of this firm. At an initial expense approximating half a million dollars, an entire new plant is to be constructed on a site comprising fifty-two acres of land, bounded by Brooks and Mountain Streets and the Worcester, Nashua & Portland division tracks of the Boston & Maine Railroad. One thousand hands will find employment in the new shops, the construction of which will be awarded and work begun as soon as the grading of the land can be completed, a task which will be undertaken at once.

Perhaps no one firm name in Worcester has become known throughout our country to more individuals than "Osgood Bradley & Sons," as the output of their factory has been offering accommodations to the traveling public for the last fifty years and more. The interference with the business of this firm during the last year, owing to the enforced abandonment of its old plant through the progress of the grade crossing work, has been serious; the problem of removal has not been easy of solution. We believe that the new location will prove an admirable one for the company's purpose, the large space at its command allowing opportunity for great extension of the business in coming years. With the more cheering outlook for unimpeded progress of railroad activity and development, we regard the prospects for the car building industry in this new section of Worcester as exceedingly bright. It has large significance as regards the industrial and residential development of the north end of our city, which has so much room for the expansion of manufacturing and the multiplication of homes in Greendale.

The Latest Morgan Motor Truck

The first complete new model truck from the Morgan Motor Truck Company is just leaving the shops, and will be watched with great interest in our streets, where Mr. Morgan's first machine has become so familiar. Some features will attract immediate attention. An increased efficiency, estimated at 50%, has been attained, largely by lessening and simplifying the parts of the mechanism. A longer wheel base will be observed, also a lower centre of gravity for the load. The engine has now been reduced in simplicity of design until it has 30% less parts than any other of its class. The rear axle is now of solid steel, 3½ inches in diameter, while the front axle is of I-beam construction. The ball bearings are the "new departure" double-row type. The wheels are radically changed, being made of two solid pressed steel discs, shrunk into a steel rim, making the wheel absolutely impervious to moisture and proof against all climatic changes.

In this new demonstrating truck the engine is placed in the centre of the cab instead of under the body of the truck, and is covered with a hood, the driver sitting on one side of it, and thus having easy access to it. This brings the loading area nearer to the front, decreasing overhang on the rear axle, and also lessening tire depreciation. The practical demonstration of this new truck will be studied with interest.

Enlargements of Industrial Plants

One of the cheering signs of the autumn is the building of additions to some of our prominent factories, in anticipation of the good times which are before us. Here are a few of the recent reports which have come to our office, which we hope to continue in our next Magazine.

Graton & Knight Manufacturing Company reports excellent progress on the 250 x 75 foot addition to its already large plant. This is four stories high, with basement, and is being built by E. J. Cross. It will be used for tanning, drying, storing and manufacturing leather. The outside of the building is now fully completed and the roof is being put on. It is hoped to have it ready for occupancy by Nov. 15. The firm reports a steady increase of orders.

W. H. Leland & Company are soon to occupy their new three-story factory, the dimensions of which are 80 x 60 feet. While this is detached from their present plant, there is connection by a covered way with their present offices, allowing additional office room. The machinery and ignition departments are to be moved from the old factory into the new structure. This will allow a considerable increase in the output and will give employment to a larger force of workmen. E. D. Ward is the contractor in charge.

The Worcester Pressed Steel Company has completed the foundation for its addition, which is to be two stories in height, with monitor roof, of mill construction, duplicating its present building, the dimensions being 90 x 104. This building will be used to manufacture and store its new product, the Worcester pressed steel pulley. The company is expecting to receive soon one of the largest presses ever manufactured, which is being built for it at Toledo, in accordance with its designs. This is a double-action cam press, especially adapted to heavy automobile work. The extension of North Avenue to the B. & M. tracks is now complete.

The addition to the Whittall Carpet Mills, which is to close one street and a portion of another, has the foundation practically completed, and ready for the reinforced concrete walls. This building is to be four and a half stories in height, and to be made as completely fireproof as possible. The architects are Frost, Briggs & Chamberlain and the Norcross Bros. Company has the contract for construction.

The model operating loom, which has been built for advertising purposes, is proving a great success. It has been on exhibition at Lord & Taylor's in New York city since Sept. 27, and is next to be taken to Brooklyn. Great crowds are continually attracted by the beauty of the machine and its process. Calls are coming from all parts of the country for its exhibition, and it is likely to be a long time before it returns to Worcester.

A New Charter for Springfield

We observe that our neighbors to the near west are considering the problem of a more economical and business-like administration for their city. As illustrating the drift of sentiment and the methods adopted by their Board of Trade for handling such matters, we quote the following from a recent number of the Springfield Republican:

Unofficial information indicates that the public improvement committee of the Board of Trade has decided to recommend to the Directors of the Board of Trade the preparation of a new city charter for Springfield. It has been known since last spring that the matter was under consideration, and it is thought that it is now to be reported to the Directors, and if the report is adopted by this body, as is usually the case with committee reports, the Board of Trade will have officially taken up the problem of preparing a new city charter for Springfield. The matter once went before the Directors of the Board, but was referred back to the public improvement committee for further investigation. It is understood that the report to be made now will not deal exhaustively or to any considerable extent with the several commission plans of government which are in operation in cities of this country, but will take the position that a new form of city government is needed for business-like administration of the city's affairs.

Some time last spring the matter was brought before the Board of Trade by a communication written to the public improvement committee by Samuel M. Green. The committee referred the matter to a sub-committee of which Mr. Green was made chairman. This sub-committee considered the matter and reported to the full public improvement committee that in the opinion of the sub-committee a different form of government was needed in this city, and that the commission form of government seemed to be working well where it was in operation. This report was made to the Directors, who referred the matter back, as before stated, to the committee for further information, and it was again referred to the sub-committee.

The sub-committee now takes the attitude and yesterday afternoon was supported by the full committee that the fundamental point is whether or not Springfield needs a different form of government. It is believed that business principles in the management of the city's affairs are possible and that they would improve conditions. It is intimated that the business-like administration of the city's affairs is impossible or unlikely of accomplishment under the present form of city government, under which there is not enough concentration of responsibility.

WORCESTER BOARD OF TRADE

EACH FOR ALL ALL FOR EACH

11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

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Secretary, JOHN L. SEWALL. *Treasurer*, ALBERT L. STRATTON.
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Any member of the Board of Trade having matters requiring consideration by any of these committees is asked to communicate directly with its chairman.

The Magazine's Growing Influence

We are not in the habit of filling our space with testimonials from appreciative readers, though much material of this kind is constantly coming into the office. Within the last few weeks, however, several wholly independent communications have been received which well illustrate the broadening scope of the Magazine's present circulation; and we quote from them for the sake of emphasizing the fact that the generous support given by our advertisers is making possible a continuous and valuable publicity for Worcester as a whole as well as for the separate products described.

The first was from Johannesburg, South Africa, telling of the changed location of American consulates and asking for redirection of the Magazine, for which "highest appreciation" is assured. The second, coming one week later, was also from Africa; this time from Natal, from the American Consulate at Durban. We quote the following words:

> [illegible] I have received a copy of the Worcester Magazine, illustrated, which I have taken great pleasure in filing in the Bureau of Information attached to this consulate. I thank [illegible] this complimentary copy. My object in writing you at this time is to call your attention to the [illegible] Bureau, and to say that all American exporters and manufacturers are invited to avail themselves of the facilities offered at this consulate, for filing their catalogues for the information of local dealers.
>
> The writer, Mr. Edwin S. Cunningham, calls attention to his request in the Consular Report of March 19 for such catalogues, and renews it for the attention of our advertisers.

The next letter comes from the American Consul-general in Constantinople, Turkey, the land of whose marvelous political transformation we were enlightened in the closing smoke-talk of last spring by Judge Forbes. The letter is significantly addressed to—

> THE WORCESTER BOARD OF TRADE,
> 11 Foster Street, Worcester, Mass.
>
> Dear Sirs: I have to acknowledge the regular receipt of your illustrated Magazine, and I feel under a certain obligation to write you my impressions in return.
>
> I can appreciate from your publication the efforts you are making to bring the industries of your city before the world. At the same time, as far as the markets of this empire are concerned, I fear your efforts are still not sufficiently aggressive.
>
> If your Board could see its way clear to influence the visits of commercial travelers, not necessarily one for each line, but preferably one man to cover several lines for a start, I have not a doubt but what the result would justify the outlay. At any rate it is the only way to capture this market.
>
> For details of this country's commerce I refer you particularly to the annual reports from this office (Department of Commerce and Labor), Turkey in Europe, annual series No. 1, April, 1908; Turkey in Asia, annual series No. 30, November, 1908; Turkey in Europe (in the press).
>
> Very truly yours,
> EDWARD K. OSMAN,
> Consul-general.

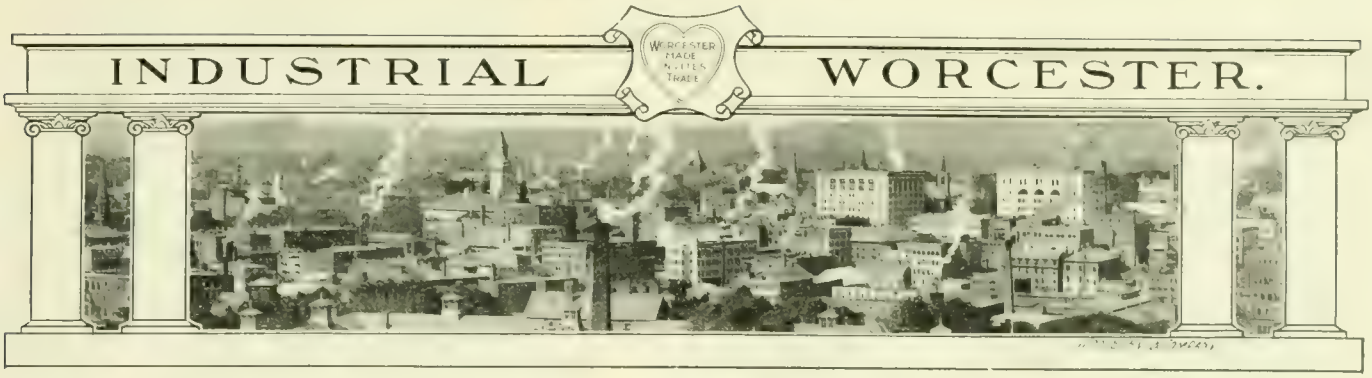
Here is a practical suggestion for the manufacturers of Worcester which seems to us inviting of careful thought, and of the expression of any desires for action to this office or directly to our Committee on Foreign Trade, to whom all such matters are referred.

The last letter in this series is from a gentleman occasionally in this city who is in touch with foreign agents in all parts of the civilized world. To a selected list these copies of the Magazine have been sent since last spring, with the following results, as stated in a letter to President Charles T. Tatman:

> I was much pleased, when I returned from a two-months' absence last week, to find that there were some thirty to forty acknowledgments of the receipt of the Worcester Magazine by my foreign correspondents to whom you had sent the Magazine.
>
> These men write in a very appreciative manner relative to it, and seem to be very much interested. These men make purchases in the United States that must aggregate many millions of dollars annually, and undoubtedly purchase many articles made in Worcester. I would suggest that the Magazine be sent to these parties permanently. They are located in the great purchasing centres of the various parts of the world, and it would in all probability prove to be a splendid investment for Worcester.

In accordance with this gratifying result of an experiment, we shall continue the sending of the Magazine to these parties, and shall gladly increase the list of foreign agencies so far as any of our members may express a desire. While it may not be possible to trace immediate orders to any of these efforts at publicity, we believe our advertisers will recognize the hopefulness of such new extensions of information about our city; and we hope that in coming months yet more will avail themselves of this avenue for reaching wider markets.

Requests for sample copies of the Magazine continue to come from various parts of the country, the mail of a single day bringing such requests from Vermont, Arizona and Manila.



A Group of Worcester Products

"Made in Worcester," is our popular slogan of trade promotion based on the recognized excellence of the long list of varied articles manufactured in this city. It may not be so well understood, however, that well nigh an entire steam-electric power plant can be selected, to which the phrase is equally applicable.

The Heywood Boot & Shoe Company of this city have recently completed a new installation approximating 150 horsepower, which illustrates our capacity in this line. To begin with, two 80-horsepower return tubular steam boilers were bought of the Stewart Boiler Works, the well-known Worcester firm, who also arranged for the brick setting and made the flue connections. These are butt strap boilers 60 inches diameter and 19 feet 4 inches long, with overhang fronts. There are 76 3-inch tubes 18 feet long, and the boilers are guaranteed to endure 150 pounds working pressure. The handsome fronts are made of steel plate, which cannot crack and permit any harmful current of cold air to enter the combustion spaces. The neatness and thoroughness of every part show the master hand of this reliable firm.

Scarcely less important than the steam generators themselves are the method, proportions and workmanship of the steam piping. The work was done by the pipe department of the A. Burlingame Company, 22 Cypress Street, Worcester, Mass., and the illustration shows the up-to-date method of using bent pipe with long sweep for all turns, ensuring the least loss in friction and power from boilers to engine. At the time this work was done a somewhat antiquated system of steam heating was removed and the same company laid in a new and modern system of heating the large factory by the use of exhaust steam from the engine, supplemented by occasional use of live steam from the boilers in exceptionally severe weather, when the exhaust is insufficient. The water that feeds the boilers has first done duty, as drawn from the high pressure gravity mains of the city service, in operating two hydraulic plunger elevators (also made in Worcester) previously installed. This water is delivered by the descending elevators into tanks in the second story of the factory, from which it descends by gravity to the heater and feed pumps.

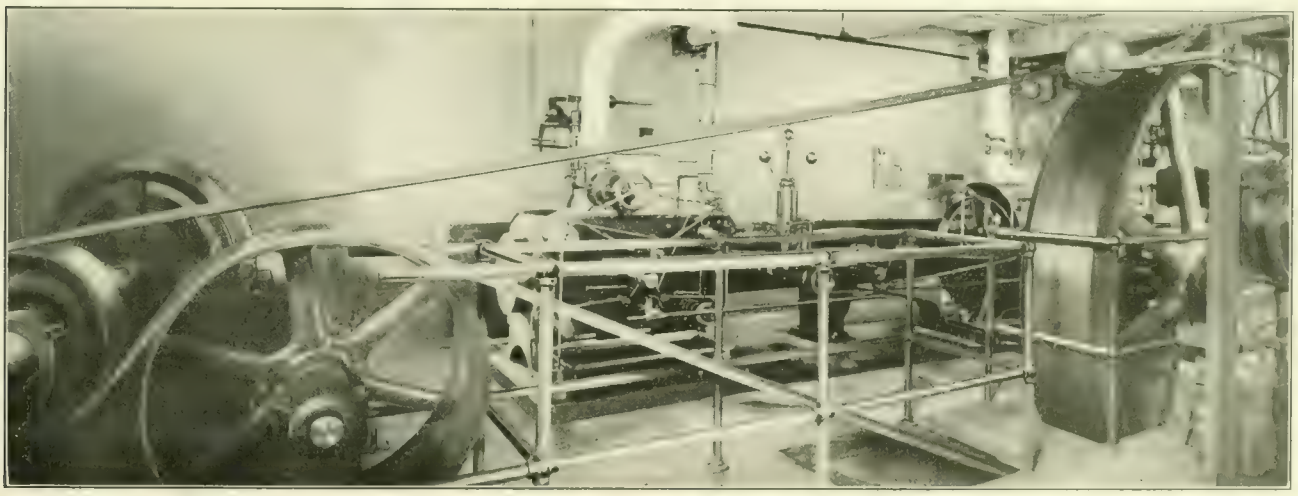
This heater is of the open type, that is to say, the steam as it comes from the engine is brought directly in contact with the water from the tank, the steam having previously been cleaned from oil by an oil separator attached to the heater. The water resulting from the condensation of the steam is saved and used over again with the entrained heat units. By this means fully 18 per cent. of the heat required to make steam in the boilers is recovered from the waste from the engine. This saving is constant the year round. In cold weather when the heating system is in use, a further economy is effected by returning all the water of condensation to the heater and thence it goes to the boilers, its temperature being near the boiling point. The hot returns from condensed steam as used in certain manufacturing operations is also saved and used in the heater.

For forcing the hot water from this heater into the boilers, a steam pump is provided. A more economical power pump is also to be connected driven by an electric motor, which is an integral part of the pump itself. This machine, designed and built by the A. Burlingame Company, has bronze valves and seats to withstand the high temperature of the feed water (205°-210° Fahrenheit, the boiling point being 212°). The pump has two cylinders easily accessible from the outside, both of which are double acting. The cranks are set 90° apart, and during the passage of one crank past the centre, the piston being driven by it comes to rest; at the same instant, however, the other piston is at its highest velocity and consequently the delivery is practically uniform.

This auxiliary apparatus is more or less detail work; nevertheless, the resultant economies are very great and the harmonious working of the entire power and heating system is dependent on the parts of seemingly minor importance. At the same time the chief interest must centre about the engine, that transforms heat energy from the boilers into mechanical energy to do useful work.

This engine was designed, built and installed by the A. Burlingame Company. It is of the Corliss four-valve type with double ported valves. Double eccentrics are provided to operate the valve motion. The mechanism for operating the steam valves, as also the high speed governor, is peculiar to this company and represents their latest designs. While the one engine is required to cover a very wide range of power to meet the demands of both factory power and electric lighting, it is so proportioned as to do its work for the most part in the zone of highest economy and will improve as the factory load is increased.

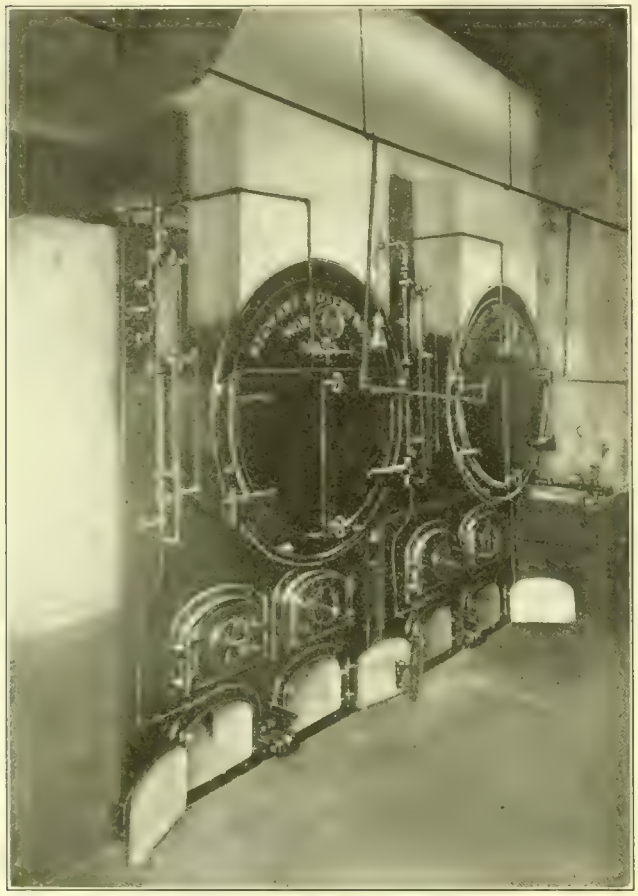
It having determined to distribute the power throughout the factory by means of electric motors, the problem was faced as to the most efficient and commercial method of generating the electricity from a Corliss type engine running at 100 revolutions per minute.



A. BURLINGAME COMPANY'S ENGINE.

The method selected was designed by Mr. Charles D. Parker, mechanical engineer for the A. Burlingame Company, and consists of a short jack shaft running at 625 revolutions per minute, and carrying a receiving pulley to take the main belt from the engine.

Two 55 K. W. generators made by the General Electric Company are the only important elements of the plant not made in this city. (There is an even chance that the copper wire in them was drawn here.) These are placed in line with the jack shaft and connected to it with 14-inch friction cut-off couplings made by McMahon & Company, Worcester, Mass., and are considered the best in their line.



BOILERS FROM STEWART BOILER WORKS

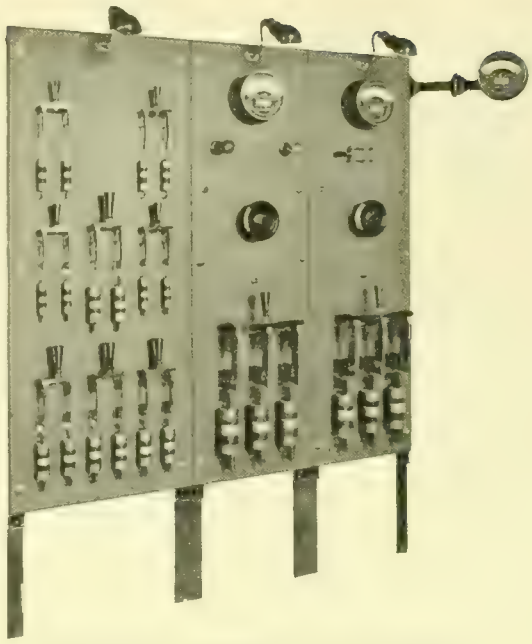
Their clutches are provided with fibre friction pads, which prevent the cutting or wearing of their metal surfaces and render the clutch practically indestructible.

This clutch will do work successfully that no other clutch is capable of doing, and in proportion to sizes will drive far more than any other clutch made.

The jack shaft is housed in powerful ring oiling bearing. Mounted on the same base is a large guide pulley running under the slack side of the belt, which wraps the belt around 75 per cent. of the circumference of the driven pulley. This is the crucial point of the design, as by so doing the efficiency of the transmission is not greatly excelled by any other method now in use. The two electric generators provide for the factory load and the electric lighting. The latter may even exceed the factory requirements. Each generator has an appropriate load, and is working at 90-92 per cent. efficiency, whereas a single machine working most of the time at less than half load would hardly exceed 80 per cent. efficiency. Consequently the efficiency and economy of the entire plant are not exceeded by any other plant now in use. The first cost of the two higher speed generators was [illegible] large [illegible] speed machine and the depreciation will be less.

The electric wiring and installation of motors for the plant was done by Henry D. Temple Company, Worcester, Mass., electrical engineers and contractors. The switchboard is of blue slate, with highly burnished main and distributing switches. The railway type mounting of voltmeter is a pleasing innovation in [illegible] The switchboard is the product of the Worcester Electric Mfg. Co., of Worcester, Mass.

The double belt transmitting the power from the engine to the [illegible] is a cylinder belt 20 inches wide and 65 feet long.

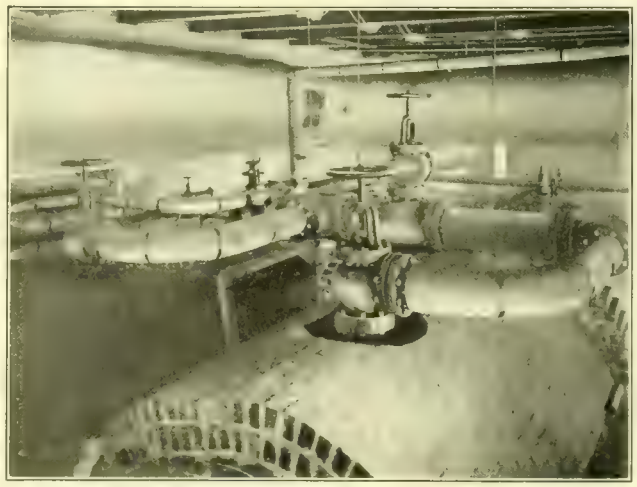


SWITCHBOARD, HENRY D. TEMPLE COMPANY.

It is made of selected stock tanned by the oak bark process, and was manufactured in the shops of J. F. & W. H. Warren Company of Worcester, Mass.

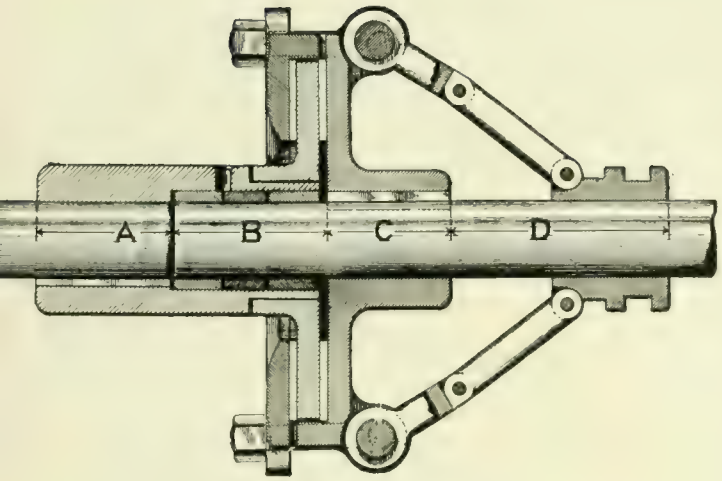
It is claimed by the builders that such a plant is the most advantageous system of operating a manufacturing concern of any considerable size, because of the economies resulting from the interworking of the power, lighting and heating systems, even when power is available from outside sources at apparently favorable prices.

The general selection and supervision of the plant fell to Mr. Albert Heywood, general manager, who is also an accomplished electrical engineer. Mr. Samuel R. Heywood, one of Worcester's veteran manufacturers, and still at the head of its affairs, established the business in 1864. Mr. Heywood demands the best of everything and has reason to be proud of the latest acquisition.



STEAM PIPING.

We are happy to give this large amount of space to a description of this interesting equipment, not alone because illustrating the progressive enterprise of one of Worcester's large and valued industries, but because it also demonstrates, in remarkable degree, the capacity of this city of varied industries to produce within its borders the mechanism needful for a modern, up-to-date industrial plant of any description whatever. Such ability has an important bearing upon the prospects of industrial enlargement for Worcester in coming days. It surely carries on the face of it an attractive invitation to manufacturers looking for a new location, to come where there is not only land in abundance, but full facilities for building and equipping their plant with all needful adjuncts.



THE McMAHON & COMPANY'S CLUTCH.

DISPLAY SUGGESTIONS

The Wire Goods Company has just issued a novel and artistic booklet for the benefit of their customers, entitled "Display Suggestions." It is the second offering of the kind they have gotten out, and is much more complete and attractive than its predecessor issued in January, 1908. Most of the illustrations are reproductions of photographs sent in by customers, and all of them ought to prove helpful to increase sales. The booklet has thirty six pages, and is copyrighted by the company.

THE JACKSON WIRE COMPANY

The Jackson Wire Manufacturing Company of this city has been organized with a capital stock of $75,000, and has been incorporated under the Massachusetts laws, George W. Jackson of 54 Fruit Street being its treasurer. The stock is divided into 7500 shares of $100 each, held as follows: 3750 by Mr. Jackson, 3000 by J. Arnold Farrar of 73 Tremont Street, Boston, and 750 by Chester S. Ellis of 48 Waldemar Avenue, Winthrop. Of these shares 3000 or $30,000 is in cash paid in, and 2000 shares, or $20,000, by machinery and tools. The remainder of the $75,000 is represented by merchandise, bills receivable and good will. Mr. Ellis is president and Mr. Farrar clerk of the company.

Its avowed purposes are the manufacturing, buying, selling and dealing in and with wire products, including galvanizing, enameling, plating, coating and lining the same; and the manufacturing, buying, selling and dealing in copperas and other by-products.

AN IMPROVED MANURE SPREADER.

If he is a benefactor who makes two blades of grass grow where one grew before, how much greater benefactor is he who lightens the burden of the man who makes the grass grow in the first place. For more than thirty years the Richardson Manufacturing Company of this city have been making manure spreaders, and they have felt all this time that they were making the best spreader on the market, and yet they were not satisfied that they had reached perfection. The great difficulty all these years has been in loading the spreader, not in distributing its contents. Indeed every detail has been so perfectly attended to in the distribution of the contents of the spreader that universal pulverization and uniform delivery have for many years been rigidly secured.

There still remained the manual labor involved in loading the spreader in the first place. To pitchfork the manure into one of these spreaders from the ground was no small task, and to obviate this detail the manufacturers determined this year to put a brand-new loader on the market. This is known as the "Easy Loader" and it religiously lives up to its name. All rods are taken off the sides and either side is let down when loading. The floor of the spreader is only thirty-five inches from the ground and that is all the lift necessary. The result is that every hundred-weight of fertilizer handled by the farmer can be thrown into the cart at a height fully eighteen inches lower than it has ever before been possible to do. The resultant relief to the muscles and back of the man behind the fork can be appreciated by every man who has ever had any experience at the heart-breaking task of getting out manure enough to fertilize even a forty-acre farm.

The new loader has been received with tremendous enthusiasm. Three separate orders of 500 each have been booked already and scores of smaller ones have also been received, rendering it necessary for the company to run this year for the first time in many years full time until snow flies.

By means of the tail-board the box of the spreader is made tight as that of a wagon and the manure is held away from the beater, allowing it a free and easy start.

The tail-board is jointed, and in addition to the raising arms at the top is controlled by two flat goose-necked levers at the bottom. The tail-board when coming up raises away from the manure so that it can never stick or bind. This feature cannot be over-estimated, for it will raise in any kind of manure with the most perfect ease. As the same lever which throws the machine into gear raises the tail-board, the driver has no responsibility and can do no wrong.

The simplex beater drive is another appreciated factor. By means of this drive all gears and stud shafts attached to the frame of the spreader and used to drive the beater are eliminated. One chain runs over beater shaft and over sprocket on main axle, and the direction of the motion of the beater is reversed by a simple mechanism attached to the beater shaft itself, and consequently in no way affected by rocking of the beater on its ball-and-socket bearings. There are no gears to be filled up with manure and no stud shafts to get out of line,—in short, there is no binding, hard draft, or breakage.

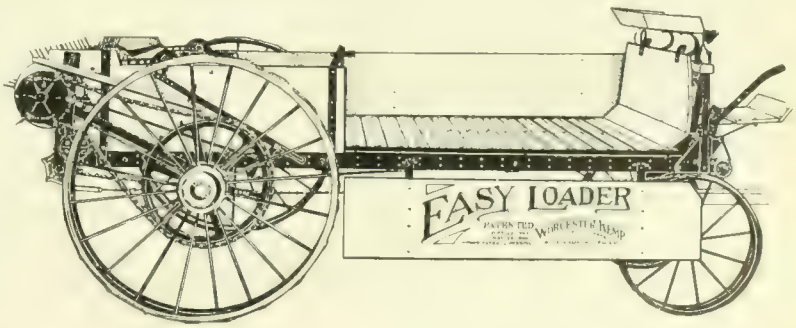
The beater shaft runs free and there is no cramping of the gears.

The pins of the patented jointed end gate resting upon the teeth of the high speeded, double spiral beater rake the load in such a way that it is separated into the finest particles and these are then distributed evenly over the surface.

The beater bearings are another point of superiority. The beater is necessarily the fastest-running part of the machine and a slight friction at this point means greatly increased draft. Every farmer knows that in driving a wagon over rough ground there is a twisting and winding to the body. The beater bearing is necessarily supported at either end by hangers bolted to the sills, and if the sills rock ever so little it can be readily seen that a plain bearing will bind and cramp the shaft, causing greatly increased draft. To overcome this the manufacturers have fitted a sleeve on the end of the beater shaft, which is held firmly in position in the beater hanger, but on account of its ball-and-socket form is free to rock, keeping itself in perfect alignment. This prevents the binding of the shaft in the bearing.

The machine spreads from five to forty loads to the acre, and is built for either a two or three horse hitch. The new 1909 model alluded to above and known as the "Easy Loader" has greatly increased the efficiency of the machine. As the sides can be let down like the tail-board of a cart, the owner can do a third more work a day than formerly and without as much labor. Notwithstanding the improvement there has been no increase in price. In the construction of this loader steel has been substituted for wood wherever practicable. A picture of the loader loaded, with one of the sideboards down, is shown.

The Richardson Manufacturing Company have been in the business of manufacturing agricultural implements such as mowers, rakes and tedders nearly fifty years, having been founded by A. P. Richardson about 1862. Since 1878 they have also manufactured manure spreaders.



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THE WORCESTER MAGAZINE

VOL. XII. NOVEMBER, 1909 No. 11

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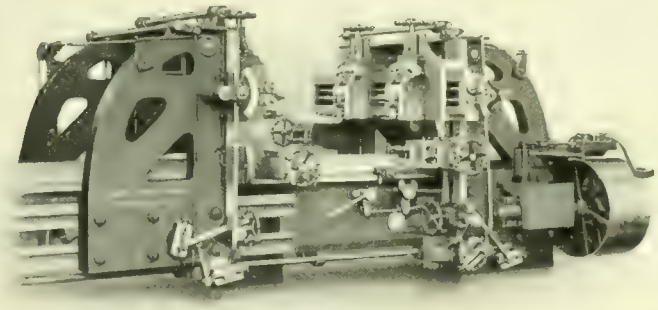
ESTABLISHED IN 1887



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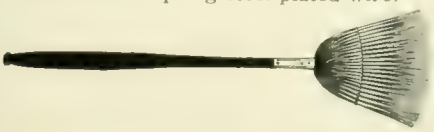

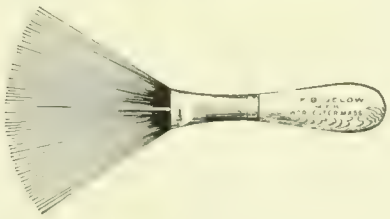

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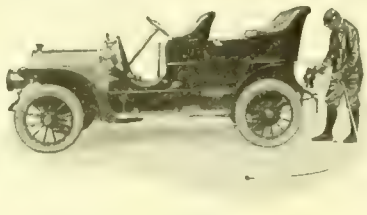

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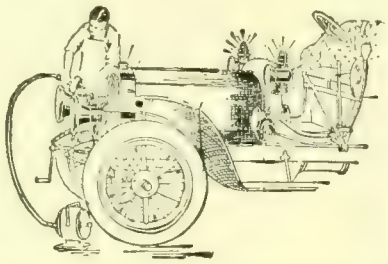

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The WORCESTER MAGAZINE

The Associated Charities of Worcester

A Business Man's Proposition

By Prof. George H. Haynes

WORCESTER is famous for its alert men of business. The Board of Trade stands for higher standards and greater efficiency in business practice, for the encouragement of enterprises that give promise of meeting a large and growing demand. Any organization which is invited to appear before the Worcester Board of Trade should therefore be prepared to justify itself first of all as "a business man's proposition."

The following principles, familiar to Worcester business men, are applied by the Associated Charities to charitable work.

1. A department store: all under one roof. (All philanthropic agencies can be reached from one centre.)
2. A clearing house. (By co-operation through one office the Charities unite their information and resources.)
3. A Dun's or Bradstreet's. (Reports to any inquirer concerning the "rating" of individuals who ask for aid.)
4. A free dispensary. (Not so much of medical as of legal and economic counsel.)
5. An employment agency. (In over 200 cases, work, temporary or permanent, was secured the past year through our office.)
6. A popular militia. (Enlisting, training and guiding volunteers in the ranks of friendly visitors.)
7. A "production engineer." (Pointing out waste, saving time and money, promoting efficiency in the field of philanthropy.)
8. An organizer. ("Securing adequate knowledge of each needy family and focusing upon it the right kind and quantity of aid from appropriate sources.")

In 225 American Cities the Associated Charities Has Proved Itself Indispensable. Why?

Modern city life tends to segregate us in isolated groups, with little notion or concern how the other ninety-nine hundredths live. Population is setting strongly toward the city. Already a third of the people of the United States are city dwellers, and the city is destined soon to be the environment in which the majority of our people are to spend their lives. But the city is the place of the most menacing problems in sociology as well as in politics. It is the place of glaring contrasts—of the palace and the hovel, the park and the slum, the most chivalrous philanthropy and the bitterest class hatred. It threatens to prove the hotbed of pauperism. In England the teeming millions of dependents present one of the most sweeping indictments of modern civilization, and have led a panic-stricken government to plunge into schemes of old-age pensions and allowances to the unemployed which may well aggravate rather than cure the disease. Our American cities cannot begin too soon to strengthen every agency or influence which makes for mutual understanding and for the development of sturdy self-reliance and self-respect.

Worcester has her full share of conditions which raise shadows for the future. In the fifteen years from 1890 to 1905 the city increased more than fifty per cent. in population. Its make-up is hardly American, as our fathers used that word. The last Federal census enumerated forty-six different sources from which immigrants had come to America. Of these, all but one were then represented in Worcester. Of our people to-day one out of every three is of foreign birth, a second was born of foreign parents, while only the third is "American" in the sense of being the child of parents who were born in this country.

Moreover, industrial changes have complicated the problem of preventing the growth of pauperism. Fifty years ago, employer and employee touched elbows at the same bench; they were of much the same stock, did much the same work, and knew and respected each other as men. To-day huge corporations hire "hands" by the thousand. System has largely displaced personality; the employer is not a man, but an organization. Nor can the church, unaided, meet the needs of the new situation, by supplementing public philanthropy. Aside from the fact that thousands of our people are "unchurched," there remains the difficulty that the Protestant parishes have no geographical bounds, and that churches of various denominations in their benevolent work overlap each other in hopeless confusion.

Under conditions such as these, Worcester might seem to present a peculiarly fertile field for the rapid growth of pauperism, yet the figures show that for the last thirty years neither out-door nor indoor relief has kept pace with population, while the number of orders and the amount of dole show a positive decrease. This gratifying result is in a measure due to three causes: the exceptional diversity of Worcester's industries, so that unemployment has occasioned less dependency here than in many cities; the discriminating intelligence with which the work of the Overseers of the Poor has been done; and the rise of a large number of private organizations for promoting self-help. Some of these have been organized along industrial lines; some have been formed with religion or race as the bond of association, while others are purely fraternal orders. These have doubtless done much to

promote thrift among their own members and to distribute the force of the blow when misfortune has come. To this checking of the growth of pauperism no other organization has contributed more directly than has the Associated Charities. Such an institution, often known as the "Charity Organization Society," is now to be found doing indispensable work in almost every large city in the land. Established here in 1890, its influence was immediately seen in the rapid reduction of the number of orders and the amount of dole given at the City Hall in the normal years which preceded the depression of 1893-4. The moving spirits in the new society were Dr. Charles L. Nichols, its present president, and Stephen Salisbury.

For nearly twenty years the Associated Charities has been trying to "help the needy to help themselves." It has been much misunderstood and criticised, but experience has made ever clearer the logic and the necessity of the characteristic lines of work for which it stands.

Investigation: Diagnosis First, then Prescription.

We believe that this precept is as logical in the practice of philanthropy as in the practice of medicine. Genuine charity consists not merely—sometimes not at all—in doling out coal and groceries, but in seeking out the real cause of the distress and in trying by every means to remove *that*. When a new applicant comes to our office for aid, if the need for fuel or food seems urgent, a small order is sent forthwith. But no second supply is given until a painstaking effort has been made by persons trained for that delicate task to find out the real cause of the trouble, and the natural sources from which relief might be expected. Not till this is done can genuine charity begin; till then, every penny given is likely to do more harm than good. A record of the essential facts learned in each such investigation and of all later dealings with the family is kept upon specially designed cards at our office (Rooms 8, 9 and 10, No. 35 Pearl Street). In these nineteen years our General Secretary has been brought in touch with 5528 cases where aid or friendly counsel was sought. A large proportion of these records deal not with single individuals, but with families. It is safe, therefore, to say that our registry contains data in regard to not less than 15,000 persons a storehouse of information which few, having responsibility for effective charitable work in Worcester, can afford to neglect. A single example is in point: A ring comes at the telephone, and someone asks: "Do you happen to know anything about a child named who is going from house to house telling a pitiful tale and trying to sell aprons?" "Oh yes," Miss Witherspoon replies; "we have known the family for a long time. The right name is not ———. The child has been trained to give a false name and address. Her parents are in fairly comfortable circumstances, and have been warned by the police to keep the little girl off the streets, but they like to get a little extra money from the child's begging. Yes, they claim to attend ——— church, but it is well known that their real affiliations are with an entirely different race and religion." And the inquirer who would inherit the blessing promised to the man that "considereth the poor" is more likely to notify the police than to buy holders or aprons of that child. Certainly that course would promise better results for the future of that girl, and of her parents, and of the city.

Co-operation: Why a Clearing-house of Charities is a Necessity.

Business men need no explanation of the serviceableness of the clearing-house. In Worcester there are, bankers tell us, 15,000 to 17,000 persons who draw checks on bank deposits. Not one in a hundred of them knows where or when the clearing-house meets or just how it does its work, but every one of them would be put to very great inconvenience if its services were interrupted or less effectively done. Now there are in Worcester an enormous number of agencies between which co-operation in philanthropic work ought to be made easy. In the first place, there are doubtless 10,000 homes of people who are able and willing to give something, great or small, in money or in service for the relief of local need. Then there are 112 churches and religious societies, each doing more or less relief work for its own members and for the stranger within its gates. And there are about 135 societies or orders (not counting separate lodges or chapters) whose names would indicate that they have certain relief-giving or benefit features. Then there is the wide range of distinctively charitable institutions. The diagram opposite tells the story. Without some central organization through which an interchange of information can be effected, it is simply impossible that there should not be enormous waste and duplication of expenditure and of effort, and a vast deal of misdirected energy much needed elsewhere. A recent Pittsburg report—which, it should be frankly acknowledged, has furnished not a few valuable suggestions for this paper—presents some highly significant figures. Out of 174 families there investigated (selected without reference to this point), it was discovered that in 79 cases help was being given by from two to eleven different charities. (Think of eleven different doctors trying to cure one patient, each in ignorance of what the others were doing!) In other words, "in 45 per cent. there was unconscious duplication, over-lapping and interference" among the charities of that city.

Friendly Visiting. "Not Alms, but a Friend."

"Who is my neighbor?" is a hard question to answer in a rapidly growing city. We are split up into small groups, and the frank human needs which in a smaller and simpler community would make direct appeal to our sympathies, here fail to get over the barriers. The aim of the Associated Charities is to bridge this chasm like a telephone exchange, to make connections between those in need and those able and willing to help. To each family where such service is needed—and where is it not?—we try to send some friendly visitor who will stand by that family, not merely to-day, but month in and month out, with cheer and sympathy, seeking all the time to help bear the burden and solve the problem.

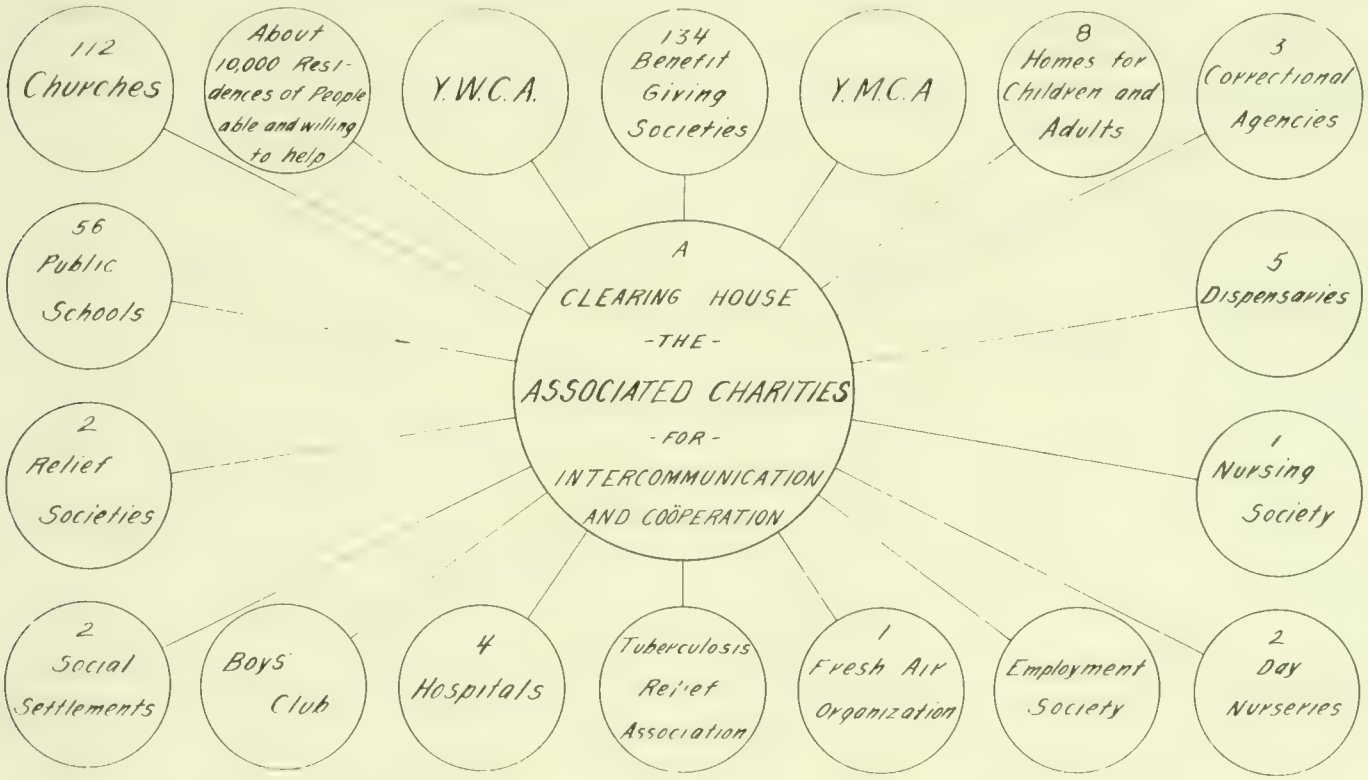
Some Side-lines.

1. An Employment Bureau. Last year we succeeded in finding permanent employment in 54, and temporary employment in 150 cases of persons belonging to families which had applied to us for aid.

2. The Flower Mission. This is really an independent society, consisting of representatives of young women's organizations in nine churches. Each Saturday morning the committee in charge for that month

start from our office, as their headquarters, on a round of visits to a list of the sick and the shut-in known by our General Secretary to be most in need of such ministrations. They carry with them flowers, fruit and delicacies and what is more welcome—youth and courage and cheer. A steady supply of flowers which used to come from Mr. Salisbury's greenhouse is now sadly missed. Many Worcester people of means might have a share in a beautiful work by sending to our office, 35 Pearl Street, Saturday mornings between 9.30 and 10 something from their abundance of flowers or sick-room dainties.

3. The Home Savings Society. In some respects this is our most promising "side-line." Started in 1895, it has shown a steady growth. The past year there were thirteen young women acting as collectors, each with an average of about twenty-five depositors—330 in all. Once a week the collector makes her round, picking up five cents in one home, fifteen in another, and sometimes a dollar from one who has had a stroke of luck. These small sums are all receipted on the owner's cards and deposited in a savings-bank. As soon as one's savings amount to three dollars an individual deposit is made in his name. Some years ago one of the collectors was urging a young colored woman to save up a little more, so that she might have a bankbook of her own. "Law, Miss," was her laughing reply; "if I had a bankbook, I sh'd feel jes' like I was Miss Stephen Salisbury!" The money comes in in driblets, yet in the last ten years our collectors have placed on deposit for these poor people sums which aggregate $16,384.48. It is worth noting that there was a steady increase from $452 in 1900 to $3312 in 1907. In 1908 the receipts fell to $2248, and in 1909 to $2175. This falling off is perfectly normal, and proves that this effort is reaching the very ones whom it was intended to help. Many a family has found in these slowly accumulated savings the fund which has tided them over what would otherwise have been a very hard place. This work has a four-fold value: it teaches thrift; it provides a resource for a rainy day; it affords a splendid opportunity for natural and effective friendly visiting; and it gives the collectors experience which makes them most enthusiastic and intelligent social workers.



How Co-operation is Working in Worcester.

When one sees how much energy is wasted, how much effort is duplicated, and how many desirable things are left undone, it sometimes calls forth the impatient query: "Why doesn't some one central organization—the Associated Charities, if it is living up to its opportunity and doing what it ought to do—map out the whole field of philanthropic activity for the city, and organize all this altruistic energy, so that betterment work may all be carried on systematically, with no interests over-supplied and none neglected?"

Yet even in government, which in a sense is organized force, there are serious perils in centralization. Philanthropy must be spontaneous, or it loses its life. Enthusiasm for some special line of work has given rise to the many and diverse charitable organizations in Worcester. No one of them has a monopoly of sociological wisdom, nor aspires to prescribe the work and the methods of all the others. But what is most desirable, and at the same time practicable of attainment, is that philanthropic individuals and the various charitable societies, each retaining its enthusiasm for its own characteristic work, should come to see how much more effectively that work can be done if carried on in hearty co-operation with other organizations of kindred aim.

It is a matter of great gratification to us that the Associated Charities is constantly being brought into closer contact with other forms of philanthropic effort. Hardly a day passes that our office is not the meeting-

place of some committee not directly connected with our own work. It is the headquarters of the Worcester Charities Commission and of the Worcester Tuberculosis Relief Association, and our General Secretary, Miss Witherspoon, is a member of the executive board of each. To an ever increasing extent, other organizations are devolving upon us the essential work of investigation. Thus the Worcester Employment Society for years has submitted its whole list of applicants to our General Secretary, and been guided entirely by her reports. (It may be added parenthetically that the employment society sets an almost unique example by recognizing its obligation to the Associated Charities not only by appreciative words, but by contributing what amounts to $100 toward our own relief work.) The Tuberculosis Relief Association, also, depends upon us for the necessary investigations. Under a recent law, the County Commissioners are empowered to release boys from the Worcester County Training School when home conditions are such as to make that course desirable. During the past two years the Commissioners have made an arrangement with the Associated Charities whereby they secure a report from our office of an investigation of every home from which a boy has been committed to the Training School, and it is on the basis of that report that they exercise this discretion. Again, the probation officers act in close co-operation with our office, and girl delinquents under the age of seventeen are placed in charge of our General Secretary. Another service which we have been called upon to render is in connection with the hospital dispensaries. The desire to get something for nothing frequently has led well-to-do people to present themselves for free treatment at the dispensaries. A little co-operation with our office has decidedly lessened that form of graft. With the District Nursing Association, the Temporary Home and Day Nursery and the Children's Friend Society, we are brought into constant co-operation, each society lightening the work of the others. A considerable number of the churches in the city have put themselves in regular communication with our office, and most of the large churches never begin dealing with a new applicant for relief without availing themselves of our registry and consulting with our staff. It is much to be desired that more churches adopt this practice. It would greatly increase the demands upon our office, but it would make charitable work in this city vastly more systematic and effective. Each new member adds immensely to a clearing-house's serviceableness to the community.

Churches and benevolent institutions come to us for assistance in all sorts of tasks—sometimes with little thought of how much time and effort their request entails. Each year we are asked to distribute twenty-five or thirty Thanksgiving dinners. At Christmas time many churches apply to our General Secretary for lists of children who would otherwise have no Christmas-tree delights, and the selecting and apportioning of some 500 children thus comes at the time when the regular work of the office is at its hardest. A few weeks ago the telephone rang, say on Tuesday, and our General Secretary was asked: "Can you take 230 children to the Charity Circus next Thursday?" Such a chance for the children was not to be neglected, and by quick work and ready co-operation from others the thing was done.

Sociological Data.

The sociological importance of such a mass of data as our records contain, both for purposes of scientific research and as a basis for legislation, is coming to be more and more recognized. As a sample of the former, a few years ago a graduate student of Clark University made an investigation of causes of poverty in Worcester, devoting most painstaking study to the records in our office of 1000 cases of destitution. These families were not specially selected, and the results were of great significance. Three years ago, when the State commission was investigating the condition of the blind in Massachusetts, they made our office the centre of their work in Worcester, and secured most of their workers from our list of visitors. At the present time, at the request of another commission, our records are being searched for data which may throw any light upon proposed legislation as to old-age pensions. During the past year, 360 blanks were filled out as Worcester's part in an investigation being made by the Federal Government upon conditions of immigration. Facts thus furnished are the essential data for intelligent legislation, and no other organization in Worcester is in position to get at them. It is obvious that it would be a misfortune of more than local effect if a bureau of information thus well begun should be kept from growing and rendering its greatest service to the community because of inadequate support.

Relation to Work of City Almoner.

Of far more importance to Worcester than any other one phase of co-operation is that between the office of the City Almoner and our own. From the beginning the relations have been most cordial; it would be hard to find another city where these two agencies for helping the needy work together more effectively. When there appears at the City Hall, among the applicants for dole, one who has a Worcester settlement but no pauper record or antecedents, the City Almoner declines to give relief, in order that the man's name may not get upon the list of town paupers; for abundant experience has proved that the putting of a man on the list of dole-receivers tends seriously to undermine his self-respect and to make later appeals easy for him, and for his children to the third and fourth generation. Worcester records show that we have had our "Jukes" and members of the "Tribe of Ishmael." Instead of giving what he asks for, Mr. Brown therefore refers this new applicant to the Associated Charities. In such a case, if there is apparently pressing need, fuel, food or clothing is sent at once. Then the conditions surrounding the case are thoroughly investigated, and every effort is made to put that applicant in the way of getting out of his difficulties. Our office has stood between many a widow or deserted wife, with a family of small children to support, and the list of town paupers. It is far-sighted economy for Worcester that that should be done. Often it is not necessary to give very much in physical aid, but every applicant needs careful and sympathetic thought from one who is trained for such work. The Associated Charities helps them get rid of their worries. When those of us who are in more comfortable circumstances have troubles, we take our aches to the physician, our financial worries to the broker, our legal qualms to the lawyer, and so on. But there are thousands of people in Worcester whose anxieties are more crushing than many of us bear, who need expert advice, yet do not know where to get it, or whom to trust, or who dare not apply to such an expert, because they cannot afford to pay for his services. The one resource open to them

is the City Hall, and to receive aid there brands them as town paupers. For such our office becomes a free dispensary of expert advice. Study and experience have made much of it instantly available, but if not, there are plenty of experts in these various fields willing to place their knowledge at the service of one who bears our guarantee that the need is great and that the spirit is such that the help will not do more harm than good. Sometimes, however, an investigation of a City Hall case leads to a different outcome. Some years ago a young man applied to the City Almoner for groceries. He was referred to us, and on plea of urgent need a small order was sent. Then began the study. It was soon found that there was actual destitution, but that the man was in good health, was master of a skilled and highly paid trade, and could easily find work at good wages but for his drinking habits, which had also caused his relatives to decline to pour more money down his throat. His next request for aid at our office was declined, and he promptly applied at the City Hall. There, too, he met with a refusal. "But there is nothing to eat in the house! Are you going to let my family starve?" "Oh, no!" was the reply: "I will take you and your family right out to the Home Farm this afternoon. There they will feed you and keep you warm. But I will not send any more coal or groceries to your tenement." "I won't go! I'll support my own family!" shouted the man angrily, as if he were taking vengeance on the hard-hearted city official. "Very well! That's all we want!" was the reply. And for eight years that man who was then willing to loaf and drink while he and his wife and child became town paupers, has kept clear of City Hall. He now runs his own shop, and you may be one of his customers. When the City Almoner and the Associated Charities agree that no further aid should be given to a certain family, the people of Worcester may be confident that thought and conscience lie back of that decision.

Every afternoon one of our assistants goes to the City Almoner's office, inspects the records of the day, notes what has been done in regard to any of the families on our lists, and also in regard to new applicants. These data are promptly entered upon our record cards, and, in a number of cases where such service has been requested, the facts are communicated to the officer of some church or relief society, with which some one of the applicants may have a natural connection.

It is the cordial testimony of the City Almoner that the Associated Charities has been a most effective agency in checking pauperism, and that but for its work the cost of poor relief to the city of Worcester would be greater by thousands of dollars each year. He gauges the help rendered not merely by the value of the emergency relief which comes from our donors instead of from the city treasury, not by the somewhat lessened administrative expenses of his own office, because so much essential investigation of applicants is done once and for all by our trained agents. Greater by far than these he values the saving in character and self-respect from the fact that hundreds of families are kept off the pauper list and placed in charge of sympathetic friends who will try to solve their problems and help them back to permanent independence.

"Costs too Much for Office Expenses."

That is what one of Worcester's most successful business men wrote across our pledge card, some years ago, in curt explanation of his refusal longer to contribute to such a concern. Evidently in his opinion the Associated Charities was not "a business man's proposition." He showed a common misconception of what we are trying to do, for he based his criticism solely on the percentage which "office expenses" bore to the amount of temporary relief given in coal and groceries. It is a question of the point of view. "The old charity [in which this critic evidently believed] was temporary relief; the new charity is continuous education. The old charity has but one way of expression; the new charity has a thousand channels. Often the most charitable course is that which has least so-called charity about it."—*Francis G. Peabody.* One or two illustrations from recent experience will give point to the distinction.

1. Mr. A. was in the midst of a long illness at the hospital. Mrs. A. was herself sick, and almost desperate with anxiety. What wonder, when the family income was cut off, both parents were ill, and four children, ranging from ten months to five years, were to be cared for. Mrs. A. had relatives in comfortable circumstances, but they lived in another city, where they could not appreciate her hard straits, and there had been an estrangement so that they were leaving her to shift for herself. At our request the Temporary Home and Day Nursery came to her relief by taking the children for the time being. Then a judicious but protracted correspondence brought about a reconciliation between Mrs. A. and her own relatives, so that they furnished all the money needed, and finally took her and her children home to her own people. On leaving the hospital, Mr. A. found a home with relatives. Before that family's problem had been solved, Mrs. A. had come to our office seven times, besides consulting us several times by telephone; five calls had been made at her home; there had been six consultations with the hospital, the Temporary Home, etc.; and there had been written nine letters which called for a lot of thought and tact to smooth away friction and misunderstandings—letters such as cannot be dictated at odd moments to a stenographer, but follow one home from the office, and haunt one's dreams. Now, not one cent's worth of "relief" was given that family in the form of coal and groceries; so our critic would say there was no charity about it. Or would he strain a point, and credit us with the eighteen cents spent for postage stamps?

2. Mr. B., a weaver in another Massachusetts city, contracted tuberculosis. He took treatment at Rutland, and was discharged with the disease arrested. It soon proved, however, that he could not work at his trade nor in his home city. He came to Worcester, bringing his wife and three small children. The Associated Charities in his home city commended him to us, and we helped him find work. Some weeks later, one Saturday night the General Secretary, on reaching her home, found that Mr. B.'s employer had been trying to telephone to her. He reported that the B.'s were in trouble, that Mrs. B. had had a severe hemorrhage and that her husband was completely unstrung. The General Secretary ate her supper and then started out across the city to see what could be done. Mr. B. met her at the door, the picture of despair. His stricken wife lay on the bed, the children needed a mother's care, the supper table had not been cleared, and everything looked doleful. "Well, Mr. B.," was his visitor's greeting, "I think the first thing we'd better do is to wash the dishes." And by the time that homely task was done, the man had got back his nerve so that he could face the future with some calmness. Arrangements were made for the care of the children by the Temporary Home; the district nurse gave effective aid, and the wife soon recuperated. Then, however, the man showed signs of breaking down; it proved impossible for him to continue at indoor work. His employer, now thoroughly interested, secured an outdoor job for him with another concern, and gave our General Secretary $50 for the use of the family. In his new employment the man developed great efficiency, so that he was presently placed in a much more responsible position under the same employ, in northern Vermont. Here the firm has made advance payment for him on a small house in the country, where he and his wife and children have found courage, health and happiness. The man is now in far better condition in every respect than before he went to Rutland. In the mill he had to stick to his job, day after day, with no time or strength to try to better his condition. He frankly says that his illness and misfortunes brought him into contact with very different people from those with whom he had

before associated. He is a new man, mentally as well as physically. This is one of the most satisfactory illustrations we have ever had of what can be accomplished when the needy family, generous employers and philanthropic institutions have joined in hearty co-operation to make the very best they could out of conditions that seemed well-nigh hopeless. No money was spent from our treasury on this case; but our General Secretary expended considerable sums specially contributed by persons interested in this particular family.

3. Mrs. C. was a deserted wife, with four little children. The Day Nursery cared for these daytimes, while the mother was trying to earn their living. This she succeeded in doing, with occasional help from us. But one day she needed $10 for a perfectly proper expenditure, and in her inexperience borrowed it from a loan agency. Presently the interest began mounting up in a way that made the debt a burden and a nightmare to her. Then she came to us with the matter. A lawyer advised us what the proper settlement should be. We lent her that amount, which the loan agency readily accepted when they knew that legal advice had been taken. We then got work for Mrs. C., by which she has paid back every cent of what we lent her. This she expected and was glad to do; but she knew that she would not be pressed for payment. "Now," she said, "I can go to bed and go to sleep!"

These are samples of what is in the day's work at our office. Salaries and "office expenses" in the Treasurer's report spell *service*. The real question is, do Worcester business men believe that such service is essential? To avoid that criticism of "high office expenses" we have kept salaries low and skimped our office equipment in a way that no up-to-date business man would tolerate. For years we got along without a telephone—how, we can't now imagine. It was years later before we secured a typewriter—a gift, second-hand at the time, and now so decrepit that it can hardly be kept in commission. But office expenses must be kept down!

Had We Any Business to Run in Debt?

The Associated Charities to-day is staggering under a debt of more than $1000, incurred during the past year. It is the plainest dictate of prudence and sense that you and I ought each to live within his means, to "cut his coat according to his cloth." The Associated Charities has been severely criticised for not following that same rule. It has been said, for example, that we ought to have taken careful note of how much money was coming in, and then, reserving enough to meet fixed charges, we should have refused to give a dollar beyond the amount that would let us reach October 1 clear of debt. Would that course have been "good business"? The answer is not so simple as it seems, for the analogy is a false one. I am not denying that we ought at all times to make strenuous efforts to keep out of debt, but I am sure that last year it should have been by more prompt and vigorous attempts to secure a larger income than by ruthless cutting down of relief. For the Associated Charities is charged with duties to the public, and must stand ready to grapple with new conditions as they arise. Who could have told in September, 1907, that within four months the normal strain on our office would be more than doubled, and that the stress would continue for two years at least? In that first year of the industrial depression the Citizens' Relief Committee, headed by several clergymen, solicited funds from the people of Worcester, and the greater part of this fund, $2500, was entrusted to the Associated Charities for the reason that it was believed that they had the knowledge, the sense and the conscience to make that sum go as far as possible in relieving that winter's distress. But every business man in Worcester knows that the hard times did not end a year ago. During the winter of 1908-9 employment was still slack, savings had been exhausted, clothes were worn out, and long-suffering landlords had to insist upon receiving their rent. The City Almoner's records show that the demands for the ten months, Dec. 1, 1908, to Oct. 1, 1909 (number of orders, 3538; dole, $7369.10), are more than double those of normal full years (in 1906-7, number of orders, 1468; dole, $3315.62). At our office the number of new applicants for aid was three times as great as during the three normal years preceding the panic, while many families which had weathered the first year had to apply to us before the end of the second winter. The Treasurer's report makes clear the cause of that $1000 debt. Look at these expenditures merely for the two items of coal and groceries the past four years:

	1905-06	1906-07	1907-08	1908-09
Coal,	$187.47	$230.70	$611.21	$554.55
Groceries,	362.43	399.58	2051.00	1602.25
Total,	$549.90	$630.28	$2662.21	$2156.80

In the year 1907-8 the outside fund of $2500 was available to meet the drain, but during the past year there has been no such resource, yet the need for temporary relief was about four times as great as in 1905-6, and more than three times as great as in 1906-7. The pressure upon our office force made necessary more hasty work than in normal times, yet not one of those 2156 dollars was spent without a conscientious facing of the alternative, if for the sake of avoiding debt we should refuse our aid. In some cases it would have meant the loss of our total investment of years of painstaking effort to help deserving families to an assured footing. In scores of other cases we should have been forced to send back to the City Hall worthy families to be branded as town paupers—a brand which not only saps the self-respect of the present generation, but leaves a blight for children yet unborn. The Associated Charities, to whom the Worcester public entrusted $2500 in 1908 for relieving distress and preserving the self-respect of the deserving poor, in the year 1909 has incurred a debt of $1000 in carrying on that same work; for conscience and humanity demanded that those efforts be not relaxed till the depression was past. We believe that to have left those families to sink, after having helped them keep their heads above water so long, would have been "bad business" of the worst kind—bad not for those families alone, but for Worcester as well. Are we wrong?

The Boston "1915" Movement

A Vision of Definite Civic Achievement; a Victory for Democratic Co-operation

AN EDITORIAL INTERVIEW

ONE of the livest wires in Boston's present telephone system ends at 6 Beacon Street, and is appropriately registered as Haymarket "1915." In the inner sanctum of an exceedingly busy suite of offices may usually be found the President of one of the city's leading dry goods emporiums, who, for the time being, is contributing most of his time and energy to organizing what has been somewhat enigmatically christened the "Boston 1915 Movement." Mr. Edward A. Filene is a business man of recognized ability and success; a student in the broadest way of social and economic problems; a citizen who has forcefully fought for the rights of all when menaced by the privileges of the few. The opportunity of a few moments of conversation with him at a lunch-table in a cozy corner of the City Club is certainly worthy of being shared with all our readers.

"How did it begin? Two very important movements lay back of it. First of all came the organization of this club," said Mr. Filene, glancing around at the vistas of well-filled tables in adjoining apartments. "In all movements for social or political betterment, the appeal to racial or religious or class differences always defeated us here in Boston, which is socially organized much like all modern cities. Without any bad intent the rich have moved out into the suburbs, and have thus ceased to keep in touch with large masses of their fellow-citizens who are under the heavy burdens of less favorable conditions. We became convinced that the first thing to do was to bring men together in a thoroughly democratic way, and this City Club was the initial step in that direction. The first hundred of the present membership of three thousand were most carefully selected from sixty or seventy different clubs and organizations. To-day, as you look through these rooms, you will find men from every class, from every political and religious and social group, and from every section of old Boston and her suburbs, meeting here in closest fellowship and freedom. The next step was the organization of the commercial interests of Boston into the new Chamber of Commerce, which unites in effective democracy all the varied and sometimes conflicting business interests of the city and of its outlying territory."

"What, in briefest statement, is the basal idea of this latest undertaking?"

In reply Mr. Filene took from his pocket a little card, bearing the heading, "The Gist of Boston—1915," remarking: "I do not know how it can be more concisely stated than here. It seeks to bring about the co-operation of all people and organizations who are trying to do something for the improvement of Boston. This requires, first of all, what is here called a city plan; a combination of all the desirable separate plans for improvement into one general programme which the people can understand and carry out. Then we have adopted as the best method for publicity the exposition idea. Beginning with the first day of November next, and continuing through the month, we open the doors of the old Art Museum in Copley Square to the most complete exhibition ever made of the material, educational, social and economic actualities of Boston; and with these we shall combine graphic displays of the larger possibilities which can grow and ought to grow out of what we have to-day. We shall show models of other cities besides our own, and wherever any city or town has some feature of value well worked out we want to show it. We want, first of all, to show the citizens of Boston their own city; and inasmuch as any city can profit by the experiments of every other, it is hoped that visitors will be attracted from elsewhere, both to see what we can show them and to bring to us the best from their own localities. Boston ought to get ideas from Chicago and Philadelphia and Washington and Worcester, as well as from her own citizens. For example, we are going to draw from your own city what information we can get about your movement to suppress tuberculosis in your factories. Dr. Overlock, who has been so active in that matter, is to give us the result of his experience in one of the lectures."

"Is this exposition feature to be made permanent?"

"Yes," was the answer, "at least in principle. Next year we hope that the Chamber of Commerce will take charge of the matter, aiming primarily at showing the material resources at our command. Yet, as the Chamber is avowedly as much interested in the city as a whole as in the commercial part of its progress, this second exposition will probably shape itself to include many of the things which are shown this year such as would naturally come in a city-planning exhibit. We have definitely in mind in 1911 another exposition showing what progress has been made in two years in the plans which will be shown during the coming month touching all lines of the city's activities; and at that time we expect to outline more clearly what we hope to see accomplishd by 1915."

"What is the real significance of this date to which you give so much prominence? Is that expected to be the goal of your undertakings?"

"Rather the beginning than the goal. We have given ourselves six years in which to get fairly ready to begin doing, rather than to complete our tasks. We believe there is power in a definite calendar; in fixing certain time limits in which it is reasonable to try to accomplish certain things. During the year 1910, for example, we hope to have firmly established a complete and adequate system of city accounting, so plain that the man on the street may be able to comprehend it. We want also as careful an accounting of the human resources of the municipality; the establishment of a broad-minded consideration by and with employers and employees of their mutual relations; and also to have regular courses of lectures established at various social centres in the city to discuss civil government, city planning, play, health and business. By the year 1911 we hope to gather for the people of Boston and for their neighbors accurate information concerning the particular capacities of the cities, towns and rural districts of all New England, and to assist sympathetically in the development of them. By 1912 we hope to be able to draw from a study of other American and foreign cities some one city plan which will show how Boston will look physically when finished. And by the year 1915 we mean to have these various projects so well advanced that we can invite visitors from all interested places to see at least the definite beginnings of the new city so far advanced that the future steps will be then intelligible. We shall want to have then some central exposition building, but shall rely largely upon

tours around the city, to show parks and playgrounds and model tenements and social centres in actual operation."

"How far have you succeeded in reaching your ideal of co-operative democracy? Can you persuade men of such varying points of view actually to work together in this movement?"

"If you will look over our list of seventeen directors," replied Mr. Filene, "you will have a partial answer to this question. You see there all phases of religious thought and political affiliation; ministers, editors, philanthropists, labor leaders, captains of industry, as well as merchants and professional men. We secure the same breadth of representation in all our committees. And we are soon to enter upon a movement of popular financial co-operation in which certificates of stock in dollar shares are to be issued, the proceeds of which will all be definitely accounted for in public print, and will be carefully expended by the directors."

"Does the Boston 1915 movement propose to attack evils that need abatement?"

"Not directly; it is thoroughly constructive, not destructive in its spirit and aim. It simply seeks to bring together all who are working for the positive upbuilding of a better city. It seeks better health, better homes, better conditions of business and recreation, better government, better citizenship. It believes that every worker should be able to secure a living wage on which he can maintain a comfortable home and bring up his children in good surroundings, giving them an education which will make them useful citizens, and being able to make adequate provision for his old age. The movement believes that the city cannot afford to do less than this; that when the workers who now lack for so many comforts are lifted to their proper condition, every portion of the community will be proportionately bettered. It is a movement for every class, because it is for the city as a whole."

"Is this movement exerting an influence outside of Boston?"

"Yes, in many ways. Other towns and cities are beginning to approach their problems on similar lines. Neighboring places are constantly calling for speakers to explain the movement, and are responding by committees to co-operate with us in specific measures which reach helpfully beyond our geographical borders. And if you wish to see what more distant places think of the movement, read this clipping from the Chicago Tribune of two days ago," said Mr. Filene as he rose from his seat to hasten away to an appointment:

> Chicago, in its blind search for civic betterment, may learn something from Boston. The Massachusetts city is the scene to-day of an interesting movement for the higher physical and social life. "Boston 1915," as a co-operative civic service body, is already doing things, and thousands are enlisted to-day in a civic movement [illegible] a year ago never dreamed of such association. Substitute for "Boston 1915" some such name as "Association for the Promotion of Team Work among All Concerned in Boston Welfare," and you have the idea. By "all" is meant not only a particular set, but everybody, whether he talks English or not; whether he dotes on culture, or lives in a room with six other persons.

How about a "Worcester 1915 movement"?

BARON SHIBUSAWA
Courtesy of Pacific Northwest Commerce

A Delightful Visit from Distinguished Guests

When the itinerary for the American journey of the Honorary Commercial Commissioners from Japan was first arranged, our city was omitted from the list; but after the visit of our Board of Trade excursion last summer to the Pacific coast, and its revelation of the industrial importance of the "Heart of the Commonwealth" through the splendid publicity then gained, the assurance was given that if it were possible a change would be made whereby these guests from the Orient should have an opportunity to accept the hospitality of the Worcester Board of Trade. To this matter Mr. J. D. Lowman of Seattle, who is President of the Associated Boards of Trade of the Pacific coast, gave his personal attention. At first it seemed an impossibility to add anything to an already crowded itinerary; but when it was decided to omit the day trip down the Hudson River, on account of the lateness of the season, Mr. Lowman at once gave the day thus left vacant to Worcester and Springfield. We are also indebted to Ex-mayor C. Herbert Moore of Spokane for his kindly offices both in telling the charms of Worcester, in which city he has personal friends, and in giving valuable information in advance concerning the party.

The Committee on Meetings and Receptions and the Committee on Foreign Trade acted jointly in arranging for these guests, who arrived on their superb special train, the finest ever sent out by the Pullman Company, at one o'clock Tuesday morning, having left Boston at midnight. During the previous week a small booklet containing an account of five possible tours in our city had been prepared in both English and Japanese, the translation being made by Mr. R. Onuki, a member of the Institute of Technology, a sample of the booklet being given at the head of this article, "Welcome by the Worcester Board of Trade." On Saturday the Secretary of the board spent the day with the Japanese and the members of the Pacific Chambers of Commerce in Boston, distributing these printed directions, and arranging for the various groups on each tour. Somewhat to the surprise of the committee, the favorite route proved to be that which included the sewage purification works at Quinsigamond, the city Home Farm, and the Bloomingdale Hospital, more than half of the visitors going on this tour of inspection. The remaining routes included Clark University, Worcester Academy, Institute of Technology, the Logan, Swift & Brigham envelope factory, the Norton Company, the Wire Goods Company, the Ames Plow Company, the Richardson Manufacturing Company, the Crompton & Knowles Loom Works, the Royal Worcester Corset Company, and the M. J. Whittall Carpet Works.

The gentlemen in the party were taken from the Union Station in automobiles at nine o'clock to the Mayor's office at City Hall, where greetings were briefly presented by acting Mayor

Brooks, a letter being read from Mayor Logan, who was out of the city, an appropriate response to which was made by Baron Shibusawa, the distinguished leader of the commissioners. Under the guidance of members of the committee and the Japanese students now residing in our city, the party were given as complete and comprehensive a view as possible of our city in the short time at their disposal. Both the Oriental visitors and our friends from the Pacific coast expressed the greatest delight over what they saw, and keen regret at the shortness of their stay. They were especially struck with the fine surroundings and interior arrangements of the factories visited, as well as with the personal appearance of the employees, and evidently left our city fully impressed with the reasonableness of our claim to be the "Ideal Industrial City" of the East.

The ladies of the Japanese party were met at the train at 9.30 o'clock by Mrs. Charles T. Tatman, and taken in automobiles to the Woman's Club House at Armory Square, where they were met by the officers of the organization and fully shown the building and its various uses, after which an automobile drive over the city, as extensive as the time permitted, was taken. We are fortunate in being able to present a picture of some of these ladies with their escorts, taken just before leaving the club-house.

It was a matter of general regret that there was no opportunity for any reception save the exceedingly brief and informal one arranged by the city, at which the members of the Board of Trade and the ladies of Worcester could have had free opportunity to meet these distinguished travelers; but the conditions of the visit made this impossible, and the committee wisely decided to bend all their energies to giving the largest possible exhibition of our city in the time at their disposal.

Our guests were gratified that no formal entertainment was attempted, especially in view of the sadness in which they were plunged by the tidings of the assassination of their beloved Prince Ito, which first reached them here, and which will cause them to forego all social functions during the remainder of their stay in this country. They were specially impressed, however, with the heartiness of the greetings here received, and the kindly spirit revealed in the few attentions which could be shown them.

THE LADIES OF THE JAPANESE PARTY AT THE WOMAN'S CLUB.

From left to right: Mrs. Charles G. Washburn, Mrs. A. B. R. Sprague, Mrs. O. M. Clark, Portland, Ore., Mrs. K. Mizuno, Mrs. Charles C. Baldwin, Baroness Shibusawa, Mrs. Edward M. Woodward; Miss Takaunshi; Mrs. James Logan; Mrs. Charles T. Tatman.

The Board of Trade is under obligations to Mr. Arthur C. Comins and Mr. Victor E. Edwards and their associates on the Committee of Arrangements for the careful preparation and successful accomplishment which marked their services, and Worcester has reason to congratulate itself over the honor and pleasure which has been conferred, in even this brief stay within her borders, of these guests from Japan and representatives of commercial organizations on the Pacific coast, who have, with such liberality and public spirit, made it possible for so many sections of the United States to pass under the eager and appreciative inspection of these visitors.

Editorial Comment

Leading Features of this Number

The coming of Thanksgiving, with its reminders of the season's prosperity, and the speedy approach of that season when the fortunate should be most considerate of their less favored neighbors, gives peculiar timeliness to our leading article, upon which we comment elsewhere. The visit of the Japanese deserves more space than we can give to it. The grouping of the various objects of interest offered to our Japanese visitors, as pictorially presented at the close of the department of Industrial Worcester, will also repay careful reading. The closing chapter of the Walker Ice Company's controversy with the Boston & Maine Railroad, and the report of a recent gathering of traffic men in Cincinnati, will furnish material for careful consideration by all Worcester shippers. The story of our city's latest contribution to the greatest steel plant in the world, at Gary, is also indicative of our continued ability to maintain our standards of high industrial efficiency.

Boston "1915"

There are some moss-covered traditions concerning Boston which are just now in danger of being rudely shattered. It has long been fashionable to allude to this city as "a state of mind," and to assume that it is dominated by a class of super-intellectual Brahmins who have given foundation for the saying, "You can tell a Bostonian anywhere, but you cannot tell him much." It has been thought that Boston was so absorbed in admiring its part in a former Revolution that it was incapable of taking any interest in some of the revolutionary movements of modern times; or, in the terms of the market-place, that it was "long" on impracticable visionaries, and exceedingly "short" on seers who could also be doers. Whatever justification for such ideas may have existed formerly, there are some radically different conditions rapidly revealing themselves. We have occasionally alluded in these columns to new ambitions and undertakings in political and commercial circles at the Hub; it seems timely to notice still another movement, and to present it to our readers, so far as possible, in the words of one who, by common consent, is recognized as its inspiring personal force. We call special attention to the statements of Mr. Filene, as found an preceding pages, and commend this unique exposition, now open in Boston, as worthy of the study of all Worcester citizens who are interested in civic progress.

Progress in Child-welfare Work

The recent gathering of some of our leading citizens at the home of President Hall to plan for co-operative advance in the promotion of child-welfare in our city is an encouraging sign. It shows that Worcester is quick to feel the widespread impulses of the hour leading on to a general "get together" movement for laying good foundations for every kind of superstructure in social betterment. This action also reveals the value of careful preliminary research and theoretic discussions, as making possible and plain the line of practical endeavor in this direction. The information mutually imparted at that gathering was a surprise to many present, and inspired all with hopefulness and courage.

It is manifest that the city of Worcester will be greatly benefited by the intelligent direction to be given by Clark University to various local movements for child-welfare. The university is fortunate in having this kind of community in which to demonstrate its work, and it seems to us that Worcester owes the duty to assist the university in its activity. The co-operation of the university and the citizens in such an enterprise will serve to strengthen the cordial relations between the university and the town. Mr. R. B. Fowler, the Rev. Dr. Austin S. Garver and the Rev. Dr. J. J. McCoy were chosen to draft a constitution for the permanent organization. These names are a guarantee that further details of the organization will be wisely worked out.

An Opportunity for Specific Endeavor

An excellent test of the power of actual achievement in such an organization is suggested by the problem set vividly before the Board of Trade at its first smoke talk, by Dr. Henry S. Curtis, concerning Worcester's crying need of equipped and supervised playgrounds. At a recent meeting of our Committee on Education action was taken favoring some organized movement for promoting this admirable work. The question at once arises, are we to have one more "cause" added to the many now before us, asking our sympathy and our money? or can this proposed central organization for child-welfare from the start stand back of such a movement, which is so vitally related to child-welfare, and where the time for investigation has passed and the hour for action clearly arrived? It is certainly to be hoped that the day of independent philanthropic societies, each ignorant of what the other is doing, is passing away, to be followed by a more economical and effective co-ordination under some central and representative control which shall furnish both energy and guidance.

An International Appeal to American Industries

The exposition of American industries which is to be held in Berlin, Germany, during the months of April, May and June, 1910, deserves the immediate and careful attention of Worcester manufacturers. It is intended to educate Europeans, especially those living in the German empire, as to the excellence and importance of the products of the United States. It is under the charge of a joint Advisory Committee representing both nations. This exposition will be extensively advertised throughout Europe, and the newspapers and transportation companies will co-operate most heartily as regards publicity and attractive rates for travelers. The two and one-half millions of Berlin's population, to say nothing of other millions living within easy reach, constitute a most attractive and promising constituency before whom American exhibitors may hopefully show forth their handiwork. While the Committee on Foreign Trade have as yet recommended no action by our board upon this matter, they desire that the attention of all our members should be called to this subject.

A Business-like Appeal to Business Men

The leading article of this number, upon Worcester's Associated Charities, may at first glance repel the interest of the average business man. Perhaps his first thought will be that he ought to be able in this Magazine to escape the "appeals" which press in so often and so irritatingly upon his business hours. The editor does not propose to argue the propriety of this selection of a leading article with his readers, because each one has such a tremendous advantage in such an argument, he can shut his eyes to both the article and the editorial defense of it. He does wish, however, to affirm that Professor Haynes' remarkably concise and able presentation of his theme appeals to every business man on the ground that if he will read it, ponder its message, and act according to good business judgment, he will probably save himself, in the long run, a great many of the individual beggings which make miserable the life of the ordinary business man.

No one will dispute the fact that in our modern civilization the duty of helping the unfortunate by those more favored has become universally recognized. Religion enforces this duty. Ordinary humanity feels its obligation. Even he who may approach the problem of others' needs only from the viewpoint of individual protection from social ills, will discover strong motives for being interested in general philanthropy. If one's sentiment is not touched by the knowledge of poverty and sickness, and unsanitary conditions, continuing without mitigation in his city, he is likely to have an unsuspected but real tribute laid upon his pocketbook when the next tax levy is made; and he who has no care for others' health and happiness in the congested life of the modern city is likely to be called upon at any time to pay some costly price for his indifference within his own home or the circle of his acquaintance.

Unless the average business man of Worcester is ready to declare himself opposed to all charitable endeavor, he should be interested in having all such work carried on in the most business-like way. If there is anything which should be so conducted, without waste or extravagance, and with the utmost promptness and efficiency, it is the business of philanthropy. The very fact that charity springs up out of sentiment is the reason why its management should be rigidly controlled by the soundest business principles. Professor Haynes demonstrates that the work of the Associated Charities in our city is so conducted. We believe that as soon as the business men of Worcester become aware of that fact, they will lift it from its present lamentable financial condition—a condition which is far more disgraceful than difficult—and see to it that in coming days it is equipped with ample means to do its work.

o o o

Electric Light and Power in Worcester

The State Board of Gas and Electric Light Commissioners has at last decided the appeal of the Worcester Electric Light Company from the order of the Board of Aldermen of the city of Worcester granting a franchise to the Connecticut River Transmission Company. The order was signed by the Mayor on July 15, and the light company filed its appeal promptly. The commissioners did not get around to hear the appeal until September 7, and although the hearing was concluded in one day, they did not announce their decision until October 30. Why it should have taken them so long to hear and decide the case we do not know, especially in view of the fact that their decision was entirely in harmony with the previous decision in the Fitchburg case.

An important change is the unlimited time granted for the franchise, instead of twenty-eight years as stipulated by the Aldermen. There is difference of opinion among alert and advanced thinkers on municipal questions as to the wisdom of limited and unlimited terms for public franchises. But Massachusetts has never recognized the limited term, and so the decision is in accord with the established policy of the State. Naturally the transmission company is better satisfied with this change, since it gives more stability to the enterprise, and renders its financing more practicable.

The most important change is the raising of the minimum limit of the unit of power to be furnished by the transmission company, from 15 horse-power capacity to 300 horse-power capacity. This change has met with widespread disapproval among the people of this community. The reason for the decision is the desire to preserve the small power business for the Worcester Electric Light Company, which has an established system for distribution. As a matter of well-known fact, the light company has never made any effort to get power business on a large scale, and it now remains to be seen whether the light company will do its duty by the people of Worcester and occupy the field so carefully preserved for its benefit by the State Commissioners.

The Worcester Electric Light Company has publicly admitted its failure to serve the public with power in the past, and has publicly promised to be good in the future. The light company is therefore on trial before the people, and now that the whole matter has been laid bare in the limelight of public notice, it behooves the light company to occupy the field in a manner such as to win the good-will of the citizens.

The new board of directors of the light company has evinced its recognition of facts and its willingness to extend the company's usefulness by purchasing a well-located site for a new power station, and making plans for its occupancy. The light company announced a new schedule of power rates on the day of the hearing on the transmission company's franchise. This new schedule is said to be a 25 per cent. reduction of the small-power rates, and a much more substantial reduction of the rates for large units.

Mayor James Logan, to whom much credit should be given for his activity in favor of the small user of power, says that he is going to have expert investigation of the rates and expert advice thereon before he will be satisfied with the schedule named by the light company. He promises also an agitation for cheaper lights.

It should be observed that the State Commissioners reserve to themselves the right to alter the limit of the unit of power upon written request of the transmission company or upon complaint of twenty or more users of power in Worcester. Therefore, in case the light company shall not serve properly the users of less than 300 horse-power in this city, it will still be possible for such users to reopen the case and possibly to compel the admission of the transmission company to the field.

We are glad that the transmission company is to have the right to sell cheap power in Worcester, and we trust it will so use its privilege as to keep the good will of Worcester citizens.

The Walker Ice Company's Railway Siding Contract

A Victory for the Worcester Corporation

IN the last number of the Worcester Magazine considerable space was devoted to a controversy between the Walker Ice Company and the management of the Boston & Maine Railroad over the proper terms for operating the siding near Thomas Street, on which this local company is wholly dependent for doing its coal business. The early history of the case was there detailed, and a report given of the first two sessions of the formal hearing before the Massachusetts Railroad Commission; also the circumstances leading up to the meeting of the Directors, the Advisory Committee and the Transportation and Railway Committee, which was held in the Directors' room on the evening of October 7, and largely attended.

In this meeting the representatives of the ice company were present, also Mr. D. O. Ives from the Transportation Department of the Boston Chamber of Commerce; a very full presentation of the history of the case, with all the points involved, was offered for the information of the meeting, and a full discussion followed. The presence and counsels of Mr. Ives were most highly appreciated.

A special meeting of the Directors followed, at which the following resolution, offered by Mr. E. M. Woodward, chairman of the Transportation and Railroad Committee, was unanimously adopted:

> The Worcester Board of Trade protests against the insertion of unreasonable provisions in contracts offered by railroad companies relative to the maintenance and operation of side-tracks, and especially such provisions seeking to render shippers responsible for injury to person and property caused by and resulting from acts and omissions of the companies and their employees in the operation and use of such side-tracks; and respectfully asks that the Honorable Board of Railroad Commissioners take such action as will do away with the imposition of such provisions.

This resolution was promptly forwarded by President Tatman to the State Railroad Commissioners, who acknowledged its receipt; also to the State Board of Trade, who at its annual meeting referred it to the appropriate committee; also to various boards of trade in Massachusetts for their information.

On Monday, October 11, at 2 p.m., the third session of the hearing before the commission took place in their rooms in Boston. Great interest continued to be manifested in this matter, one shipper coming from Portland, Maine, to get light upon this matter before signing a siding contract which had been offered him by a railroad.

The first witness offered by the railroad was Mr. W. F. Berry, second vice-president and general traffic manager. By him Mr. Rich, the counsel for the road, established the fact that in case there were no contract the rate for operating the siding would be two dollars per car. In the cross-examination following, Hon. Herbert Parker, counsel for the ice company, drew from Mr. Berry the admissions that hitherto sidings had been operated with no other charges than those made for switching all cars from foreign lines to Boston & Maine tracks; that in Worcester, as in some other places, the railroad would have to buy land and build more tracks for public delivery of its freight if it were not for private sidings; and that he had made no computation as to what elements of expense would enter into a charge of two dollars per car. The conclusion of the cross-examination was as follows, as reported in the Worcester Telegram:

> "Mr. Berry, you say you haven't figured it out. If you have nothing to work on, how can you get a result?"
>
> "We figure high enough to get a profit," replied Mr. Berry.
>
> "Then your railroad is levying such tribute as it can impose?"
>
> "Absolutely."

This seemed to reduce the case of the learned counsel for the railroad to such an extremity that nothing but speedy retreat was feasible; and as the most graceful way of making it he referred to an expression of Mr. White's views reported in the Worcester Telegram, to the effect that if relieved of liability for fire loss outside of its own premises, the Walker Ice Company would accept such liability for its own property. Mr. Rich intimated that to such a position there would be no further opposition on the part of the road. Chairman Hall of the commission promptly called for a recess, in order that agreement might be reached and the commission relieved of the necessity of a decision.

In private conference Mr. Parker wrote out a form of contract which was accepted verbatim by the counsel for the road. On the day following, this contract was presented and signed, and operation begun upon the siding which for nearly three months had been closed, causing losses of many hundreds of dollars to its owners.

For the information of all owners or proprietors of sidings among our readers, we quote the final form of this document, to which the Boston & Maine Railroad has at last consented, and which seems likely to represent the maximum of concessions which shippers will hereafter be obliged to make to any New England road in order to have its business properly handled. The clause providing that the shippers shall keep the siding in proper repair and free from snow or ice, and the clause providing for termination upon due notice, remain as in former contracts; but all liability for personal injury is stricken out, and the fire liability is expressed as follows:

> The said shipper agrees to release the said railroad from and to indemnify and save it harmless against any and all claims for loss or damage by fire, to the property owned by, in the possession of, or under control of said shipper, and to contents of cars placed on said side-track for the said shipper, when caused by engines while operating upon or doing work exclusively in connection with said side-track, but nothing herein contained shall be construed to impose any liability upon said shipper for any loss from fire, except such as occurs upon and is limited to the premises of the shipper, or to property thereon owned by or in the possession or control of said shipper, or to contents of cars while upon said side-track for said shipper.

We earnestly advise all owners of side-tracks in Worcester, upon any one of the railroads now operating within our city limits, to examine without delay the contracts under which they are operated, and if they discover any conditions or liabilities in excess of this, to take prompt action for releasing themselves from needless and unwarrantable burdens.

In concluding the history of this case, in which the Board of Trade has been glad to take an active part, we desire to make one or two comments upon its origin, progress and conclusion. First of all we wish to condemn, in the name of all the business interests of this

city, the ill-judged efforts of a railroad corporation to embarrass one of their patrons, and to force unjust and unbearable conditions. The treatment of the Walker Ice Company by the railroad has been, in our judgment, ungenerous and foolish, from the hour when consolidation took away from this company the privileges of competition for its business which it once enjoyed. That treatment has practically made it impossible for the ice company to ship ice over the Boston & Maine system; and for three months, the most important in its yearly business, it has been shut out of the use of all its machinery for handling coal. True, the railroad has also been throwing away the profits it might have had from this business, but this does not lessen the injury done the Walker Ice Company.

It should be noted, in the second place, that the railroad was finally obliged, when the weakness of its case was exposed to public view, to agree to the precise terms of settlement which the ice company proposed at the first informal conference before the Railroad Commission. What has it gained by its stubborn delay? It has succeeded in subjecting some of its leading officials to the merciless cross-examination of one of the keenest lawyers in this Commonwealth, with some exceedingly damaging results to the reputation of the company for fair and honorable dealing with its patrons and the general public. It has admitted its purpose to mulct its patrons without regard to actual cost of service. And it has intensified an impression, already far too prevalent, that the removal of competition is the necessary preface to tyranny. Can any New England railroad afford to do this?

We also wish to remark upon the impotence of our Railroad Commission, under its present methods of operation, to give that assistance to wronged shippers for which it was presumably established. Either because of a defect in the statutes which govern the commission, or else because of their extreme caution, to use no stronger term, in the exercise of what powers they possess, they have been a negligent factor in relieving the Walker Ice Company of the wrongs it has sustained. Was it because of defective statutory powers? If so, let the commission state what additional legislation it needs, and we believe it will be forthcoming at the earliest opportunity. If, on the other hand, there is need of stiffening some spinal vertebrae somewhere, we hope the combined boards of trade of this Commonwealth will undertake that task.

We disavow utterly any spirit of hostility to any railroad as such. We do not forget the dependence of the commercial life of this city upon the railroads; we are not likely to be allowed to forget that fact. We have no desire for anything but the kindliest personal relations between two parties who are so dependent upon each other for the success of either. We have no quarrel with the able and courteous representatives of these railroads who are in charge of affairs here in Worcester; we wish that those higher up in the management would display more of their spirit and methods. We do wish to protest against the disingenuousness, to use no harsher word, of imposing upon shippers unfair contracts made so skillfully ambiguous as to deceive those signing them, even as we protest against such lawlessness and disregard of verbal agreements as that recently manifested in an effort clandestinely to close one of the city's highways. It is such disregard of business decencies which keeps the community in a state of irritation and suspicion of railroads, and hinders where it does not defeat the efforts of honorable and wise railroad men to establish amicable relations with the general public.

National Association of Commercial Executives

The Worcester Board of Trade was represented at the recent meeting of this body held at Rochester, N. Y., October 23-26, by its Assistant Secretary, Lowell sending the only other New England delegate. The sessions were held in the auditorium of the Rochester Chamber of Commerce, an attractive room, whose principal adornment besides an American flag was an electric sign blazoning the words, "Do it for Rochester."

If this spirit, rather than do it for America, or do it for the National Association of Commercial Executives, was a trifle evident during the entire session, it may perhaps be attributed to local pride and a lack of true perspective on the part of the convention management rather than any desire to trumpet fulsomely the superiority of Rochester to the rest of the habitable globe.

Rochester people are naturally proud of their city. In the period from 1880 to 1890 it jumped from 89,000 to 133,000 inhabitants, and it is estimated that the population to-day is 210,000. In the last six years new buildings costing $35,000,000 have been erected, including two new hotels built on a scale of magnificence calculated to impress even a Pittsburg millionaire. A story is told of Larry Jerome, who was sent to California by his physicians for change and rest, that after he returned a friend asked him if he succeeded in securing what he went after. "N-no," said Larry, "the waiters g-got the change and the landlord took the r-rest." It is said that Rochester has booked forty-seven conventions for 1910, and if that is true, the delegates to some of them will probably find out during their stay in town the appropriateness of the above anecdote.

The convention itself brought together thirty-nine men from various sections of the country, anxious to obtain ideas that they could utilize to best advantage in their various fields. It must be confessed that with a few notable exceptions the programme was a distinct disappointment. In several instances the papers announced were not read, and the men appointed to read them were not even present. In point of attendance, too, the convention was equally unfortunate, the expectation being that fully one hundred executives would turn out.

Four addresses were worth hearing. One was on "Practical Civic Development," by Mr. R. B. Watrous, secretary of the American Civic Association. Another was on "Securing New Industries," by W. O. Hodgdon, secretary of the Industrial Committee of the Joliet, Ill., Commercial Club, and an old newspaper man. A third was on "Commercial Organization Work in Canada," by G. M. Murray, and the last was a heart-to-heart talk by Milton "In-Detroit-Life-is-Worth-Living" Carmichael. Mr. Carmichael is the "convention man" for the beautiful Michigan city, and what he does not know about the convention business is not worth knowing. He says that there are 5000 conventions held in America every year, and he generally manages to land 150 of them, a convention every other day the year round. He has conventions booked for Detroit as far ahead as 1913. His principal coup for 1909 was securing at Los Angeles the next convention of the B. P. O. E. It will take $30,000 to entertain the "Best People on Earth," but Mr. Carmichael declares the Elks are worth it. The bulk of the conventions he gets very cheaply. As a rule, about all he gives the delegates

besides the glad hand is a button booming Detroit that he buys for $16 a thousand. Mr. Carmichael impresses one as being thoroughly competent for the splendid part he has played in making Detroit conventionally famous.

One of the brightest addresses made was by G. M. Murray of Toronto, secretary of the Canadian Manufacturers' Association, on "Commercial Organization Work in Canada." His illuminating facts about "The Last West," and the fascination it possesses for the United States settler were thought-arresting. He showed how American immigration to the Canadian Northwest had grown in ten years from 44 persons to 46,000, and he stated that this invasion was going forward now more rapidly than ever. There is a tremendous boom on throughout the entire region from Winnipeg to Vancouver as a result. Land speculation is at its height; a new town springs up on the prairie in a night and realty values double and quadruple.

Mr. Hodgdon told how, in the past eighteen months, he had secured six new industries for Joliet without the expenditure of a dollar for bonuses, or in free sites, or through the medium of any other extraordinary inducement. The last of these industries purchased sixty acres of land, paying therefor $18,000, and will employ some 1100 hands. Some of the delegates believed in offering a going concern almost anything to get them to locate in their town. Others did not.

The paper by Mr. Watrous was, among other things, a plea for a safe and sane observance of the Fourth of July. It is perhaps unnecessary to state that Mr. Watrous is not an intense admirer of the late John Adams' method of celebrating Independence Day, and he is firmly convinced that the country can be patriotic on that day and still not depend on either homicide, suicide or germicide to render it distinctively an occasion of mirth and good fellowship.

The very interesting and timely remarks of Mr. Watrous met with unanimous approval, and a resolution was adopted putting the organization on record as being emphatically in favor of a more humane, careful and modern method of celebrating the country's natal day. Mr. Watrous is apparently well fitted for the important post he holds; he made many friends during his stay.

The delegates gave themselves a banquet at one of the local hotels Monday night and left for home Tuesday afternoon. As the guests of the Rochester Chamber of Commerce they saw on Saturday the tail end of the industrial exposition which that organization had been conducting for two weeks. There were more than 75,000 persons paid admission fees during this time, and the Chamber will clear up $10,000 at least from the exposition. The fair resembled our food fairs and was such a success it will be repeated another year.

The following were the delegates in attendance:

Chas. G. Adams,	Auburn, N. Y.
James A. Bell,	Harrisburg, Pa.
Geo. Badders,	Topeka, Kan.
Silas T. Braman,	Saratoga Springs, N. Y.
R. Nelson Bennett,	Wilkes-Barre, Pa.
Milton Carmichael,	Detroit, Mich.
Levi A. Cass,	Warsaw, N. Y.
Wesley E. Cole,	Schenectady, N. Y.
Clarence A. Cotton,	Grand Rapids, Mich.
Herbert N. Davison,	Worcester, Mass.
Carl Dehoney,	Kansas City, Kan.
Wm. A. Dickensen,	Lockport, N. Y.
Thos. F. Dunn,	Toledo, O.
John J. Fitzgerald,	Paterson, N. J.
Byres H. Gitchell,	Binghamton, N. Y.
Geo. R. Hanford,	Watertown, N. Y.
E. O. Harrold,	Marion, Ind.
Wm. H. Hecox,	Binghamton, N. Y.
W. O. Hodgdon,	Joliet, Ill.
Henry T. Hoag,	Poughkeepsie, N. Y.
Carl Dehoney,	Kansas City, Kan.
George S. Lenhart,	Atlantic City, N. J.
John A. McKenna,	Lowell, Mass.
G. M. Murray,	Toronto, Ont., Canada.
Charles O. Palmer,	Sherbrooke, Que., Canada.
A. D. Pardee,	Kingston, N. Y.
Fenton M. Parke,	Buffalo, N. Y.
J. H. Perkins,	Wilkes-Barre, Pa.
W. L. Raeder,	Wilkes-Barre, Pa.
H. L. Romig,	Auburn, N. Y.
Roy S. Smith,	Elmira, N. Y.
N. I. Schennerhorn,	Schenectady, N. Y.
Jay H. Stevens,	Hornell, N. Y.
Jacob Unmitz,	Erie, N. Y.
H. D. C. Van Asmus,	South Bend, Ind.
Richard B. Watrous,	Harrisburg, Pa.
W. S. Whitten,	Lincoln, Neb.
G. B. William,	Geneva, N. Y.
Geo. R. Hanford,	Watertown, N. Y.

The convention for 1910 will be held at Grand Rapids, Mich. The following officers were elected for the ensuing year: President, Woodworth Clum of Rochester; Vice-president, George S. Lenhart, Atlantic City; Secretary and Treasurer, Clarence A. Cotton, Grand Rapids, Mich.; Executive Committee, three years, E. A. Quarles, Petersburg, Va.; C. H. Hathaway, Springfield, Mass.; George Badders, Topeka, Kan.; for two years, Roy S. Smith, Elmira, N. Y.; James A. Bell, Harrisburg, Pa.; Woodworth Clum, Rochester; for one year, Nelson Bennett, Wilkes-Barre, Pa.; Clarence A. Cotton, Grand Rapids, Mich.; George S. Lenhart, Atlantic City.

The Cincinnati Conference

As the result of a call for a conference of the shipping interests of the country at Cincinnati, Ohio, October 8, representatives of almost sixty commercial organizations, many of them national in their scope and involving millions of capital, met at Hotel Sinton in that city to protest against the statement contained in the circular recently sent out by C. C. McCain, chairman of the Trunk Line Association, entitled, "Diminishing Power of Railway Earnings."

Not only were the statements made by Mr. McCain emphatically challenged, but in almost every instance the exact opposite was shown to be the fact.

Mr. McCain's argument is, in brief, that inasmuch as the wages of employees, price of fuel, rolling stock, taxes, etc., are higher in 1907 than in 1897, so the purchasing power of a dollar received by the carriers in payment for freight transportation is less in 1907 than in 1897, and therefore the maintenance of the present level of railway wages is endangered, and the stability of the railway industry threatened. His suggestion is that there must be an advance in freight rates, or a reduction in railway wages. Mr. McCain is chairman of the Trunk Line Association, composed of the Baltimore & Ohio; Buffalo, Rochester & Pittsburg; the Central Railway of New Jersey; Delaware & Hudson Company; the Delaware, Lackawanna & Western; Erie; Grand Trunk; Lehigh Valley; New York Central & Hudson River; New York, Ontario & Western; Pennsylvania; Philadelphia & Reading; Western Maryland; and the West Shore. He therefore speaks as one having authority.

So far from Mr. McCain's assertions being borne out by the facts, it was shown in the resolutions adopted

that the net income of all the railways of the United States showed an increase in 1907 over 1897 of 473 per cent., while the surplus from operations of all the railroads in the United States exceeded that year the net income for 1897 by $60,000,000. Moreover railroads have increased the dividend rate on their stocks from 5.43 per cent. in 1897 to 6.23 per cent. in 1907, an increase of 14.7 per cent. in ten years; and in this same time they have increased the amount of stock upon which they are paying dividends from $1,003,549,978 to the enormous total of $4,948,756,203, almost five fold.

Instead of diminishing the income from every source of revenue offered, the roads show an increase during this decade. The revenue per train-mile on all trains in the United States in 1897 was $1.382, and the cost of operation was $0.929, a profit of 45.3 cents per mile. In 1907 the revenue per train-mile was $2.177, while the cost of operation had only risen to $1.47, showing a profit of 70.7 cents per mile.

In other words the profit per train-mile for operating the railroads of the country in 1907 showed an increase of 56 per cent. in ten years.

A comparison of the net income per mile of road in New England alone over ten years ago shows an increase of 41 per cent., and in the country at large the increase reaches the gigantic total of 345 per cent.

Before adjournment resolutions were adopted pledging those present to resist by every means in their power any general advance in freight rates, and calling on the roads to make a reduction in the existing schedules. An executive committee was also created with power to sit during recesses and act for the entire body.

Local October Trade Conditions

Reviewed by O. C. Ansley of the Mercantile Agency of R. G. Dun & Co.

Weather conditions have been favorable for the distribution of all seasonable merchandise in retail lines, and the volume of trade has responded to the general improved conditions, ante-election influences have offered no disturbing features to the local commercial situation, and there is but little or no idle machinery throughout the county.

The scarcity of skilled mechanics explains the situation in the machine line, while manufacturers in many other lines report more or less difficulty in obtaining sufficient help.

Local bank clearings for September showed a total of $6,997,106 compared with $5,833,301 of the corresponding month of 1908, showing a gain of 20%, and compared with 1906 a gain of 22.1%.

Failures during the month in the county showed a total of eleven (11) with liabilities of $475,870 and assets of $423,395, compared with the corresponding month of last year, when they showed a total of eight (8) with liabilities of $113,573 and assets of $45,023, while in 1907 they showed a total of three (3) with liabilities of $10,954 and assets of $1425, and in 1906 there was a total of twelve (12) with liabilities of $88,074 and assets of $35,973.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

B. Walberg, Drum, No. 929,175.

A drum formed of two sections pivotally connected and provided with locks to fasten the sections together, to allow a smaller drum or other article to be carried inside.

A. C. Higgins, Method of Treating Aluminous Materials, No. 929,219.

A method which consists in fusing an aluminous material in an electric furnace at a temperature substantially above the state of quiet fusion and sufficient to prevent substantial segregation of impurities, and cooling or chilling the resulting product into a pig or mass.

Jerome R. George, Gas Producer, No. 932,853.

A device to provide for the delivery of ashes from a gas producing chamber and their final removal from the gas producers, consisting of a heating chamber inclosed by annular upper and lower sections, the upper section being stationary and the lower section supported by a rotatable ash pan of larger diameter than the bottom of this section, the bottom of the lower section being provided with openings, and an adjustable stationary plow within the bottom of this lower section and above the rotatable ash pan to drive the ashes into the openings.

C. R. Sturdevant, Apparatus for Testing Rail Bonds, No. 933,597.

A device consisting of a portable measuring or indicating instrument, contact devices for making contact with a track rail at opposite sides of a rail bond, and also at variable distances from the bond at one side thereof, flexible conductors connecting the contact with the windings of the instrument, and a tape for measuring the distance between the last named contact and one of the first named contacts.

H. B. Smith, Coil Winding Device, No. 933,792.

A device for winding coils for transformers and other electrical apparatus consisting of a horizontally rotatable drum having an end flange and provided with an insulating sleeve or spool, a ring loosely fitted over the sleeve or spool, and having a diagonal slot in its inner surface, and means for exerting a substantially constant force upon the ring in such direction as to tend to move it toward the flange.

Worcester Quotations

Furnished by Fisk & Robinson, Worcester.
November 1, 1909.

BANKS.	Bid.	Asked.
Mechanics National Bank	125	...
Merchants National Bank	165	. .
Worcester National Bank	205	.
Worcester Trust Company	300	.
RAILROAD STOCKS.		
Boston & Albany	229½	last sale
Boston & Maine common	150½	last sale
Boston & Worcester Elec. common	11	12
Boston & Worcester Elec. pfd		53
Fitchburg preferred	130	132
New England Inv. & Sec. pfd	84	86
New York, New Haven & Hartford	164½	last sale
Norwich & Worcester	210	last sale
Providence & Worcester	266½	last sale
Worcester, Nashua & Rochester	144½	last sale
Worcester Railways & Investment	62	70
INDUSTRIAL STOCKS.		
Crompton & Knowles pfd	147½	
Denholm & McKay common	200	
Denholm & McKay pfd	101	102
Graton & Knight Mfg. common	130	.
Graton & Knight Mfg. pfd	114	115
Royal Worcester Corset Co.	140	.
United States Envelope common	54	55

United States Envelope pfd.	114	115
Worcester Gas Light	260	..
Worcester Electric Light	260	295
Wright Wire Company common	102	....
Wright Wire Company pfd.	106	....
BONDS.		
Amer. Writing Paper 1st 5's	87	88
Boston & Worc. St. Ry. 1st 4½'s	98½	100
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 6's	5¼	basis
Marlboro & Westboro St. Ry. 1st 5's	..	98
Norcross Brothers 1st 6's	97½	100
United States Envelope 1st 5's	101	102
Worcester Cons. St. Ry. 1st 4½'s	94½	
Worcester & Marlboro St. Ry. 1st 5's	98	..
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General

Sept. 25. Worcester Post-office received 60,000 Hudson-Fulton stamps.

29. Worcester County Mechanics Association votes to hold another industrial exposition Feb. 5 to 12, 1910.

Worcester coal dealers raise the price of coal fifty cents a ton.

Fremont Corporation formed with a capitalization of $30,000; incorporators, James E. Orr, John H. Orr and George M. Orr. The company to erect two-story brick and concrete storage warehouse to cost $35,000, on Fremont Street, near Delaware. E. D. Ward, builder.

30. Worcester Motor Car Company incorporated with $5,000 capitalization; Frank B. Williams, president and treasurer. Other incorporators, Eben F. Thompson and Geo. S. Hamel.

Stewart & Skinner Company incorporated with $50,000 capitalization; Charles A. Stewart, president; Harry J. Hill, Los Angeles, Cal., vice-president; Jesse T. Skinner, treasurer, and Cornelius Lawrence, clerk.

Oct. 1. George A. Greene, general yardmaster for the Boston & Albany Railroad, resigns after twenty-eight years of continuous service.

Postal receipts for the month of September at the Worcester Post-office, $33,931.57, against $33,318.81 in September a year ago, a gain of 4.99 per cent.

Receipts at Worcester Port of Entry for the month of September: 2,683 packages valued at $130,655, on which duties were paid amounting to $40,000.

Building operations in Worcester from Jan. 1 to date amount to $3,179,735, against $1,587,354 in corresponding period one year ago.

4. Prof. Henry S. Curtis addresses the Board of Trade on the playground movement at its first smoke-talk of the season.

Charles R. Chase of Chicago assumes the position of assistant secretary of the Worcester Y. M. C. A.

A. A. Elston & Company of Boston commence the work of demolishing the old Union Passenger Station.

Osgood Bradley & Sons, car builders, buy fifty-two acres of land at Greendale for car shops on the line of the Boston & Maine R. R.

5. Rev. Dr. and Mrs. H. S. Bradley received by the people of Piedmont Church.

6. Miss Elizabeth M. Gardiner elected assistant director of the Worcester Art Museum.

Nathaniel Paine retires from the Worcester Trust Company after sixty years' continuous service as a banker.

7. Worcester County Commandery elects Henry A. Knight Eminent Commander.

Court records show that there were issued during the past twelve months in Worcester 3916 search warrants for liquor, of which 874 were successfully served.

8. Oread Collegiate Institute, made up of alumnae of Oread College, vote to raise $3000 for a scholarship in Pembroke.

Miss Mabel Spencer of the Deaconess Training School of Boston begins her duties as deaconess of Grace Church.

John T. Brierly purchases the interest of W. H. Crawford in W. H. Crawford & Company. The firm was established in 1847, and is said to be the oldest house dealing in machinery and mill supplies in the United States.

9. Contract for the power house, construction shop and paint shop, three of the six buildings in the new Osgood Bradley car plant, awarded to the McClintric, Marshall Construction Company of Pittsburg.

The Y. M. C. A. announces a course in aeronautics in connection with its educational department for this year.

Rev. James M. Lester of Tenair, Cal., called to the pulpit of the Highland Street Church of Christ.

11. Congregational Club banquet attended by 700 persons, and addressed by Dr. Booker T. Washington.

Reception to Rev. and Mrs. F. A. Poole by the people of Union Church.

Chief Engineer Everett E. Stone of the Boston & Albany Railroad resigns to return to private business in his home city, Springfield.

Annual meeting of the Associated Charities; Dr. Charles L. Nichols re-elected President.

13. Worcester Electric Light Company stockholders elect Matthew J. Whittall, Rockwood H. Bullock, John A. Denholm and Charles E. Hildreth, directors; and re-elect Gen. A. B. R. Sprague, Geo. T. Dewey, Frank L. Coes, John C. MacInnes and Edgar Reed; Gen. A. B. R. Sprague re-elected president; Wm. H. Coughlin, superintendent, and H. H. Fairbanks, clerk and treasurer. Charles T. Tatman, Joseph L. Davis and N. G. Burbank elected auditing committee. Receipts for the fiscal year, $349,734.48; net earnings, $177,766. Assets $1,473,523.06; liabilities, $1,098,823.32.

Registration for the State election closes with 24,796 names on the list.

Worcester Woman's Club has the formal opening of the club year with a reception attended by nearly 500 members.

15. Announcement made that the creditors of the New England Corset Company are to receive a total dividend of 39 per cent. on their claims.

17. Ryan & Keon awarded the contract to construct the viaduct from Harding Street to Front Street alongside the new Union Station.

Joint bebate on the license question before the Economic Club, attended by 800 persons; speakers, Hon. J. F. Hanly of Indiana for prohibition and Hugh P. Fox, secretary of the United States Brewers' Association, for license.

20. Officers of the Temporary Home and Day Nursery elect Mrs. Henry S. Pratt, president; Mrs. I. E. Comins, secretary; Mrs. Luther M. Lovell, treasurer. Receipts for the fiscal year, $3,875.83; expenditures, $3,792.75.

22. Tentative organization for child welfare work in Worcester formed, Rufus B. Fowler, Rev. Dr. Austin S. Garver and Rev. Dr. John J. McCoy, committee.

Announcement made that the Worcester Consolidated Street Railway will pay the city excise tax of $18,340.84 against $17,500.67 last year.

24-25. St. John's Episcopal Church observes its twenty-fifth anniversary.

City Affairs

Sept. 25. Edward S. Fuller, late janitor at the Public Library, brings libel suit for $10,000 against the city of Worcester, and one in similar amount against Librarian Robert K. Shaw. The suit grows out of his discharge from the city's employ, May 11.

Oct. 1. Expenses of the public schools for September, $62,657.29. Total expense for ten months for the fiscal year $512,132.44.

4. Kindergarten teachers petition the sub-committee on Music and Kindergartens of the School Committee to raise their salaries from $700 to $750, and the committee so recommends.

6. Members of Marion Hose & Steam Company of Reading, Pa., are the guests of the Worcester Fire Department.

Commitment of the insane for the past quarter costs the city of Worcester $1,269.08.

7. Mayor Logan secures option for the city for the purpose of widening Harding Street 11,625 square feet of land facing Harding Street and extending from Harrison to Vernon Square. Price, $14,257.

11. Proposition to pension the police postponed indefinitely by the city government.

Tax collections for the day amount to $406,151.58, a total since bills were sent out of $1,321,691.50. Corresponding period one year ago collections amounted to $1,049,547.81.

City Library Trustees accept the library of the late Dr. Henry S. Knight given the city by Mrs. Knight.

13. Police parade of 120 men, headed by Chief of Police David A. Mathews, reviewed by the Mayor and the city government.

15. Hassam Paving Company awarded the contract for laying granite blocks grouted with cement on Southbridge Street, to and including Stearns Square. Price, $18,000.

25. City Councils pass upon revised ordinances increasing among other things the number of City Hospital Trustees from 9 to 11.

WORCESTER BOARD OF TRADE
11 FOSTER STREET
WORCESTER MASSACHUSETTS
EACH FOR ALL ALL FOR EACH
USA

Officers.

President, CHARLES T. TATMAN. *Vice-President*, EDWARD M. WOODWARD.
Secretary, JOHN L. SEWALL. *Treasurer*, ALBERT L. STRATTON
Assistant Secretary, HERBERT N. DAVISON.

Directors.

FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
CLARENCE W. HOBBS, JOHN J. POWER, HERBERT H. FAIRBANKS,
JOHN W. HIGGINS, EDWARD J. CROSS, WILLIAM WOODWARD,
WINTHROP HAMMOND, CHARLES E. HILDRETH, LOUIS H. BUCKLEY,
WILLIAM FORSBERG, CHARLES T. TATMAN, ARTHUR C. COMINS,
VICTOR E. EDWARDS, CHARLES L. GATES, MARCUS L. FOSTER,
ARTHUR W. PARMELEE, EDWARD M. WOODWARD.
Clerk of the Corporation, WILLIAM H. SANFORD. *Auditor*, H. WARD BATES

Membership Committee.

E. BRUCE DUNN, MARK F. COSGROVE, GUSTAF A. BERG,
BENJAMIN B. SNOW, HARLEY W. BARTLETT

Any member of the Board of Trade having matters requiring consideration by any of these committees is asked to communicate directly with its chairman.

An Impressive Statement

It is not often that the message of a city's chief executive sent to a city council in behalf of civic improvements contains so much that is stimulating and impressive as one recently put forth by Mayor James Logan. The occasion for this message was the purchase of the new location of the Bradley Car Works in the northern part of Greendale, and the consequent necessity for extending the city conveniences to that undeveloped district.

The argument of this message was convincing as regards the immediate object in view, but we allude to it here, and quote largely from it, because it has a far broader application to our municipal progress. In leading up to the specific recommendations of the message, Mr. Logan says:

The future of this city will, in a large measure, be determined by the manner in which the municipal problems of the next five or ten years are met and mastered.

If a penurious, short sighted policy, which does not wisely plan for the future, shall obtain, then the future growth of the city will be retarded. But if a broad-minded, intelligent policy shall dominate, Worcester, with 250,000 inhabitants, is an assured fact at no distant day.

The municipality should do everything within its power to encourage and strengthen the industries that are already located here, which give employment to the people, and which by so doing give life and growth to the city.

To strengthen and make stronger any one of our established industries, will be worth more to the city than to spend time and thought on scores of enterprises that come seeking financial assistance.

Having emerged from the recent industrial depression, Worcester, during the past two years, without brass band accompaniment, has made the largest additions to her industrial plants that have ever been made in the history of the city in a like time.

Among the successful business enterprises which have, during the past two years, made substantial additions to their already large plants may be named the Spencer Wire Co., Reed & Prince Manufacturing Co., Curtis & Marble Machine Co., M. J. Whittall, Royal Worcester Corset Co., Graton & Knight Mfg. Co., Wright Wire Co., Webb Granite & Construction Co., Worcester Pressed Steel Co., American Steel & Wire Co., the Norton Co., Logan, Swift & Brigham Envelope Co. division, Crompton & Knowles Loom Works, Heald Machine Co., Wyman & Gordon, W. H. Leland & Co., A. W. Gifford, Peter Baker, J. F. & W. H. Warren, Merrifield Building Trust, Fremont Corporation, Wachusett Thread Co., L. Hardy Co., Howard Bros.' Manufacturing Co., Mills Woven Cartridge Belt Co.

No other two years in the life of this city has witnessed such a development.

It is the business of this municipality to see to it that every possible advantage shall be given to its industries in order that they be not placed at a disadvantage with corporations located elsewhere, for whatever helps Worcester industries will make work for the workers.

We welcome these words, not alone because of their cheering résumé of recent progress, but because the closing sentence suggests a broad, far-visioned municipal programme which should more and more command the support of all good citizens, without regard to petty political differences or party designations.

The New Tariff Board at Work

We are in receipt of a letter from the new Tariff Board, appointed under the recent tariff legislation, which indicates its purpose to proceed with due deliberation, but without delay, in the discharge of its duties. We are not able even to conjecture the exact amount of service which it can render to Worcester's business interests, but we gladly give publicity to their communication, and trust that it will receive the attention it merits from our readers:

A tariff board has been appointed by the President, whose duty it is to assist him in determining whether or not undue discrimination does exist at the present time under the laws or regulations of any country. It is necessary for the proper fulfillment of this duty that the Tariff Board should have full information, not only as to the formal legislation, or regulations of foreign countries in this regard, but also as to the practical working of any such laws or regulations in their effect on American export trade.

In carrying out the purposes of this act the board desires and asks for the co-operation of the business interests of the country. We invite communications containing definite and explicit statements of fact as to the actual bearing of foreign tariffs or regulations on the trade of American exporters as compared with the exporters of other countries. All such communications will receive prompt and careful consideration.

Will you kindly bring this letter to the attention of all members of your association who have an interest in this inquiry?

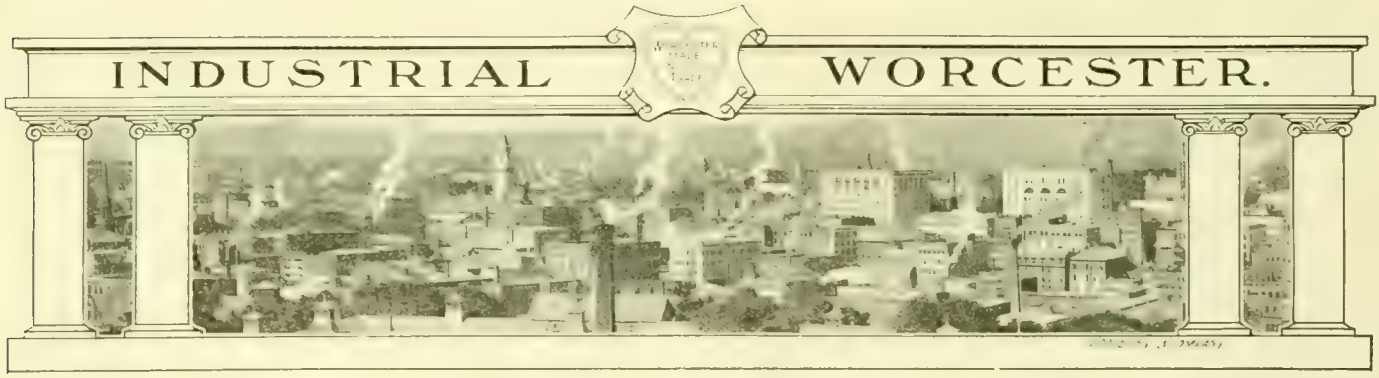
Respectfully,

H. C. Emery, Chairman.

Death of Edwin J. Watson

The Board of Trade sustained the loss of another member and one who had been identified with it for many years, when Edwin Judson Watson passed away at his home, 16 Westminster Street, October 25, of spinal paralysis, at the age of sixty-one years, after an illness of eight weeks. For many years he was prominently identified with the wire manufacturing industry of Worcester, rising to a post of much importance in the management of the American Steel & Wire Company in this city. He was born in Worcester, a son of Smith R. and Abigail (Bartlett) Watson. Entering the Washburn & Moen wire mill as a boy, he early developed faculties peculiarly adapted to wire making, and rose in a short time to the position of foreman and from that to assistant general superintendent. In his forty-eight years of service for this company and its successor, he gave the best there was in him of conscientious, faithful endeavor and sincere valuable achievement. The loss to the company in his death is one that is deeply felt.

Mr. Watson was a Mason and was identified with the club life of Worcester. He leaves, besides a widow, two sons, Ralph E. and Arthur J. Watson, and a daughter, Mrs. William A. Gaylord.



WORCESTER'S CONTRIBUTION TO GARY

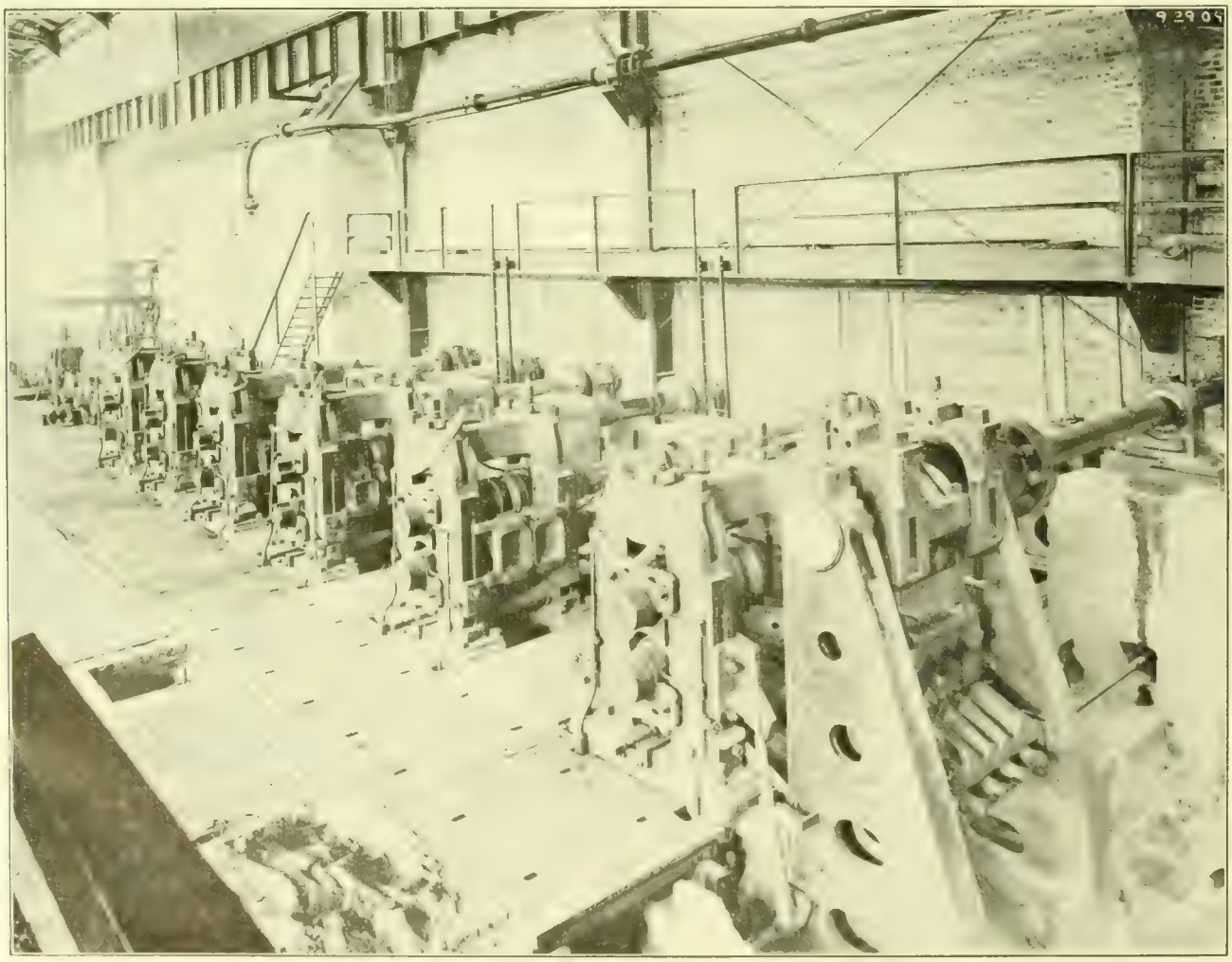
A desolate waste of shifting sand dunes on the southern shore of Lake Michigan, thousands of acres in extent, has been transformed within a very few years into the great town and steel works of Gary, Ind. The past summer has witnessed the starting up of some of the departments of this most wonderful and up-to-date steel works in the world. Early in October of the present year, one of Worcester's contributions to this tremendous development was placed in operation. The installation consists of a 24-inch continuous rolling mill, the largest continuous mill in the world, and an 18-inch continuous rolling mill, with their accessory equipment.

The actual construction of the mills was not undertaken here, there being no machine shop equipment in this part of the country suitable for so heavy work, but the designs throughout are a Worcester product. Many of the operating roll tables, used in connection with these mills, were built in the works of the Morgan Construction Company, as was the Edwards flying shear, a device for cutting steel billets, while in motion, which has attracted the attention of the whole metallurgical world.

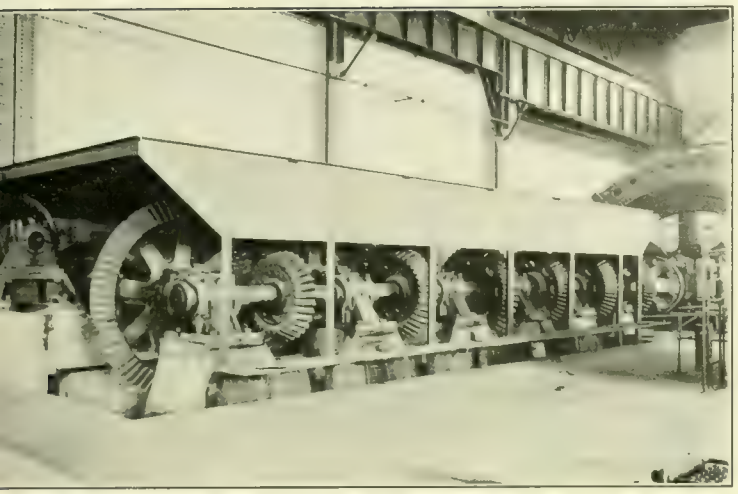
The 24-inch continuous mill consists of six trains of rolls, is driven by a 6000 horse-power electric motor, and can produce easily five tons of billets per minute, or three hundred tons per hour. These billets would range in size from 6½ inches by 6½ inches to 4 inches by 4 inches square. Flats in various sections may be rolled as well as billets.

The 18-inch continuous mill also consists of six trains of rolls, and is driven by a 6000 horse-power electric motor. In this mill smaller billets are produced, down to 1¾ inches by 1¾ inches in section, all of which are cut into thirty feet lengths, as they issue from the finishing rolls, by the Edwards flying shear. This rolling mill is designed to produce one hundred and fifty tons of billets per hour.

Worcester has previously supplied gas producers, reversing valves and flue work for this greatest of modern plants, but the 24-inch and 18-inch continuous billet mills will doubtless stand as her greatest contribution for some years to come.



The 18-inch Continuous Rolling Mill Built for the Works at Gary by Morgan Construction Company



Bevel Gear Drive of the 18 Inch Mill

NEW HARRINGTON & RICHARDSON ARMS CO. GUN

The Harrington & Richardson Arms Company of this city announce their latest production, a small bore double barrel hammer gun. Entirely new throughout, this gun, which is light in weight and sold at a reasonable price, has all the latest features of high-priced hammerless guns, including coil main springs (practically unbreakable), top lever, cross bolted through extension rib, and is fitted with a fine checked, imported walnut stock and fore-end.

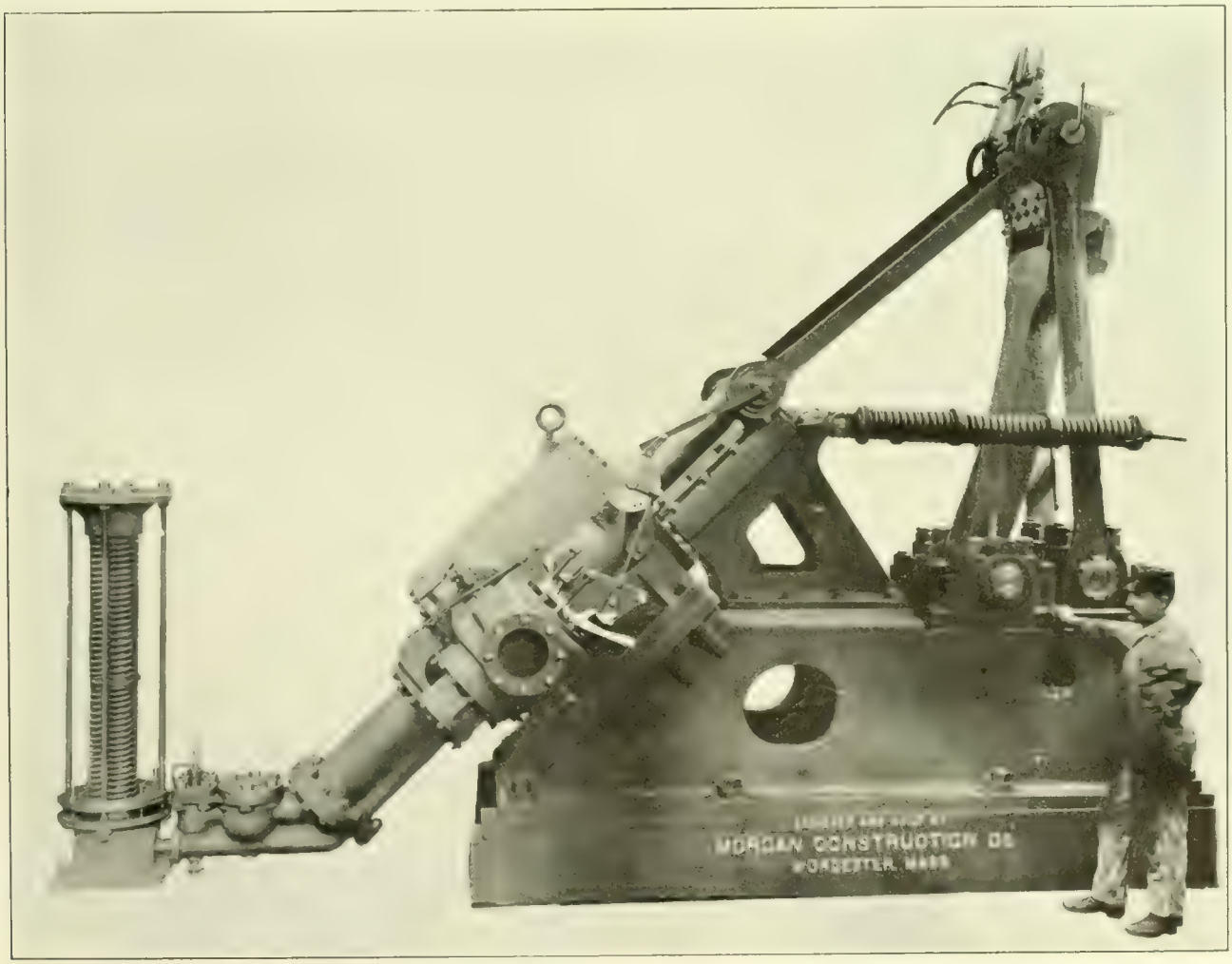
This gun will be made in 28-gauge and 44-caliber, the former now being ready for the market and the latter about Jan. 1.

As game becomes scarce the tendency is to employ small bore guns, and sportsmen are surprised at the remarkable efficiency and killing power of guns heretofore considered suitable only for ladies or boys. Many like to get out into the woods and country where it would not be worth while to carry a heavy gun, which would prove burdensome, and it is on just such occasions that a light gun will prove a most desirable companion.

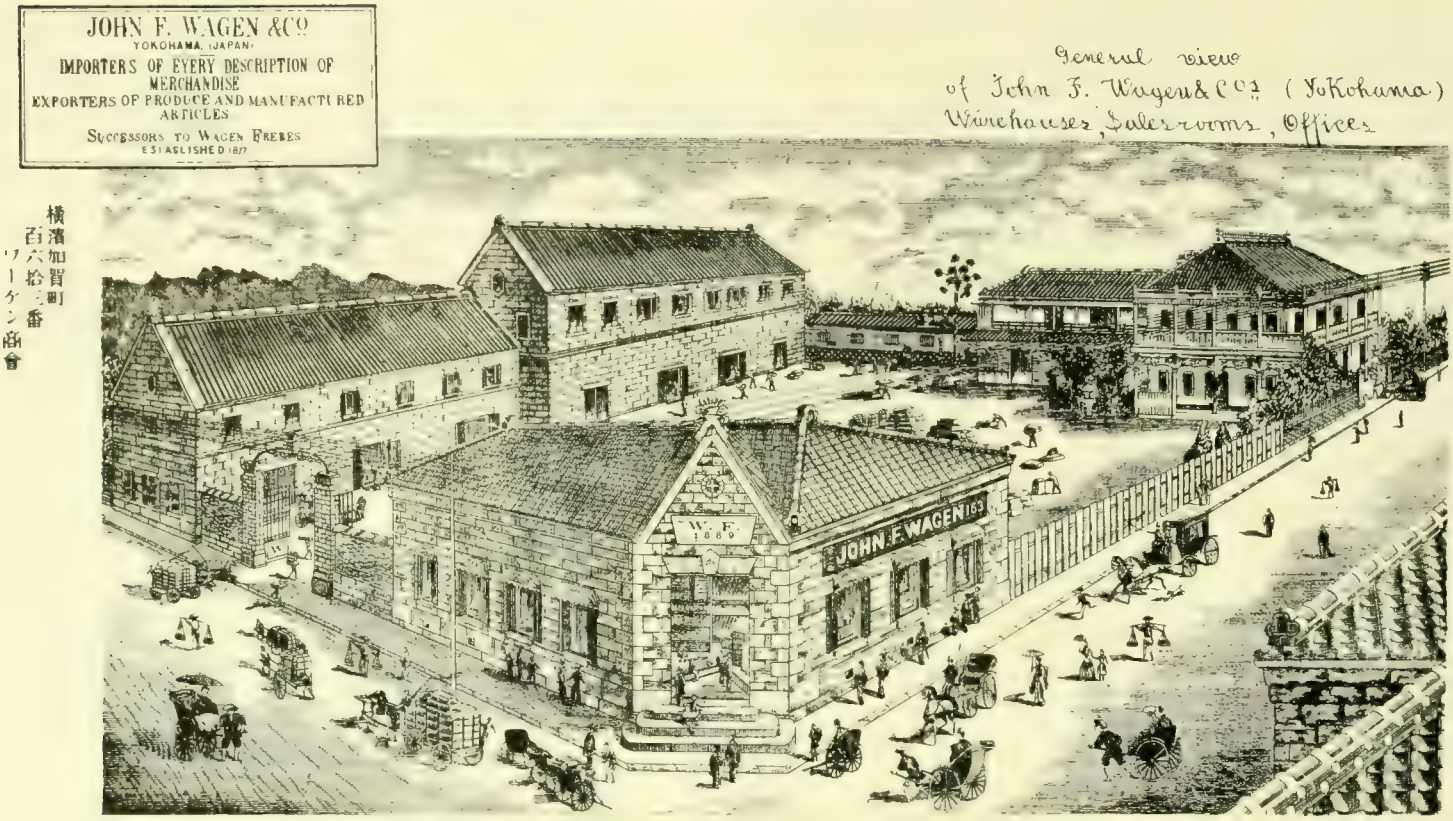
For collectors and taxidermists a small bore gun is a necessary tool, and while securing the specimen, the small charge of shot will not tear or mutilate.

R. L. MORGAN CO. CAPITALIZATION NOW $1,000,000

The R. L. Morgan Company, manufacturers of motor trucks, has increased its capitalization from $300,000 to $1,000,000. The stock will be divided into 5000 shares of $100 each, 7 per cent. preferred cumulative, and 5000 shares of $100 each, common. The company states that it has already received contracts for trucks amounting to nearly $400,000, and it feels that the magnitude of its business warrants the increase. The vote of the stockholders authorizing the increase was, it is announced, unanimous, and Mr. Morgan is confident that the entire amount sought for will be subscribed at an early date. The officers state that although the concern has not been in business a year it has already received orders for some 125 heavy duty trucks, and that the demand for its output fully warrants the step proposed.



The Edwards Flying Shear Built by Morgan Construction Company



At the time the Seattle Excursion of the Board of Trade was planned, it was determined to carry to the Pacific coast and to send out to the world at large a booklet embodying the peculiar claims that Worcester makes for industrial supremacy along the multitudinous lines in which her mechanics and artisans find remunerative employment. Time was when Newark, N. J., claimed to be the centre of more diversified industries than any other city on this continent, but to-day Worcester has reached and passed her Jersey competitor, and stands at the head in this regard among the Americas. Knowing this to be the fact, there was included in the booklet a catalogue of the more important articles now made here, the finding list comprising over 400 different manufactured products and covering four pages of printed space. The index simply gave the titles, with no attempt to enumerate the various varieties and types of machines constructed in any plant. The Crompton & Knowles Loom Works, for example, make over 100 different kinds of looms, and it would be obviously impossible to enumerate them all. In the same way we were unable to incorporate the names of the more than 4400 articles made by the Wire Goods Company, the numerous styles of skates made by the Winslow Skate Company, the variety of wrenches made by the F. L. Coes Company, the screws, planers, lathes and drills, and multitudinous other devices made in this city by other concerns.

What we did do was to tell the world that the Worcester Board of Trade would put any concern in this country or abroad in touch with the manufacturer in Worcester making the goods he desired if, after he read the booklet, he would communicate with us stating his wants. Many such inquiries have already been received, enough in fact to justify the outlay involved in the publication of the souvenir, but it is peculiarly fitting that the largest and most important query of this kind yet received should come last month, and come from the land of Nippon itself. The inquiry came from John F. Wagen & Company, of Yokohama, Japan, and was received through Mr. Julian F. Bigelow of this city, who has for many years acted as a commission agent for this house. The letter was dated Yokohama, Sept. 18, 1909, and read:

Dear Sir: We would thank your Secretary of the Board of Trade kindly to approach these manufacturers for catalogues, samples and cheapest export prices with full discounts for firm orders, cash against bill of lading.

Yours truly,
John F. Wagen & Co.

Mr. J. F. Bigelow, Worcester, Mass.

Accompanying this letter were the pages of the booklet containing the list of goods manufactured in this city with a check against no less than sixty different articles as follows: bank-railings, barb-wire, bar-fixtures, bed-springs, bicycle-chains, bicycle-saddles, blacking, bolts, boot and shoe dies, braid, brass goods and castings, brooms, bug-powder, can-openers, carpets, carriages, celluloid goods, clippers, coffee-roasters, combination hand-tools, confectionery, copying-presses, crackers, curtain-rod fixtures, cutlery, door-mats, egg-beaters, elastic goods, felt, files, finger-nail clippers, fly-traps, hardware specialties, hosiery, infants' shoes, inner soles, knives, locks, nail-cutters, office-railing, poultry-netting, pulleys, rakes, razor-strops, razors, ribbon, saws, sausages, screwdrivers, scissors, soap, spectacles, springs, suspenders, thread, towels, toys, wall-paper, wire goods and wire rope.

For many years the house of John F. Wagen & Company has been one of the principal importing houses of Japan, and Mr. Bigelow has done a large amount of business with it with the most satisfactory financial results. Worcester concerns manufacturing the lines asked for have been put in touch with Mr. Wagen as far as possible, and if for any reason any have been overlooked, we should esteem it a favor if they would notify us of the omission. A picture of the Japanese headquarters of this enterprising concern appears above.

J. W. BISHOP CO.'S CONTRIBUTION TO WEST POINT

One of the most beautiful additions to the new West Point is the Post Headquarters building just completed by the big contracting firm of J. W. Bishop Company, this city. Workmen for four years have been at work on this contract, and the completed structure, which cost $500,000, is one of the most impressive in that marvelous group of buildings that now crown the Hudson at that point.

The splendid edifice, in harmony with the architectural scheme devised by Messrs. Cram, Goodhue & Ferguson of Boston, the architects in charge, is of English Tudor Gothic, and it suffers nothing by comparison with the other principal buildings of the Academy.

It is affirmed that when completed these rugged climbing masses of semi-mediæval Gothic will have no superior in picturesqueness on this continent, and one finds the statement easy to believe who has been to West Point and perceived the facility with which its natural beauty lends itself to treatment of this kind. The stone utilized by the J. W. Bishop Company for the building was quarried on the reservation and harmonizes perfectly with all the outcroppings in that vicinity. A picture of the superb contribution the J. W. Bishop Company has made to the distinctive group of buildings that are to house the new Academy is published in their business announcement in this issue of the Worcester Magazine.

The Japanese Pilgrimage to Worcester—America's Industrial Mecca

The most important event industrially of the past month was the visit to Worcester of the Japanese Commissioners, October 26. In another portion of the Magazine suitable recognition of the pilgrimage itself is made. It simply remains here to recapitulate briefly the places they saw and the character, variety and extent of the output the varied industries they visited, afford. It would be impossible in a day or a week for any group of men to obtain an adequate idea of the tremendous volume of business done by these concerns, and it is not intended to go into that here. It is to be regretted of course that the Commissioners did not have more time to devote to the other great manufacturing plants in this the model industrial city of this Union, but they saw enough while here to convince them that whatever Worcester manufacturers make, they excel in, and that although separated by more than 6000 miles from Japan, it is necessary to bridge that distance to secure the highest type of mechanical excellence. Impressed were the visitors with the fact that "Worcester made" not only "invites trade" but spells perfection.

Among the places visited were Clark University, where several of their fellow-countrymen are putting the finishing touches to their higher education. The library and the new building for child-welfare work, as well as the laboratory and administration building, were objects of intense interest.

The Worcester Polytechnic Institute, which was also visited, received, they were told, its first entering class in 1868, only forty-one years ago. It was at first an almost purely local institution, but it has now grown to be one of the leading engineering colleges of the United States, and is not unrepresented by graduates even in far Nippon. In the increase of its number of buildings, its material equipment, and the enlargement of its teaching facilities, it has in these forty years kept pace fully with the tremendous educational development of the times. In some departments the school equipment is now superior to that possessed by any other similar institution in this country or Europe. The Polytechnic Institute has been a thorough believer from the start in the laboratory method of instruction, and its underlying principle is that courses of study and laboratory exercise may be so arranged as to furnish all the intellectual training of real use necessary in the so-called liberal education demanded by modern scholarship. It also equips the student with a knowledge of the sciences specially relating to his chosen profession, and much actual practice in that profession. Pattern, machine and forge shops, a foundry, a power laboratory, fully equipped, and the largest building devoted wholly to electrical engineering in the world are features of the Worcester Polytechnic Institute.

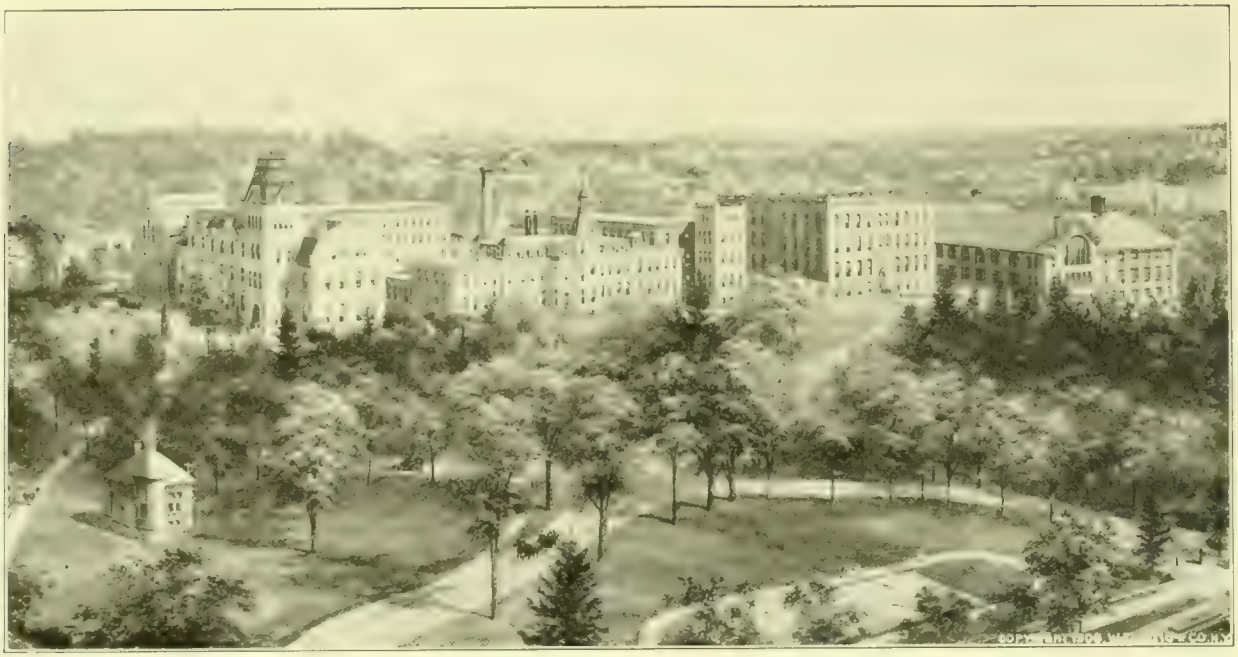
Leaving the Train

One of the Auto Parties

Baron Shibusawa on City Hall Steps

Party Leaving City Hall

SNAP SHOTS OF THE JAPANESE VISIT



Worcester Polytechnic Institute
Visited by Honorary Commercial Commissioners of Japan, October 26th

Library, Clark University

Buildings of the Worcester Academy Visited by Commission

WORCESTER ACADEMY

Worcester Academy, which was among the educational institutions visited by the delegation, is situated on Union Hill, one of the highest sections of Worcester, where its twenty acres of land are beautifully and conveniently arranged in campus and athletic field. The school is housed in eight buildings, all but one of which have been built in the last twenty years. The dormitories are all equipped in the most modern way, and the administration and class room buildings are complete in furnishings. All classes in science are held in Kingsley Laboratories, one of the best buildings for secondary school science in the country. A six-inch telescope is a part of the equipment. The school possesses a structure which is unique among school buildings, the "Megaron," devoted to the social intercourse of the students. Its great features are a very large room, elegantly furnished, where the boys come to read, sing and talk. Below this is a superb swimming pool; both are connected with the gymnasium. Adams Hall, the building containing the dining hall, is a gem of architecture. The new athletic field is adorned with a solid concrete field house of beautiful design.

The student body contains representatives from nearly every State in the Union, and several foreign countries. This is the beginning of the seventy-sixth year of the school, and the enrollment is the largest in its history. It is also the conclusion of Dr. Abercrombie's twenty-seventh year as principal. The courses fit students for the entrance examinations of all college and technical institutions which do not require a college degree for entrance, and its graduates are widely scattered in the various higher educational institutions.

The constant aim of the school is to develop well rounded, honest, efficient, manly character. Continuous hard work is what every student enjoys in this school. Seldom is the true democratic spirit found in such pure type as at the Worcester Academy, and the motto, "Achieve the Honorable," is put into practice in every occupation.

Manual Training Department at Worcester Academy

WORCESTER PLANT AMES PLOW COMPANY
Visited by Japanese Commission Oct. 26

THE AMES PLOW COMPANY

The Ames Plow Company is the outgrowth of a business started in 1825 by Joel Nourse of Worcester. In 1837 the firm name was changed to Ruggles, Nourse & Mason, in 1856 to Nourse, Mason & Company, and in 1861 to Oliver Ames & Sons. It was first incorporated in 1864 under the present name of Ames Plow Company. It is undoubtedly the oldest agricultural implement house in this country. It was the Ames Plow Company that first started exporting plows, and the name Ames now stands for the highest excellence in plows throughout South Africa, South America and other regions of the world.

As the Hon. George F. Hoar said in one of his speeches in the United States Senate in 1903: "In Worcester the modern plow was brought from a rude implement to its present condition of unrivalled excellence." This firm has also been noted for the perfect harmony existing between employer and employee. In the factory office hangs a huge clock presented to the firm in 1851 by its employees in acknowledgment of the establishment of the 10-hour day.

The large warehouse of this firm, on Hanover, in the centre of the market district, has been a landmark for many decades and a warehouse has been maintained in New York since 1864.

In addition to the manufacture of plows, its business has been extended to carts, wagons, harrows, cultivators, seeders, garden, field and road rollers, cider and wine presses, grindstone frames, trucks of all kinds, fan mills, vegetable cutters, corn-shellers, jacks, wheelbarrows, pungs, spraying apparatus, lawn-seats, contractors' tools, ice-tools, and many other lines.

M. J. WHITTALL'S CARPET MILLS.

The carpet works of M. J. Whittall were founded in 1880 by the present owner, a native of Kidderminster, Eng., who came to this country in 1841 as superintendent of the Crompton Carpet Company, with whom he remained until 1879, when the company was dissolved. The next year he leased a portion of what was known as the Wicks Mill, and started in the manufacture of Wilton and Brussels carpets with twelve looms. By 1883 he had doubled his plant and built his first mill. In 1885 he purchased the Edgeworth Mill to manufacture carpet yarns, taking in Mr. Alfred Thomas as a partner. Other additions have been made from time to time, until now he has the largest carpet mill in this country under individual management. This year extensive improvements and additions have brought the plant up to the highest point of efficiency it has ever attained. Mr. Whittall's son, Matthew P. Whittall, is associated with him in the management of this great concern. The product of the mills is sold through agencies in New York city and San Francisco, and enjoys international reputation for beauty, superiority and wearing qualities. He employs 1300 hands, and the output of the mills is immensely valuable and eagerly sought after both in this country and abroad.

BOSTON WAREHOUSE AMES PLOW COMPANY

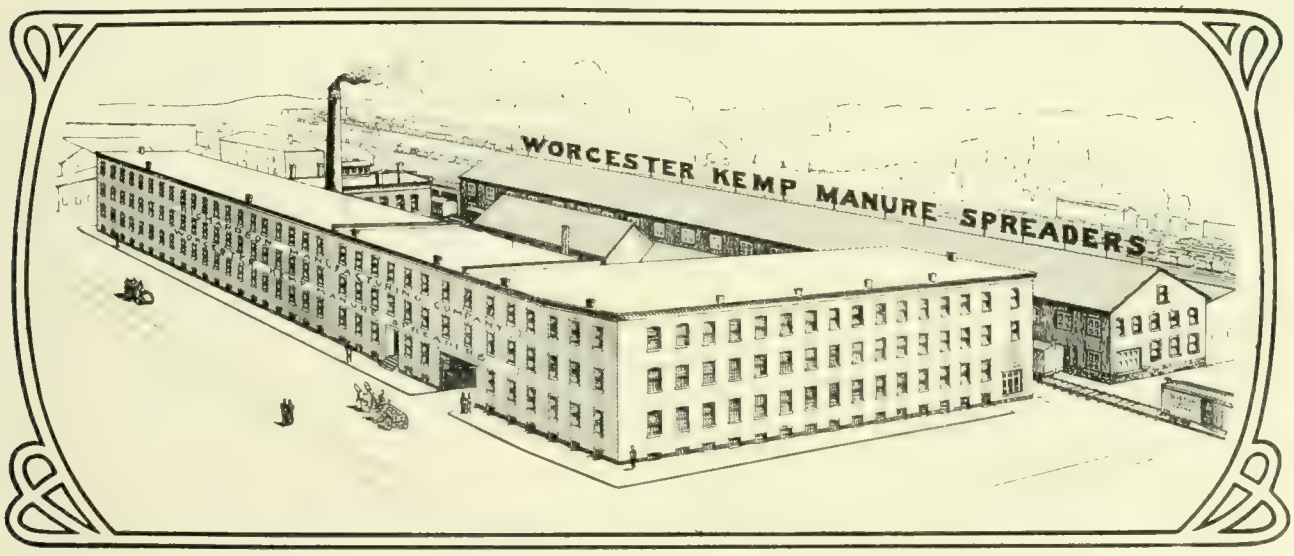
EASY LOADER MANURE SPREADER
Manufactured by the Richardson Manufacturing Company

THE RICHARDSON MANUFACTURING COMPANY

The Richardson Mfg. Co., which was one of the concerns embraced in the itinerary furnished the visitors, is one of the oldest and most reliable agricultural machinery houses in the East. Established in 1862 by A. P. Richardson, it was incorporated in 1870 under his name. Its works utilize 75,000 square feet of space, the nature of the product requiring a large amount of room per man, and it has turned out in its nearly half century of history an enormous product. Nearly 20,000 manure spreaders alone have been built by this company, and in addition they manufacture Buckeye mowers, Bullard hay tedders and Worcester hay rakes. The Worcester Kemp manure spreader is known the world over. Their new easy loader, by which the sides are lowered so that the fertilizer only has to be raised eighteen inches from the ground to be tossed into the cart, is the biggest boon in the shape of a labor saving device that the agriculturalists of the world have recently encountered. This loader was described in detail in the September number of the Worcester Magzine, and it is meeting with an enormous sale, both in this country and abroad. The company employs 150 men, and its officers are: E. P. Curtis, president and treasurer; J. D. Curtis, assistant treasurer.

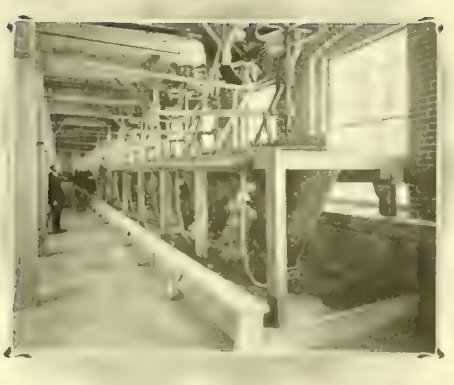
THE CROMPTON & KNOWLES LOOM WORKS

The Crompton & Knowles Loom Works had their beginning back in 1851, when George Crompton, under a renewal of the original patent granted his father fourteen years previously, built the first power loom in the city. Lucius J. Knowles was then in Warren, Mass., building looms, but in 1856 he removed to Worcester and formed a partnership with his brother, the concern being known as L. J. Knowles & Brother. The present company was formed in 1897, and has grown steadily from that date onward, branches having been established in both Philadelphia and Providence, while their English representatives, Hutchinson, Hollingworth & Company, have built up an enormous foreign trade in their looms. Extensive additions have been made during the past year, and the plant now covers fourteen acres, and employs hundreds of skilled workmen. Every variety of weaving machinery is constructed from that capable of producing elaborately embroidered silks and intricately patterned rugs to the coarsest sheeting. There is no fabric that it is possible to weave that cannot be made on some one of the many types of looms built by this company.



RICHARDSON MANUFACTURING COMPANY PLANT

Norton Company



Machines for Washing Alundum.

The members of the commission who visited the Norton Company plant shown on this page, surely must have been impressed with many features besides magnitude. It is not only considered the largest grinding wheel manufacturing plant in this country, but the most modern. Practically the entire equipment was especially designed to meet requirements found necessary through many years of experience in manufacturing this line of goods. Scientific experiments are constantly carried on, the company maintaining both a chemical and mechanical laboratory. Each of these laboratories is fitted with the best appliances known to science.

The unusual consideration given by the company to the comfort and health of the workmen is everywhere apparent.

In the short time the visitors had to go through this plant, but a vague idea could be obtained of the many operations and the exactness in detail necessary in the manufacture of grinding wheels, the great variety of sizes, shapes and combinations of wheels made, and their uses in the manufacturing world.

A few years ago emery and corundum were the chief materials used in the manufacture of grinding wheels, but now alundum, produced in electric furnaces at Niagara Falls, N. Y., is the "grit" or cutting material used exclusively in Norton wheels.

Electric Furnace Plant for the Manufacture of Alundum, Niagara Falls, N. Y., U. S. A.

Works of Norton Company and Norton Grinding Company, Worcester, Mass., U. S. A.

Visited by the Honorary Commissioners of Japan, October 26, 1909.

The alundum comes from the electric furnace in large ingots, after which it is crushed and shipped to Worcester, where it is put through various processes to prepare it for use in the manufacture of wheels and other Norton products.

The many operations necessary in making grinding wheels, such as mixing, drying, shaving, baking in kilns, truing, balancing, grading, testing for safety, etc., hold the interest of visitors from the time they enter the plant until they leave.

It is interesting to know that in this plant wheels are made in every conceivable size, from $^{3}/_{16}$ inch diameter up to six feet diameter. It has been estimated that the number of combinations of grain and grade that could be worked out is something like 100,000.

As it requires about four weeks to finish a grinding wheel complete, it is necessary to carry an immense stock of various sizes, shapes and combinations to be able to execute orders promptly. This stock constitutes one of the interesting features of the plant.

The product of the Norton Company is grinding wheels, glass cutting wheels, oil stones, razor hones, rubbing and sharpening stones and scythe stones. Their product and reputation have reached all parts of the world.

Corner of Electric Furnace Room

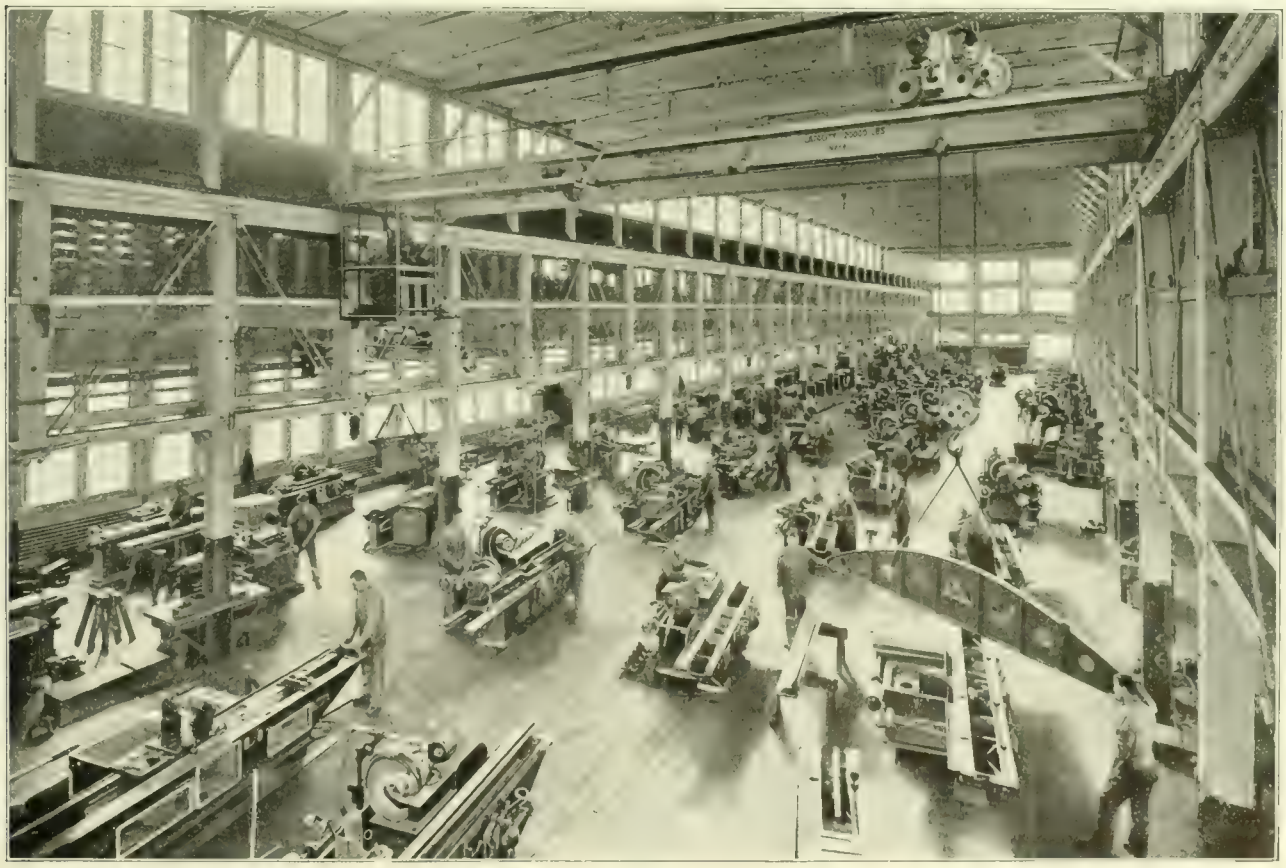
Plant of the Norton Grinding Co., Visited by the Honorary Commissioners of Japan, October 26, 1909

Norton Grinding Company

This is one of the few large plants devoted to the manufacture of grinding machines exclusively. Their product consists of plain cylindrical grinders, universal tool and cutter grinders, bench and floor grinders.

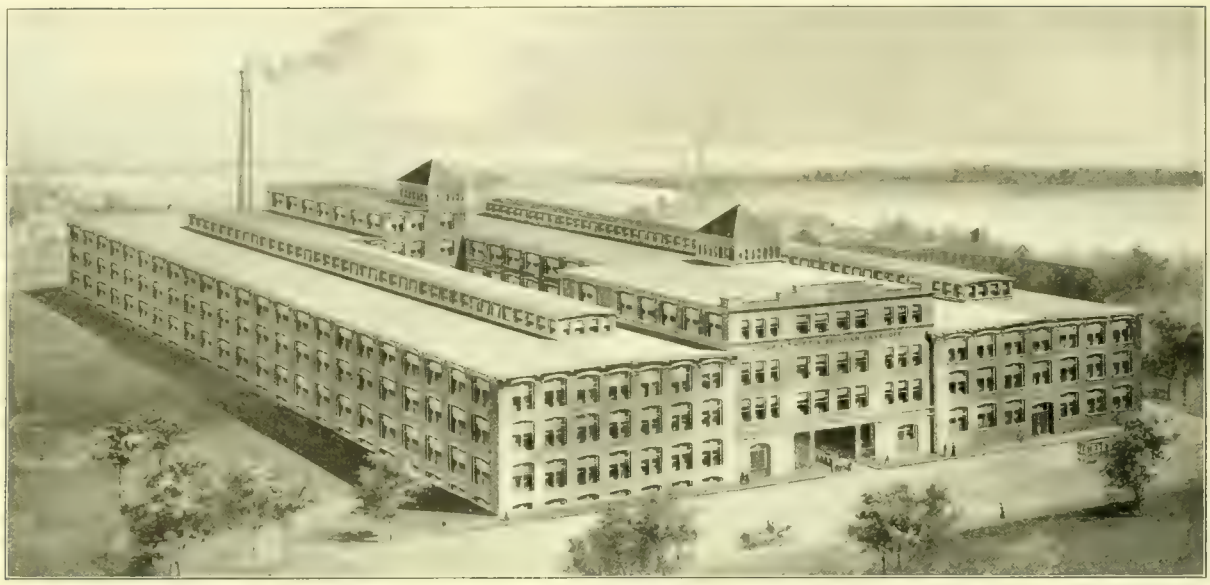
The line of cylindrical grinders includes sizes ranging from 3000 lbs. to 20 tons in weight—from 6″ swing to 32″ swing, from 32″ to 22′ between centres.

The company has enjoyed rapid growth, and its product is held in high repute on both continents.



A Portion of the 84,000 Sq. Ft. Devoted Exclusively to the Production of Grinding Machines, Norton Grinding Co.

Worcester Magazine Advertiser



Over four acres devoted exclusively to the manufacture of envelopes

LOGAN, SWIFT & BEIGHAM DIVISION, WORCESTER, MASS.
Visited by the Honorary Commissioners of Japan, Oct. 26th, 1909

MANUFACTURING PLANTS OF THE UNITED STATES ENVELOPE COMPANY

No. 1. Logan, Swift & Beigham Div., Worcester, Mass.
No. 2. Eagle Envelope Co. Div., Hoosick Falls, Mass.
No. 3. White, Corbin & Co. Div., Rockville, Conn.
No. 4. Hartford Envelope Co. Div., Hartford, Conn.
No. 5. Morgan Envelope Co. Div., Springfield, Mass.
No. 6. New Factory now under construction, Springfield, Mass.
No. 7. National Envelope Co. Div., Waukegan, Ill.
No. 8. F. F. Kellogg & Co. Div., Springfield, Mass.
No. 9. Whitcomb Envelope Co. Div., Worcester, Mass.
No. 10. W. H. Hill Envelope Co. Div., Worcester, Mass.

PLANT OF ROYAL WORCESTER CORSET COMPANY
Visited by Honorary Commercial Commissioners of Japan, Oct. 26th, 1909

THE ROYAL WORCESTER CORSET COMPANY

One of the most unique plants visited by the Japanese delegation was that of the Royal Worcester Corset Co. The women of Nippon have not as yet adopted this symbol and evidence of modern civilization, and the Japanese visitors were intensely interested in the product of the works. Almost none of them had ever seen a corset before, and they were as much puzzled by its peculiar construction as we should be by the tiny shoes with which many of the charming daughters of the far East still adorn their feet. The Royal Worcester was particularly interesting to them because of the humanitarian spirit toward its female employees that evidently actuates its progressive management. The new and enlarged plant was pronounced by every visitor to be a model among American workshops. They were interested to know that 1500 people are continuously employed in these works, and that here corsets are turned out for every possible type of figure from sylph-like to the most robust. They were pleased to find, too, that the management maintains a library, hospital and dining hall for the exclusive use of the employees, and were impressed by the fact that it operates its own complete box-making and printing plants within the building. Another detail that struck them forcibly was the fact that all machines are electrically driven, thus eliminating all over-head shafting. When told that these goods, still largely unknown in Japan, are sold to-day in nearly every town and city in the United States, and about forty foreign countries, they were amazed.

Inquiry as to the price of these goods brought out the fact that the Bon Ton corsets made by this concern retail at from $3 to $15, Royal Worcester corsets for all figures sell for $1 to $3, while Adjusto corsets for stout figures command from $3 to $5. Also Royal Worcester waists for children and misses are manufactured steadily.

Three models, illustrated below, portray authoritative corset style, which is characteristic in all the corsets designed and manufactured by this concern.

Worcester Magazine Advertiser

PLANT OF THE WIRE GOODS COMPANY

THE WIRE GOODS COMPANY

The Wire Goods Company, 28 Union Street, manufactures one of the largest line of wire goods produced by any concern in this country, over 1400 articles being catalogued, including every variety of bright wire, brass hooks, wrought goods, garment hangers, coat and hat hooks, wire nails, tacks and staples, also a line of kitchen wire goods of the most comprehensive sort, including broilers, pot chains, strainers, soap brackets, and a vast multitude of other household articles. A specialty is made of articles formed from wire, made to order.

The concern was incorporated in 1882, and employs 250 hands the year around. So extensive has the business become that it has been found necessary to establish a branch factory at 1144 West Third Street, Cleveland, Ohio, for the convenience of their western trade. The Wire Goods Company also owns and operates the Woods Sherwood Company of Lowell, Mass., established in 1861. The Lowell concern manufactures a very high grade of wire goods. The Wire Goods Company prints a catalogue of 268 pages, giving a complete enumeration of all their goods, which they will be glad to send to any address.

WORCESTER ELECTRIC LIGHT CO.'S NEW SITE

The announcement that the Worcester Electric Light Company had purchased the Curtis pond property, comprising eight acres of land and the factory buildings standing thereon, of the Curtis Manufacturing Company, was one of the most important made to the business interests of Worcester last month. Through this deal the Electric Light Company comes into possession of a site capable of providing them with adequate facilities for the vast amount of business the company has in prospect in this community. It is estimated that the cost of fitting up a complete modern transmission plant at this point added to the original outlay for the site and buildings will foot up to nearly $400,000. The water rights are especially valuable, and will give the company facilities in that direction they have never possessed. The present Faraday Street plant will be used for a distributing station, while the new location will be devoted wholly to generating purposes. It is among the possibilities that land at Curtis pond will be sold or leased for power purposes to plants that may desire to locate there, as the company has now more room than it needs for its immediate use.

"Made in Worcester"

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Complete set, 15 cards, all different, in special envelope ready for mailing, **Price 25 Cents.** Why not procure a set for the home-coming guest at Thanksgiving or send a set to some former resident who will appreciate the greeting and glimpse of familiar scenes. You can get them of *F. A. Easton Co. Armstrong News Stand, Union Station, Davis & Banister, Sanford-Putnam Co. L. H. Browning, L. B. Wheaton, J. C. Freeman & Co., D. A. Upham & Co. J. H. Pollard, H. L. Green, Druggist, Peter R. Culbert, J. F. Bruso, Webster Sq. Druggist, L. E. Bragg, Brittan Sq. Druggist, Boston Store and Barnard, Sumner & Putnam Co.*

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The WORCESTER MAGAZINE Illustrated

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Entrance Lobby, Odd Fellows' Building

Photo by E. B. Luce
405 Main Street, Worcester, Mass.

DECEMBER, 1909

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HARRINGTON & RICHARDSON ARMS CO., Worcester Mass.

Made in Worcester.

THE WORCESTER MAGAZINE

VOL. XII. DECEMBER, 1909 No. 12

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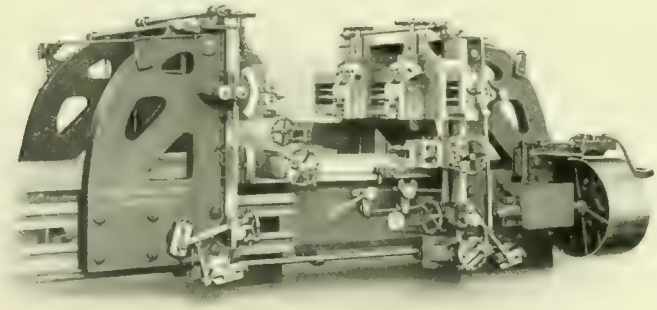
ESTABLISHED IN 1887



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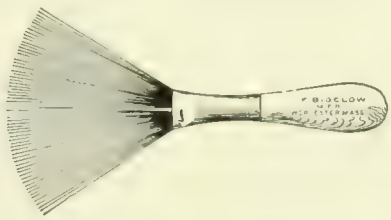

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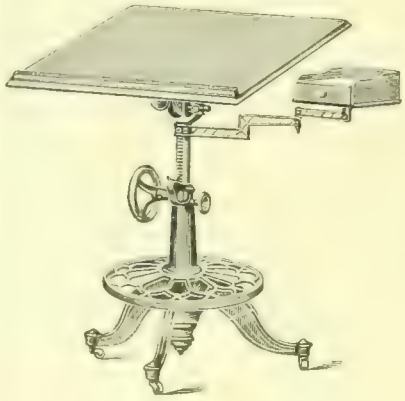

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The WORCESTER MAGAZINE

The Odd Fellows' Temple

Odd Fellowship

Its Early History and Present Greatness

By Grand Master Charles B. Perry

THE rise of Odd Fellowship in America dates from an advertisement inserted in the Baltimore American on the 27th day of March, 1819, inviting the brethren who might be in the vicinity to meet on the 2d day of April following at the tavern known as the Seven Stars. A number responded, and on the 26th day of April in the same year these brothers formed a lodge of Odd Fellows, named it Washington Lodge, No. 1, and chose Thomas Wildey Noble Grand, who is justly given the credit of founding the order in this country.

Thomas Wildey was a native of London, England, where he was born Jan. 15, 1782, 127 years ago. There were at that time in Great Britain several Odd Fellows' lodges. Indeed history states that as early as 1745, so called Odd Fellows' lodges were in existence in that country, mainly devoted to recreative purposes. It is also certain that these Odd Fellows' lodges made a business of assisting needy brethren to obtain employment, and that at the first, at any rate, their membership was largely composed of workingmen. These organizations were all independent of each other, and were self-constituted in the various localities in which they worked. It was into the body of membership of one of these lodges that Founder Wildey was received when upon reaching his majority he entered the fraternity.

Grand Master Charles B. Perry

Soon after, withdrawing from the lodge in which he had been initiated, Wildey in common with others started a new lodge in London known as "Morning Star, No. 38," and for fourteen years he worked in this lodge, perfecting himself in Odd Fellowship. In 1817 he came to the United States and settled in Baltimore, Md.,

The meeting of the 26th of April, 1819, involving so much for human weal, was attended, besides Mr. Wildey, by Richard Rushworth, John Duncan, John Cheatham and by John Welch, another Odd Fellow whose acquaintance Mr. Wildey had previously formed. These five men launched the fraternity which has spread now from sea to sea. In deference to the Father of his Country it was decided to call the lodge then and there formed, Washington Lodge of Odd Fellows.

Shortly after the institution of Washington Lodge, No. 1, Henry M. Jackson arrived in Baltimore from England for the purpose of introducing Odd Fellowship in this country, ignorant of the fact that a lodge already existed here. He gave the members of Washington Lodge some instruction in the work of the order, and after a short stay returned to England. The same year a brother of the name of Crowder of Preston, England, visited Baltimore, and on his return to England presented to his own lodge a petition from Washington Lodge for a charter, which was promptly issued, giving it the following title: Washington Lodge, No. 1, the Grand Lodge of Maryland and of the United States of America of the Independent Order of Odd Fellowship. In 1820 a committee of Past Grands was constituted which, outside of hearing grievances without power to regulate further than to recommend action which was adopted or rejected at option, had little influence. For a time Washington Lodge, No. 1, remained a subordinate lodge and a grand lodge as well. It soon became apparent that it was advisable, if not absolutely necessary, to separate the legislative from the operative power, and on the 7th day of February, 1821, a meeting of this committee of Past Grands was held to consider the subject of forming a Grand Lodge which should constitute the legislative body. The formation of such a body was deemed advisable, and as a necessary step Washington Lodge was invited to surrender to the Grand Lodge to be formed, the charter which it had received from the Duke of York's Lodge in England. The lodge complied with the request and the Grand Lodge of Maryland and the United States of America came into existence, with Thomas Wildey as Grand Master.

In the meantime lodges had been formed in other jurisdictions, not knowing what was going on in Maryland. There was, for instance, in New York a lodge of Odd Fellows known as Shakespeare Lodge, organized as early as 1806, but it lapsed in 1813, and was not again reinstituted until 1818. By January, 1822, there were four independent lodges in that State.

In Massachusetts, too, a lodge was formed March 26, 1820, known as Massachusetts Lodge, and this body worked under the impression that it was the only lodge in America until February, 1822, when it learned of the Baltimore organization. It immediately made application to the Baltimore body, acknowledging that to be the supreme authority in the United States, and asking for a charter for a Grand Lodge with authority to control all the lodges thereafter formed in Massachusetts. The request was granted and the Grand Lodge of Massachusetts was instituted June 11, 1823.

Mr. Wildey having been elected Grand Master of the Grand Lodge of Maryland and of the United States secured the adherence of not only Massachusetts, but eventually of New York and Pennsylvania—in both of which states independent lodges were working—to a plan whereby a new Grand Lodge of the United States could be organized embracing these and the other jurisdictions that might subsequently apply for membership. This was done at a session held Feb. 22, 1824, just eighty-five years ago.

On the 15th of January, 1825, following, the first constitution of the Grand Lodge of the United States was adopted, and this Grand Lodge became the supreme authority of the I. O. O. F. in this country. When organized, it had in its jurisdiction three lodges in Maryland, three lodges in Pennsylvania, two lodges in Massachusetts, and one in New York.

This is the history of the establishment of Odd Fellowship in America, and it is a matter of extreme gratification to Massachusetts Odd Fellows that the order in this State should have played so early, so loyal and so important a part in this great work. Had it not been for the fine spirit displayed by the members of the order in this State in promptly giving in their adherence to the Baltimore body, Founder Wildey's task in organizing the national body would have been much greater, more perplexing and delicate than it finally proved.

JEWEL PRESENTED GRAND MASTER OCT. 29, 1909, AT MILLBURY

In 1879 the order having had for some time grand lodges outside of the territory of the United States, changed its name to that of the Sovereign Grand Lodge. Though the order in this country sprang from the order in England, the two bodies now have no affiliation with each other, the order in England and those in this country affiliated with it being known as the Manchester Unity Branch.

To-day there are sixty-nine grand bodies subordinate to the Grand Lodge with a membership report December 31, 1908, of 1,492,478 brothers with 395,898 sisters in the Rebekah Branch. There are in addition to the sixty-nine grand bodies, six quasi independent jurisdictions, namely: Australasia, Denmark, Germany, Sweden, Netherlands and Switzerland, their members having the right to visit lodges of the Independent Order of Odd Fellows anywhere.

From 1830 to December 31, 1908, inclusive, the vast sum of $125,630,414.78, has been expended in relief of members, while the benefits accruing in other forms than in material relief cannot be reckoned by any human computation. Invested funds of more than forty-six millions of dollars testify to the stability of the order, and forty-six homes for the aged and indigent members, their wives, widows and orphans demonstrate that the work of the order is not mere lip service.

September 20, 1851, the Rebekah Branch of the order was instituted, the founder being Schuyler Colfax, once Vice-president of the United States. While Rebekah lodges do not pay benefits, they have been of great assistance in the work of the order, especially in their care for the comfort and entertainment of the inmates of the Odd Fellows' homes.

The first lodge of Odd Fellows in Massachusetts was self-instituted in Boston in 1820, and named Massachusetts Lodge, No. 1. For a time the members believed it the only lodge of Odd Fellows in the country, but on being convinced of the priority of Washington Lodge of Baltimore, acknowledged the supremacy of the Grand Lodge of Maryland and the United States. In 1823 Massachusetts Lodge, No. 1, asked for and received a charter with full powers, becoming the Grand Lodge of Massachusetts, with Daniel Hersey Grand Master.

The growth of the order in Massachusetts has been rapid, numbering on the 31st day of December, 1908, 58,194 contributing members in the subordinate lodges, and 20,436 sisters in the Rebekah lodges. For the year ending December 31, 1908, $102,952.64 was paid for relief, not including the cost of maintaining the Massachusetts Odd Fellows' Home. Subordinate lodges have invested funds amounting to $2,311,979.83, and Rebekah lodges have invested funds amounting to $191,241.54.

Massachusetts Odd Fellows support a home for aged members located in this city. Of none of their works are they more proud than of this. A hundred aged and infirm brothers and sisters find shelter and loving care under its roof. One of its greatest benefactors is a citizen of Worcester, though not a member of the order, Mr. Thomas H. Dodge, whose interest in the project in a great degree influenced the choice of Worcester as its abiding place.

In the Supreme Council of the order, Massachusetts has always had a high place, one of its Past Grand Masters, the Honorable Albert S. Pinkerton, being a Past Grand Sire.

While the order lays considerable stress upon the ma-

terial advantages conferred upon its members, the moral and social advantages are equally to be considered. In many lodge quarters, rooms are set apart for reading and games. Good influences surround those who spend their evenings there, and no young man, especially one residing in a city where he has no home-ties, can afford to be outside of an order whose efforts supplement those of the Christian church in building and maintaining a high standard of citizenship. The order is democratic in its government, with no path to advancement but merit. The members have nothing to fear in comparison with those of any other order. Its ritual is dignified, impressive and elevating, and no one can witness its rendition unmoved or uninspired. There is nothing in it that might not be listened to by the most pure minded with profit, and its degrees illustrate the most powerful stories of the Scriptures. It teaches obedience to civil laws and stands for a stable and honest government. It has no quarrel with any organization whether secret or religious. It does its own work in its own way, and is ever ready to aid all others in their efforts to make the world a better place to live in.

THE SIX NOBLE GRANDS OF THE WORCESTER LODGES

The Story of the Temple

THE Odd Fellows of Worcester, albeit they are now provided with sumptuous quarters, including not only beautiful lodge rooms, a spacious banquet hall, attractive reading and billiard rooms, and everything else found in a modern club-house, did not attain to all this luxury without a struggle.

For years they met in small, poorly ventilated, inadequate and isolated halls located on side streets at the top of old buildings that could only be reached by climbing many flights of stairs. In one case the hall they abandoned to move into the present temple on Main Street would have been condemned as a fire-trap by the State inspectors had they not vacated it when they did.

More than ten years ago the erecting of a suitable Odd Fellows' building, where the various lodges in Worcester could meet under one common rooftree, was taken up and seriously debated and the necessary steps were taken to secure a lot on Irving Street, near the corner of Chatham. The plan fell through. Later the fraternity took steps to acquire the property on Pleasant Street where some of the lodges were then meeting. The price asked and agreed upon was $70,000, but the owners securing a bid of $80,000 from another source refused to sell and this plan likewise failed.

By 1905 the order had come to a point where it was felt that something must be done. Not only the Pleasant Street, but the Pearl Street halls were not only inadequate, but were a distinct handicap to the growth of the fraternity, and it was felt by everybody that if the society was to fulfill its true mission and expand as it ought with the increase of population in Worcester, it must have a more modern and attractive meeting-place.

At a meeting June 9, 1905, called by order of Herbert Wesby, chairman of the Board of Trustees of the several lodges, to see what arrangements could be made with John E. Day in regard to a hall for future use, a committee, appointed May 31 for that purpose, reported that it was inexpedient to act. The matter of securing a permanent home for the body was then taken up, and both the Wood lot, so called, on the corner of Sycamore and Main Streets, and the Wells lot on Main Street opposite the foot of Sycamore, were named as eligible sites. It was finally voted that George F. Brooks attend the auction sale of the Wells lot on Jan. 22, and purchase the same for the order at a cost not to exceed $10,000. There were present at this initial meeting Messrs. Herbert Wesby, George F. Brooks, Franklin A. Caswell, Theodore H. Day, Edward M. Woodward, Albert M. Thompson, William M. Shearman, Oliver M. Dean, James H. Hartwell, George E. Fiske, John A. Cherry, L. A. Hastings and William F. Ewell. George F. Brooks was elected chairman and John A. Cherry secretary of the committee.

At a meeting June 22 Mr. Brooks stated that he had purchased the Wells lot for the order, and it was voted, on motion of Mr. Hartwell, to assess Quinsigamond, Worcester, Central, Ridgely and Anchoria Lodges $2000 each to pay for the same. This was done, and at the next meeting, June 29, these several bodies sent in the names of the following representatives to sign the deed: Quinsigamond, George F. Brooks; Worcester, A. M. Thompson; Central, William H. Shearman; Ridgely, H. B. Belcher; Anchoria, John A. Cherry.

ONE OF THE LODGE ROOMS IN THE TEMPLE

A committee on plans from the different lodges was then appointed, consisting of Franklin A. Caswell from Quinsigamond, Theodore H. Day from Worcester, Wallace A. Kendall from Central, James H. Hartwell from Ridgely, and James B. Mullikin from Anchoria.

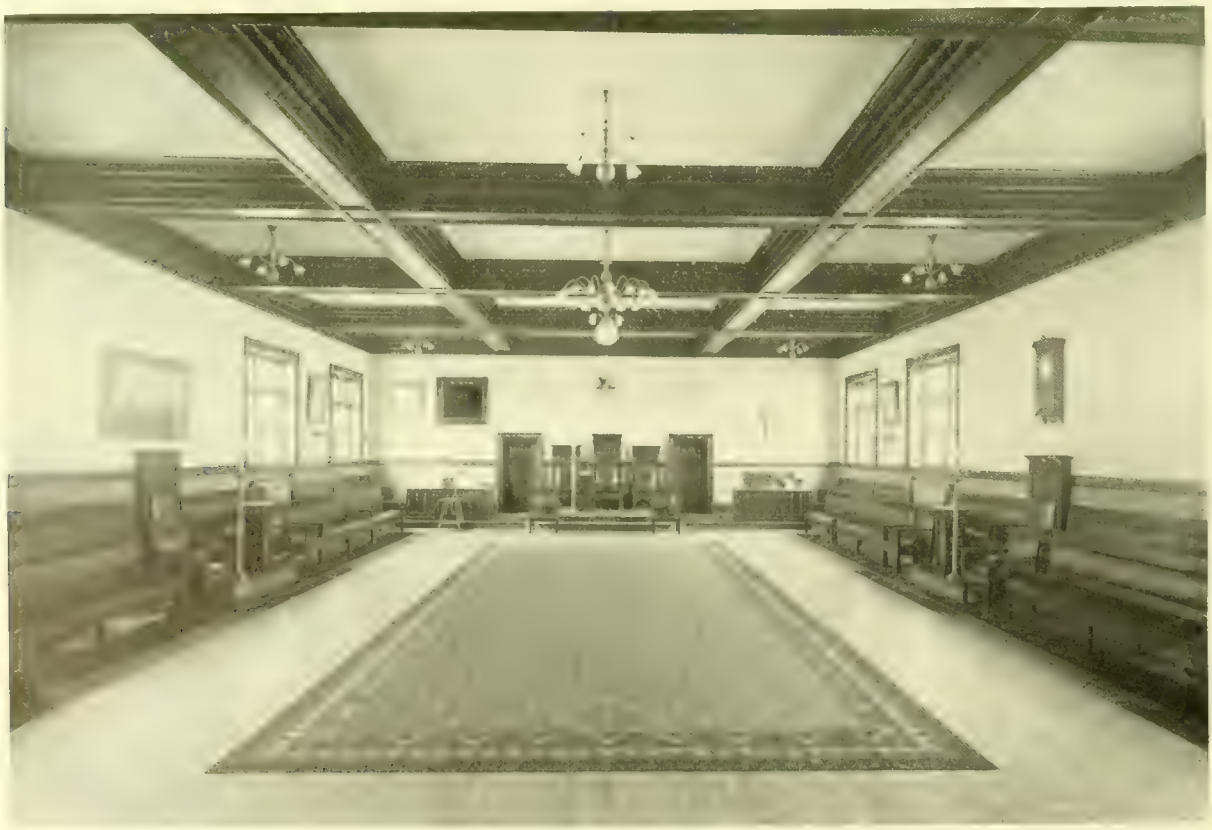
At a meeting July 11 the committee voted to incorporate under the name of the Odd Fellows' Charitable Association, the amount of capital stock, on motion of A. M. Thompson, being fixed at $40,000. Then followed, Aug. 3, the adoption of by-laws and the election of officers as follows: President, George F. Brooks; Vice-president, Herbert B. Belcher; Treasurer, E. M. Woodward; Clerk, John A. Cherry; Directors, Herbert Wesby, George F. Brooks, F. A. Caswell, E. M. Woodward, A. M. Thompson, T. H. Day, W. H. Shearman, O. M. Dean, W. A. Kendall, H. B. Belcher, J. H. Hartwell, L. H. Williams, James B. Mullikin, G. E. Fiske and J. A. Cherry.

All was now in readiness to take up the building project in earnest. Seven sets of plans were submitted, and after some discussion the one calling for a structure to cost $53,000 was adopted. Subsequent additions and changes brought the cost well above this figure, but the edifice was built upon honor and its construction throughout reflects the utmost credit upon the builder, architect and fraternity alike. Many Odd Fellows' temples are erected as purely commercial propositions, devoting large space to stores and offices, the lodge rooms, ante-rooms and recreation rooms being merely incident to the general plan. The fraternity in this city determined to erect a structure here that should be absolutely free from commercialism and dedicated wholly to their own uses. The result is a model among Odd Fellows' temples in America, and is a source of great and pardonable pride to the fraternity in this place. The committee on plans was made the committee on building, and Mr. Day resigning, Mr. A. M. Thompson was appointed in his place. The committee as thus made up consisted of Franklin A. Caswell, Wallace A. Kendall, Albert M. Thompson, John H. Hartwell and James B. Mullikin, and to their efficient and untiring and conscientious labors the order owes a large debt of gratitude.

They were authorized to make a contract with E. J. Cross as contractor and Clellan Waldo Fisher as architect to erect the building, and Dec. 28, 1905, arrangements were made for laying the corner-stone, the following committee being appointed to arrange for the exercises: President, George F. Brooks; E. M. Woodward, O. M. Dean, H. B. Belcher and John A. Cherry. It was at first intended to have this ceremony Sunday afternoon, Jan. 7, but as it was found impossible to secure the presence of Grand Sire A. S. Pinkerton on that date, Jan. 6 was substituted. The day was stormy, but there was great interest in the exercises and they were largely attended.

It was soon evident that the amount of incorporation was too small, and the lodges gallantly responded to the request that it be increased from $40,000 to $60,000. This was followed by the announcement that Thomas H. Dodge, always a friend of the order, had given $1250 and his portrait, and it was voted to name the hall on the second floor Dodge Hall in his honor, and display his portrait therein.

July 21st, 1906, the corporation voted to appropriate $10,000 to furnish the building, and at a meeting Nov. 5 it was voted to appropriate $1500 more if necessary. The building was formally dedicated Nov. 8, 1906, the exercises being in charge of a committee headed by Reuben G. Smith.



Another Lodge Room

The Odd Fellows' Home

AS early as 1846 the various I. O. O. F. grand bodies began discussing the establishment of Odd Fellows' homes as an important feature of fraternal work. The need of a place where the aged and indigent members of the order might spend their declining years in peace was everywhere felt, but it was not until 1887 that the Grand Lodge of Massachusetts took action in this matter. In that year a committee was appointed, of which the Hon. A. S. Pinkerton was a member, and a report presented indorsing the project. The original Board of Trustees consisted of Francis Jewett for five years, Henry K. Braley for four years, James Joslin for three years, William E. Ford for two years, and Hon. John J. Whipple one year. These gentlemen at once issued an appeal to the order asking for $100,000 to build a suitable Odd Fellows' home in this State. The circular also embodied the action of the Sovereign Grand Lodge at Denver that year, which warmly endorsed the erection of such structures everywhere. Zealous workers at once began visiting the various subordinate lodges and explaining to the members the objects and benefits of the Home, and contributions commenced to pour in. Particularly active in this pioneer work was Past Grand H. A. Barbour of De Soto Lodge, Springfield. The next session of the Grand Lodge showed before adjournment $22,149 in the treasury to the credit of the Home. The Daughters of Rebekah materially assisted in securing this sum, and from that day to this their interest in the cause has continued unabated. Among the early contributors was Charles Hayden of Boston, the Past Grand Treasurer of the Grand Lodge, who gave $1000.

Rufus B. Gifford and Nathan Taylor having been elected Trustees of the Home on the part of the Grand Encampment, its membership was thereby increased to seven. By February, 1889, the Grand Lodge had accumulated $35,737.99 for the new institution.

Then began the perplexities incidental to securing a favorable site. All parts of the Commonwealth offered eligible locations, including among others Shirley, Belmont, Worcester and Lowell. The choice finally fell upon Worcester, thanks to the splendid generosity of Hon. Thomas H. Dodge, who, though not a member of the fraternity, gave to the order in perpetuity for the purposes designed eleven acres of land at the north end of the city, and this the Grand Lodge, through Grand Master Pinkerton, in fitting language gratefully accepted at the session in August, 1889.

THE ODD FELLOWS' HOME

Other Worcester citizens contributing liberally to the Home, although not identified with the fraternity, were Hon. Stephen Salisbury and Hon. Samuel Winslow, then Mayor of the city. Mr. H. H. Bigelow also showed his public spirit by offering the order a building site of ten acres on the shores of Lake Quinsigamond scarcely less desirable than the lot finally chosen.

Not content with the plot given, Mr. Dodge determined that nothing should interfere with the view from the Home, and he accordingly presented the trustees with the tract of land extending to the adjacent tracks of the Boston & Maine R. R., thus ensuring forever a

Col. Geo. W. Dickinson

clear outlook at this point. Even this did not exhaust his benefactions, for he gave to the city of Worcester thirteen acres of land directly contiguous to the Home for a public park, and that gift being accepted by the Park Commissioners made it certain that the institution would always be blessed with ample light and air. Furthermore, to complete his munificence he gave eighty feet of driveway for a boulevard leading to the Home,

Capt. Philip M. Pfaffmann
Canton Worcester

The Four Noble Grands of the Rebekah Lodges

C. P. Mt. Vernon

Louis M. Webb
C. P. Wachusett
Encampment

and made a substantial donation for the establishment of a library.

The building was formally dedicated June 22, 1892, with elaborate ceremonies and with a procession of the order through the streets of the city, which attracted great attention.

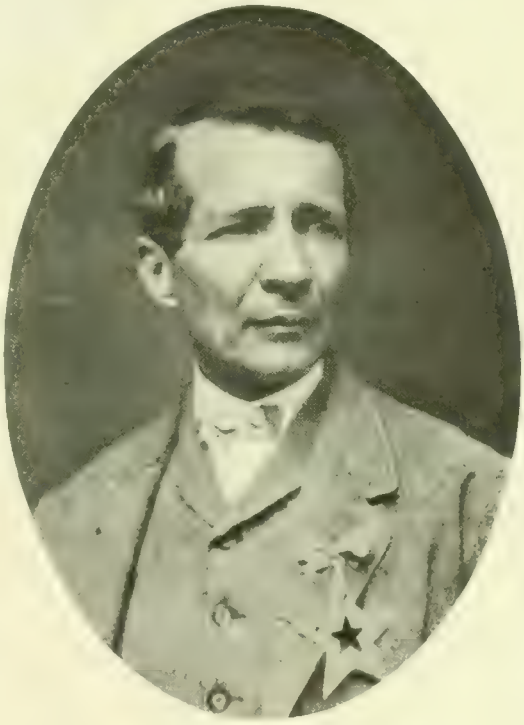
The Home has at present one hundred inmates, men and women, and Mr. H. B. Belcher is its very capable superintendent.

Sixty-Five Years of Odd Fellowship

THE year 1909 is the sixty-fifth anniversary of the introduction of Odd Fellowship into Worcester. Although the order had grown rapidly elsewhere it was not until the Massachusetts Grand Lodge obtained its majority that the fraternity obtained a foothold here, and then it was through the leadership and fostering care of a stranger that it secured its start.

Quinsigamond Lodge, No. 43, was the first Odd Fellows' lodge organized in this city, and local historians ascribe its creation to two men—Joseph W. Coburn, who on or about the year 1844 was engaged in construction work at the Court House, and Joseph S. Wesby, the well-known book-seller and binder, whose place of business was 124 Main Street, about where the Bay State now stands. In the early part of the year 1844 Joseph W. Coburn of Boston was building the new Court House in this city, and among his employees were James Murray, John F. Loche, Thomas C. Douglass and Joseph D. Bishop. All of these men were Odd Fellows, and finding no lodge in the town they immediately took steps for the formation of one. In this movement they were aided and abetted by Joseph S. Wesby.

Mr. Wesby had been made an Odd Fellow in Philadelphia, and tradition records that Coburn and his associates were frequenters of Wesby's shop and that the preliminary plans for the launching of the lodge were there perfected. For some reason Mr. Wesby's name does not appear in the list of charter members, but soon after the lodge was instituted he became a member of Quinsigamond by card, and he has always been honored as one of the founders of the order in this city. In his little shop was planted the seed that has flowered into so marvelous a fruitage in this community.



JOSEPH S. WESBY
In Whose Shop Odd Fellowship in Worcester Had its Birth

The petitioners for Quinsigamond Lodge were Messrs. Coburn, Murray, Loche, Douglass, Bishop and Samuel S. Leonard and George C. Taft, the last two named having gone to Boston and been initiated into Siloam Lodge, No. 2, for that purpose. A dispensation was granted and May 1, 1844, a deputation from the Grand Lodge instituted Quinsigamond Lodge, No. 43, in Masonic Hall, which was then over the Five Cents Savings Bank, opposite Central Street. James Murray was installed as the first Noble Grand.

The history of Quinsigamond Lodge is one of which any lodge might be proud. It is one of the few lodges in Massachusetts possessing a complete set of the reports of the Grand Lodge from the institution of that body in 1823 to the present time, and in the sixty-five years since its founding has never missed a meeting. The Grand Lodge at that time held quarterly sessions, and June 30, 1844, the first one held after the institution of the lodge, Quinsigamond, reported it had initiated twenty-six members. Since that date nearly 2000 members have signed its membership rolls, and cards in clearance have been granted to members to assist in forming lodges in Milford, Grafton, Westboro, Barre, West Boylston, Spencer, North Brookfield and other localities. The lodge owns two burial plots, one in Rural Cemetery, known as the strangers' lot, and another in Hope.

The strangers' lot was bought under the following circumstances. Soon after the formation of the lodge Dr. Joseph Bates, a member of Quinsigamond, was called to attend a sick man employed in the construction of the Worcester & Nashua Railroad. The man died, and an examination of his effects showed that he was a member of an Odd Fellows' Lodge in New York. No relations appearing, the lodge took charge of the body, held a funeral in Universalist Church, and bought a lot in Rural Cemetery, in which the remains were interred. Some time later another similar case occurred, and had it not been for this action both men would have been buried in paupers' graves. From that day the lot has been known as the strangers' lot. The burial place in Hope Cemetery is for members in indigent circumstances, and several commitments have been made there as well. In all, this lodge to date has expended fully $70,000 in relief.

The next lodge to be instituted was Worcester, No. 56. At the meeting of the Grand Lodge Feb. 6, 1845, this lodge was granted a charter, a dispensation having been granted Dec. 20, 1844, to that end. At the time of the first report this lodge had initiated sixty-five members. It met with reverses, however, and at the session of the Grand Lodge Aug. 3, 1854, Alfred Mudge, chairman of elections and returns, stated that the Worcester Lodge had resigned its charter. On petition of S. V. Stone and fifteen others, Worcester Lodge, after lying dormant for sixteen years, was reinstated Sept. 28, 1870, with the following charter members: Samuel V. Stone, Hon. Charles B. Pratt, L. A. Hapgood, Otis S. Hammond and William Hammond. Samuel V. Stone was the first Noble Grand, and at the first report the lodge had forty-seven members.

At this time Quinsigamond had 147 members and the great growth of Odd Fellowship followed these years.

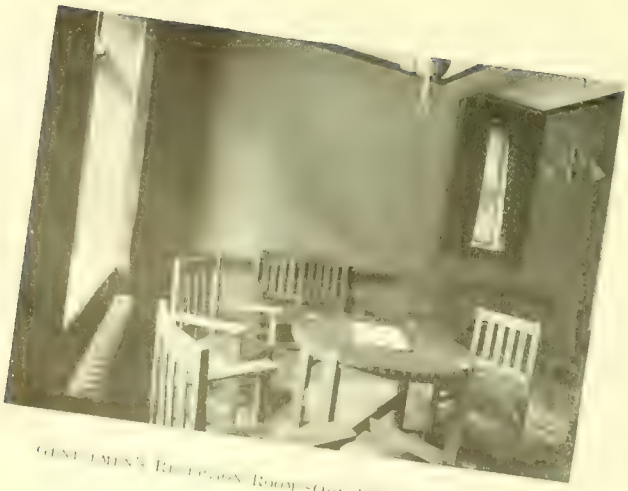
It was four years before another lodge was formed. This was Central, instituted Sept. 17, 1874, Maj. Nathan Taylor, James A. Ballantyne, James A. Smith, Albert R. Hicks, Daniel P. Lord, E. Henry Wentworth and William Gamlin being the charter members. Nathan Taylor was the first Noble Grand and at the time of its first report it had thirty-two contributing members.

Ridgely Lodge, No. 112, was instituted Sept. 20, 1882, by Grand Master Francis Jewett on petition of

Ladies' Reception Room—Odd Fellows' Temple

Reading Room—Odd Fellows' Temple

Herbert B. Belcher
Superintendent, Odd Fellows' Home



Gentlemen's Reception Room—Odd Fellows' Temple

The Pool Room—Odd Fellows' Temple

Hon. A. S. Pinkerton
Past Sovereign Grand Sire

A. L. Sawyer and twenty-seven others. Levi Williams was the first Noble Grand, and at its first report it had forty-seven members.

Five years later Hon. Wm. F. Hill of Salem, Grand Master, instituted Anchoria Lodge, No. 152, with Chas. M. McFarland as Noble Grand. Number of members at the first report, 53.

Thule Lodge, the sixth and last subordinate lodge in this city, came into being May 25, 1900, Grand Master Nathaniel J. W. Fish being the instituting officer. Sven E. Hansen was the first Noble Grand, and at the time of its first report it had ninety-eight contributing members.

Wachusett Encampment, No. 10, was the first encampment organized in Worcester, it having been instituted April 30, 1845. It lapsed subsequently and ceased to work, but Oct. 20, 1869, was reinstated and has continued to this day. Mount Vernon Encampment dates from Sept. 27, 1877.

The four Rebekah lodges were instituted as follows: Naomi, May 9, 1872; Queen Esther, Feb. 3, 1881; Utopia, Oct. 16, 1891; Idun, March 31, 1905.

Canton Worcester, Patriarchs Militant, celebrates next year its silver anniversary, it having been instituted Dec. 12, 1885, with William F. Bancroft as Commandant and Daniel A. Harrington, now Brigadier-general, as Lieutenant. Fred A. Myers was the first Ensign of the new canton. The officers of Component No. 10, chosen at the same time, were John C. Green, captain; Fred W. Bemis, lieutenant; and George E. Myers, ensign, while those of Component No. 22 were S. F. Myrick clerk, and D. A. Pratt accountant, both warrant officers. The canton was mustered by Major-general John G. Underwood and staff Feb. 13, 1886. The new organization was dubbed Grand Canton Worcester, No. 3, but it is claimed that it antedates actually both Shawmut, No. 1, and Bunker Hill, No. 2. On Dec. 21, 1905, the members voted to change from a grand canton to a canton, and since June 20, 1906, have been working under a new charter to that effect. Philip M. Pfaffmann is captain of Canton Worcester, Irving I. Johnson is lieutenant, Charles H. Edgerton is Ensign, Past Captain A. B. Ingerson is clerk, and E. O. Knight is accountant. The canton has about 100 chevaliers belonging.

From the seven men who founded Quinsigamond Lodge May 1, 1844, Odd Fellowship in Worcester had grown June 30, 1909, sixty-five years later, to 3015 members, scattered through six different lodges as follows:

Quinsigamond Lodge,	No. 43	676
Worcester Lodge,	" 56	545
Ridgely Lodge,	" 112	490
Anchoria Lodge,	" 142	365
Central Lodge,	" 168	640
Thule Lodge,	" 239	299

In addition there were, Dec. 31, 1908, at the time of the last annual report, the following men and women enrolled in the four Rebekah lodges and the two encampments:

Naomi Rebekah Lodge,	No. 18	611
Queen Esther Rebekah Lodge,	" 33	403
Utopia Rebekah Lodge,	" 107	203
Idun Rebekah Lodge,	" 165	193
Wachusett Encampment,	" 10	244
Mt. Vernon Encampment,	" 53	256

Brig. Gen. Daniel A. Harrington

The History of Transportation in Worcester

By J. Brainerd Hall

APROPOS of the erection of a new union passenger station in this city, I have been asked to write a series of papers on the transportation industry as it affects Worcester, and I have prepared a brief history of the same from the earliest times to the present moment.

The first number detailing the means of travel into and out of Worcester for both men and goods during the first century of its existence is given here. The second installment, outlining the tremendous development of the last forty years, will appear in the January issue:

Tradition states that the first open track or road in this vicinity, in fact in Worcester County, that was wide enough for the passage of a conveyance on wheels or runners, was built in 1753 in consequence of a petition dated August 8, 1752, asking that a suitable way for travel be opened from Mendon to Worcester.

The first record of an established line of transportation over this road was in June, 1772, when a semi-monthly stage from Boston to New York was established. Time en route, 13 days.

In 1775 appears an announcement that the time of the post-line between Boston and Philadelphia had been reduced from twenty-one to fifteen days. At that time all the mails were carried on horseback and in saddle-bags.

In June, 1775, Isaiah Thomas established a weekly post-line between Worcester and Salem, starting from the Spy office Wednesday noon, arriving at Cambridge Thursday forenoon, and Salem Thursday evening.

J. Brainerd Hall

September 23, 1775, Postmaster-general Benjamin Franklin appointed Isaiah Thomas as Worcester's first postmaster, and Worcester's first post-office was established Nov. 15, 1775, when it began to receive three and dispatch two mails a week. To-day Postmaster Hunt receives 682 and dispatches 631 mails per week.

The receipts of the Worcester post-office for the first quarter of 1809 were $178.80½; by 1859 the receipts had risen to $4183; while for the first quarter of 1909 the receipts aggregated $101,947.58.

In 1783 a weekly line of "convenient" wagons was put on between Boston and Hartford; leaving Boston Monday at 6 a.m., stopping at Northboro Monday night; passing through Worcester Tuesday forenoon and stopping at Brookfield that night, stopping at Somers, Ct., Wednesday night; reaching Hartford Thursday afternoon.

Levi Pease in 1786 advertised a coach-line between Boston and New York, starting from his inn opposite the mall in Boston each Monday at 5 a.m., reaching New York Saturday afternoon; this was the winter arrangement. In summer he started three coaches each way, carried the mail, and reached New York on the evening of the fourth day from Boston.

By 1825 there were two prominent stage headquarters or hotels in Worcester: the Central House, at corner of Main and Exchange Streets, where the Bay State House now is; the other the United States Hotel, at the corner of Main and Mechanic Streets, where is now the Walker Building. In Wall's History of Worcester it is written that "it was a common thing before the opening of the railroads to count from twenty to thirty stages from different directions arriving at and departing from the old 'United States' almost in line."

The Bay State House remained a prominent stage headquarters until after the opening of the Boston, Barre & Gardner road. If my memory serves me correctly, it was many years after that the headquarters of the Barre stage line.

In 1831 the stage travel between Worcester and Boston was estimated to be 22,300 passengers per year, and 33,000 passengers to Hartford per year. In September that year there were twenty established stage routes out of Worcester, with 122 regular stage arrivals each week; but three of the routes were designated as mail lines, one to Boston and the Hartford Southern, each seven times a week, also one to Springfield three times a week.

The Blackstone Canal

An effort was made in 1794 to secure quicker and cheaper transportation between Worcester and Providence, and a Rhode Island company, to provide water connections between Providence and Worcester for transportation purposes, was incorporated.

In 1796 citizens of Worcester County asked the Legislature for an act to enable them to open up inland navigation from Providence to the interior of Worcester County and, if feasible, to the Connecticut River.

Pending this petition, a counter one was filed asking authority to construct a canal across the State from Boston via Fitchburg, Winchendon and the Millers River Valley. Neither petition was granted.

In 1822 the question of inland navigation was again agitated, and a company for that purpose was incorporated in both states, and on July 5, 1825, they were consolidated as the Blackstone Canal Company.

Excavation for the canal was soon after started at the Providence end, and at this (Worcester) near Thomas Street, and at what was later the Upper Canal Basin in 1826. The first boat from Providence arrived at this basin Oct. 7, 1828, and the first freight-boat reached Uxbridge Oct. 18th. Before navigation closed that year (1828) $1000 was received for tolls. The business steadily increased each year until the maximum was reached in 1831, when $18,907.45 was received. The successful attraction of Worcester trade from Boston to Providence after the canal was opened for business undoubtedly hastened the construction of a railroad from Boston to Worcester as well as the rapid decline of the business of the canal and the receipt of its last toll in 1848.

It is reported that the Blackstone Canal was built at a cost of not far from $750,000, over half a million of which was paid by the citizens of Rhode Island.

Steam Railroads

The successful operation of the Blackstone Canal caused the asking for and the granting of a charter in 1829 to the Worcester Railway Company. It was the second railroad charter granted in this State, and the first in Worcester County. It was for two roads from the coal mine on Plantation Street, one from the mine to the waters of Lake Quinsigamond, the other from the mine to the banks of the Blackstone Canal. The mine not proving a success, the roads were never built.

The first movement to connect Worcester with Boston by a railroad, as far as an exhaustive examination of early records discloses, was in 1830. The plan was a line across the State from east to west, passing through Lancaster—the first town incorporated in the county—then on to Rutland, with a branch to Worcester. The movement never materialized.

The first railroad of any considerable length in the State actually built and operated was the Boston & Worcester, incorporated June 23, 1831, opened for business July 4, 1835, with three trains a day that summer, and two a day the following winter; time en route was from two and one-half to three hours; passenger rates at the start, $1.50, later $2. Freight rates to Boston, $3, and from Boston $3.50 per ton.

The second Worcester Railway Company was incorporated April 25, 1838, for a line from the tracks of the Boston & Worcester Railroad, near Foster Street, up the valley to Lincoln Square, then across the square and down Main Street to Foster to the railroad station. The road up the valley was built, following closely the present location of Union Street, to a brick building at corner of Lincoln Square and Summer Street, where the Dean Building now stands. At first the moving power was by horses; later the valley part was granted a permit to use steam; this road to move freight up the valley was operated until the opening of the Worcester & Nashua Railroad. The Main and Foster Streets section was never worked.

March 15, 1833, the Western Railroad Company was incorporated to build from the terminal of the tracks of the Boston & Worcester Railroad in Worcester to Albany, N. Y. It was open for business as far as Springfield Oct. 1, 1839, and to Albany Dec. 21, 1841. Although it maintained a station at Washington Square, its trains were backed up to the Foster Street station until a line south of Springfield was constructed and through trains were run from Boston to New York.

The Norwich & Worcester Railroad Company was incorporated in Connecticut in 1832, and in this State in 1833; consolidated by legislation of both states in 1836, and opened for business April 1, 1840. Very soon it became a popular rail and steamboat line to New York; the train was constructed especially for the line with extra high backs to the seats. Coming up from Boston it would run around the Foster Street station to the Common and then backed into the south ell of the station to take on the Worcester passengers for New York. The road was leased in 1869 to the New York & New England Railroad Company, which was later absorbed by the New York, New Haven & Hartford system.

The Providence & Worcester Railroad Company was incorporated in 1844; opened for business Oct. 25, 1847, with its terminal the south ell of the Foster Street station, which it used for about one year; it then used one end of its Green Street freight-house until a passenger station was built on Green Street south of the freight-house. The Green Street passenger station and the freight-house were removed this year in connection with the elimination of the Green Street railroad crossing. In 1888 the road was leased to the New York, Providence & Boston Railroad Company, which was some time ago absorbed by the New York, New Haven & Hartford system.

The Worcester & Nashua Railroad Company was incorporated in 1845; opened for business Dec. 14, 1848; in 1874 came the Nashua & Rochester extension, making a through line from Bar Harbor, Maine, to New York city without change of cars, possible. The Portland Board of Trade celebrated the opening and the establishment of the Portland & Worcester line by a visit to this city, and were guests of the, that month incorporated, Worcester Board of Trade. The western passenger traffic of the line was in part provided for by the backing of the afternoon train across the Common and to the Junction station at South Worcester. This road is now the Worcester, Nashua & Portland Division of the Boston & Maine Railroad Company, which is being absorbed by the New York, New Haven & Hartford system.

The Fitchburg & Worcester Railroad Company was incorporated in 1846; opened for business in 1850; from Sterling Junction to Worcester it was operated by the Worcester & Nashua; later it became a part of the Boston, Clinton & Fitchburg Railroad, and more recently it was absorbed by the Old Colony system, which is now a part of the New York, New Haven & Hartford system.

The Boston & Worcester Railroad Company and the Western Railroad Company were, by the act of May 24, 1867, consolidated as the Boston & Albany Railroad Company, which a few years ago was leased to the New York Central & Hudson River Railroad Company.

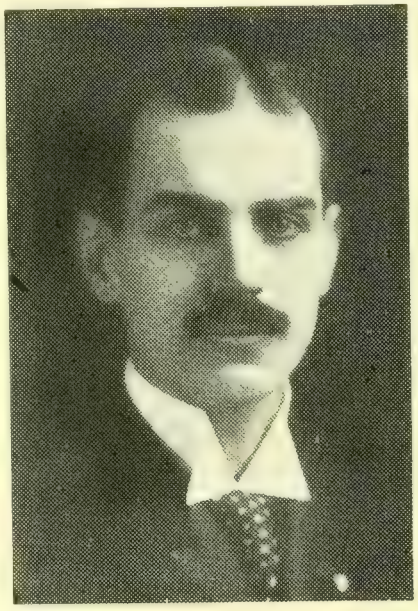
The Barre & Worcester Railroad Company was incorporated in 1847, and the next year the name was changed to the Boston, Barre & Gardner Railroad Company. It was opened for business as far as Gardner Sept. 4, 1871, and to Winchendon Jan. 5, 1874; sold to the Fitchburg Railroad Company, Hoosac Tunnel line, in 1886; is now a part of the Worcester & Peterboro branch of the Fitchburg Division of the Boston & Maine system.

The Modern City

Economists, Publicists and Humanists Unite at Cincinnati in Describing What it Has that it Ought Not to Have, and What it Has Not that it Ought to Have

By Richard B. Watrous
Secretary American Civic Association

THE fifth annual convention of the American Civic Association, held at Cincinnati Nov. 15 to 18, in conjunction with the National Municipal League, was the most successful in the history of that great national organization. It was successful in point of attendance, in the completeness of its programme, in the number of distinguished speakers, and in the interest manifested by the city acting as the host of the occasion. The presence of Dr. Charles W. Eliot, president emeritus of Harvard University, as the especial guest of the American Civic Association, and his participation in the programme, added much to the dignity of the convention. His address at the joint session of Tuesday evening on the subject of "Conservation" was a notable exposition of that great movement now so prominently before the American people. At the same meeting Hon. James R. Garfield, ex-secretary of the interior, delivered an address on "Conservation on Public Lands."



Richard B. Watrous

"Conservation" was the keynote of the convention, so far as the American Civic Association was concerned. Pres. J. Horace McFarland made it the theme of his annual address under the title, "The Intimate Side of Conservation," in which he presented many new views, and among other things urged that in the dissemination of the principles of conservation that there be a wise conservation in the organization and management of the various societies engaged in propaganda work. He contended that by the multiplication of organizations working for much the same ends, there was a striking violation of the general principles of conservation.

The sessions of Tuesday were devoted to city planning and attracted unusual attention. Mr. John Nolen of Boston spoke on the general subject of "City Planning and the Civic Spirit." George E. Kessler of Kansas City told of the plans that had been drawn for the park development of Cincinnati. The afternoon session was presided over by W. W. Hannan, president of the National Association of Real Estate Exchanges. A leading feature of the session was a paper prepared by William E. Harmon, the well-known real estate operator of New York, on the subject, "The Influence of Playgrounds and Small Parks on Suburban Development," in which he made plain that the introduction of such reservations in suburban properties was not only in the line of progress so far as the beautifying of cities is concerned, but was directly profitable to the real estate interests. He stated that he had at first commenced such development with philanthropic motives only, but that it had been fully demonstrated that it was not only rendering an invaluable service to mankind, but that the financial returns were immediate and material. In arousing an interest in the general subject of city planning, a very important factor to be considered is that it is not purely an æsthetic movement, but is quite practical.

As an example of specific achievements in city planning, Harold A. Caparn of New York discussed "Water Fronts: their Possibilities of Use and Beauty." Mr. Caparn showed by pictures what had been accomplished in foreign countries, and pointed out the way for very effective effort in this direction in hundreds of American cities.

Richard B. Watrous, secretary of the American Civic Association, dwelt upon "The Responsibility of Commercial Organizations in Furthering the Adoption of City Plans." Too often, he said, commercial organizations have failed to identify themselves with movements for physical improvement on the ground that it was not within their particular province. Mr. Watrous indicated that the city that seeks to attract successfully to itself the investment of labor and capital must, of necessity, put itself in a proper position to receive both, and argued that the only practical method of procedure was in the adoption of city plans, prepared by experts, which may be systematically carried out during a long term of years. He said that the city that makes ample provision for the comfort, health and happiness of its citizens by providing ample park areas, play-grounds, clean, well-shaded streets, pure water, and necessary sanitary conditions will have no difficulty in attracting to itself new industries and thousands of new inhabitants. J. H. Prost, city forester of Chicago, told what is being done in that and other cities to promote the wise planting and care of trees, contending that it was one of the practical applications of city planning.

Wednesday was devoted to a discussion of nuisances—the billboard, smoke and unnecessary noises. In an editorial survey of sentiment against the billboard, Harlan P. Kelsey of Salem, Mass., showed that there is now a more general demand for the abatement of the billboard than ever before.

The smoke nuisance was presented in a very practical manner, the aim of the speakers being to show that it is a question of economics—that it is to the financial interest of manufacturers to install devices that will prevent waste through escaping smoke. Incidentally, of course, it was shown that cities would be brighter and that one of the great sources of disease would be eliminated. H. M. Wilson of the United States Geological Survey presented a most valuable paper on the subject, and R. C. Harris of Toronto, secretary of the International Association for the Prevention of Smoke, told of

what had been achieved in smoke abatement in all parts of America.

The noise nuisance session was devoted almost exclusively to the noisy Fourth of July. Mrs. Isaac L. Rice of New York prepared a most effective paper on "Our Barbarous Fourth." and Mr. Watrous read an account of the safe and sane Fourth of July celebration at Washington last July, in which it was demonstrated that people can observe the nation's birthday with just as much pleasure to themselves as of yore, but without loss of life or property and without accident to children and adults.

The Thursday morning session was devoted to "Beauty and Good Taste in Daily Life," and was presided over by Mrs. M. F. Johnston of Richmond, Ind., with addresses by Dr. John Quincy Adams of the New York Art Commission; Mrs. Annette McCrea of Chicago on "Art and the Railroad"; Mrs. Everett W. Pattison of St. Louis on "Practical Art Work in Women's Clubs;" Miss Leila Mechlin of Washington on "The American Federation of Arts," and W. W. Taylor, who told of "Cincinnati Municipal Art."

The closing session was distinguished by an address by Mr. John Nolen of Boston on "The Beauty of Nature as a State Resource," in which he told of the development of state parks—a new development, but one that promises splendid results for many of the states distinguished for their areas of natural beauty.

At its business session resolutions were adopted favoring the preservation of the scenic beauties of that part of the Yosemite Park known as the Hetch-Hetchy Valley; also the Appalachian Mountains, and reiterating its belief in the value of civic centres for American cities.

The report of Secretary Richard B. Watrous showed the advance in the varied activities for which the Association stands; a constantly increasing number of civic improvement associations in all parts of the nation, and he outlined future activities that promise rich results for the making of a beautiful America. He advocated a general adoption of comprehensive city plans, the extension of school gardens and play-grounds, the abatement of the billboard, and made a special plea for a general observance of a safe and sane Independence Day.

The Cincinnati local committee earned the sincere thanks of both associations for the splendid preparations made for their reception and for their convenience. The banquet tendered the visiting associations on Wednesday evening was notable, being attended by the representative men and women of Cincinnati. Unusually interesting after-dinner talks were made by President J. Horace McFarland of the American Civic Association, Hon. Charles J. Bonaparte, president of the National Municipal League, Dr. Charles W. Eliot, Mrs. Philip M. Moore of St. Louis, president of the General Federation of Women's Clubs, and Mr. Horace L. Deming of New York.

Most of the former officers were re-elected, the complete list being as follows:

President, J. Horace McFarland, Harrisburg, Pa.; Vice-president, Clinton Rogers Woodruff, Philadelphia, Pa.; Treasurer, William B. Howland, New York; Secretary, Richard B. Watrous, Harrisburg, Pa.

Vice-presidents, Hon. James R. Garfield, Cleveland, Ohio; Rev. John Wesley Hill, New York; W. W. Hannan, Detroit, Mich.; George W. Marston, San Diego, Cal.; Mrs. Edward W. Biddle, Carlisle, Pa.

Executive Committee, Dr. John Quincy Adams, New York; Henry A. Barker, Providence, R. I.; Miss Mary Marshall Butler, Yonkers, N. Y.; Kenyon L. Butterfield, Amherst, Mass.; Mrs. Caroline Bartlett Crane, Kalamazoo, Mich.; George Otis Draper, Hopedale, Mass.; Frederick L. Ford, Hartford, Conn.; Mrs. Melville F. Johnston, Richmond, Ind.; Harlan P. Kelsey, Salem, Mass.; Warren H. Manning, Boston, Mass.; Mrs. A. E. McCrea, Chicago, Ill.; Mrs. Edwin F. Moulton, Warren, Ohio.

Worcester's Word Painters

They Have Made the Heart of the Commonwealth Known to the Ends of the Earth

There is an organization of which little mention is heard and with which the general public is little acquainted. Except once or twice a year its members rarely assemble together in a body. Yet of all the organizations of which the city of Worcester can boast, and the number is a large one, there is probably no other single association of men who contribute more in a material way to the support of Worcester's retail trade and its manufacturing industries.

A large number of the members of this Association are residents of the city, while all are residents of Worcester County, the by-laws requiring this; many are married men with families, and so in their expenditures, necessarily made here, they contribute a very large sum to the support of the retail merchants of the city, a recently made estimate placing the amount of money annually expended by these men at $500,000.

It is not, however, in the amount of their personal expenditures as in the work they do of carrying the wares of Worcester manufacturers and wholesale merchants, by samples, pictorial exhibits and word paintings to all parts of the United States and some foreign countries, thereby increasing the trade of Worcester with the outside world, that the real value of such an organization is manifested.

Unlike some other similar organizations, the Worcester Commercial Travelers' Association takes in as members those who travel to *buy* goods as well as those who travel to sell, and therefore has among its members very many of the heads of our business establishments. The objects of the Association, as outlined in its by-laws, are to promote a friendly acquaintance and interest among its members and to cultivate a regard for the traveling man as an individual. It is not a beneficiary organization in a sense, as it confines itself at the present time to the payment to the family or heirs of a member $100 upon notice of death, and does not pay sick benefits. Its work therefore is largely of a social and fraternal nature, and in this it has made a notable success.

Organized in December, 1894, the Association has steadily increased in membership and to-day numbers upwards of 500. Its business is transacted by its officers, consisting of a president, two vice-presidents, a secretary-treasurer and an executive committee consisting of five members, all of whom are elected annually in December.

The Association publishes every year an elaborately gotten up magazine, full of matter of special interest to the members and traveling men generally, and the issue this year, which will come out in December, is going to be more than usually complete and interesting.

The Pilgrim Publicity Association

What it is Seeking to do for New England

By J. D. Adams

Chairman of Trade Extension Committee, Boston, Mass.

THE Pilgrim Publicity Association is an organization of New England advertising men. Every branch of the profession is represented publishers, agencies, manufacturers and their advertising managers.

To quote from a leaflet issued by the Association, its purposes are:

> To assist in the advancement of New England by studying and improving the methods of promoting business through advertising; to serve as a publicity bureau for all New England business associations which may desire expert assistance on questions relating to advertising and general publicity; to promote among New England manufacturers and merchants a thorough understanding of the power of good advertising, when applied to the building up of business for individuals, corporations, cities, states or sections; and in other ways to assist in the development of New England's commercial enterprises and its resources.

New England needs a force like the Pilgrim Publicity Association. Problems vital to her industrial existence have risen lately which the men who have made New England what she is—her great manufacturers, lawyers, economists, organizers—are unfitted by training to solve. New England has a new malady and needs a new specialist.

Industrially speaking, the trouble with New England is that she is losing control of her markets. We have our splendid factory organizations, skilled workmen, and financial resources, but we have not a dominant voice in the method of distributing the goods. Our textiles are sold almost entirely through independent selling agents outside of New England. Our shoes are very largely sold through jobbers, although in this respect shoes are far better off than textiles, as a number of our leading shoe manufacturers have adopted far-sighted selling policies which have given them complete mastery of their individual markets.

The great bulk of New England made goods, however, goes to the consumer absolutely lacking in any distinguishing mark whatsoever, and is marketed by middle men.

As long as New England was without rivals in her manufactures, this was undoubtedly an efficient and economic method of distribution; but now she has rivals for most of her important industries, rivals who have shown tremendous resource and energy in building trade, and we find the old method of distribution to be inefficient, peculiarly vulnerable to attack, and so uncertain as often to leave us completely at the mercy of competitors. Such conditions check progress and paralyze initiative; they breed cowardly caution where aggressive master-plays are needed.

The cure is obvious—New England must control her markets. She must control them by the one force adequate to the task—the wonderful influence of modern, scientific publicity.

Every product made in New England ought to be stamped with a trade mark of strong individuality, and that trade mark should be indelibly stamped on the mind of every possible consumer. These consumers must then have their buying instincts trained to the selection of the goods in question.

When this result is accomplished, New England will find that she has the master-key to all her problems. As her markets broaden, and the demand for her products steadies and grows, the middle man will return to his rightful, subordinate relations to the manufacturer. Legitimate profits will be assured. Competitors will be powerless to injure. Behind her impregnable fortifications of powerful publicity New England can develop each of her many industries to a fuller prosperity. Communities will take on a new life as wages are raised and pay-rolls grow. Transportation facilities will increase. Real estate will become more valuable.

These are not theories, but merely statements of fact as proved by the history of every industry that has allied to itself the power of modern publicity.

The Pilgrim Publicity Association has already started a work which will prove a powerful impetus to the general adoption of advertising by New England manufacturers.

The Association has prepared a series of full-page magazine advertisements, which it is arranging to have appear in magazines of national circulation and in newspapers. These "ads." will present to the consumers the fundamental, economic factors which make it possible for New England to produce merchandise of the highest quality and workmanship at prices that are little higher than the actual cost of the raw material.

The first of these "ads." is printed in connection with this article. It suggests the influence of three hundred years of development. The themes run like this:

"Inherited Technique"; that is, the standard of workmanship which results from the same industry having been located in a town for many generations.

"The Yankee Knack;" referring, of course, to the marvelous ingenuity and inventive faculty of New England skilled workmen.

"New England Thrift;" a discussion of our enormous financial resources, acquired largely by the thrift of our workmen as shown by savings banks deposits.

"The Citadel of Competition." New England made goods are produced under conditions of intense competition, which makes an economic certainty that prices will reach their lowest and quality its highest level.

"A National Asset;" presenting the reasons why New England is necessary to the whole nation, being in fact an asset of value to each of the ninety million inhabitants thereof.

These "ads." will all be kindly in tone; they will entirely lack the dogmatic, assertive style of commercial advertising. Nothing will be printed which might injure or irritate people of other sections.

Yet the effect is sure to be beneficial to New England manufacturers. A powerful meaning will have been given to the phrase, "Made in New England." That phrase will hereafter stand in the minds of the consumer for skilled workmanship and ultimate value.

In other words, this advertising will have given commercial trade mark value to the name New England; it remains to the manufacturer to build on this solid foundation a publicity campaign of his own which will impress his trade mark on the consumer and prove that

his goods are produced under sound and favorable New England conditions.

The surest way in which a manufacturer can aid New England is to aid himself; to build up a stronger, more aggressive organization; in this way doing his part toward convincing the world of New England's industrial importance.

The Pilgrim Publicity Association has started this work; it has many other important constructive projects in mind to accomplish as it acquires the necessary resources. Among the members of the club are men of intelligence and thorough, special training, who are giving freely of their time and thought to further this movement so vital to the welfare of New England.

Every man who is interested in quickening and broadening the resources of New England business interests, and who wishes to be identified with a live movement which has this very end in view, should join forces with the Pilgrim Publicity Association.

If you are interested in any way in the greater wel-

fare and prestige of New England as a whole; if you take toll from its industries, or if you take pride in its civic advancement, we need you with us and you need us to encourage, strengthen, and give direction to your desires and efforts.

Master Minds at the Commonwealth's Heart

Such is the striking title of a notable volume just appearing from the publishing house of F. S. Blanchard & Company of this city. It is from the facile pen of one of our city's most virile and original writers, Rev. Percy H. Epler, pastor of the Adams Square Congregational Church, author of "The Beatitude of Progress," and other writings. It was the act of a master mind to discover the wealth of material lying close at hand in the history of Worcester and its immediate vicinity, and to weave together into most delightful biographical chapters the stories of men and women who have been leaders in various lines of usefulness. The list of chosen worthies is sufficient to show the importance of this work, and its claim upon the attention of all Worcester readers: Artemas Ward, first commander-in-chief of the American Revolution; Eli Whitney, inventor of the cotton gin; Thomas Blanchard, and other inventors; Elias Howe, inventor of the sewing machine; William Morton, the conqueror of pain; Dorothy Lynde Dix, the redemptress of the world's insane; Clara Barton, founder of the Red Cross in America; George Bancroft, historian of the United States; John Bartholomew Gough, greatest apostle of temperance; George Frisbie Hoar, an American ideal statesman; Luther Burbank, discoverer of a new plant world.

A brief extract from the foreword of this volume presents clearly the original aim of the author:

> I present these ten lives in a group with a purpose. For zones of genius have always held their peculiar place in the history of humanity. Master minds, isolated as they may be in their originality, do not exist alone. Others living near catch the breath of their inspiration, and though proceeding perhaps along altogether different paths, are animated to achieve equally great masterpieces.
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> These in the Worcester zone of genius are not only writers and dreamers, but founders, creators, inventors, discoverers, "doers of the word and not 'writers' only."
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> * * * * * * * *
>
> Geniuses are these; small, perhaps, if you bound them by their starting-point, the hill-crowned region of Worcester; but they are mighty when you see them radiate the globe.

There is a most happy blending of fresh, forceful interpretation of the lives of these distinguished persons, and careful research into original sources of information. The style of the book is clear, and one who begins upon one of its narratives finds it hard to drop the story.

In the multitude of things which this Magazine is describing from month to month as "Made in Worcester," we are specially delighted to call attention to the fact that we have both authors and publishers capable of joint workmanship which is a credit to any community; for the printer's art as shown in this volume is worthy of the text which it sets forth. The illustrations are excellent and well-chosen. We bespeak for this work a wide circulation, not alone in this city, but among all lovers of New England history and its notable makers.

The Daylight Saloon

By Rev. Arthur L. Weatherly, Lincoln, Neb.

Since July of the present year Nebraska has had a "daylight saloon" law, permitting the sales of liquor only between the hours of 7 a.m. and 8 p.m. This plan had been previously tried in the city of Lincoln for a period of twelve months. Previous to that time there had been from forty to fifty saloons in the city, open from 5 a.m. to 11.30 p.m., and paying a license fee of $1000. In the spring of 1897, on a referendum petition, the no-license issue was presented to the people, and at the same time the Excise Board offered an alternative in the form of the so-called "daylight saloon," raising the fee to $1500, and reducing the hours to twelve, from 7 a.m. to 7 p.m. The city voted in favor of the "daylight saloon."

I have interviewed a large number of people in regard to the workings of this plan. The saloon men who obtained licenses became on the whole well pleased with the law. They endeavored, without exception, to see that the liquor laws were enforced. Of course the men who did not obtain licenses were opposed to it, as were also the radical prohibitionists. It was held that the amount of liquor consumed was not very much less, and that the amount consumed in the homes was much increased. On the other hand, many no-license people claimed that the "daylight saloon" was a step in the right direction. This was the view held by a large number of other people who have no radical views on the liquor problem.

After a year's experiment in Lincoln, the city voted for no-license; but this does not mean that there was not a marked improvement over previous conditions in the operation of the "daylight saloon." The Excise Board here consists of two elected members and the Mayor. During the period in question the elected members showed themselves men of high public spirit and wise administrative ability. One of them, who made a most careful study of the situation, said that the average business of forty-eight saloons under the old plan was $15,000 per year; while during the régime of the "daylight saloon" the average business for twenty-five saloons was only $13,000 annually. The general consensus of opinion of newspaper men, charity workers and others whose business brought them into close touch with the situation, was that during that year the saloon-keepers tried to obey the law, as the reduction in the number gave them a valuable franchise that the amount of drunkenness and crimes due thereto was considerably lessened. It ought to be said that one reason, and perhaps the chief reason, why the city went no-license after one year's trial of the "daylight saloon" was the resentment of the laboring men. They declared that if they could not go to the saloon in the evening they would prevent others from going there in the daytime. In my talk with one of the Excise Commission I was interested to know that he regards the absence of the licensed saloon as the best policy for the city, provided that wholesale houses are established where people will buy for home use what they would otherwise ship in by express.

So far as the entire State is concerned, it seems to be the general opinion, except in Omaha, that the early-closing plan is a good one. It is quite generally agreed that the coming to town of farmers in the evening with the subsequent loafing and drinking in a saloon has been stopped. My own conviction is that the "daylight saloon" is a vast improvement over the old plan of permitting the saloons to remain open half the night.

Railway Rates Between East and West

By Charles T. Tatman

REPRESENTATIVES of most of the leading business organizations in the East were present at the rooms of the Merchants' Association of New York on Monday, November 22, to hear the report of the Hon. Nathan Bijur, who acted as consul for the eastern interests in the so-called Spokane Rate Case before the Interstate Commerce Commission.

That case was begun by the city of Spokane, Washington, and several Spokane business organizations against the Northern Pacific Railway Company, the Great Northern Railway Company, the Union Pacific Railroad Company, and other companies interested in transcontinental freight business. Primarily the case in hand was for the purpose of determining whether the railroad companies discriminate unduly against Spokane in favor of Pacific Coast points, and whether the rates to Spokane are inherently unjust and unreasonable. The first point has been answered by the Commission in the negative, it being adjudged that the existence of water competition warrants a lower rate to the Pacific Coast than to Spokane. The second point was decided in favor of Spokane, the Commission directing the reduction of certain rates.

The railroad companies were invited to submit a comprehensive scheme for the readjustment of Spokane rates, which they have done. By this schedule proposed, the rates would be graded from St. Paul upward to the Atlantic Coast.

At this juncture came the intervention in the Spokane case by the Merchants' Association of New York and seventeen other business organizations scattered from Vermont to Virginia, as follows: Boston Chamber of Commerce, Boston, Mass.; Worcester Board of Trade, Worcester, Mass.; Philadelphia Chamber of Commerce, Philadelphia, Pa.; Chamber of Commerce of the State of New York, New York City; Richmond Chamber of Commerce, Richmond, Va.; Petersburg Chamber of Commerce, Petersburg, Va.; New Haven Chamber of Commerce, New Haven, Conn.; Somerville Board of Trade, Somerville, Mass.; Springfield Board of Trade, Springfield, Mass.; Marlboro Board of Trade, Marlboro, Mass.; Worcester Branch National Metal Trades Association, Worcester, Mass.; Hampden County Traffic Association, Chicopee Falls, Mass.; Westerly Board of Trade, Westerly, R. I.; Haverhill Board of Trade, Haverhill, Mass.; Rochester Board of Trade, Rochester, New Hampshire; Providence Board of Trade, Providence, R. I.; Bellows Falls Board of Trade, Bellows Falls, Vermont.

Heretofore a blanket rate has prevailed between all points in the East and places in the inter-mountain country like Spokane. That is, the rate was the same from Worcester or Boston or Philadelphia to Spokane as it was from Chicago or St. Louis to Spokane. However unjust this may appear at first sight, it is founded upon conditions which amply warrant the continuance of the practice. The reason why the section adjacent to the Atlantic Ocean enjoys cheap freight rates across the continent is the fact of water competition. This water competition is in small part actual and in large part potential; that is, there are some ships ready to carry the freight around the Horn or by the Isthmus route, and if the railroads did not make freight rates low, there would be many more ships ready to carry the goods.

Everyone knows that Chicago and St. Louis are not on the sea-coast, but the railroads have heretofore allowed this eastern water competition to affect the rates from the Middle West to the Pacific, and have given that section, the Middle West, the benefit of the low rates which the East has enjoyed by reason of its natural proximity to the sea.

Now, it seems, the Middle West wants to retain this privilege of low rates, made low by the effect of a fictitious water competition (fictitious so far as the Middle West is concerned), and at the same time, to oblige the East to pay the rate from Chicago westward, plus the local rate from the eastern point to Chicago. That is, the Middle West wants to enjoy the benefit of the effects of water competition, which is the natural right of the East by reason of geographical location, and at the same time it wants to deprive the East of the fruits of that advantageous location.

It is to protest against this blowing hot and cold by the Middle West (herein impersonated by the railroad companies) that the eastern business organizations intervened in the Spokane Rate Case.

What the East wants is to preserve the blanket rate from the present blanket territory into Spokane and other inter-mountain points. If Chicago and St. Louis manufacturers and merchants are to enjoy freight rates to the West lower than Worcester, Boston and New York enjoy, the shippers from these eastern cities will be handicapped to the extent of the local rate from the point of shipment to Chicago. This will be a tax upon eastern business men which will make it difficult for them to compete with the concerns of similar kind in the Middle West.

The argument of Judge Bijur in a nutshell is that Chicago and St. Louis ought not to say in one breath that they are on the ocean for the purpose of getting cheap freight rates, and in the next breath to say to Massachusetts and New York, "We are a thousand miles nearer the market than you are, and it makes no difference that you are near the ocean."

The meeting in New York was attended by about fifty delegates from eastern business organizations. The Worcester Board of Trade was represented by Edward M. Woodward, vice-president and chairman of the Committee on Transportation and Railroads; two other members of the same committee, namely, Albert C. Lorion, traffic manager for the Wright Wire Company, and Benjamin F. Curtis, traffic manager for the Norton Company, and Charles T. Tatman, president.

The rooms of the Merchants' Association of New York were admirably adapted to the purposes of the gathering, and the New York people entertained their guests most agreeably. After luncheon in the rooms of the association, a business meeting was held, the outcome of which was that the President of that association was empowered to appoint a committee of seven, and to add to it at his discretion, to have in charge the management of the Spokane Rate Case and the Missouri River Rate Case, and to formulate a tentative plan for a permanent eastern traffic organization. This committee will be appointed soon, and will later call a larger meeting, to be attended by delegates from all eastern business associations for the purpose of formally organizing.

It is to be hoped that all business men in the East will be alive to the very serious importance of acting together to prevent injustice to our section of the country.

Editorial Comment

Leading Features of this Number

The Worcester Magazine takes pleasure in offering to its readers, in this closing month of the year, a number which is much above the average in size and also, as we venture to hope, in interest to its readers. The leading features, including a comprehensive survey of the local development of Odd Fellowship, seem to us worthy of all the space given; but in addition to this we have been able to devote to other subjects nearly the same space ordinarily given to all the reading matter, because of the kind patronage of our advertisers. Without making any invidious distinctions, we feel that special attention should be given to the article by President Tatman describing the recent important meeting in New York city for the consideration of freight rates from the Atlantic coast westward; and also to the account of the work of the Pilgrim Publicity Association, which is to benefit our own city quite as much as any other part of New England. This month's glimpses of "Industrial Worcester" give some gratifying demonstrations of increasing vigor and promise in manufacturing circles.

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A Year of Steady Gains

As this Magazine completes another annual volume, it is proper to look back and note the progress which the year has witnessed. Two years ago the form of this publication was enlarged and the policy of more extended illustrations adopted. During the year 1908 there were 326 pages of advertising and 342 other pages of reading matter. During the year just closing we have been enabled to print 426 pages of display advertising and 400 pages of other reading matter, a gain of 20 per cent. in the amount given our readers. If we may judge from the kind commendations received from many quarters, there has been at least a proportionate gain in the value and interest of the matter furnished. In the special numbers issued from time to time we have sought to treat distinct local interest, without lessening the value of the periodical for the general public. There has been a large extension also of the circulation of the Magazine, especially among foreign buyers of goods manufactured in our city.

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The Magazine in 1910

We offer no formal or detailed prospectus for the year to come, because it seems the wiser course to hold our pages open to such subjects as may from time to time seem to warrant attention. We propose steadily to increase the space devoted to "Industrial Worcester," describing progress in our manufacturing plants; but we also wish to give like attention to all other lines of business which are represented in the membership of this organization; and we assure our readers that just so far as we receive the support of these various lines of business in our advertising pages, we shall extend the reading matter descriptive of what Worcester in all the departments of its growth is achieving. We hope to print in either the first or second number of the new year an article summarizing "A Year's Progress in Worcester's Anti-tuberculosis Battle"; also an account of the Worcester "Garden City" plan. As the result of Mr. Davison's attendance at the Rochester meeting of Commercial Executives, we are also able to promise several articles, from time to time, upon special features of the work of our organization by experts who have had marked success along these lines, such as "The Value of Commercial Publications to Boards of Trade and Chambers of Commerce," by Ralph T. Olcott, editor of "Commerce," Rochester, N. Y.; "Civic Betterment," by Richard B. Watrous, secretary of American Civic Association, Harrisburg, Penn.; "How to Obtain New Industries Without Money and Without Price," by W. O. Hodgdon, secretary of the Industrial Committee of the Joliet, Ill., Commercial Club, a former resident of Worcester, and others.

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A Free Workshop for Inventors

The Iron Age is authority for the statement that the McMillan Pump Power & Manufacturing Company proposes to erect at Kansas City, in what is known as the Blue Valley district, a free workshop for inventors whose ideas are seen to possess merit. The building will be 75 x 200 feet, two stories high, constructed of cement, and the second story will be set aside for those inventors who take advantage of the offer. The idea originated with Milton McMillan, the President of the company, whose early experiences as an inventor convinced him that many worthy devices are lost to the world because their inventors are handicapped both by lack of necessary funds to develop them themselves and an opportunity to exploit them so that somebody with sufficient capital can take them up and make them successful. It would seem that Worcester, with its unrivalled leadership in the field of invention, ought to possess something of a similar sort to the Free Kansas City workshop. Certainly, here is a suggestion for some broad-gauge Worcester manufacturer who is public-spirited enough to offer the necessary space free in order that our inventors may not have to send clear to Kansas City to secure a hearing or to demonstrate our industrial supremacy. Seldom does a week pass when the office of this Board of Trade is not visited by some one with a partially developed idea for which he wishes assistance. Frequently he desires money wherewith to manufacture something which ought first of all to be carefully developed, that its defects may be eliminated, and its merits fully brought out. Who will see at this point an opportunity for doing a real service to Worcester?

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The Boston Chamber of Commerce Journal

The entrance of the new Chamber of Commerce in Boston into the realm of magazine publicity is an event of as wide interest as its influence is designed to reach; and that means all the New England states. We have read with much satisfaction the opening numbers of this dignified and well-edited periodical. Its contents are worthy of a better mechanical dress and less use of exceedingly small type. It is noteworthy that much of its space is devoted to subjects whose range of interest reaches far outside the borders of its home city. As regards the statement of its aim, "devoted to the commerce, industry and public interests of Boston and New England," these contents prove that the last three words are no idle phrase. We are specially interested in one of its declarations touching the prin-

ciples underlying the present organization of Boston's commercial interests. After mentioning the fact that the combined membership of three commercial bodies a year ago was but fourteen hundred, while to-day three thousand are enrolled and five thousand expected a year hence in the one body, it declares—

> Its character is composite; its energy is concentrated. In most American cities the power and efficiency of organized effort are dissipated through a multiplicity of associations, chambers of commerce, boards of trade, commercial clubs, convention bureaus and the like. In Boston we have a united force inspired by singleness of purpose; a force of three thousand representative citizens, representing not only the great financial, commercial and industrial institutions of New England, but also the learned professions. With every additional member the sum of what may be accomplished is increased, and every member who aids in adding to the roll contributes a share to the usefulness of the organization.

Specially noteworthy articles in the November number treat of reforms in methods of taxation in Massachusetts, the Yankee farmer's opportunity, and the need of better transportation facilities for New England. There is also interesting mention of the establishment by the Clyde Line of direct steamship service between Boston and Galveston, in which Worcester shippers should be interested.

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The Buying and Handling of Steam Coal

The Committee on Fuel Supply of the Boston Chamber of Commerce has performed a valuable service not alone for its own members but for all New England, and even for wider sections of the country, in compiling and publishing under the above title its report upon the sources of coal supply, the methods of its transportation, the various rates for different points, and much other valuable material upon the general subject, including some maps and charts. We gratefully acknowledge the receipt of a copy of this report from the Boston Chamber of Commerce, and are happy to call the attention of all large users of coal to its wealth of information.

The Chamber of Commerce offers copies of this book for sale at the low price of $2.50, including all maps and charts. Any orders for the same left at this office will be forwarded promptly. There is likely to be a general demand for this handbook among large coal consumers, in view of its practical information as to the kinds of coal best suited for special uses, and the most convenient and economical methods of transportation and handling.

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The Odd Fellows

As late as 1845 the Odd Fellow, a paper published in Boston, stated that a clergyman in that city one Sunday morning gave out the following announcement: "All those who are in good standing in the Baptist Church, excepting slave-holders and Odd Fellows, are invited to the Lord's table." It seems difficult of belief, if not actually incredible, that the prejudice against secret societies of all kinds, and particularly the Odd Fellows and Masons, should have persisted as late in the nineteenth century as this anecdote would indicate. Yet such was the case. The first Odd Fellows' lodge in Worcester (Quinsigamond) was not a year old at that time, and it is related that Joseph Wesby, who helped found it, and who was made an Odd Fellow in Philadelphia, experienced difficulty in finding Odd Fellows' lodges even in Boston when he went to that city prior to coming to Worcester. To-day what a change! No longer do clergymen link together Odd Fellows and slave-holders under a joint ban of excommunication. In the march of human events slavery has been swept out of existence, while the Independent Order of Odd Fellows has come to be recognized by the church as one of the greatest organized powers for good that exists outside of her own membership. In this city alone scores of thousands of dollars have been paid out in relief by the six subordinate lodges in the last sixty-five years, and it is peculiarly fitting at this Christmas season, when the whole earth teems with the spirit of good will and mutual helpfulness, that the Worcester Magazine should devote some space to the splendid record of this model order. Here, as elsewhere, the membership embraces the bone and sinew of the Commonwealth, and in its various bodies, from its youngest lodge to its virile veteran association, can be found enrolled the men who have made Worcester the ideal industrial municipality of the Union.

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The Application of Business Principles to City Government

The result of the recent referendum in Boston, whereby a radical change in its charter was ratified by popular vote, is perhaps the most noteworthy example yet seen of the modern tendency to abolish the bi-cameral system of civic legislative functions, and centralize responsibility upon one man, who is given the position of general manager of the city's business affairs. It is a fashion to call this "the commission plan," and by that phrase to excite prejudice against it; but such a term is manifestly improper. A city council of nine, instead of a board of aldermen of eleven, and another body of nearly a hundred, is not a "commission" if it be elected by popular vote. Massachusetts is so burdened with appointive commissions, in too many instances expensive in their workings and arbitrary in their actions, that her citizens might well dread the extension of such methods to city governments; but so long as Boston and Haverhill elect mayor and councilmen, there is no departure from the time-honored principle of truly representative government. The abolition of all distinctions of national political parties, and the requirement that any nominee for city office must receive the signatures of five thousand petitioners, is beyond all question a step in the direction of more business-like conduct of a city's affairs.

We note with great interest the way in which the desires of Boston as a business community have turned toward Mr. James J. Storrow, the President of the Chamber of Commerce, as the right man to head the city's management of civic affairs. No act in his long and honorable career has done him more credit than his consent to lead the forces of seekers for good government in the present campaign. In view of the way in which Boston was despoiled under the Fitzgerald régime, it seems almost unthinkable that there can be any other result of the coming city election in Boston than the placing of Mr. Storrow at the head of affairs for the next four years. If this be the outcome, we are sure that the privilege of recall at the end of two years will be wholly superfluous. In view of the rapid extension of this change of city government in many municipalities in the west and south, and the universal success which has attended such changes, the country will watch with keenest interest Boston's experiment in the years to come.

Local Trade Conditions

Reviewed by O. C. Ansley, of the Mercantile Agency of R. G. Dun & Co.

Warm and unseasonable weather has materially retarded the distribution of heavy and seasonable merchandise in retail lines, but preparations are being made on a liberal scale for a heavy holiday trade.

Without exception reports from manufacturers and wholesalers throughout the country continue to be more encouraging and satisfactory, and hold out the promise for the year 1910 as an unprecedented one for business. The production among local manufacturers is already fully up to normal, and in some instances plants are running over time.

Local bank clearings for last month show a total of $7,913,794, a gain of 13.7 per cent. over 1908, when they showed $6,960,935, and a gain of 5.5 per cent. over 1906, showing a total for that year of $7,501,226.

Failures in the county for the month show a total of ten (10), with liabilities of $165,574 and assets of $94,-270, compared with last year, when they showed a total for the month of six (6), with liabilities of $23,126 and assets of $5,146, and in 1907 a total of seven (7), with liabilities of $204,951 and assets of $78,961, while in 1906 there was a total of eleven (11), with liabilities of $55,857 and assets of $43,662.

Worcester Patents

By Hartley W. Bartlett, Patent Attorney.

Chetwood Smith, Grinding Machine, No. 930,626.

A machine to grind metal bars simultaneously on both sides, consisting of two grinding wheels having frusto-conical grinding faces having their axes intersecting, and provided with means for moving the wheels longitudinally of these axes to compensate for wear on the grinding faces.

A. C. Higgins, Electric Furnace, Re-issue No. 13,027.

An electric furnace having a long, narrow furnace chamber provided with water-cooled walls, electrodes therein, and a removable water-cooled casing projecting into the charge between the electrodes, the water-cooled walls and casing co-operating to minimize the temperature differences within the furnace.

H. G. and J. H. Frappier, Finger Head, No.

The device consists of two plates hinged together and provided with a stop to hold the upper member in a horizontal position, a bolt through the upper member having a perforation to contain a pig tail, a clamping nut to retain the pig tail in position in the bolt and a roller on the bent portion of the pig tail. The pig tail is adjustable so that the finger head need not be moved.

Board of Trade Man's Views

George W. Bard, president of the Board of Trade of the Bronx, in an address delivered before the members of the Real Estate Association of the Buffalo Chamber of Commerce Nov. 27, at Hotel Lafayette in that city, told the realty dealers that advertising was the secret of negotiating big real estate deals successfully. Mr. Bard is the New York real estate auctioneer, with a record of having sold 180 lots in 180 minutes for $140,000.

Worcester Quotations

Furnished by Fisk & Robinson, Worcester, Nov. 29, 1909

BANKS.

	Bid	Asked
Mechanics National Bank	125	.....
Merchants National Bank	167½	....
Worcester National Bank	210	...
Worcester Trust Company	300	....

RAILROAD STOCKS.

Boston & Albany	228	sale
Boston & Maine common	149	sale
Boston & Worcester Elec common	..	12
Boston & Worcester Elec pfd.	50	sale
Fitchburg preferred	131	sale
New England Inv & Sec. pfd.	84	86
New York, New Haven & Hartford	156⅞	sale
Norwich & Worcester	215	sale
Providence & Worcester	266¾	sale
Worcester, Nashua & Rochester	144½	sale
Worcester Railways & Investment	62	70

INDUSTRIAL STOCKS.

Crompton & Knowles pfd.	147½	. .
Derbolm & McKay common	200	.
Derbolm & McKay pfd.	101	102
Graton & Knight Mfg. common	140	....
Graton & Knight Mfg. pfd.	115	117
Royal Worcester Corset	140	. .
United States Envelope common	54	55
United States Envelope pfd.	113	114½
Worcester Gas Light	265	....
Worcester Electric Light	290	300
Wright Wire Company common	102	.
Wright Wire Company pfd.	106	110

BONDS.

Amer. Writing Paper 1st 5's	88	sale
Boston & Wor. St. Ry. 1st 4½'s	98½	100
Crompton & Knowles 1st 6's	4½	basis
Crompton & Knowles deb. 6's	5¼	basis
Marlboro & Westboro St. Ry. 1st 5's	.....	98
Norcross Brothers 1st 6's	97½	100
United States Envelope 1st 5's	101	102
Worcester Cons. St. Ry. 1st 4½'s	94½	....
Worcester & Marlboro St. Ry. 1st 5's	98	.....
Worcester & Southbridge St. Ry. 1st 4½'s	90	92

Current Events

Personal and General

Oct. 27. B Battery observes its fortieth anniversary with a shoot and dinner at the Worcester rifle range, Shrewsbury.

Eugene V. Debs addresses socialist rally at Horticultural Hall.

One hundred and seventh annual meeting of the Massachusetts Baptist Missionary Association at the First Baptist Church.

Dr. W. H. Tolman of New York addresses the Board of Trade on "Safety Devices in Manufacturing Plants," at the second smoke-talk of the year.

Dr. Herman L. Slobin, son of Rabbi Joseph D. Slobin, appointed instructor in the University of Minnesota.

Willard Eddy, 16-year-old son of H. P. Eddy, fatally injured by the accidental discharge of a rifle in the hand of his brother Prescott.

Norcross Bros. awarded contract for the erection of the Merchants National Bank Building, on Main Street, opposite City Hall; structure to cost in the vicinity of $60,000.

28. Miss Lisi Ingham commits suicide in Blackstone canal because of despondency.

30. Worcester Protestant Evangelical churches vote to raise $25,000 for the laymen's missionary movement, with the intention of eventually bringing the amount up to $88,000 per annum.

Nov. 1. Instruments recorded at registry of deeds office for October, 1725; against 2023 in October, 1908.

Announcement made that the Connecticut River Transmission Company has accepted franchise as revised by the State Gas and Electric Light Commissioners.

Receipts at port of entry for month of October, 4219 packages valued at $135,789, on which duties were levied of $67,413.

Worcester Auxiliary of Masonic Home Committee votes $500 to that institution.

2. O'Connell Real Estate Company buys sixty-five acres of land at Richmond Heights, of the Chamberlain and Hammond estates, paying therefor $100,000, to be developed into house lots.

4. Henry C. Page elected a director of the Worcester Consolidated Street Railway Company, vice E. G. Connette resigned. Board comprises: Francis H. Dewey, A. George Bullock, Henry C. Page, of Worcester; L. S. Storrs, J. T. Harmer, of Springfield; Chas. E. Ware, Fitchburg; F. W. Kendrick, New York; James A. Parker, Boston; B. W. Warren, Williamstown.

Father Mathew's Mutual Benefit and Total Abstinence Society of St. John's Parish celebrates sixtieth anniversary.

Atty. Thomas H. Sullivan begins action on mortgage suit against Oread estate for $50,000, mortgage given by Henry Perky, last owner, to Joseph Fels, Philadelphia, and never satisfied.

Modification of the State boiler rules asked for, among the petitioners being James C. and Charles M. Stewart, of the Stewart Boiler Company; George L. Brownell, Prof. Carleton A. Reed, of the W. P. I.; Secretary Donald Tulloch of the National Metal Trades Association, and Secretary John L. Sewall of the Board of Trade.

5. Atty. James F. McGovern announces his candidacy for Mayor on the Democratic ticket.

Harold Bond, 12-year-old son of Mrs. Alice Bond, 96 Austin Street, killed in a freight elevator accident in the rear of the block 192-196 Front Street.

Announcement made that the Connecticut River Transmission Company has come to a working agreement with the Worcester Electric Light Company with reference to using the latter's conduits for the transmission of power.

9. Thomas D. Gard Company, jewelers, incorporated with a capital stock of $8000. Officers C. M. Wood, president; Alfred T. Howarth, general manager; LeRoy E. Wood, clerk.

10. Prof. Donald B. McMillan, Worcester Academy, lectures before the Commonwealth Club on his experiences as a member of the Peary expedition to the North Pole.

11. Worcester Board of Trade Directors vote to consider matter of forming a chamber of commerce to include, besides the Board of Trade, National Metal Trades Association, the Merchants Association and the Builders' Exchange.

Alvin J. Weeks of Fall River, Great Sachem of Massachusetts I. O. R. M., entertained by 500 Red Men, under the auspices of Cherokee Tribe.

Edward M. Bliss Company, manufacturers of wool soles, joins the Worcester County manufacturers and merchants' agreement with reference to caring for their employees afflicted with tuberculosis.

13. Stuart B. Esty, 20 years old, thrown from motorcycle on State road between Worcester and West Boylston, and fatally injured.

14. Rev. James N. Lester, Denair, Cal., accepts call to pastorate of the Highland Street Church of Christ.

16. Installation of Rev. F. A. Poole as pastor of Union Congregational Church.

17. Worcester Consolidated Street Railway Company for the fiscal year ending Sept. 30, 1909, reports gross earnings of $1,703,657 against $1,642,143.41 for 1908, an increase of $60,513.59.

Worcester Slipper Company joins Worcester County merchants and manufacturers' agreement to provide treatment for their employees afflicted with tuberculosis.

Worcester Board of Trade invited to send representatives to joint conference in New York, Nov. 22, on the Spokane rate case, so called, under the auspices of the Merchants Association of that city.

Dr. Perley P. Comey goes to Aiken, S. C., in search of health.

Albert H. Stone appointed receiver of the D. H. Eames Company, liabilities $50,059.13, exclusive of capital stock; assets $73,760.64.

18. Arrangements made for the inauguration of the new President of Clark College, Dr. Edmund Clark Sanford, Feb. 1, 1910; committee in charge, Dr. George H. Blakeslee, Dr. John C. Hubbard and Dr. Frank B. Williams.

20. Letter carriers decide to hold a banquet Jan. 8, 1910, in honor of the twentieth anniversary of the organization of their association.

21. Charity Sunday observed by the Protestant churches of Worcester in behalf of the Associated Charities of the city.

City Affairs

Oct. 30. Mayor Logan causes obstructions placed in Jackson Street by contractors in charge of grade crossing work to be demolished.

Nov. 1. Worcester Board of Health reports thirty eight cases of diphtheria during the month of October.

City government votes $35,000 for the extension of water mains.

Announcement made that total amount of water in city's storage reservoirs is 1,327,000,000 gallons, a loss of 71,000,000 gallons in the past week.

Building operations in Worcester during October amount to $219,670 against $386,602 in 1908.

Nov. 3. Mayor Logan orders chief of police to prevent the speeding of automobiles in the streets of Worcester.

8. City government votes to continue the term of the Board of Fire Engineers at one year.

Industrial School Trustees listen to the report of Manager Elmer Fish, advocating election of John R. Back, John P. Casey, George H. Scott, Olaf G. Peterson, M. L. Carroll and C. J. Bergstrom as instructors, and Miss Anna L. Metcalf as clerk.

Industrial School Trustees expend $13,376 for construction and $25.76 for equipment in October. Total expenditures to date for land, construction and equipment $75,973.34.

10. City Library Trustees vote to discontinue forty periodicals, principally German and scientific publications.

16. Worcester School of Trades adopted as the official name of new independent industrial school in Worcester.

17. Announcement made that arrests in Worcester for eighteen months under no-license are 6775, against 8982 in previous eighteen months of license.

Board of Trade Notes

The Minneapolis Chamber of Commerce wants a man stationed in Washington all of the time to represent the commercial bodies of the country on matters of legislation.

The Los Angeles Chamber of Commerce gave the honorary commercial commissioners from Japan a banquet on the evening of Nov. 20, costing $10 a plate.

Thanks to the efforts of its Chamber of Commerce, Poughkeepsie, N. Y., expects soon to have 50,000 people.

Scranton, Pa., is trying through its Board of Trade to secure four new industries employing 1200 hands and disbursing $65,000 a month. It is also trying to secure legislation to prevent mine cave-ins.

The Commercial Club at Roswell, N. M., elects newspaper men as honorary members.

Dallas, Texas, is experiencing trouble with its freight delivery. Two carloads of hogs had to stand on a side track for sixteen hours before they were unloaded, and the packing-house to which these hogs were consigned finally had to shut down because its owner could not get his coal out of the Dallas freight yards inside of thirteen days after it arrived. The Dallas Chamber of Commerce is trying to straighten out the tangle.

The city of Birmingham, Ala., has organized under the auspices of the Chamber of Commerce what is known as the 500 Club, whose members will pledge themselves to raise $500,000 in the next ten years for the benefit of new industries. The members of the club will purchase stock in the concerns that locate in Birmingham, and it is hoped and expected to develop the city largely as a result.

The little city of Gloversville, N. Y., boasts of a population of but 18,624 and a Chamber of Commerce with 400 members. At that rate Worcester ought to produce 3200.

Lancaster, Pa., has adopted as its slogan: "Present Right; Future Bright," while Chester, Pa., is anxious to be known as the "Gateway to the Sea;" Hudson, N. Y., is depending on "Hustle for Hudson" to make it famous.

WORCESTER BOARD OF TRADE

EACH FOR ALL ALL FOR EACH

11 FOSTER STREET
WORCESTER MASSACHUSETTS
USA

Officers

President, CHARLES T. TATMAN. *Vice-President*, EDWARD M. WOODWARD.
Secretary, JOHN L. SEWALL. *Treasurer*, ALBERT L. STRATTON.
Assistant Secretary, HERBERT N. DAVISON

Directors

FRANK S. BLANCHARD, ARTHUR O. YOUNG, CLINTON S. MARSHALL,
CLARENCE W. HOBBS, JOHN J. POWER, HERBERT H. FAIRBANKS,
JOHN W. HIGGINS, EDWARD J. CROSS, WILLIAM WOODWARD,
WINTHROP HAMMOND, CHARLES E. HILDRETH, LOUIS H. BUCKLEY,
WILLIAM FORSBERG, CHARLES T. TATMAN, ARTHUR C. COMINS,
VICTOR E. EDWARDS, CHARLES L. GATES, MARCUS L. FOSTER,
ARTHUR W. PARMELEE, EDWARD M. WOODWARD

Clerk of the Corporation, WILLIAM H. SANFORD *Auditor*, H. WARD BATES

Membership Committee

F. BRUCE DUNN, MARK T. COSGROVE, GUSTAF A. BERG,
BENJAMIN B. SNOW, HARLEY W. BARTLETT

Chairmen of Standing Committees

Finance: RUFUS B. FOWLER *Mercantile Affairs:* WINTHROP HAMMOND
Publication: CLARENCE W. HOBBS. *Municipal Affairs:* CHARLES L. GATES.
Building Laws: EDWARD J. CROSS. *New Enterprises:* WILLIAM WOODWARD.
Education: JOHN W. HIGGINS *Publication:* GEORGE F. BOOTH.
Foreign Trade: VICTOR E. EDWARDS *Public Health:* ARTHUR O. YOUNG.
Insurance and Fire Protection *Statistics and Information:*
JOHN J. POWER. MARCUS L. FOSTER.
Legislation: WILLIAM FORSBERG. *Taxation:* HERBERT H. FAIRBANKS.
Manufactures: CLINTON S. MARSHALL *Transportation and Railroads*
Meetings and Receptions EDWARD M. WOODWARD
ARTHUR C. COMINS.

Any member of the Board of Trade having matters requiring consideration by any of these committees is asked to communicate directly with its chairman.

The Value of Publicity

In giving to our readers last month the admirable article by Professor Haynes, on the work of Worcester's Associated Charities, we were confident that its clear statement of fact would prove an irresistible appeal to the members of our Board of Trade and other business men of the city. We were convinced that such facts needed only adequate publicity in order to secure the desired results. That article was placed in the hands of every clergyman in the city before Charity Sunday, November 21, and formed the foundation for many a pulpit appeal, supplementing that of the printed page.

We are gratified to be informed by the Finance Committee that as a result of that article and its influence, the burden of debt has been wholly removed from the organization, and the way now opened for securing such support from new memberships as to make such a burden unlikely in the future. It is a pleasure to feel that this Magazine has contributed to this result. We specially commend the advance movement going on at present for securing dollar membership subscriptions. The first thousand of these now being solicited should be quickly taken. They represent shares of investment in an enterprise which will pay splendid and satisfying dividends to all who participate.

One Thousand Members by Next April

Why not? A year ago last July our membership was a little over 500. A year ago this present month, with the help of an auxiliary committee our Membership Committee brought the number of applicants for membership close up to 700, and at the close of the Board of Trade year in the spring this number had risen to 735. During the summer and autumn months this number has been maintained with little change, but recent additions have brought the number up to 745.

For several years past it has been the custom to make the campaign for new members during the last three months of the year, with the banquet as the objective point, and the offer of what amounted to two years' membership for one annual fee of $10. In the revision of the rules last spring this was changed to a pro-rata fee of $5 for the portion of the year remaining after Nov. 1, with another fee of $10 due from all members at the beginning of the year next May. The opportunity is therefore now open to all who wish to unite with other business men in promoting the general interests of our city to give in their names and help on the activities of the next few months, as well as share the pleasure of the banquet, for the small sum of $5. The last banquet was universally voted the "best yet"; but the committee are determined to make the banquet of 1910 still better.

In order to reach this desired goal, the Membership Committee propose to organize, as last year, a strong auxiliary committee who shall join them in a thorough study of the entire field from which new members may be recruited, and plan another movement similar to that which resulted in such large gains a year ago. In view of the present activities and achievements of our organization, and its present outlook for yet larger usefulness, if only it can have the hearty and continuous support of Worcester's business men, it would seem that such an effort should meet even larger success than last year.

The committee on speaker for the next banquet, consisting of President Charles T. Tatman, Hon. Charles G. Washburn, Hon. James Logan and Mr. George F. Booth, in addition to Mr. Arthur C. Comins, the chairman of the Committee on Meetings and Receptions, has now upon its list several names of national reputation, any one of which will ensure a great treat to those who attend the next banquet; and it is hoped that the committee within a month will be able to announce the result of its quest. Meanwhile, we urge every member of the Board to consider himself a committee of one to help on the good work of increasing our membership to high-water mark.

Taking the Initiative

One of the votes passed at the last meeting of the directors deserves special mention. The action was as follows:

> Voted, That it is the desire of this Board of Directors that every member of a standing committee consider it his privilege and duty to suggest and initiate action which will lead to recommendations to the Board by his committee on any subject that seems within the scope of its work.
>
> Voted, That a copy of this vote be sent to every member of a standing committee.

If this Board of Trade is to accomplish its greatest usefulness for our city, it must rely upon the manifested interest of the largest possible number of workers. A standing committee should be not merely a group of men to whom some subject requiring attention may be referred for preliminary consideration; they should also look for opportunities to suggest action in directions which may not have occurred to the directors or officers of the organization. This may be a new conception of the privileges and duties of individual members of committees; we are inclined to think it is; but assuredly its

general acceptance and adoption would tend to greater activity and a wider range of efforts helpful to our city. In this connection we call attention to the complete list of the chairmen of our standing committees, as found at the top of this page, and the invitation to any member of this Board to present to the proper party any subject which, in his judgment, deserves attention.

Courtesies from Boston

In connection with the private opening of the new Art Museum in Boston, the directors and members of the Advisory Committee were kindly favored with tickets from the Boston Chamber of Commerce, a courtesy which was greatly appreciated by those who were able to go and inspect Boston's art treasures in their new and worthy abode.

In like manner, the management of the "Boston 1915" Exposition sent an invitation to the Committee on Municipal Affairs to be their guests at the old Art Museum in Copley Square, which for the last month has been occupied by the remarkable exhibits of civic resources and city planning mentioned in our last Magazine. It was found difficult to fix upon a date convenient for all to attend, and some made their visits individually; but on Friday, Nov. 19, a party was formed consisting of Mr. C. L. Gates and Mr. C. Edmond Belisle of the Municipal Affairs Committee; Dr. O. Draper Phelps of the Committee on Public Health, together with Secretary E. B. Clapp of the Merchants' Association, Mr. Halleck Bartlett of the Charities Commission, and Prof. U. Waldo Cutler of the Public Education Association. These gentlemen with the Secretary of the Board were shown through the various rooms, under the personal guidance of members of the Board of Management, and greatly enjoyed the privilege. Among the contributions of real value to the success of the exposition was the anti-tuberculosis address made by Dr. M. G. Overlock, a member of this Board, and Commissioner of Labor John Gunshannon of Connecticut, on the same subject.

Tidewater Connection for Worcester

The Blackstone Canal, so helpful to this city in the years before the railroad came, has come to be regarded by many as merely a relic of the past. With the revival and extension of interest in commercial waterways, however, Massachusetts is beginning to question the expediency of restoring some of her long-abandoned canals. Lowell is agitating the question of tidewater connection as of old with Boston, as well as considering improvements of the Merrimac, which would accomplish similar results. Springfield is persistently at work to secure like tidal connections as far north as Holyoke in the Connecticut Valley. And now there are indications of a movement among manufacturers in Providence and vicinity to consider seriously a re-opening of the old Blackstone Canal in connection with a new ship canal inside of Point Judith. The leading spirit in this movement, according to a Providence dispatch to the Boston Transcript, is Mr. Frank A. Sayles, at present the chief owner of the Moshassuck Valley Railroad and of the Sayles Bleacheries. We quote as follows from the article in the Transcript:

The re-opening of the canal is undergoing discussion in connection with the widespread purpose of developing inland waterways in order to supplement the carrying capacity of railroads and facilitate the handling of increased bulk of freight. The development of the project, so far as Rhode Island and the Bay State are interested, would mean that coastwise freight carriers would enter a canal at Watch Hill, R. I.; pass in through it behind Point Judith, where every year scores of barges and schooners find the bottom, or are beached in heavy storms; enter Narragansett Bay at Wickford; pass up the Seekonk (or Pawtucket) River, whose channel has already received much attention towards deepening it, to the terminus of the Moshassuck Valley line, at tidewater. There the freighters would empty their cargoes into cars of that line, which would transport the freight overland a matter of five miles or less, to Lonsdale, and over a short spur track to the rebuilt canal, where boats would receive it for its last stage of the journey up the canal to Woonsocket, Uxbridge, Whitins and intermediate towns to Worcester.

A man who for years has been in close touch with the developments of transportation facilities in this State and Massachusetts, declared to-day that this method of freight carrying was so much of a possibility as to become almost a probability within the near future. Such a development of inland waterways in Rhode Island and the Bay State would be directly in line with such undertakings as a canal across Cape Cod, and would be in strict harmony with the issuing of bonds amounting to $500,000 for harbor improvements in and near this city, which has just been carried throughout the State at the last election. The development of such a plan to utilize the long-idle Blackstone Canal would assuredly mean profits from the capital invested in its promotion, while manufacturers in Rhode Island and the neighboring Commonwealth should materially profit by reduced freight rates from points to the westward. The old canal has been covered at a few points by mill property, but short detour trenches could undoubtedly be constructed so as to afford an unbroken right of way from Lonsdale to Worcester by water.

In view of the present conditions in the Blackstone Valley, between this city and Narragansett Bay, it does not seem, at first thought, to be reasonable to expect any profitable returns from a rebuilding of this former waterway. The most formidable obstacle would seem to be the insufficient amount of water available for such purpose. With the Blackstone River harnessed in water power to a greater proportionate extent than any other stream in the United States, it would seem difficult to secure a sufficient amount of storage water for operating locks. The importance of such an achievement to Worcester, if possible, is too evident to need argument. With the vast quantities of coal and iron brought to this city, and with the amount of heavy freight going out from it, barge connection with tidewater would mean great savings to our city, and constitute an added point of vantage for the development of our industrial life.

Central States Organize

Secretaries Meet at Cincinnati and Elect William A. Gibson, of Chicago Association of Commerce, President

Following the example of commercial executives of the East and the South, an association of secretaries of the Central States was formed at Cincinnati Nov. 18 and 19. The new association will be known as the Association of Commercial Secretaries of the Central States. The meeting was representative of the leading business organizations of Ohio, Kentucky, Indiana, Illinois, Michigan and Wisconsin.

The sessions were held at the Hotel Sinton, with Will L. Finch, secretary of the Industrial Bureau of Cincinnati, as temporary chairman, and A. B. Lipscomb of the Louisville Commercial Club as secretary. Addresses of welcome were given by Mayor John Galvin, Hon. Gideon C. Wilson, president of the Cincinnati Associated Or-

ganizations, and John M. Manley, president of the Cincinnati Secretaries' Association. The response for the visitors was made by Mr. Lipscomb of Louisville.

A committee on permanent organization was appointed, consisting of Robert G. McClure, secretary of the Indianapolis Commercial Club; Wm. Geo. Bruce, secretary of the Merchants and Manufacturers' Association of Milwaukee, and Carl Dehoney, secretary of the Mercantile Club of Kansas City, Kan. On its report, William A. Gibson, executive secretary of the Chicago Association of Commerce, was elected President and Carl Dehoney Secretary.

The purpose of the initial meeting was stated to be for "forming the acquaintance of our fellow secretaries; of discussing permanent organization for mutual benefit; and for the general betterment of the work in which we are engaged." The discussions of the two days followed these lines, and it was shown that there was a need of a closer affiliation between the secretaries and opportunities for mutual benefit.

Woodworth Clum of the Rochester Chamber of Commerce, and president of the National Association of Commercial Executives, addressed the convention and expressed the hope that there might eventually be a consolidation of the various interstate associations, and extended a cordial invitation to the new association to meet with his association at its next annual convention, to be held at Grand Rapids, Mich. For the time being it was decided to be wiser to establish the new organization on a firm basis, and the selection of the next place of meeting was left to the officers.

Thursday evening the guests were tendered an informal dinner at the Hotel Sinton, at which Hon. Nicholas Longworth talked on "The Corporation Tax," and laid great stress upon it as a form of taxation to be encouraged. He expressed his hearty approval of the new Federal law. Prof. Frederick Hicks of the University of Cincinnati discussed "The Taking of the Next Census," and Col. Wm. B. Melish, president of the Cincinnati Convention League, enlivened the evening with "A Bit of Advice, Wise and Otherwise." Mr. John M. Manley was toastmaster.

Friday morning was devoted to a continuation of the business sessions, with an address by Richard B. Watrous, secretary of the American Civic Association, on "Practical City Development." Mr. Watrous directed his remarks to the importance of an active participation on the part of industrial organizations in all movements looking toward the physical improvement of the communities they represented, and particularly urged that the subject of city planning be given serious consideration and support. He stated that one of the gratifying signs of the times was in the fact that commercial bodies are coming to recognize that upon them devolves much of the responsibility for the forwarding of civic improvement movements as well as fostering the industrial and manufacturing activities of cities.

Before the convention adjourned vice-presidents were chosen for each State represented, as follows:

Ohio, Will L. Finch, secretary Cincinnati Industrial Bureau; Indiana, Robert G. McClure, secretary Indianapolis Commercial Club; Wisconsin, Wm. George Bruce, secretary Merchants and Manufacturers' Association, Milwaukee; Kansas, Carl Dehoney, secretary Mercantile Club, Kansas City, Kan.; Nebraska, J. M. Guild, commissioner Omaha Commercial Club; Kentucky, A. B. Lipscomb, secretary Louisville Commercial Club; Illinois and other states to be appointed later.

From the Field

Notes from Boards of Trade and Chambers of Commerce in other Cities

The New Bedford Board of Trade had its annual dinner Nov. 22, and listened to an address on the new Cape Cod Canal by J. W. Miller, vice-president of the Cape Cod Canal Company.

The Bridgeport, Ct., Board of Trade is talking of sending a representative of that body to the Philippines to represent Bridgeport concerns in the islands.

The Sioux City Commercial Club is planning a reorganization and proposes to do away with all firm memberships in favor of individual connection. The organization plans to introduce club features and provide for a cafe, billiard and reading rooms.

The Minneapolis Commercial Club now has 1200 members, its total receipts last year were $134,492.18, and it opens quarters in the Hotel Radissin Dec. 15 that it cost $80,000 to equip.

Amherst, Mass., is considering organizing a board of trade. It tried to form such a body in 1892, but the scheme died of inanition.

Attorney Don M. Larrabee has been appointed manager of the Williamsport, Pa., Board of Trade, succeeding H. R. Laird, resigned.

The Oklahoma City Chamber of Commerce has entered upon a campaign for 1000 members.

The Little Rock Board of Trade complains that a bale of cotton recently received in that city contained two or three pieces of old brass, any number of rocks and a big chunk of cast iron.

Fort Worth, Tex., has accepted the resignation of its secretary, Capt. B. B. Paddock, after ten years of service, and has presented him with a loving cup in token of its esteem.

The Hartford, Ct., Business Men's Association has elected Maj. Edward Mahl president, and E. H. Warner secretary.

The city of New Castle, Ind., a plant of 12,000 inhabitants, is talking of raising $375,000 this winter to bring there a $50,000,000 corporation which will require a plant of 200 acres. Seven years ago it is said there was not a person in the place with $100,000, and now it boasts several millionaires.

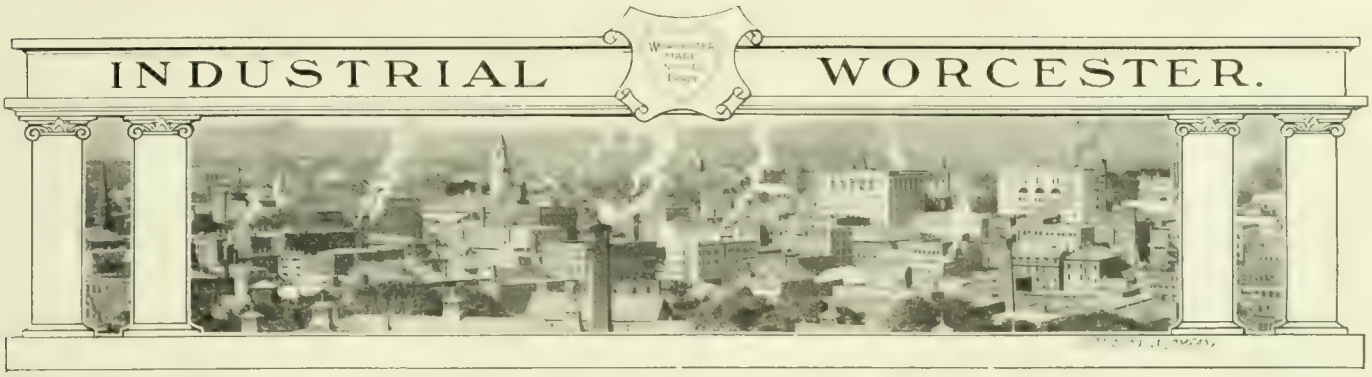
Columbus, Ind., has a clergyman that booms the Board of Trade in his Sunday sermons. The reason for his utterances is the fact that the local organization is trying to locate a gown factory in that town where unemployed working girls can earn from $6 to $8 a week.

The Omaha Commercial Club is violently indignant because the Nebraska authorities have allowed a shirt factory to be established in the penitentiary. Omaha makes shirts and does not care to go to jail to continue the privilege.

The Board of Trade of Asbury, N. J., is endeavoring to carry that widely known summer and religious resort for license. Founder Bradley, and the clergy generally, are indignant.

The Board of Trade of Summit, N. J., is protesting against the establishment of a tuberculosis hospital in that town.

The Rochester, N. Y., Chamber of Commerce is just leading off in the matter of organizing an associated charities in that city, and upon request the Worcester Magazine sent five copies of the November number to the committee having the matter in charge, that they might see how the work was done in Worcester.



BAKER CIGAR COMPANY

The city of Manchester, N. H., with a population approximately one-third that of Worcester, employs 285 cigar makers; Springfield, 335; Hartford 280, and New Haven, 193. All of these cities, considerably smaller than Worcester, completely swamp the forty men engaged in this industry in this city. Even small towns like Milford and Westfield employ 52 and 170 cigar makers respectively; while Boston claims not less than 2223.

Worcester is recognized as one of the greatest tobacco and cigar consuming centres of New England; more cigars per capita are smoked in our city than in many of the above mentioned places.

Taking into consideration the fact that Worcester has long held an enviable position among manufacturing towns, and that its products are sent to every quarter of the globe, it is a little difficult to explain just why this city has been so far behind in the manufacture of cigars. The total amount of money expended here every year on cigars represents an immense sum, which means that the smokers of Worcester have been buying their cigars of Springfield, Westfield, Manchester and other cities which have exhibited more enterprise, but which possess no better facilities for manufacturing than exist right here in Worcester.

As skilled cigar makers receive excellent wages, and are valuable customers in every town where they are given employment, it can readily be seen that the annual loss to this city is a large one, and that, were we to make a fair proportion of the cigars we now purchase from rival communities, the general prosperity would be advanced in proportionate degree.

It is not always easy to determine just what factors are operative in making certain cities the headquarters of cerfain industries; whips could be made as well in Milford as in Westfield, shoes as well in New Bedford as in Lynn, and there is certainly no legitimate reason why Worcester should not become as noted for its cigars as it is for its wire specialties and looms.

The fact seems to be that hitherto no concern with sufficient capital has been interested along this line, and as a result the Cigar-makers' Union in this city is weak and uninfluential, and Worcester people are buying domestic cigars from towns which for one reason or another have awakened to the opportunities which exist in this industry.

It is the hope of the Baker Cigar Company, just established in Salem Square, to help place Worcester among the leaders in the manufacture of high grade cigars. The new concern is backed by plenty of capital, and its model factory is in charge of a man known for more than twenty-five years throughout New England as an expert in the selection of leaf tobacco, and the making of it into fine cigars. Realizing that in the manufacture of cigars every care and safeguard should exist which surrounds the manufacture of products under the regulations of the pure food law, since contagion and disease are as certain to follow the use of cigars made under unwholesome and unsanitary conditions as food similarly prepared, the Baker Cigar Company has endeavored to meet in every way the tests insisted upon by the Cigar-makers' Union, and their factory is spotlessly clean, and every room is well lighted. All the fittings and apparatus are new, and of the most recent models, and anyone interested in observing the process of making cigars under the very best possible conditions is invited to call and follow the work, from the properly cured leaf to the finished cigar. The Baker Cigar Company believe that it is not possible to secure men possessing greater skill than their employees, and that no one has better facilities for buying the right sort of tobacco to suit the local demands. Their broker visits Amsterdam every year, there securing for them at the great government "inscriptions" the superb Sumatra leaf, for which no substitute as a wrapper has ever been found, and in like manner their Cuban filler is selected in Havana, and the broad-leaf binders are purchased direct from the fields of the Connecticut Valley, and are selected with as much care as the imported grades.

All these styles of leaf can be seen in their various stages of preparation until, having been properly sweated, they appear

BAKER CIGAR COMPANY.

on the bench to be made up by the deft fingers of the skilled employee.

For the present the Baker Cigar Company will make two brands, a five-cent cigar called appropriately "Salem Square," and a ten-cent grade named "Wachusett," on each box of which will appear a handsome half-tone of the mountain which is a familiar landmark to all residents of Worcester County. Every box will bear the union label, with the skilled labor and careful workmanship which this stands for fully guaranteed. Whatever success they may achieve will make directly for the benefit of Worcester consumers, dealers and workingmen, who have long been asking why Worcester should not take place with its sister cities of New England as a cigar manufacturing centre.

AN INNOVATION IN PRINTING

Another new Worcester industry that in three years has extended all over the Union and promises eventually to be world-wide in its scope is the New England Fibre Blanket Company, located at the top of the Bowker Building, 24 Washington Square, Theodore T. Ellis, treasurer.

This concern, established in October, 1906, and incorporated with $25,000 capital stock, in June, 1909, started with the manufacture of fibre blankets alone, but has now developed into a general printing supply house, with agencies in New York city, Montreal, and on the continent.

The founder of this business, Mr. T. T. Ellis, is himself a printing pressman of many years' experience and acknowledged ability. Indeed, it is probable that he has few superiors in his line in this country. From personal experience he became satisfied that an impressionable surface could be devised for printing presses superior to the rubber blankets in general use by the trade. Such blankets were not only unsatisfactory because they were subject to rapid deterioration, but their initial expense was the smallest cost, for their constant renewal served greatly to increase the overhead charges in all large printing plants.

T. T. Ellis

As the demand for the use of rubber in the arts increased, the price of these printing press blankets increased until the blanket-makers found difficulty in supplying the demand even at $10 a yard. In this emergency Mr. Ellis began experimenting with other materials than gum, and after trying many surfaces finally hit upon fibreoid. The difficulty then lay in securing the manufacture of the goods at a price that would make them commercially profitable and in a manner that would answer the exacting demands sure to be put upon them. Rubber, while not ideal, had, up to 1906, proved the bast material devised by man to do the work that a cylinder press revolving at great speed is called upon to do, viz., turn out at the least calculation from 300 to 500 printed papers a minute.

It was necessary, if rubber was to be supplanted on the impression cylinder, as it is known, that the substance substituted must possess all its firmness, its resiliency and its printing qualities, plus any other advantages it might possess. After experimenting for months in this country without avail, Mr. Ellis was finally obliged to go abroad to have the fibreoid made, and he eventually secured the exact material that he wanted from a large textile house in Germany, with whom his company has now made a fifteen-year contract.

The fibre blanket that this company is putting on the market not only possesses all the advantages of the old-fashioned rubber blanket, but it can be made and sold for $2 a yard less than its gum rival. The principal component of the modern stereotype plate used on all web-perfecting presses is lead, and although this is hardened slightly by the use of antimony and some other materials, it is still very friable and subject to wear. The natural result is that the surface of the plates soon wears down and becomes glossy and illegible unless the printing surface possesses peculiar qualities calculated to bring out with the utmost sharpness and nicety even the most minute types, pearl and agate, as they are known among printers, for example.

In addition there have come to be used in modern printing, even on web-perfecting presses traveling at great speed, half-tones etched in copper instead of the zinc etchings formerly employed. These half-tones are sorter and more delicate than anything known to modern rapid printing as late as ten years ago, and their introduction caused a veritable revolution in many press-rooms. Even now they are not successfully employed except upon calendered surfaces, the ordinary wood pulp paper employed on the average daily affording an inferior medium for the reproduction of anything except blocks engraved in the very coarsest screens.

The fibre blanket put on the market by the New England Fibre Blanket Company acts like a powerful spring. It is extremely resilient and still is firm enough to produce an ideal reproduction. It is impervious to oil and ink, that bane of all pressmen, and turns out a paper free from smut and offset.

The blanket has been adopted by the largest printing press manufacturers in the world. It is now being used by the United States government at Washington, and also has been taken up by the King's printer at Ottawa, Canada.

There are over 3500 daily papers in the United States, and the company expects to equip them all. Last year alone the New York World saved $4500 by the use of these blankets, and they are now being tried out on the London Mail, and if proven successful there, as Mr. Ellis expects they will be, they will be adopted on Lord Northcliffe's entire list of publications.

The capitalization of the company has been divided as follows: 100 shares of common stock at $100 each; 1500 shares preferred stock, paying 8 per cent. dividends, at $10 each. There has been already bid $150 for the common and no sale. An advertisement in this issue, on page xiv, explains more fully the achievements of this enterprise and its business-getting possibilities.

Personally Mr. Ellis, the treasurer of the concern, is one of the most companionable of men, and none rejoice more heartily at the success that has come to him than his old confreres of the printing trade. He is a member of Worcester Lodge, I. O. O. F.; of the Elks, of the United Commercial Travelers, and of the Worcester Board of Trade.

INCREASING CRANK-SHAFT OUTPUT

Extensive improvements are being made at the drop forging plant of Wyman & Gordon, 30 Bradley Street, calculated to increase the efficiency of the plant in question in marketing its output, particularly crank-shafts. This concern is now working to full capacity, twenty-four hours a day, and it is still impossible to meet the demands made upon it. Its managers believe in pursuing a conservative business policy, and do not feel justified in taking on a large number of new accounts for the simple purpose of seeing how vast a product they can turn out. For several years they have enjoyed the cream of the automobile business, and they have been at special pains to produce a crank-shaft that would meet every demand made upon it by their customers. As a result practically every high class car manufactured in this country to-day is equipped with a Wyman & Gordon crank-shaft. To keep these drop forgings at the highest point of efficiency and reliability possible rather than greatly to increase the volume of their business is the greatest aim of the managers of this industry.

For some time, however, they have felt that their output was not reaching the shipping room fast enough. This was particularly true of their crank-shafts. The product was being handled with such rapidity, and the plant was being operated at so high pressure, that there was literally no opportunity to make the changes necessary to facilitate the progress of this essential line through the shop. As a result of the alterations now in progress the concern expects to increase its output of crank-shafts fully fifty per cent.

One of the new buildings erected is to be of brick 40 by 124 feet, the lower floor devoted to turning flanges on crank-shafts and to straightening and centering them. The second floor is for die sinking, and the third floor will be given up to a pattern shop.

A new forge shop is also being erected 80 by 120 feet for the express purpose of giving additional facilities for heat treating steel. The old forge steel shop was about 200 by 100, giving them now about 30,000 feet devoted to this one operation.

Wyman & Gordon are also putting up a new storage shed 30 by 280 feet devoted entirely to die and steel storage in cut lengths. They have also added to their equipment one of the Maine Electric Company's huge cranes equipped with a cab and having a radius of 120 feet. This crane will pick up from three to five tons of steel or iron at a time, and is a striking improvement over the manual labor fermerly necessary to handle their product. This comes in the form of steel billets three inches square by sixteen to eighteen feet long and weighing about 450 pounds each. Raw material in this shape is not only bulky and difficult to handle, but packs down very solidly and can be unloaded and moved about from point to point much more readily and humanely by machinery, besides affording increased yard room.

Inside the plant a system of trackage has been installed so that the steel can be handled in small cars instead of being moved about in trucks as has been the case heretofore. This will materially assist in securing prompt and early delivery.

The Wyman & Gordon management is also adding new equipment to its Cleveland plant.

THE BRIERLY-LOMBARD CO. FORMED

Two Worcester concerns that are among the oldest and most reputable in this country, in their respective lines, have just consolidated. J. T. Brierly, who recently bought out Crawford & Company, dealers in woolen machinery and mill supplies of all kinds, a business established in 1847 by Sumner Pratt, has united with the Lombard Machine Company, manufacturers of preparatory machinery for woolen manufacturers since 1823. The Lombard Machine Company has for years made shoddy pickers, woolen and worsted cards, card feeds, etc., and it has recently brought to the attention of woolen manufacturers a new breast for cards and also a new high speed loom called the Lombard-Landry loom. The latter was recently described at length in the Worcester Magazine, and needs no additional description at this time. Mr. Brierly was with Crawford & Company twenty-three years, thirteen of which he was a member of the firm. The new corporation is to be known as the Brierly-Lombard Company, and assumed control of the joint properties Dec. 1. It is capitalized at $150,000. The combination of a mill supply house, with a national reputation and a national trade, and a manufacturing plant building, both staples and specialties, ought to result in many economics, and the marketing of the product built by the concern in the most efficient possible manner and at a marked profit.

A UNIQUE ODD FELLOWS' EMBLEM FOR SALE.

Among the out-of-the-ordinary business announcements in this issue of the Worcester Magazine is one that was specially called forth by the publication of the principal article in this issue—that on Odd Fellowship. The advertisement referred to is the beautiful emblematic monogram designed by W. W. Cowan of Bradford, Vt., a brother of the order, and a loyal Odd Fellow of many years' standing. Mr. Cowan is exceedingly facile with pen, pencil and brush, and he conceived the idea of grouping the various emblems of the I. O. O. F. around, upon and in connection with the mystic letters "F. L. T.," which possess such peculiar significance to the members of this fraternity. Not content with including the subordinate lodge, he also incorporated into the design the symbols of the encampment, the Rebekahs and the Canton. The whole he had lithographed most artistically in a design twenty-two by twenty-eight inches, and these unique emblematic monograms are now offered to the fraternity at the modest price of $1. Like so many other New Englanders Mr. Cowan some years ago fell a victim to tuberculosis and was obliged to remove to Arizona, where he has since had to remain, with his health in a most precarious condition. Clyde N. Stevenson, 18-20 Foster Street, is agent for these monograms and will be glad to correspond with any one interested either to purchase or to act as agent.

A NEW LINING FOR AUTOMOBILE BRAKES

Automobile owners will be pleased to learn that the latest thing in the way of brake linings is now being manufactured in Worcester. The Multiple Woven Hose & Rubber Company, whose factory is located at Nos. 7 and 9 Summer Street, has been carrying on experiments in this direction for some months past, and their linings have been extensively tested out on a number of cars owned in this vicinity. The results have been so satisfactory that the company is now making arrangements to turn out these brake linings in quantity and in all the standard widths.

The basis of these new linings is a multi-ply cotton fabric, specially designed and woven for the purpose, and of unusual firmness and solidity. This fabric is subjected to a special frictioning process, entirely different from anything heretofore employed in making linings, and imparting to it extraordinary clinging qualities. At the same time it is rendered absolutely waterproof throughout.

This lining is attached to the metal brake band by means of rivets, in the usual manner. When the brake is applied the firm, solid character of the fabric effectually prevents any tearing away from the rivets, while the compound with which the fabric is treated produces the maximum braking effect.

These goods are now being placed on the market under the brand "Best." They are certainly worthy of the attention and investigation of every automobile owner.

LELAND & CO.'S NEW SENSITIVE DRILL

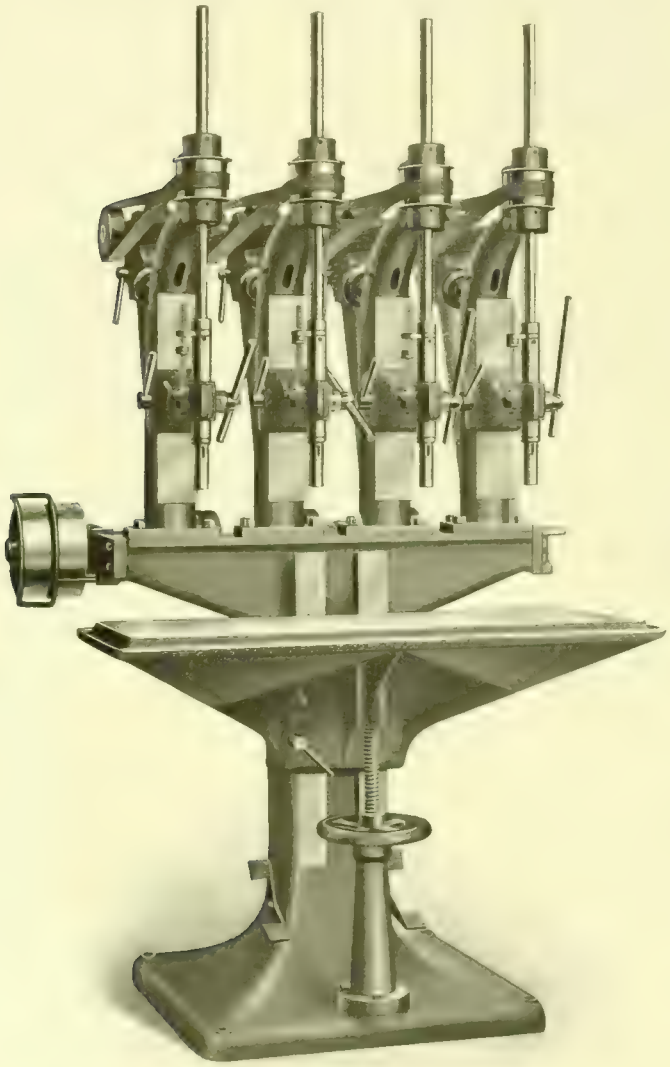
A four spindle high speed sensitive drill, the first of a new line built by W. H. Leland & Company, is illustrated herewith. It is a very heavy tool with some 250 pounds more metal than is usual in its class, the builders believing that the work now required of a sensitive drill press necessitates very substantial construction, taking into consideration the fact that the only sensitive parts are the feed by hand and when required the drive by belt.

The base is very heavy of a box shape section throughout, up to the foot of the columns, for the purpose of maintaining under all circumstances the truth of the surface to which the heads are bolted. The ribbing of the table is another feature, the design being similar to that of surface plates. In this the effort has been made to insure maintaining the table level, so that even under the weight of the heaviest jib no springing of this part can take place.

Regarded mechanically, most attention will be attracted by the method of tightening the belts, which must always be an essential feature of this type of tool. The combination of a screw and swivel motion gives the desired position of the back shaft pulleys and at the same time equalizes the tension of the two belts. A unique feature of the feed is a ratchet device for the lever handle. The stop motion is furnished with micrometer readings if desired, and in both this and the standard form is mounted at the end of the spindle. Being of the screw type no slip is possible. All horizontal bearings are ring oiling, made with inserted bushings of a special metal, following the practice which has been so thoroughly developed in automobile design.

When desired, however, ball bearings are furnished. The vertical bearings have felt storage for oil. The shifting of the belt is accomplished by the treadles located at both sides of the base.

The drill is designed to run at the highest speeds permissible with high speed steel drills.



Leland & Co.'s New Four-Spindle High-Speed Sensitive Drill

The accompanying illustration shows a front view of the machine with details of the shop motion and table construction.

The construction of the goose-neck together with the method of tightening the belts constitutes an essential feature in the design of the machine.

The head is held in any position on its face of the post by a binder. In fact binders are employed throughout the machine, there being no necessity to use a wrench in any adjustment or operation. The feed lever is of sufficient diameter and length to permit of a powerful feed for large drills. It can be moved quickly from short to long leverage, being splined in its bearing for that purpose. The feed is through rack and pinion, in the usual way, and also through a ratchet, which is novel. A twist of the hand lever raises the pawl and holds it disengaged until released to engage a new tooth. The lever is knurled sufficiently to permit of a good grip.

The stop motion, mounted at the side of the spindle, consists of a screw and nut and a projecting piece from the spindle sleeve, together with a check nut and binder. The screw passes through a clearance hole in the projecting piece, and the motion of the spindle downward is stopped when the nut strikes the piece. In the ordinary equipment of the machine the screw is round, while two ordinary nuts are furnished, depths being set by scale or block. The machine is shown equipped with a micrometer gauge. The screw is slabbed off on its front and graduated to tenths of an inch, while the nut is graduated to hundredths; each graduation, therefore, corresponds to 1-1000 inch traverse of the spindle. This arrangement is desirable in tool-making and for other purposes where precision is required.

The table is raised and lowered by an elevating screw which is stationary, while the nut hand wheel revolves. The thrust is taken on a ball bearing.

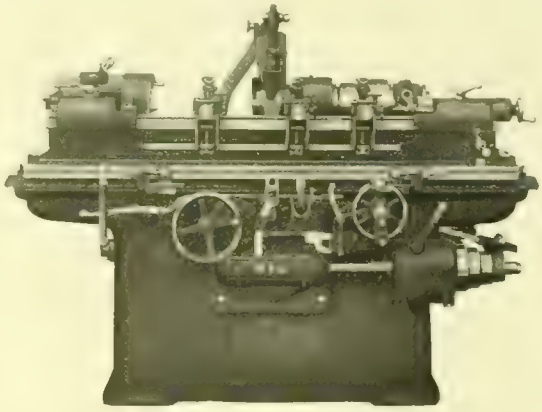
NORTON GRINDING CO. 10x36 CYLINDRICAL GRINDER

The Norton Grinding Company is placing upon the market a 10 by 36 motor-driven cylindrical grinder, illustrated herewith, that possesses many valuable features.

All rapid-running shafts are made of high carbon steel, are carefully ground, and run in self-oiling bearings. Any constant speed motor is suitable for running this machine. Motor speed must not be less than 800 r. p. m., nor more than 1500 r. p. m. The motor shown in the cut is 10 h. p., and is suitable for any work that can be done in this machine.

The motor is furnished by the customer and it is not necessary that it should be attached to the machine at the factory. All that the shippers require is to know the height from floor to centre of shaft, diameter of shaft, size of keyway in shaft, length of shaft, outside of bearing and speed of motor. The builders furnish motor pulley. With these machines belts are furnished in place ready for use, with the exception of the main driving belt. All expense for putting up and equipping overhead works, and for belting, except the main drive belt, is eliminated. The machines are ready to run as soon as the motor is placed in position.

Two wheels 18-inch diameter 2-inch face are furnished with this machine. One of these wheels is intended for the grinding of soft steel and tool steel, the other for the grinding of cast iron, hardened steel, and bronze.



Norton Grinding Co. 10x36 Cylindrical Grinder.

This machine is made to swing 10 inches in diameter, in order to receive work having projections and occasional large, short pieces, but particularly to give room for suitable steady rests for supporting work from ½-inch diameter to 4-inch diameter up to 36 inches in length, for which the machine is best suited.

Three universal steady rests are furnished with this machine, supplied with one set of chilled iron work shoes for one diameter of work. Other sizes can be furnished to order. These shoes are designed with view to quick change from one size of work to another, as well as convenient adjustment and rigid support, for long, medium diameter, and small diameter work.

Provision is made for grinding tapers up to 2½ inches per foot.

A centre grinding attchment is furnished with this machine, arranged to grind the centre points perfectly round, true and to 60 degrees included angle. If a different included angle of centre is required, a special attachment will be made to order.

THE BAJNOTTI MEMORIAL CLOCK TOWER
BROWN UNIVERSITY, PROVIDENCE, RHODE ISLAND

GUY LOWELL, *Architect*

J. W. BISHOP CO., CONTRACTORS

Worcester *Boston* *New York* *Providence* *New Bedford*

BILLIARD AND POOL ROOM EQUIPMENT, ODD FELLOWS' BUILDING

Furnished by

WARREN ALEXANDER

Manufacturer **Repairs**

Made in Worcester.

607 MAIN ST., WORCESTER

Progress Pictures
Erwin Cotton Mills

Durham, N. C.

F. P. SHELDON & SONS
Engineers

Interior Spinning Mill. 200' x 518'

Weave Shed. 300' x 300'

FISKE-CARTER CONSTRUCTION CO.

Builders

Worcester, Mass.

OFFICES
11 Foster Street
Spartanburg, S. C. Greenville, S. C.

The 72″ 3-ply leather belt referred to in the accompanying illustration is in use at Scotia, Cal., in one of California's largest lumber mills.

G&K

Leather Belting

¶ Even though you may not need a large drive belt in your plant, yet need other sizes, you will find it profitable to consult us.

¶ There is nothing in the leather belting line but what *we manufacture.*

¶ With nearly three score years of "belt-building" experience, we know how to manufacture belts that will do your work successfully.

¶ In connection with this experience, consider the large and thoroughly equipped tanneries and factories which we own and operate, and you will begin to understand why our belting is the recognized standard.

Write for our 24-page copyrighted booklet, "Glimpses of Modern Belt Making." It's free

Graton & Knight Mfg. Co.

Belt Makers since 1851 Oak Tanners since 1867

Worcester, Mass.

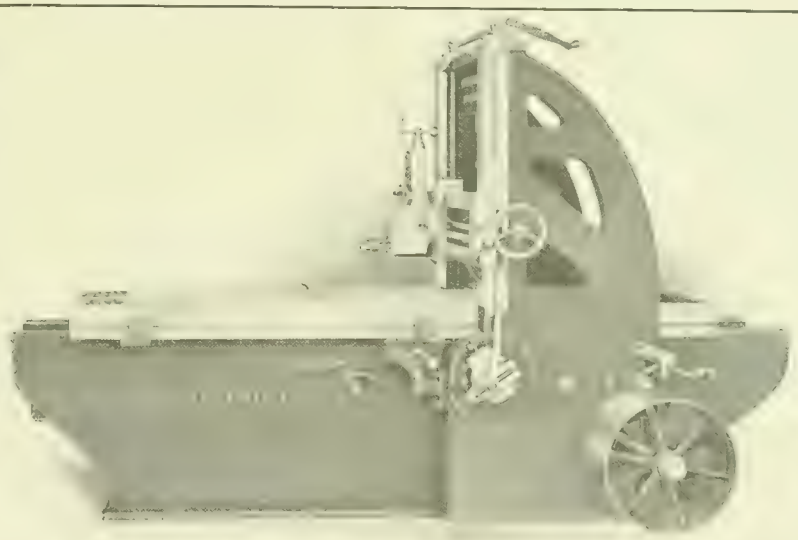
Branches: Atlanta, Ga., 93-95 S. Forsyth St.; Boston, Mass., 33 Lincoln St.; Chicago, Ill., 165 E. Lake St.; Milwaukee, Wis., 103 W. Water St.; Minneapolis, Minn., 310 3d Ave. N.; New York, N. Y., 72 Warren St.; Philadelphia, Pa., 132 No. 3d St.; Portland, Ore., 51 First St.; San Francisco, Cal., 30-32 Fremont St.; Seattle, Wash., 219 Occidental Ave.; St. Louis, Mo., 614 N. Third St.

Made in Worcester.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

WHITCOMB

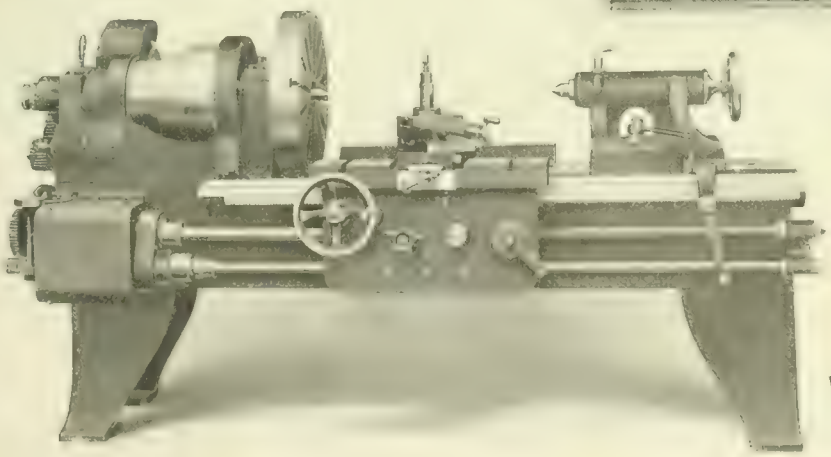


Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″



THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

Worcester, Mass.

Made in Worcester.

INCORPORATED 1868

WORCESTER TRUST COMPANY

Capital, Surplus and Profits **$1,300,000**
Total Resources **$10,000,000**

IN ADDITION TO A GENERAL BANKING BUSINESS

ACTS AS

EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

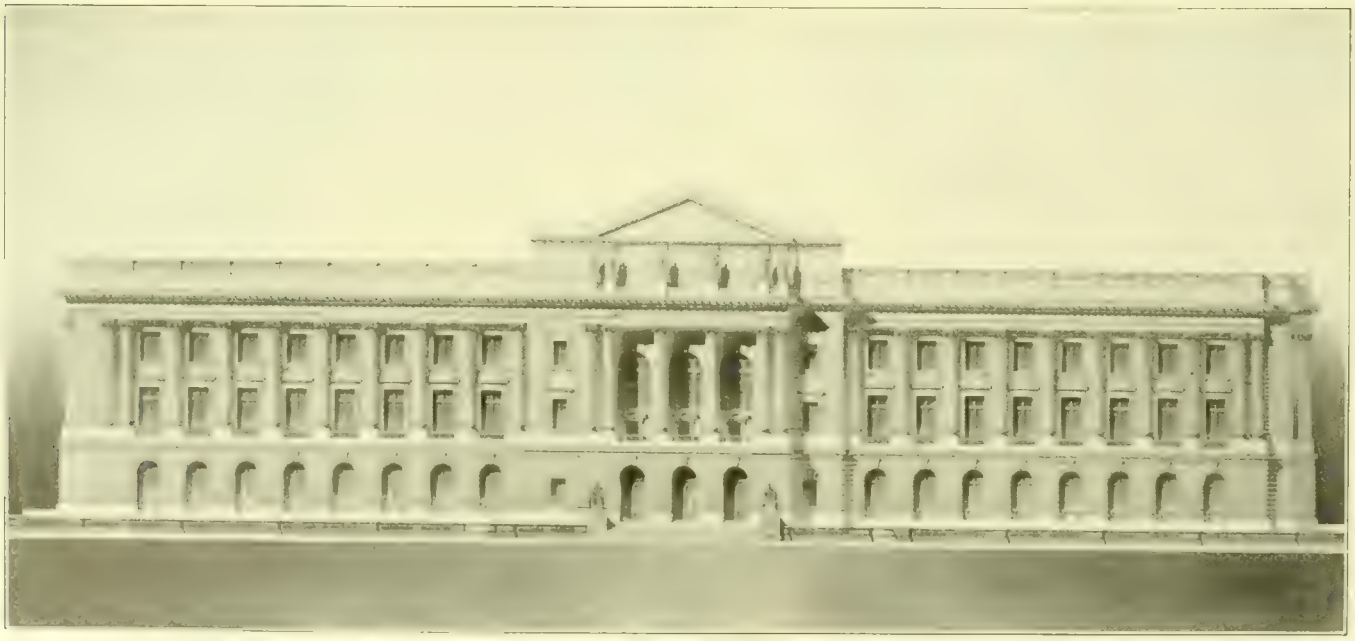
FINANCIAL AGENT FOR INDIVIDUALS AND CORPORATIONS

Depository Under Plans of Reorganization, Trustee of Corporation Mortgages, Registrar and Transfer Agent

ISSUES

LETTERS OF CREDIT AND FOREIGN EXCHANGE

ACCOUNTS SOLICITED



CUYAHOGA COUNTY COURT HOUSE, CLEVELAND, OHIO

Entire structure of

MILFORD, MASS., PINK GRANITE

furnished by

WEBB PINK GRANITE COMPANY

Quarries at MILFORD, MASS. **Offices at WORCESTER, MASS.**

SAFE DEPOSIT VAULTS
WOMEN'S DEPARTMENT
Resources over $4,000,000

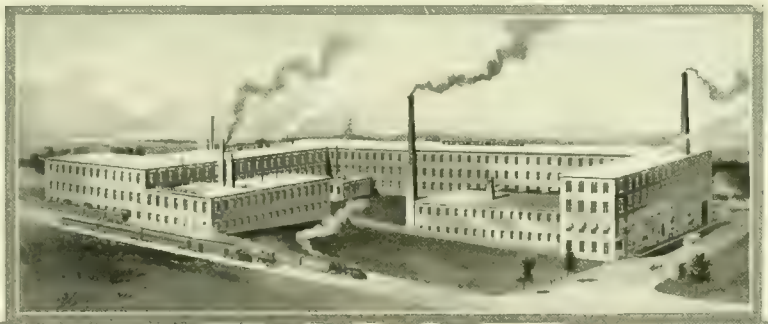
Worcester National Bank

FOUNDED 1804

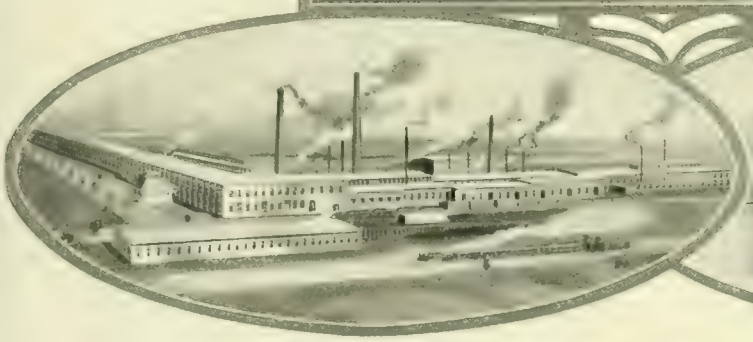
AN OLD INSTITUTION
WITH MODERN
BANKING FACILITIES

JAMES P. HAMILTON, *President* S. D. SPURR, *Cashier* F. M. HEDDEN, *Assistant Cashier*

WIRE
WIRE CLOTH
Wire Clothes Lines
Picture Cord
Coal and Sand Screens
Foundry Riddles
Wire Goods and
SPECIALTIES



POULTRY NETTING
Wire Rope Staples
Flower Bed Guard
and Trellis
Wire Fencing
Elevator Cabs and
Enclosures



Wright Wire Company

FACTORIES
WORCESTER and PALMER, MASS.
Branch Warehouses: BOSTON, PHILADELPHIA, PITTSBURG, CHICAGO, SAN FRANCISCO

Made in Worcester.

"The Foot Doctor"

Cushion Shoe

Those who suffer from tender feet and to whom walking means headache and other complaints due to jar to the spine will find comfort, health and rest from this perfect fitting, stylish shoe.

THE FOOT DOCTOR TRADE MARK

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A.

Made in Worcester.

Retail Store
415 Main Street

Worcester Consolidated Street Railway Company

THE Worcester Consolidated Street Railway Company operates railways in the following cities and towns: Worcester, Fitchburg, Marlboro, Leominster, Lancaster, Clinton, Berlin, Hudson, Boylston, Shrewsbury, Sterling, West Boylston, Westboro, Grafton, Northboro, Millbury, Leicester and Spencer.

State Mutual Life Assurance Company

(Incorporated 1844)

Assets, January 1, 1908,	$29,845,723.08
Liabilities, January 1, 1908,	$28,286,361.96
Surplus, January 1, 1908,	$1,559,361.12

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, - - - Massachusetts

International Bureau of American Republics, Washington, D. C.

Albert Kelsey and Paul P. Cret, Architects. **The Norcross Brothers Co., Builders**

Entire exterior of Georgia Marble, from the quarries of the

SOUTHERN MARBLE COMPANY

THE NORCROSS BROTHERS COMPANY

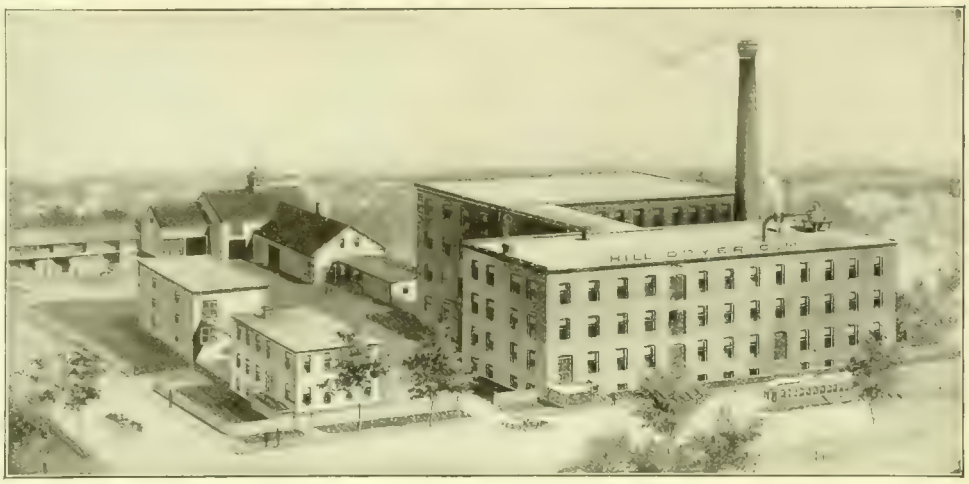
General Contractors and Builders

Worcester, Massachusetts

100 Fifth Avenue, NEW YORK
Tremont Building, BOSTON

Colorado Building, WASHINGTON
Industrial Building, PROVIDENCE

We are the Largest Manufacturers of Clothes Dryers in the World



HILL DRYER CO., 340 to 350 Park Avenue, Worcester, Mass.

Dryers made to swing to balcony or fire escape and for use on roof and lawn.

Also Makers of the

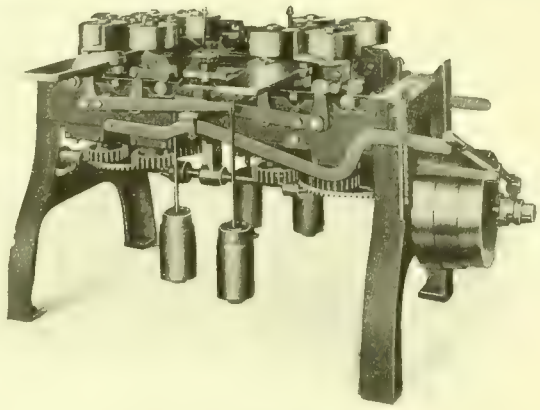
"Hustler" Ash Sifter

Made in Worcester

Hill Dryer Company
340-350 Park Ave.
Worcester, Mass.

New York Office, 1133 Broadway

SHIPPING CASES AND BOXES



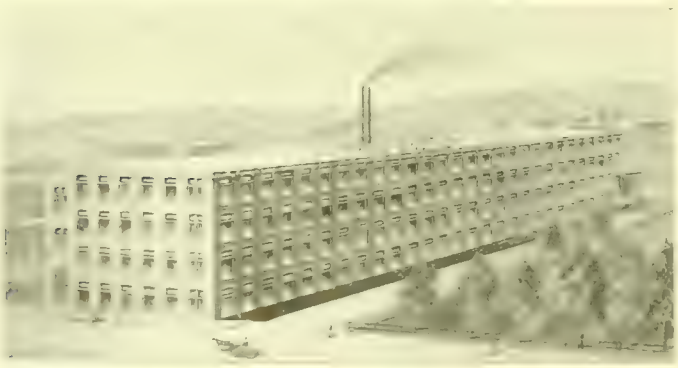
Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.



SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope

Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.

Made in Worcester.

A LOOM FOR EVERY FABRIC

Everything that may be woven by power—practically every kind of fabric used by civilized beings—is produced on looms built in these works.

Woolens and worsteds, silks, velvets, ribbons, cotton goods of every description, carpets and rugs, mattings and hammocks, belting and webbing, furnish an idea of the great variety of our weaving machinery.

In addition are dobbies, jacquards and supplies built in all of the different plants.

CROMPTON & KNOWLES LOOM WORKS,

WORCESTER, PROVIDENCE AND PHILADELPHIA.

RUBBER RUBBER RUBBER RUBBER RUBBER RUBBER

Cultivated Rubber, La Zacualpa

This is a picture of 10,000 pounds of pure cultivated rubber from the famous La Zacualpa Rubber Plantations, taken in the warehouse of the Goodyear Rubber Co., San Francisco, California; the first shipment of cultivated rubber ever received in San Francisco.

The rubber trees now in bearing at La Zacualpa are producing at a much higher rate per tree than the estimates of the management.

The total cost of production is 15 cents per pound.

15,000 acres now planted to rubber on the combined La Zacualpa properties.

The No. 1 Plantation, now completely financed, has been established nine years.

Shares in the No. 1 Plantation participating in production are now on a heavy dividend basis, averaging over 15 per cent net per annum.

We offer for sale the balance remaining of a total issue of 2,000 shares of the 1908 series in the LA ZACUALPA NO. 2 PLANTATIONS.

Send for particulars.

RIPPEY & COMPANY,
Boston London New York

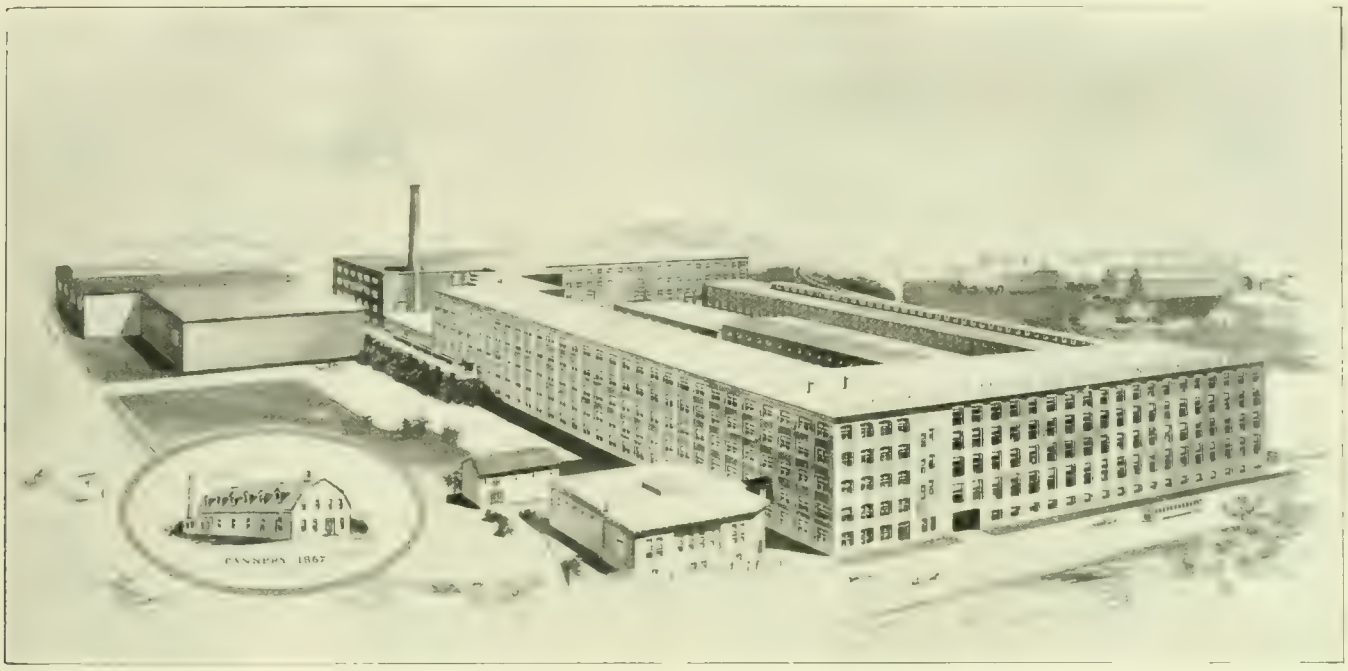
H. M. FOWLER, Representative
716-717 State Mutual Bldg., Worcester, Mass.

RUBBER RUBBER RUBBER RUBBER RUBBER RUBBER

ROLLING MILL EQUIPMENT, ETC. GAS PRODUCERS
MORGAN CONSTRUCTION COMPANY
STATE MUTUAL BLDG
PLANERS and LATHES
WHITCOMB-BLAISDELL MACHINE TOOL COMPANY
ROYAL WORCESTER AND BON TON CORSETS
ROYAL WORCESTER CORSET CO.
DRILLING MACHINES ENGINE LATHES
PRENTICE BROS. CO.
STATE BLDG
& POWELL PLANER CO.
"WORCESTER-MADE" INVITES TRADE
THE GRATON & KNIGHT MFG. CO.
OAK LEATHER TANNERS
BELT MAKERS
WORCESTER, MASS. U.S.A.
COATES' CLIPPERS AND FLEXIBLE SHAFTS
"WORCESTER-MADE" INVITES TRADE
ORGAN REEDS HAMMOND REED COMPANY
RESERVED
"WORCESTER-MADE" INVITES TRADE
GUNS REVOLVERS
HARRINGTON & RICHARDSON ARMS CO.
BOX MACHINERY
HOBBS MANUFACTURING COMPANY
"MADE IN WORCESTER, U. S. A."
CITY HALL
SOME OF WORCESTER'S MOST PROMINENT MANUFACTURERS
FOR FURTHER PARTICULARS SEE INSIDE PAGES OF MAGAZINE
GOVERNMENT BLDG
LATHES
F. E. REED COMPANY
"BI-MOORE" BEST HOSE
MULTIPLE WOVEN HOSE & RUBBER CO.
SPENCER WIRE CO.
LOOMS FOR ALL PURPOSES
CROMPTON & KNOWLES LOOM WORKS
NORTON GRINDING WHEELS
MADE OF ALUNDUM
TRADE MARK
NORTON
REGISTERED
SOLD ALL OVER THE WORLD
NORTON COMPANY
AMERICAN STEEL & WIRE CO.
HEYWOOD TRADE MARK SHOE
Heywood Boot & Shoe Co.
WINSLOW'S Skates
THE BEST ICE AND ROLLER SKATES
GOOD ENVELOPES
U.S. ENVELOPE CO.
UNITED STATES ENVELOPE CO.
NORTON GRINDING MACHINES
ART
NOVELTIES
VALENTINES
THE GEORGE C. WHITNEY COMPANY
NORTON GRINDING CO.
The WYMAN & GORDON CO.
DROP FORGINGS
O. S. WALKER & CO.
SURFACE GRINDERS AND MAGNETIC CHUCKS
"Pyramid"
HILL DRYER CO.
TRADE Q
The Wire Goods Co.

Fifty-eight Years in Business Capital and Surplus $1,800,000

Factories and Main Offices of



The Graton & Knight Mfg. Co.

Oak Leather Tanners and Belt Makers

Worcester, Mass.

Our first tannery, built in 1867, forty-two years ago, and with a capacity of only a few hundred hides annually, has been added to until now we have the largest and best equipped plant in the world for tanning and currying hides and manufacturing same into leather belting, our capacity being over 200,000 hides per annum.

To these advantages add our facilities for disposing at a profit, in our Shoe Stock and Strap Departments, those portions of the hide not suitable for belting, and you will not question our ability to furnish HIGH GRADE

LEATHER BELTING

both the regular and waterproof, at LOW prices.

If you are interested in Belting and its manufacture, write us for "Glimpses of Modern Belt Making," a twenty-four page illustrated booklet of absorbing interest. IT'S FREE.

BRANCHES:

Atlanta, Ga., 91 S. Forsyth St.
Boston, Mass., 33 Lincoln St.
Chicago, Ill., 165 E. Lake St.
Milwaukee, Wis., 103 W. Water St.
Minneapolis, Minn., 310 Third Ave. N.
New York, N. Y., 72 Warren St.
Philadelphia, Pa., 132 No. Third St.
Portland, Ore., 51 First St.
San Francisco, Cal., 30-32 Fremont St.
Seattle, Wash., 219 Occidental Ave.
St. Louis, Mo., 614 N. Third St.

INCORPORATED 1868

Worcester Trust Company

Capital, Surplus and Profits - - **$1,300,000**
Total Resources - - - **10,000,000**

IN ADDITION TO A GENERAL BANKING BUSINESS
IS AUTHORIZED TO ACT AS
EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

CITY HALL BRANCH
448 MAIN STREET

MAIN OFFICE
342-344 MAIN STREET

LINCOLN SQ. BRANCH
11 MAIN STREET

MAIN OFFICE, 342-344 MAIN STREET

WILLIAM D. LUEY, *President*

HENRY A. MARSH, NATHANIEL PAINE, HENRY P. MURRAY, *Vice-Presidents*

SAMUEL H. CLARY, *Treasurer* ALVIN J. DANIELS, *Secretary*

Directors

CHARLES S. BARTON
GEORGE F. BLAKE
A. GEORGE BULLOCK
JOHN H. COES
ALEXANDER DEWITT
THOMAS B. EATON
WILLIAM ENDICOTT, JR.
HENRY T. HARRIS
CHARLES H. HUTCHINS
LINCOLN N. KINNICUTT
EDWIN T. MARBLE
L. RUSSEL MARBLE
A. W. PARMELEE
NEAL RANTOUL
WILLIAM H. SAWYER
FRANK BULKELEY SMITH
CHARLES M. THAYER
ROBERT M. WASHBURN
GEORGE W. WELLS
M. J. WHITTALL
G. MARSTON WHITIN
ROBERT WINSOR
A. O. YOUNG

REED & PRINCE MFG. COMPANY

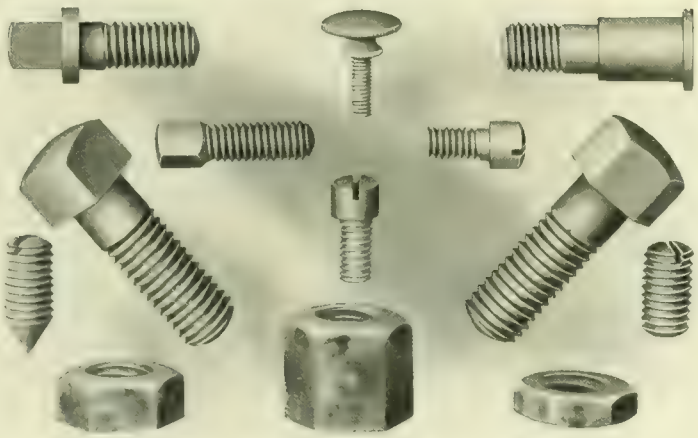
MANUFACTURERS OF

WOOD SCREWS, MACHINE SCREWS, STOVE BOLTS, TIRE BOLTS, RIVETS AND BURRS, TAPS AND DIES

5 1-2 Acres, Floor Area
OFFICE AND WORKS

WORCESTER, MASS., U. S. A.

Made in Worcester.



OUR NUTS ARE OF BEST QUALITY AND FINISH

Anthony Screw Co.

Specialties Manufactured

Send samples, specifications or drawings for estimates

Finished, Case-Hardened
and Semi-Finished
HEXAGON NUTS

Iron and Steel
Milled Machine Screws

Screw Machine Products

330 CHANDLER ST., WORCESTER, MASS.

Made in Worcester.

SPENCER WIRE COMPANY

ESTABLISHED 1828

MANUFACTURERS OF EXTRA FINE AND SPECIAL WIRES OF EVERY DESCRIPTION.

MILLS IN WORCESTER AND SPENCER, MASS.

AGENCIES IN NEW YORK, BOSTON, PHILADELPHIA, CHICAGO, ST. LOUIS AND TORONTO.

WORCESTER, MASSACHUSETTS, U. S. A.

Made in Worcester.

HIGH GRADE SHOES FOR MEN

1864 HEYWOOD TRADE MARK SHOE 1864 1909

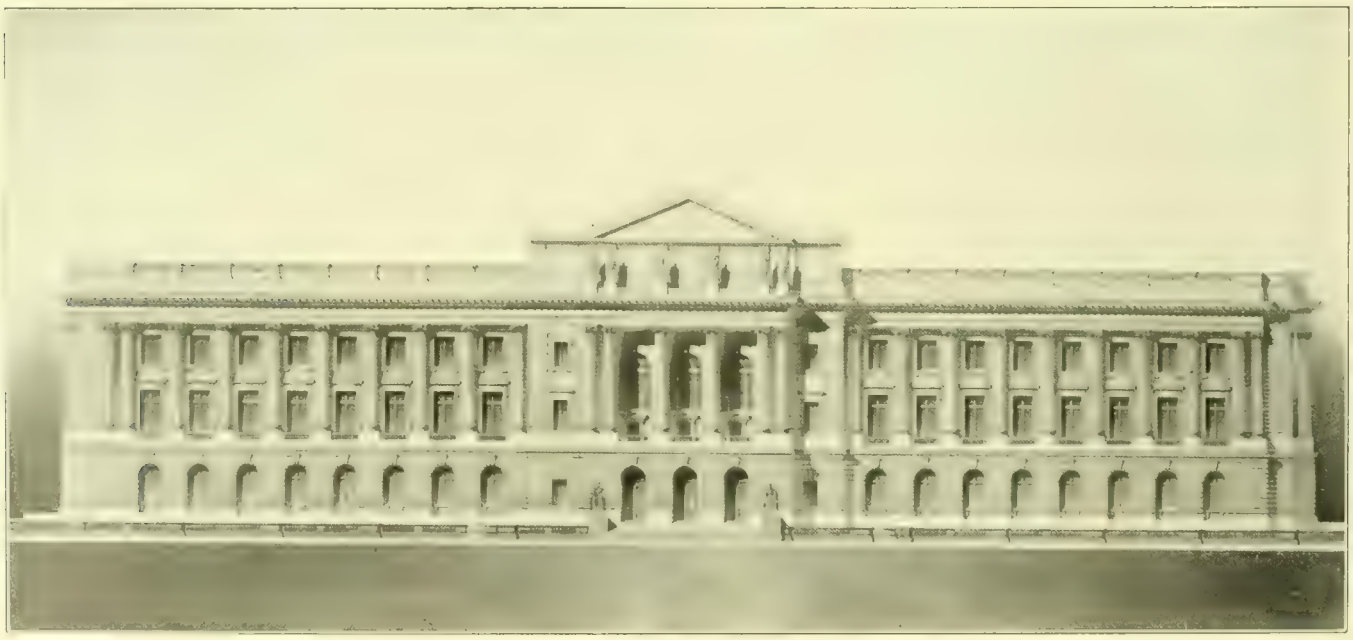
For forty-five years the name "Heywood" on a boot or shoe has been a guarantee of excellence of material and workmanship.

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.



Cuyahoga County Court House, Cleveland, Ohio

Entire structure of

MILFORD, MASS., PINK GRANITE

furnished by

WEBB PINK GRANITE COMPANY

Quarries at MILFORD, MASS. Offices at WORCESTER, MASS.

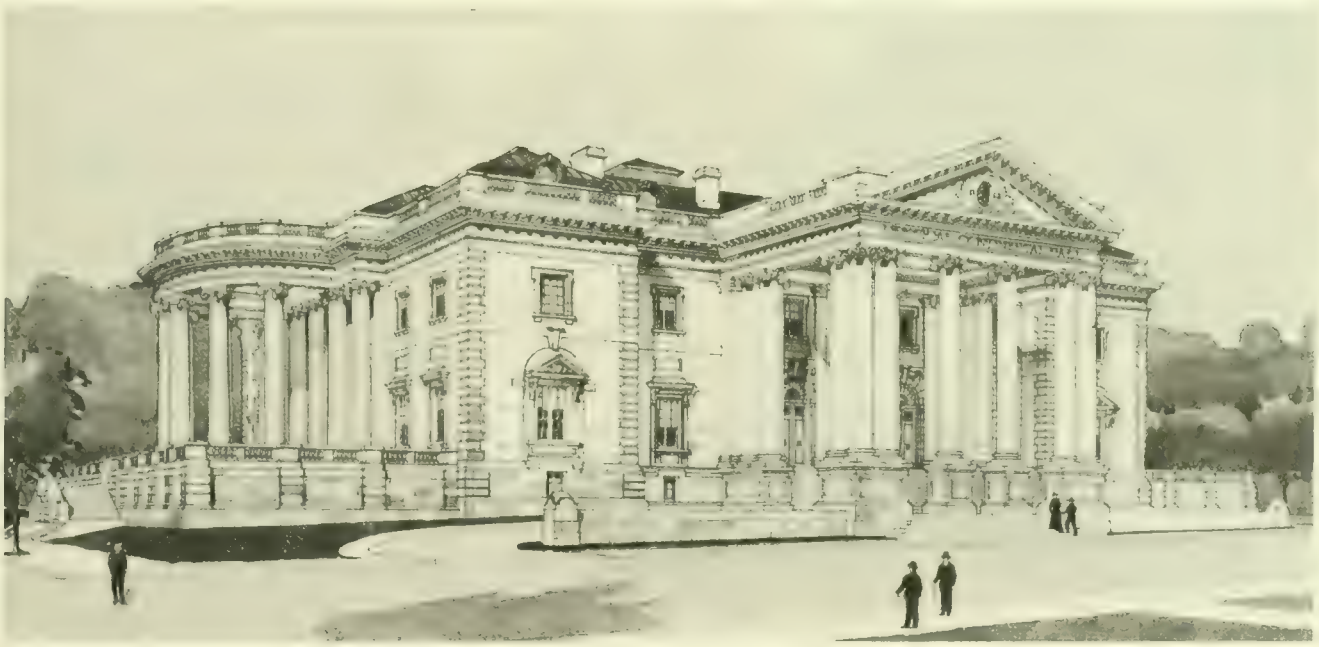
State Mutual Life Assurance Company

(Incorporated 1844)

Assets, January 1, 1909,	$32,540,041.03
Liabilities, January 1, 1909,	$29,843,942.37
Surplus, January 1, 1909,	$2,696,098.66

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, - - - Massachusetts



Memorial Continental Hall, for the National Society, Daughters of the American Revolution, Washington, D. C.

Edward Pearce Casey, Architect **The Norcross Brothers Co., Builders**

Exterior of Plateau White Marble from

NORCROSS-WEST MARBLE CO., DORSET, VT.

THE NORCROSS BROTHERS COMPANY

General Contractors and Builders

Worcester, Massachusetts

160 Fifth Avenue, NEW YORK Tremont Building, BOSTON Colorado Building, WASHINGTON Industrial Building, PROVIDENCE

Walden Ratchet Wrench

The Only Ratchet Wrench with No Small Springs or Pawl. Combined Handle, Spring and Pawl
Only Three Parts to this Tool

Ever Have Trouble

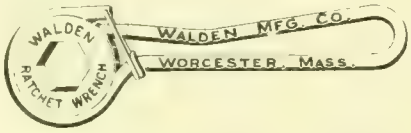
from having corners of tire lugs or nuts wear off, and wrench slip?

Use Walden Ratchet

It fits the lug or nut, saves time and temper. Cannot slip. Ratchet works quickly.

ALL SIZES SQUARE AND HEXAGON OPENINGS

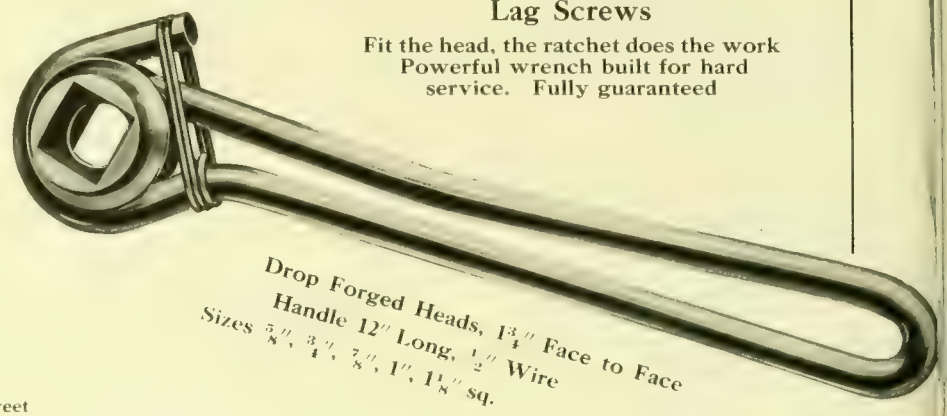
Tire Lug Wrenches, 5″ handle, 35c.
Spark Plug Wrenches, 8″ handle, 75c.



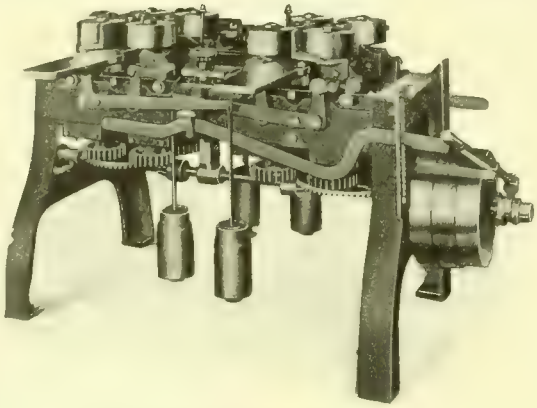
59 Beacon Street, corner Hermon Street

This is the Wrench for Lag Screws

Fit the head, the ratchet does the work
Powerful wrench built for hard service. Fully guaranteed



SHIPPING CASES AND BOXES



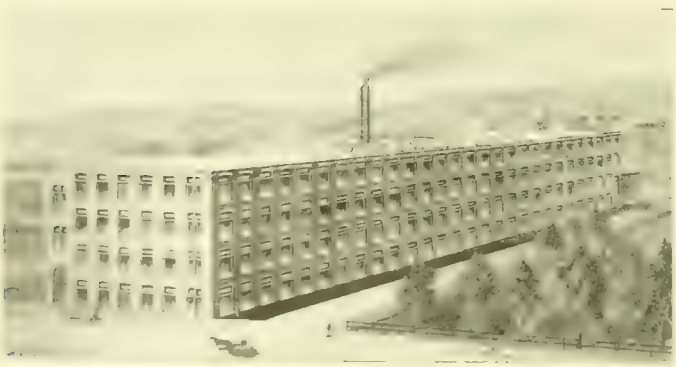
Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.



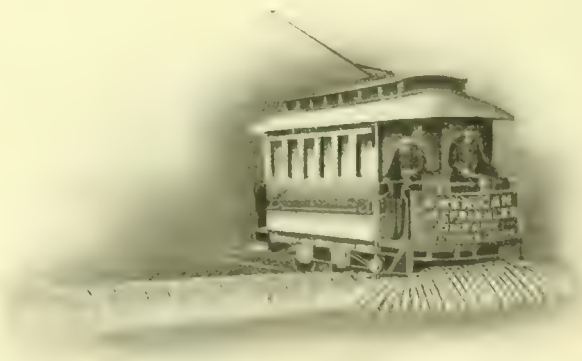
SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

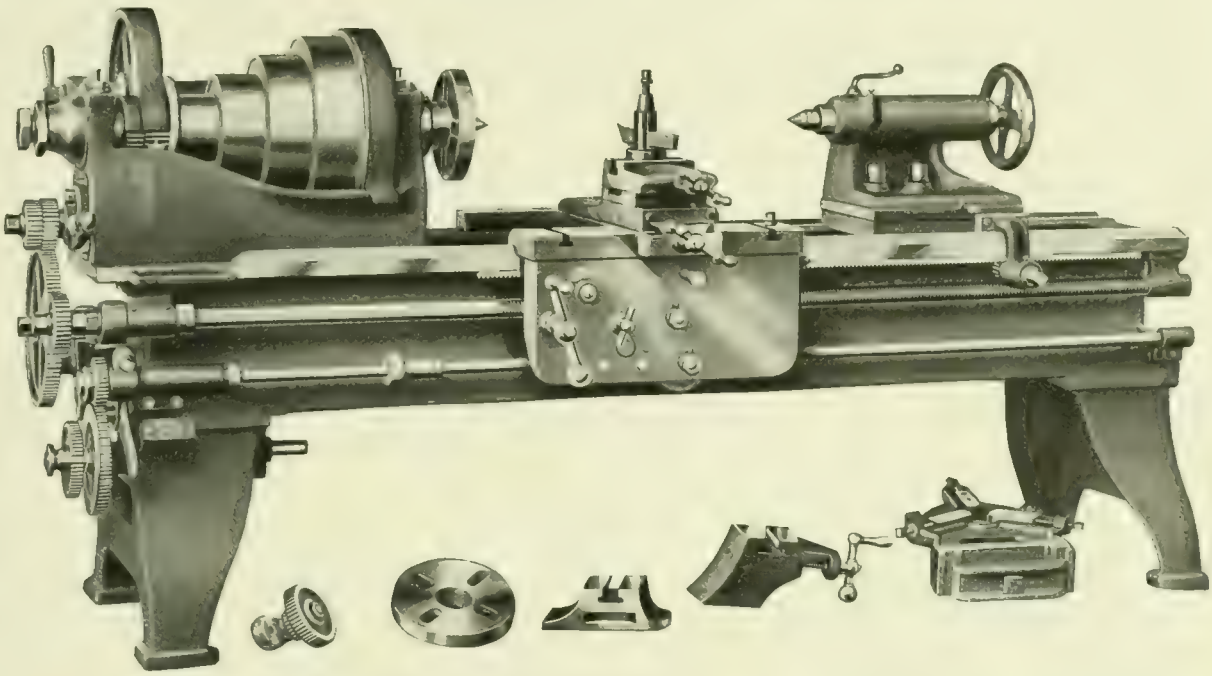
Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper
The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST



AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.
Made in Worcester.



The NEW REED LATHES are
HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

CHASE ENGINEERING COMPANY
EXPERTS IN THE DEVELOPMENT OF MECHANICAL IDEAS

We can develop any mechanical proposition which you may have, do your designing, general and patent office drafting, make your blueprints, construct your models and solicit your patents.
We make a specialty of handling the entire drafting for business concerns.
Expert draftsmen supplied by the day.

OFFICE: 412 DAY BUILDING
306 MAIN STREET

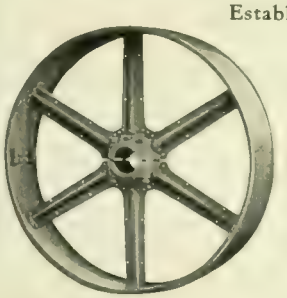
DRAFTING ROOM AND EXPERIMENTAL DEPARTMENT
274 MAIN STREET

WORCESTER, MASS.
TELEPHONE 5344

W. H. Crawford J. T. Brierly

CRAWFORD & CO.

Established 1847



New and Second Hand

Woolen Machinery

Wool Stock and Everything in Mill Supplies

The Improved Worcester Shoddy Picker

Wood Split Pulleys with Iron Centre, Pressed Steel Pulleys, Belting, Lace Leather, Cordage, Packings, etc.

663 and 665 Main St., Worcester, Mass.

Made in Worcester.

G. L. Brownell,

Builder of

IMPROVED TWISTING AND SPINNING MACHINERY

For making Hard or Soft Twines, Lines, and Cordage. Wet or Dry Twist, from Cotton, Linen, Hemp, Manila, Sisal, Paper, Silk, Jute, Hair, Wool, etc.

Nos. 49 and 51 Union Street,

Worcester Massachusetts

Please address Station A.

Made in Worcester.

THE J. F. & W. H. WARREN COMPANY

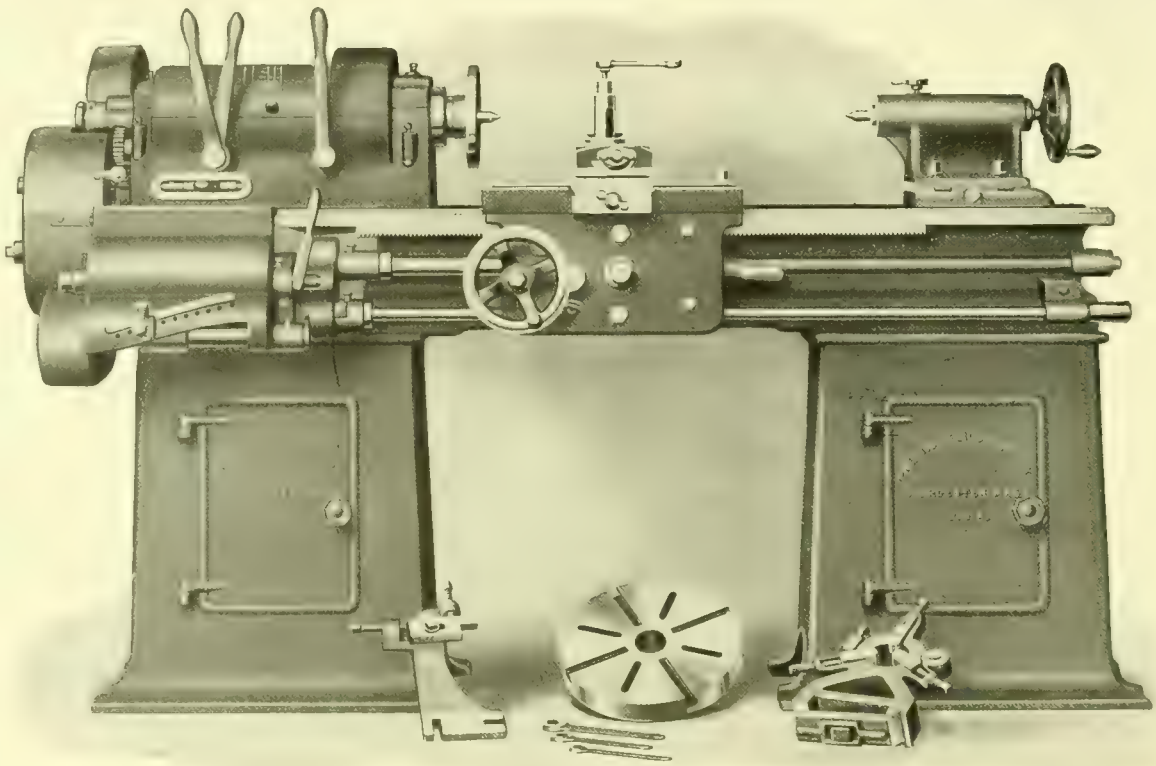
WORCESTER, MASS.

Makers of **OIL PROOF** Leather Belting

Unexcelled for SCREW MACHINERY or any machine where oil comes in contact with the belt.

WILL NOT ROT FROM EXCESS OF OIL

Made in Worcester.

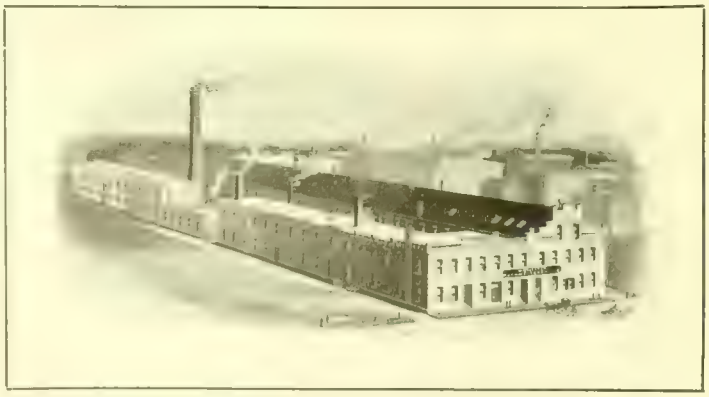


See our exhibit at Mechanics Association Industrial and Electrical Exhibit, March 27 to April 3, 1909.

PRENTICE BROTHERS CO., WORCESTER, MASS.

Made in Worcester.

Upright and Radial Drilling Machines and Engine Lathes



Worcester Machine Screw Co.

Branch of the

Standard Screw Company

Makers of

Set Screws, Cap Screws, Machine Screws, Taper Pins, Milled Studs, Special Parts

Beacon and Jackson Streets

Worcester, Massachusetts

Made in Worcester.

New Union Passenger Station, Worcester, Mass.

Watson & Huckel, Architects

WOODBURY & LEIGHTON CO.

General Contractors and Builders

166 Devonshire St., Boston **Front St., Worcester**

MANUFACTURERS—Why buy from small operators, who can ship now, but will be lost when the pinch comes next winter, Bituminous Coal that will not contain 14,000 B. T. U.'s, or evaporate 9 pounds of water under the best conditions, when you can buy from a responsible company who cannot lose themselves when most needed? Backed by a million-dollar corporation, with a daily output of 25,000 tons and 1300 individual cars. Coal that will contain over 15,000 B. T. U.'s, and will evaporate over 11 pounds of water under normal conditions, and at less prices. Call or have us call on you.

M. C. BOYD & BRO. COAL WORCESTER COAL CO.

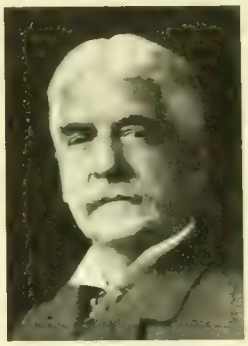
M. C. BOYD & BRO.

ANTHRACITE AND BITUMINOUS COAL

Col. Isaac Davis
1st President 1846-1866

Col. John D. Washburn
2d, 1866-1903

Col. E. B. Stoddard
3rd, 1903-1903.



Henry M. Witter
4th, 1903—

Merchants & Farmers Mutual Fire Insurance Company

Incorporated 1846

Worcester, Mass.

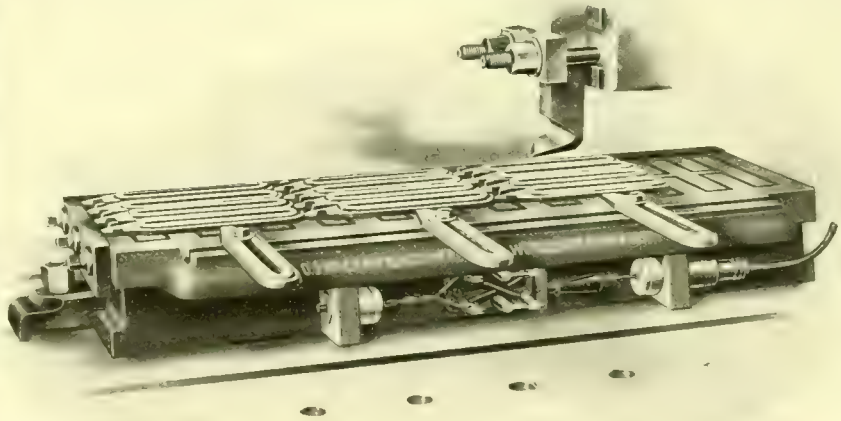
Subscribers to the petition for the act of incorporation:

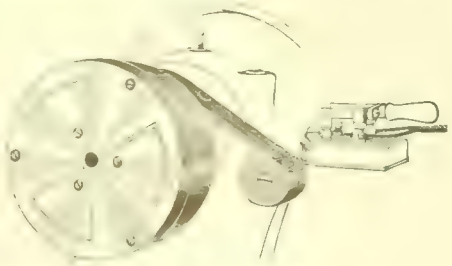
Fred William Paine	Nathan Heard	James H. Baker
Fred W. Gale	Elisha Gale	Edwin Conant
Joseph White	J. W. Lane	George W. Richardson
Parley Goddard	John B. Pratt	Artemas Ward
Isaac Davis	Anthony Chase	William Dickinson
J. S. Woodworth	George M. Rice	Clarendon Harris
Samuel Damon	E. L. Fish	James Green

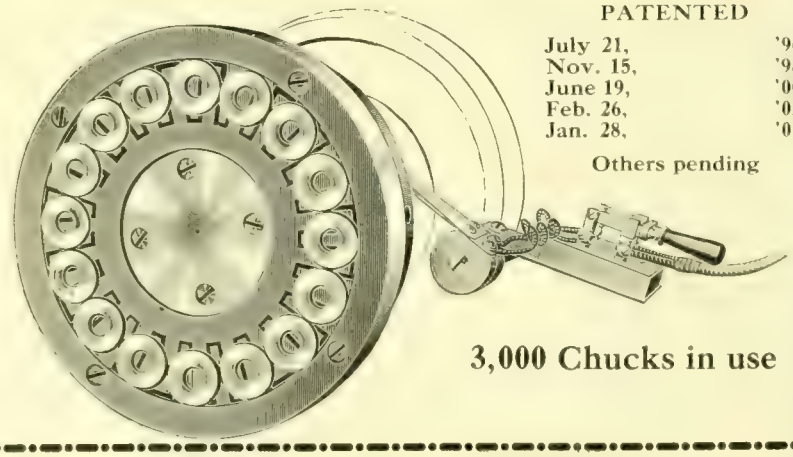
Many of these gentlemen will be remembered as prominent citizens at the time Worcester became a city. They were of sterling worth and their institutions have proven of the same character. The financial history of the last half century has justified them in their belief that Worcester and the State of Massachusetts needed a fire insurance company to protect the merchants and farmers of the community and to furnish adequate indemnity in the time of need and devastation by fire.

This protection has been furnished at the lowest cost price by this company during every year of its existence, and the conflagrations in Boston in 1872 and in Chelsea in 1908 have proven the soundness and stability of this company of the people. What has been done can be done again, and we are doing it every day.

Insurance at cost, the policy-holder sharing in the profits.







PATENTED

July 21,	'96
Nov. 15,	'98
June 19,	'00
Feb. 26,	'02
Jan. 28,	'01

Others pending

3,000 Chucks in use

AUTOMOBILE INSURANCE

Insure your new car before the accident.

Our policy protects you against FIRE wherever the car may be; also against Accident or Loss on Boats or Railroad Cars, and Theft of parts or attachments.

The "Collision Clause," covering damage to your own automobile, can be attached to this Fire policy at a reasonable additional cost.

Nobody is safe without LIABILITY INSURANCE on each automobile.

We furnish this Insurance under various limits of liability covering Personal Injury; and at moderate expense can be added the "Property Damage Clause" offering protection against liability for damage done to horses, vehicles, fences, buildings or other property belonging to other persons.

Our facilities for handling this Automobile Insurance are first class and our prices are at the bottom.

GREENE & BATES

Telephone 5048 **405 Main Street**

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

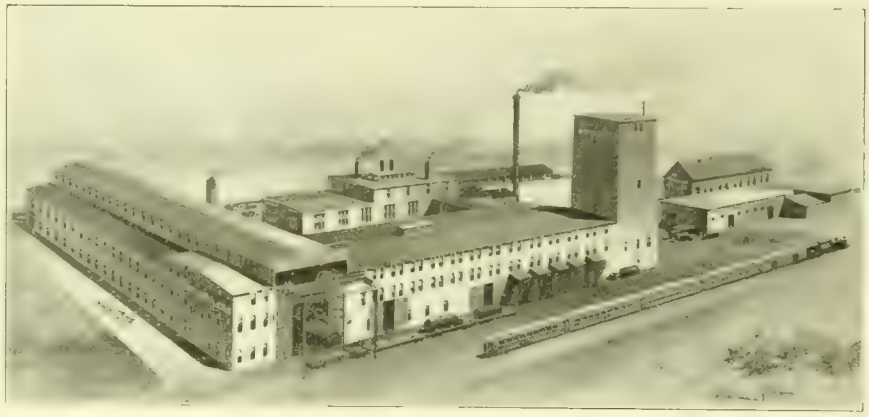
One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.



STEAM BOILERS

TANKS and

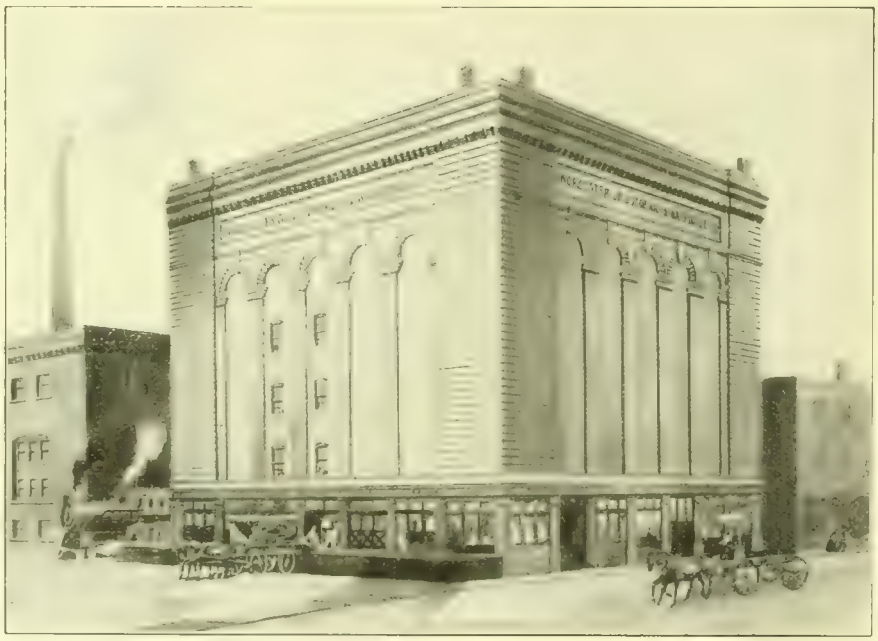
PLATE IRON WORK

STEWART BOILER WORKS,

WORCESTER

Made in Worcester.

Cold Storage for Furs *Pure Ice*



artificially made from filtered water from a deep artesian well, is clean, pure and healthful.

Being clean and hard, it lasts longer than pond ice.

Our motto—Best ice, best service. The Best is the Cheapest. Try it.

Furs in Summer

Our new fireproof building has a special room for cold storage of **Furs, Rugs** and **Garments,** at **lowest rates.**

Telephone 4186

Worcester Cold Storage & Warehouse Co.

"WORCESTER" IGNITION SPECIALTIES

1910 COMBINATION ROTARY SWITCH

Automobile and Marine Spark-Coils and Switches

W. H. LELAND & CO., Worcester, Mass., U.S.A.

80-CENT GAS

Worcester has a decided advantage in having a large Gas Company, which supplies its citizens with gas at the extremely low price of eighty cents per thousand cubic feet.

One price for all consumers, large and small alike, and for all purposes, lighting, heating, cooking and power. No other city, except a part of the Consolidated Gas Company of Boston, has a price as low as this.

It is the cheapest illuminant known. For cooking it is cheaper than coal, and by the use of the modern gas engines extremely economical results are obtained for power.

Worcester Gas Light Company,

Worcester, Mass.

THE WORCESTER

Mechanics Savings Bank

311 Main Street

ASSETS **$12,721,857.78**

Deposits go on Interest January 15, April 15, July 15 and October 15

A. B. R. SPRAGUE, President **CHAS. L. BURLEIGH, Treasurer**

Patients Transferred from House or Train to Hospital, or vice versa, any Distance in State

Ambulance of the Latest Design and Equipment

Experienced Uniformed Men

Telephone 1887-1 (Night) 6492

HANSON'S PRIVATE AMBULANCE SERVICE

Prompt and efficient Service Day or Night

35 Central St., Worcester, Mass.

AUTOMOBILE OWNERS

should protect themselves by insurance against loss from accidents to persons or property caused by their autos. We issue policies that do it.

Automobile Fire Insurance

We issue policies at our office that insure autos in garages, repair shops, on roads or wherever they may be, and the policies also insure against loss by theft from the autos. Our rates are low for this insurance. The companies in which we place this insurance are million-dollar companies. **SEE US.**

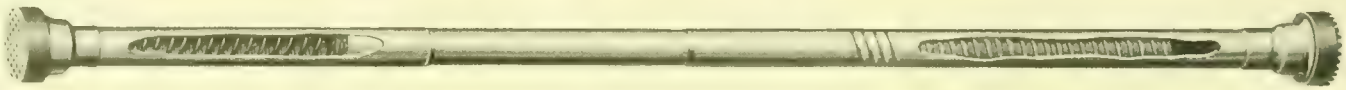
TATMAN & PARK INSURANCE AGENCY

No. 408 Main Street, Worcester, Mass.

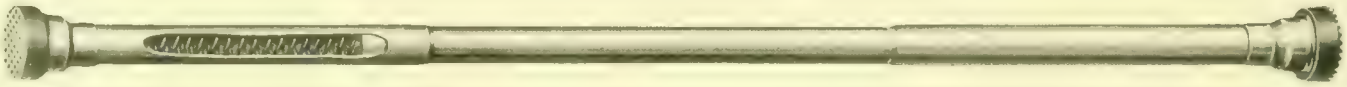
Patented Jan. 12, 1892; Feb. 16, 1892; May 29, 1894

The Fowler Specialties

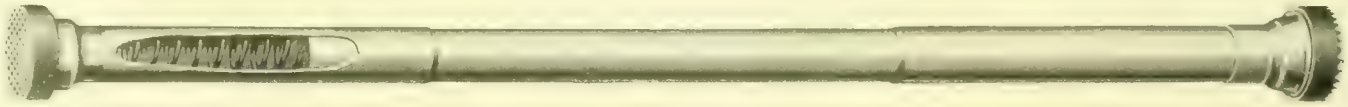
Patented Oct. 9, 1894; Mar. 26, 1901; June 11, 1907



The Fowler Improved Adjustable Curtain Rod Screw Adjustment



1-4 Inch Improved Perfection Curtain Rod Sockets



3-8 Inch Improved Perfection Curtain Rod Sockets

1, 1 3-8 and 1 1-2 Inch Perfection Curtain Pole Sockets

Sold by all leading Upholstery Hardware Jobbers

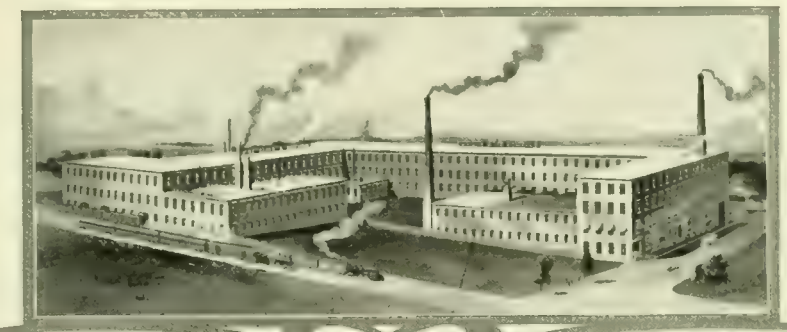
Catalogue and Prices upon request

THE FOWLER RODS AND SOCKETS are securely fastened to window or door casings by spring and friction

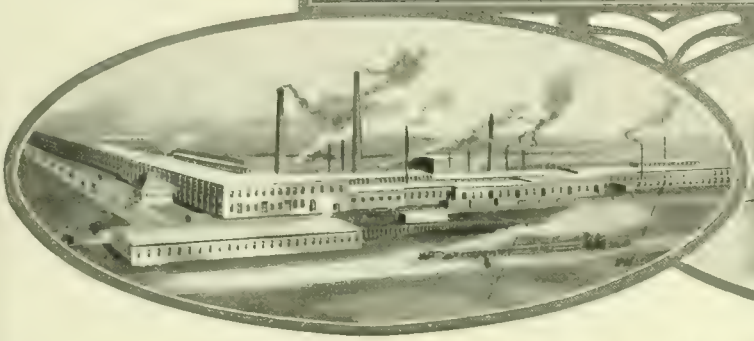
SOLE MANUFACTURERS

FOWLER & COMPANY, 65 BEACON STREET, WORCESTER, MASS.

WIRE
WIRE CLOTH
Wire Clothes Lines
Picture Cord
Coal and Sand Screens
Foundry Riddles
Wire Goods and
SPECIALTIES



POULTRY NETTING
Wire Rope Staples
Flower Bed Guard
and Trellis
Wire Fencing
Elevator Cabs and
Enclosures



Wright Wire Company

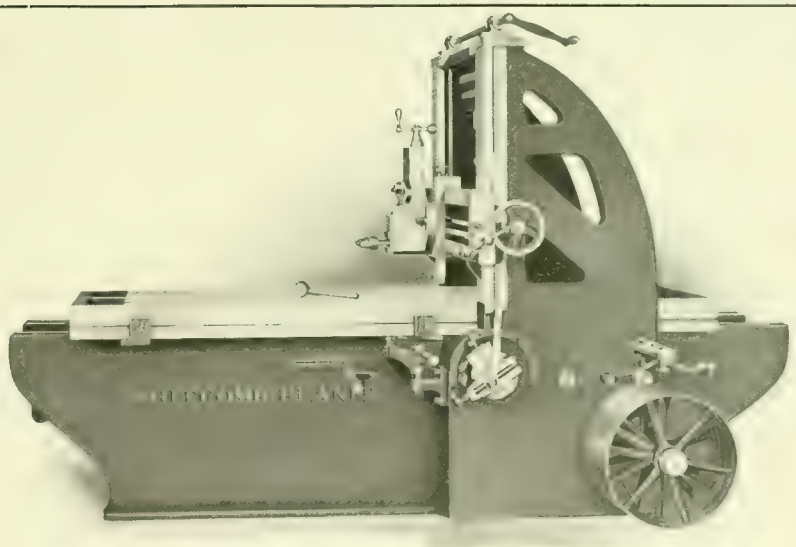
FACTORIES
WORCESTER and PALMER, MASS.
Branch Warehouses: BOSTON, PHILADELPHIA, PITTSBURG, CHICAGO, SAN FRANCISCO
Made in Worcester.

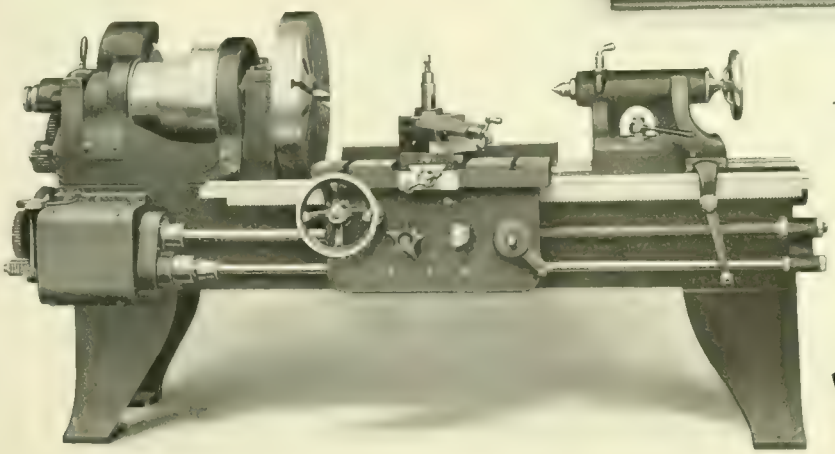
SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

WHITCOMB

Planers
17″ 22″ 24″ 26″ 30″
Lathes
13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.
Worcester, Mass.
Made in Worcester.

NORTH STATION
BOSTON

A SENSATIONALLY SUPERB GASMOTO TRUCK, COMBINING THE STURDY STRENGTH OF A GOLIATH, WITH THE MILDNESS OF A DAVID IN POINT OF PRICE.

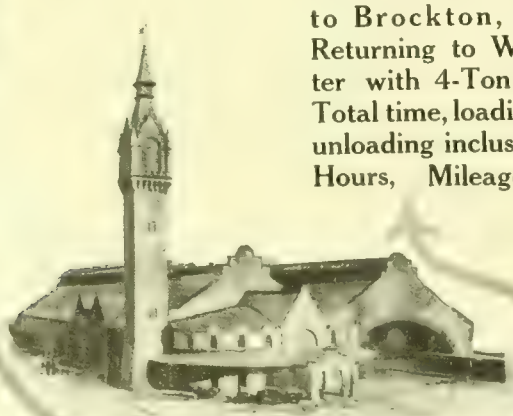
BROCKTON STATION

THE MORGAN "FORTY"

146 MILES

13 HOURS

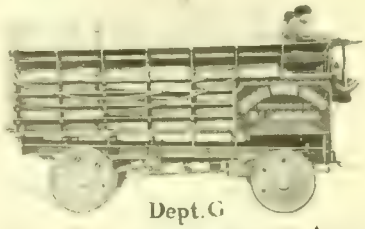
From Worcester to North Station with 5 Tons Aboard, Thence to Brockton, Light, Returning to Worcester with 4-Ton Load. Total time, loading and unloading inclusive, 13 Hours, Mileage, 146.



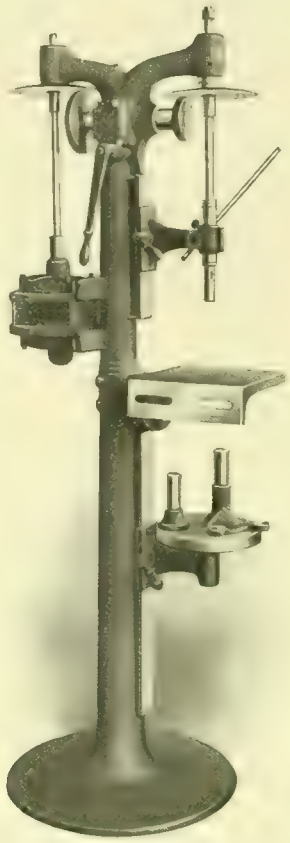
UNION STATION
WORCESTER

10,000 LBS. CAPACITY.
Forty Per Cent Overpacity.

40 HORSEPOWER.
Ten Horsepower Reserve.



Dept. G
R. L. MORGAN
WORCESTER, MASS.



See our Exhibit
at the

Worcester
Mechanical and
Electrical
Exposition

MARCH 27 to
APRIL 3.

Automatic
Friction
Drive

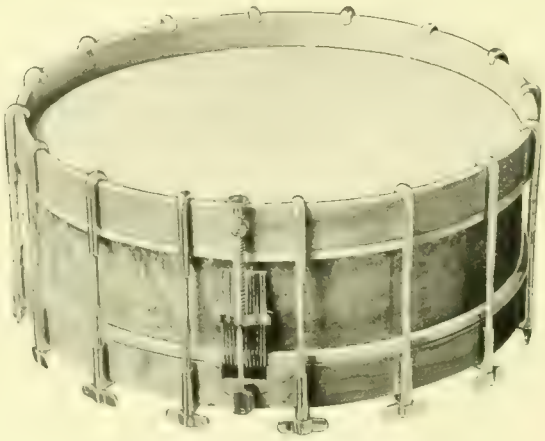
Variable Speed
SENSITIVE DRILLS

Single or Multiple Spindle. Motor or Belt Drive.

The Washburn Shops
OF THE WORCESTER POLYTECHNIC INSTITUTE
Worcester, Mass., U. S. A.

Descriptive Circular on Application.

DRUMS OF QUALITY



BETTER THAN THE BEST

Dept. K **WALBERG & AUGE** Manufacturers WORCESTER

A Comparison of Two Waterproof Belts

These photographs were taken under actual working conditions in the dye-house of a woolen mill near Worcester

This photo shows the present condition of a **"BEST"** Multiple Woven Waterproof Belt after two years' constant service driving a reel over a dye-tub in an atmosphere saturated with steam and water. It is as good as new, shows no signs of wear, and is still giving perfect satisfaction.

This photo shows the condition of a rubber belt after six months' use in the same room, on a similar drive and under identically the same conditions. Its cover is broken and peeled in many places, the underlying fabric exposed and worn and the whole belt is about "all in."

THESE FACTS TELL THE WHOLE STORY

If you are operating a dye-house or bleachery, or running a belt in any wet place, you should use

"BEST" BELTING

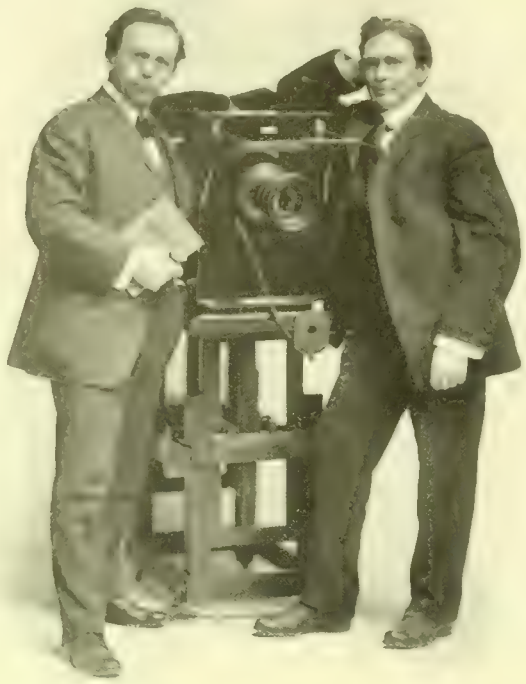
Will you not try one at our expense? Every belt fully guaranteed

THE MULTIPLE WOVEN HOSE & RUBBER CO.

Dept. "B" WORCESTER, MASS.

Made in Worcester.

SEE OUR EXHIBIT AT EXPOSITION.



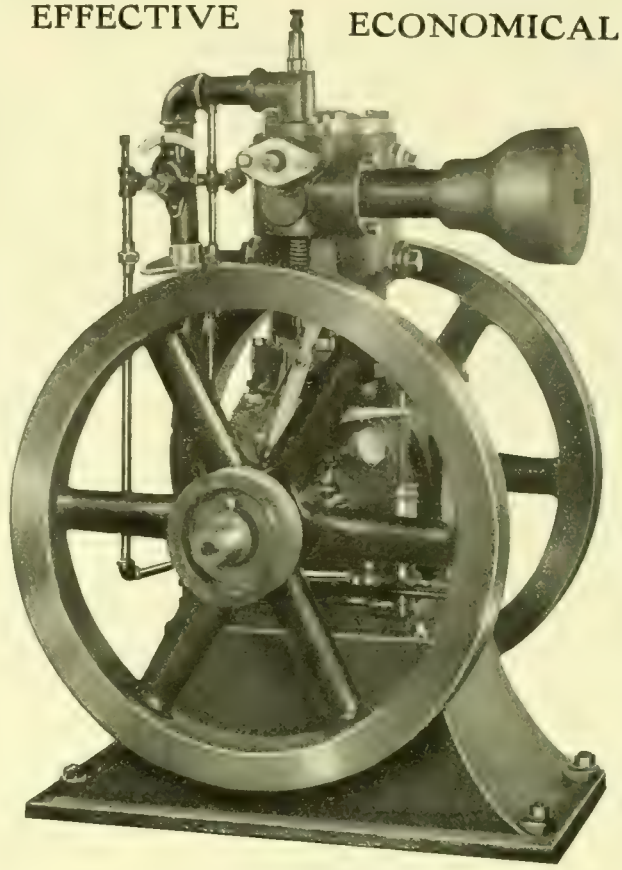
EVERYTHING THAT IS BEST
IN
PHOTOGRAPHY
UP-TO-THE-MINUTE
COMMERCIAL DEPARTMENT

Schervee & Bushong

328 Main Street, Worcester, Mass.

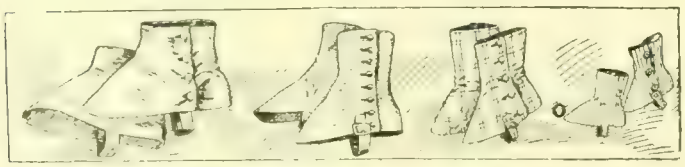
Made in Worcester.

SIMPLICITY DURABILITY
EFFECTIVE ECONOMICAL



7 H. P. GREENDALE
The "GREENDALE" 4-cycle
jump-spark, fool-proof
GAS ENGINE
for a variety of power purposes
Send for catalogue to Dept P
GREENDALE GAS ENGINE CO.

Made in Worcester.



FAMILY SPATS

are often caused by badly-shapen, ill-made, *worse*-fitting clothes. Many stores will buy anything that looks like an overgaiter because it's a little cheaper.

Watch for Cuts in this space next month and note the difference, or better still, call and have a pair made to order.

"RELIANCE" SPATS AND LEGGINS

made to fit, and for the whole family. Some bargains in samples and odd pairs.

E. H. EDDY
86 MECHANIC STREET
SECOND LOFT

Made in Worcester

Patronize home industries

Iron Fire Escapes and Stairs

Structural Iron

Richard French Iron Works

82 & 84 Union Street, Worcester, Mass.

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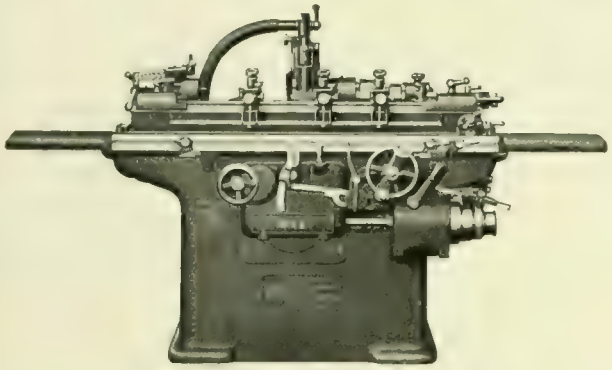

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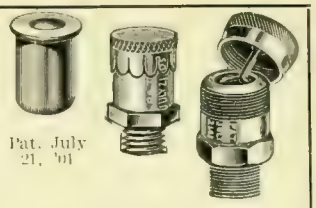

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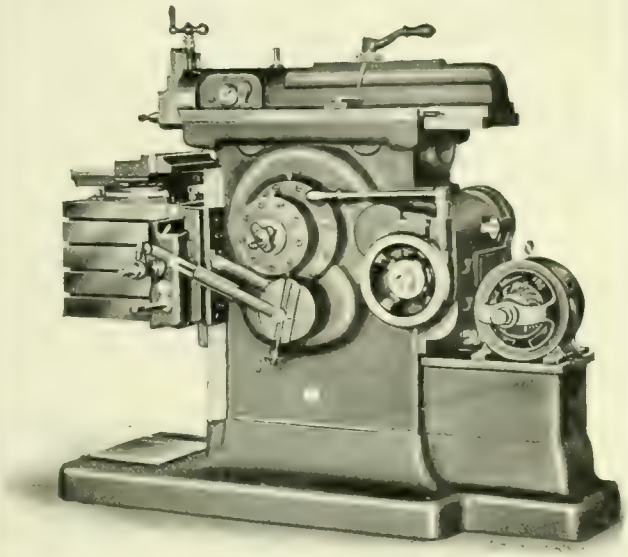

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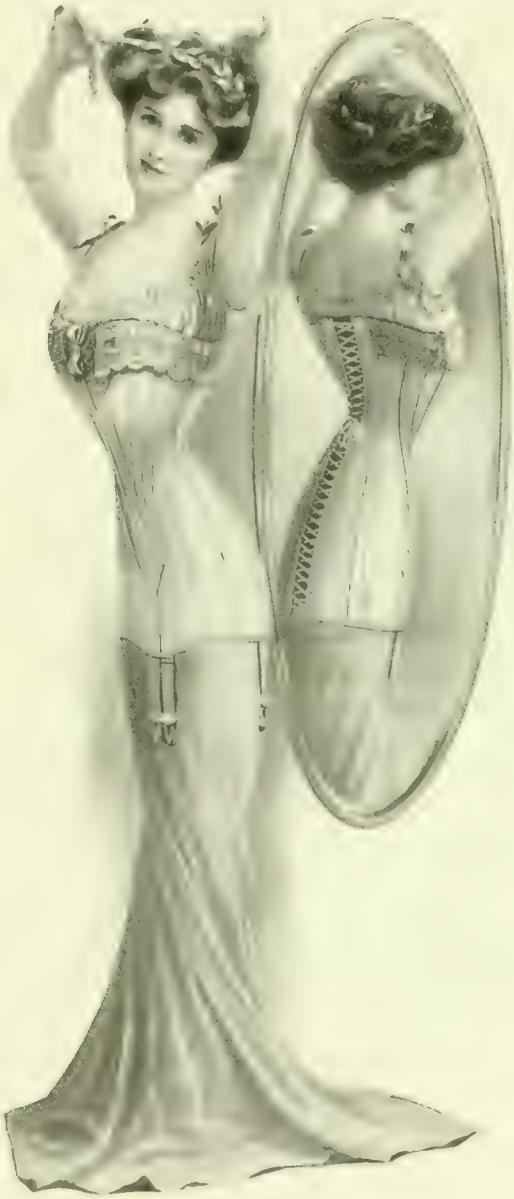

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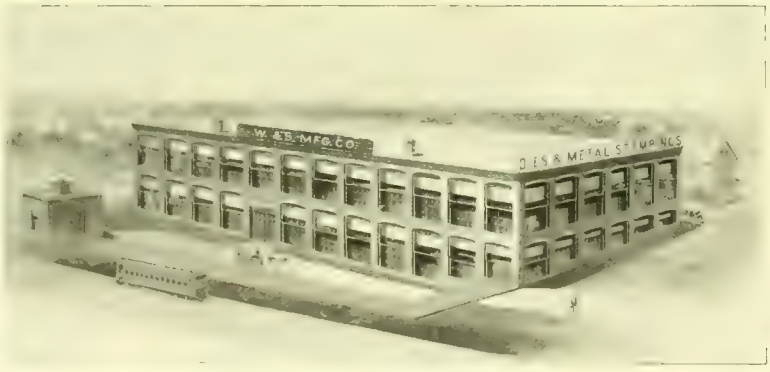

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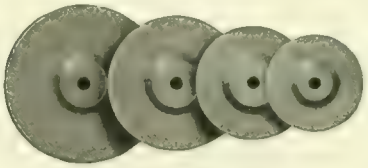

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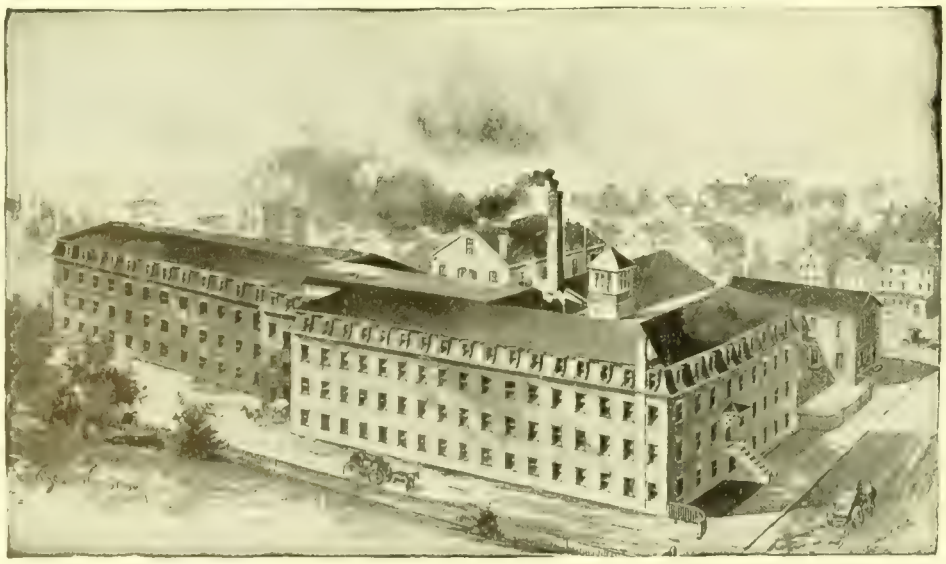

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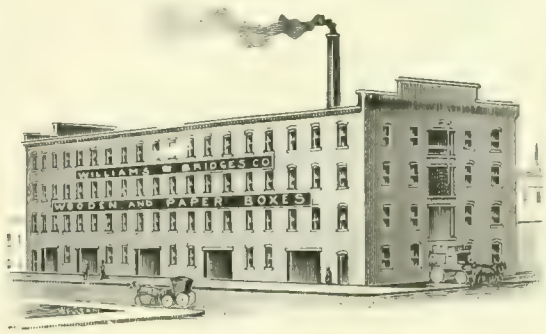

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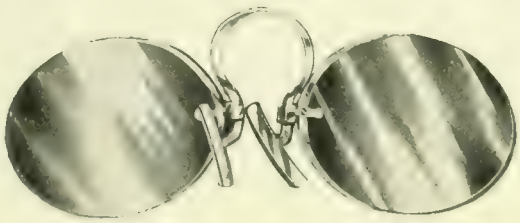

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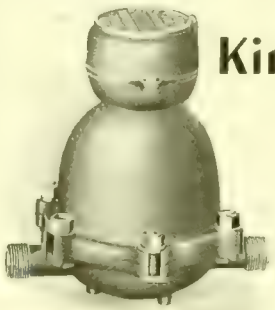

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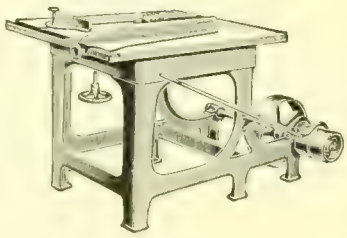

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U.S. ENVELOPE CO. USEC

UNITED STATES ENVELOPE CO.

ART NOVELTIES VALENTINES

THE GEORGE C. WHITNEY COMPANY

NORTON GRINDING MACHINES

NORTON GRINDING CO.

The WYMAN & GORDON CO. DROP FORGINGS

O. S. WALKER & CO.

SURFACE GRINDERS AND MAGNETIC CHUCKS

"Pigeon" WORCESTER SLIPPER

Everything in Wire

TRADE MARK

The Wire Goods Co.

Established 1841

COES

Wrenches

KEY MODEL AND
STEEL
HANDLE
4″ to 72″

Screw Wrenches
11 Sizes

Coes Wrench Co.

Worcester, Mass., E. U. A.

DEPARTMENT "K"

USE

KEEP UP WITH THE PROCESSION

START THE NEW YEAR RIGHT

Oilzum

FOR ALL MAKES OF MOTOR CARS

IT

LUBRICATES

IS GUARANTEED TO KEEP

PLUGS, VALVES, PISTONS

AND

CYLINDER WALLS CLEAN

INCREASES

POWER

BEST BY EVERY TEST

MADE AND SOLD IN CANS, BARRELS AND CARLOAD LOTS

BY

THE WHITE & BAGLEY CO.

WORCESTER, MASS.

U. S. A.

WE ARE GIVING AWAY SOMETHING USEFUL FOR YOUR CAR. IF YOU WANT ONE, SEND THIS COUPON

SEND THIS COUPON

Don't fail to see our Exhibit at Worcester County Mechanics Association Exposition.

The 72″ 3-ply leather belt referred to in the accompanying illustration is in use at Scotia, Cal., in one of California's largest lumber mills.

Leather Belting

¶ Even though you may not need a large drive belt in your plant, yet need other sizes, you will find it profitable to consult us.

¶ There is nothing in the leather belting line but what *we manufacture.*

¶ With nearly three score years of "belt-building" experience, we know how to manufacture belts that will do your work successfully.

¶ In connection with this experience, consider the large and thoroughly equipped tanneries and factories which we own and operate, and you will begin to understand why our belting is the recognized standard.

Write for our 24-page copyrighted booklet, "Glimpses of Modern Belt Making." It's free

Graton & Knight Mfg. Co.

Belt Makers since 1851 Oak Tanners since 1867

Worcester, Mass.

Branches: Atlanta, Ga., 93-95 S. Forsyth St.; Boston, Mass., 33 Lincoln St.; Chicago, Ill., 165 E. Lake St.; Milwaukee, Wis., 103 W. Water St.; Minneapolis, Minn., 310 3d Ave. N.; New York, N. Y., 72 Warren St.; Philadelphia, Pa., 132 No. 3d St.; Portland, Ore., 51 First St.; San Francisco, Cal., 30-32 Fremont St.; Seattle, Wash., 219 Occidental Ave.; St. Louis, Mo., 614 N. Third St.

Made in Worcester.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

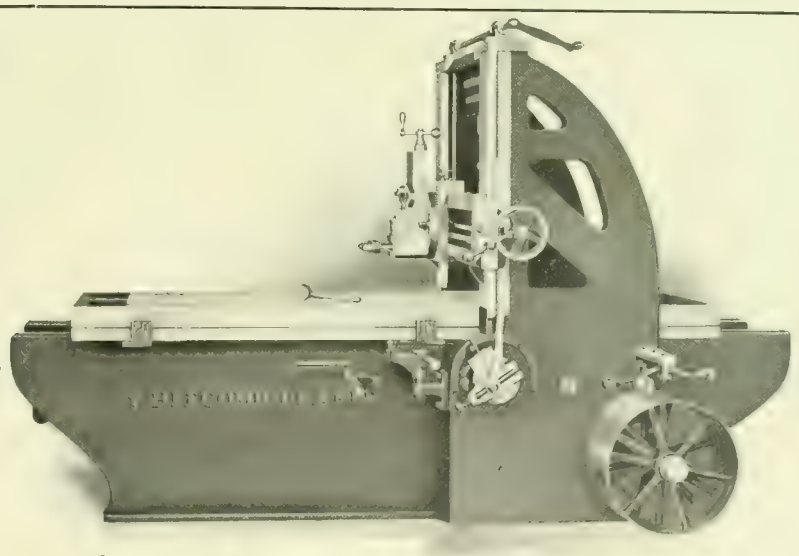
WHITCOMB

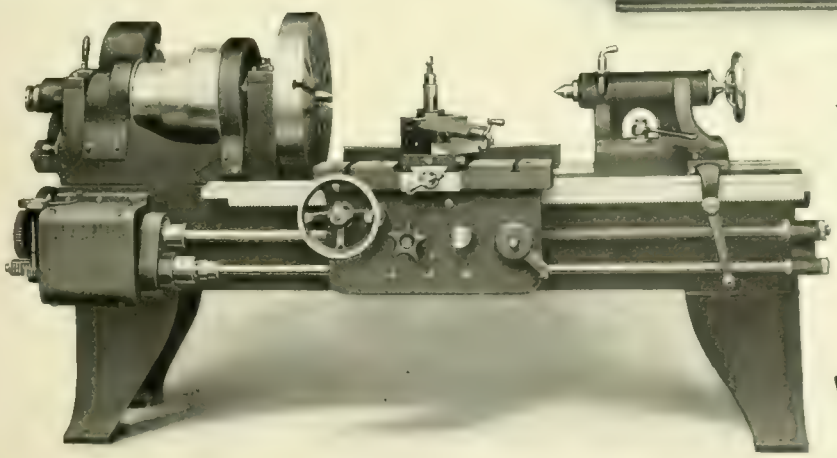
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

Worcester, Mass.

Made in Worcester.

INCORPORATED 1868

Worcester Trust Company

Capital, Surplus and Profits - - **$1,300,000**
Total Resources - - - **10,000,000**

IN ADDITION TO A GENERAL BANKING BUSINESS
IS AUTHORIZED TO ACT AS
EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

CITY HALL BRANCH
448 MAIN STREET

MAIN OFFICE
342-344 MAIN STREET

LINCOLN SQ. BRANCH
11 MAIN STREET

MAIN OFFICE, 342-344 MAIN STREET

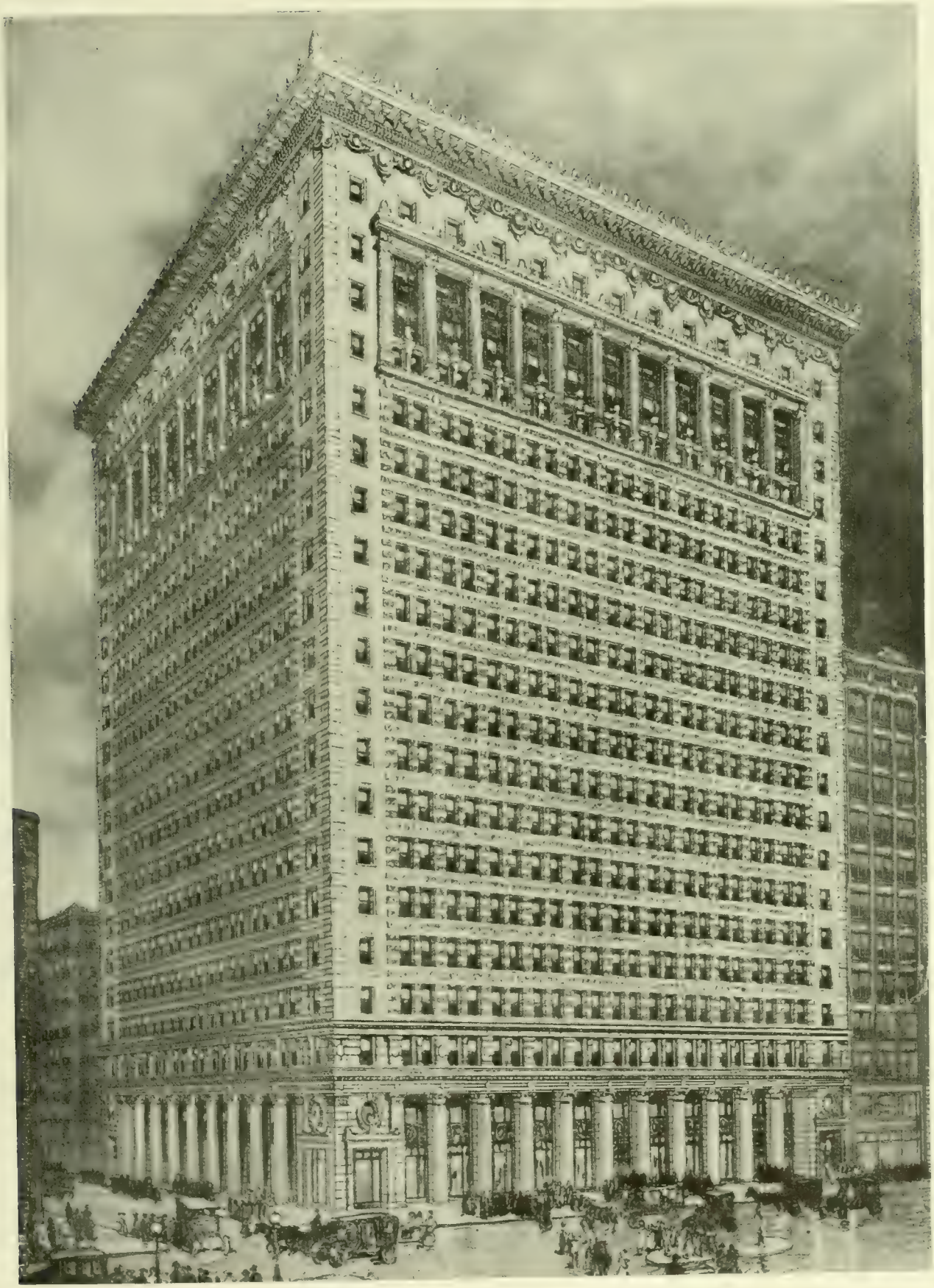
WILLIAM D. LUEY, *President*

HENRY A. MARSH, NATHANIEL PAINE, HENRY P. MURRAY, *Vice-Presidents*

SAMUEL H. CLARY, *Treasurer* ALVIN J. DANIELS, *Secretary*

Directors

CHARLES S. BARTON
GEORGE E. BLAKE
A. GEORGE BULLOCK
JOHN H. COLES
ALEXANDER DEWITT
THOMAS B. EATON
WILLIAM LINDSOTT, JR.
HENRY F. HARRIS
CHARLES H. HUTCHINS
LINCOLN N. KINNICUTT
EDWIN T. MARBLE
J. RUSSEL MARBLE
A. W. PARMELEE
NEAL RANTOUL
WILLIAM H. SAWYER
FRANK BULKELEY SMITH
CHARLES M. THAYER
ROBERT M. WASHBURN
GEORGE W. WELLS
M. J. WHITTALL
G. MARSTON WHITIN
ROBERT WINSOR
A. O. YOUNG



PEOPLE'S GAS LIGHT & COKE CO. BUILDING, CHICAGO, ILL.

Another structure of Milford, Mass., Pink Granite

Furnished by

WEBB PINK GRANITE COMPANY

Quarries at Milford, Mass. Offices at Worcester, Mass.

Refer to literary section of this issue

SAFE DEPOSIT VAULTS
WOMEN'S DEPARTMENT
Resources over $4,000,000

Worcester National Bank

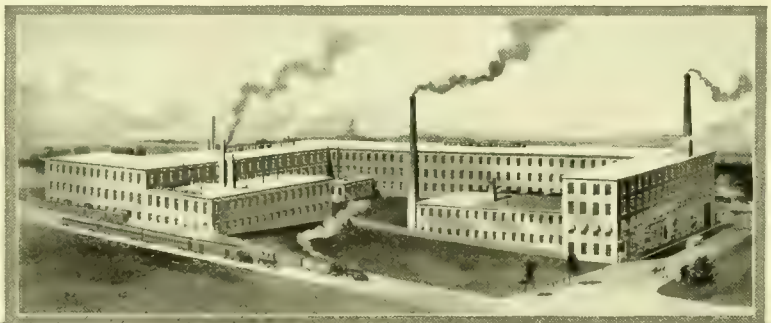
FOUNDED 1804

AN OLD INSTITUTION
WITH MODERN
BANKING FACILITIES

JAMES P. HAMILTON, *President* S. D. SPURR, *Cashier* F. M. HEDDEN, *Assistant Cashier*

WIRE
WIRE CLOTH

Wire Clothes Lines
Picture Cord
Coal and Sand Screens
Foundry Riddles
Wire Goods and
SPECIALTIES



POULTRY NETTING
Wire Rope Staples
Flower-bed Guard
and Trellis
Wire Fencing
Elevator Cabs and
Enclosures

Wright Wire Company

FACTORIES
WORCESTER and PALMER, MASS.
Branch Warehouses: NEW YORK, PHILADELPHIA, PITTSBURG, CHICAGO, SAN FRANCISCO

State Mutual Life Assurance Company

(Incorporated 1844)

Assets, January 1, 1909,	$32,540,041.03
Liabilities, January 1, 1909,	$29,843,942.37
Surplus, January 1, 1909,	$2,696,098.66

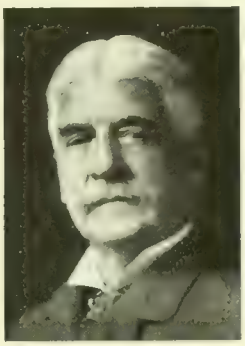
A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, - - - Massachusetts

Col. Isaac Davis
1st President, 1847-1865.

Col. John D. Washburn
2d, 1865-1903.

Col. E. B. Stoddard
3rd, 1903-1905.



Henry M. Witter
4th, 1905-

Merchants & Farmers Mutual Fire Insurance Company

Incorporated 1846

Worcester, Mass.

Subscribers to the petition for the act of incorporation:

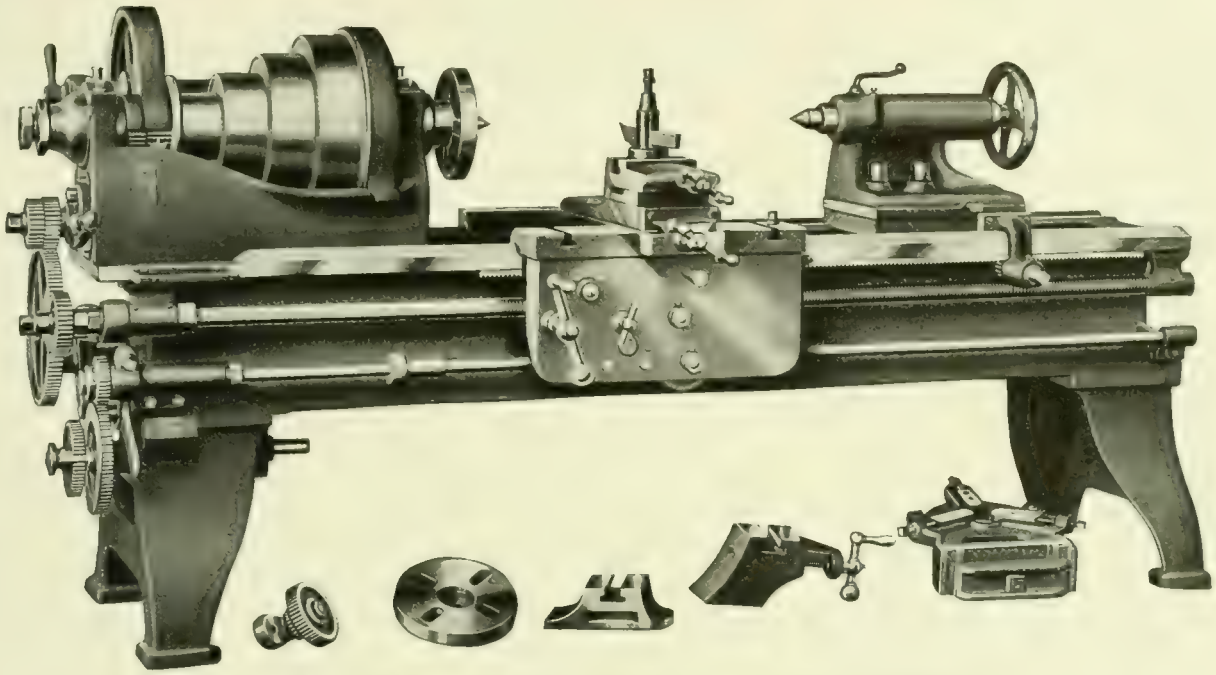
Fred William Paine	Nathan Heard	James H. Baker
Fred W. Gale	Elisha Gale	Edwin Conant
Joseph White	J. W. Lane	George W. Richardson
Parley Goddard	John B. Pratt	Artemas Ward
Isaac Davis	Anthony Chase	William Dickinson
J. S. Woodworth	George M. Rice	Clarendon Harris
Samuel Damon	E. L. Fish	James Green

Many of these gentlemen will be remembered as prominent citizens at the time Worcester became a city. They were of sterling worth and their institutions have proven of the same character. The financial history of the last half century has justified them in their belief that Worcester and the State of Massachusetts needed a fire insurance company to protect the merchants and farmers of the community and to furnish adequate indemnity in the time of need and devastation by fire.

This protection has been furnished at the lowest cost price by this company during every year of its existence, and the conflagrations in Boston in 1872 and in Chelsea in 1908 have proven the soundness and stability of this company of the people. What has been done can be done again, and we are doing it every day.

Insurance at cost, the policy-holder sharing in the profits.

THE NORCROSS BROTHERS COMPANY
GENERAL CONTRACTORS AND BUILDERS
WORCESTER, MASSACHUSETTS



The NEW REED LATHES are

HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

HEYWOOD TRADE MARK SHOE 1864

HIGH GRADE SHOES FOR MEN

HEYWOOD TRADE MARK SHOE 1864

1864 1909

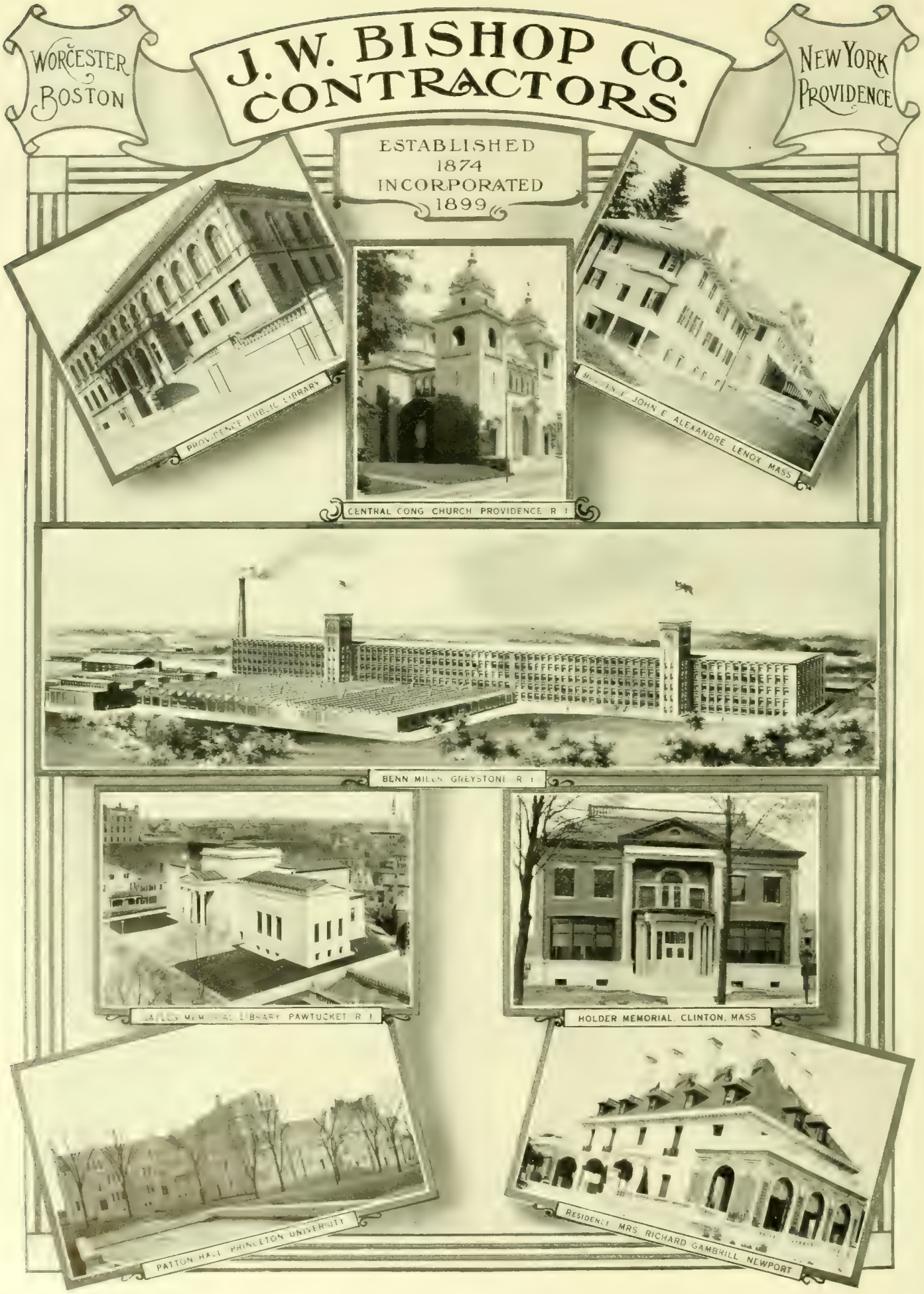
For forty-five years the name "Heywood" on a boot or shoe has been a guarantee of excellence of material and workmanship.

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.


WORCESTER
BOSTON
J. W. BISHOP CO.
CONTRACTORS
NEW YORK
PROVIDENCE
ESTABLISHED
1874
INCORPORATED
1899
PROVIDENCE PUBLIC LIBRARY
CENTRAL CONG CHURCH PROVIDENCE R I
JOHN E ALEXANDRE LENOX MASS
BENN MILLS GREYSTONE R I
HOLDER MEMORIAL, CLINTON, MASS
PATTON HALL PRINCETON UNIVERSITY
RESIDENCE MRS RICHARD GAMBRILL NEWPORT

Walden Ratchet Wrench

The Only Ratchet Wrench with No Small Springs or Pawl. Combined Handle, Spring and Pawl
Only Three Parts to this Tool

Ever Have Trouble

from having corners of tire lugs or nuts wear off, and wrench slip?

Use Walden Ratchet

It fits the lug or nut, saves time and temper. Cannot slip. Ratchet works quickly.

ALL SIZES SQUARE AND HEXAGON OPENINGS

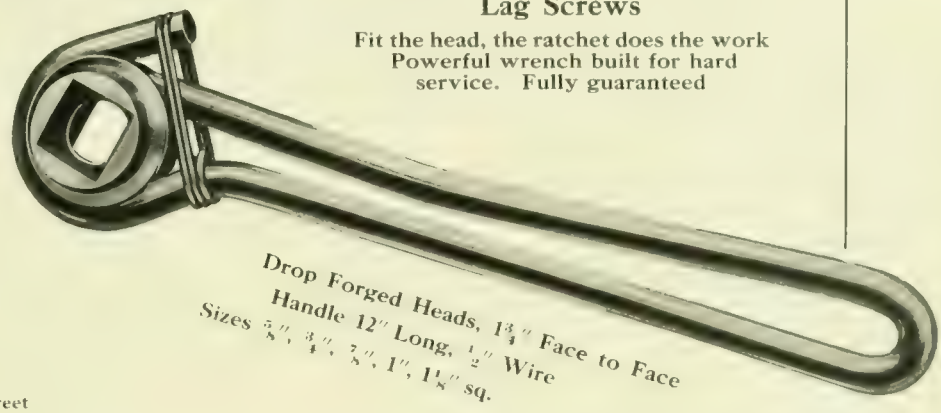
Tire Lug Wrenches, 5″ handle, 35c.
Spark Plug Wrenches, 8″ handle, 75c.

WALDEN RATCHET WRENCH
WALDEN MFG. CO.
WORCESTER, MASS.

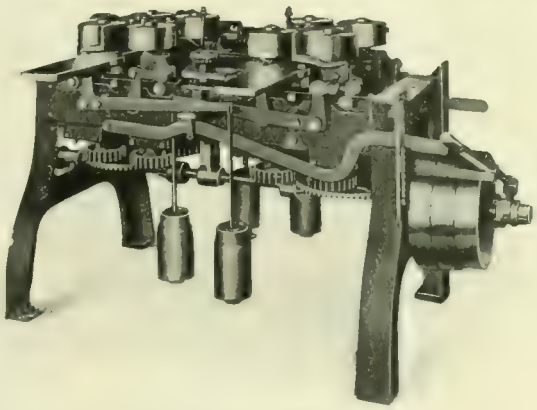
59 Beacon Street, corner Hermon Street

This is the Wrench for Lag Screws

Fit the head, the ratchet does the work
Powerful wrench built for hard service. Fully guaranteed



SHIPPING CASES AND BOXES



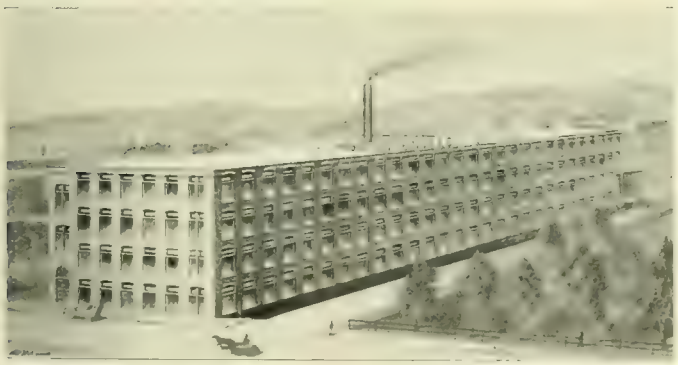
Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.



SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.
Made in Worcester.

WOOD SCREWS

OVAL

ROUND

We carry over 1,000 sizes, styles, and finishes in constant stock.

We also manufacture and carry in constant stock in large quantities:

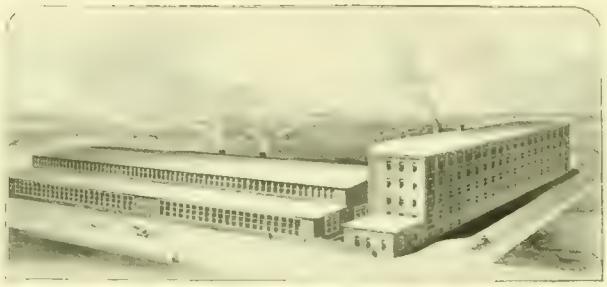
MACHINE SCREWS, STOVE BOLTS, TIRE BOLTS, RIVETS AND BURRS.

REED & PRINCE MANUFACTURING COMPANY,

WORCESTER, MASS.

Made in Worcester.

HIGH GRADE GREY IRON CASTINGS



Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

Capacity 20 tons a day

L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY

DEPARTMENT OF SPENCER WIRE CO.

NOW IS THE TIME TO CONSIDER AN ORNAMENTAL WIRE OR WROUGHT IRON

FENCE

TELEPHONE OR WRITE AND LET US SEND YOU CATALOGUE AND TELL YOU ABOUT THEM

LAWN GUARD, TRELLIS AND TREE GUARDS

WORCESTER, MASS.

Made in Worcester.

AUTOMOBILE INSURANCE

Insure your new car before the accident.

Our policy protects you against FIRE wherever the car may be; also against Accident or Loss on Boats or Railroad Cars, and Theft of parts or attachments.

The "Collision Clause," covering damage to your own automobile, can be attached to this Fire policy at a reasonable additional cost.

Nobody is safe without LIABILITY INSURANCE on each automobile.

We furnish this Insurance under various limits of liability covering Personal Injury; and at moderate expense can be added the "Property Damage Clause" offering protection against liability for damage done to horses, vehicles, fences, buildings or other property belonging to other persons.

Our facilities for handling this Automobile Insurance are first class and our prices are at the bottom.

GREENE & BATES

Telephone 5048 **405 Main Street**

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

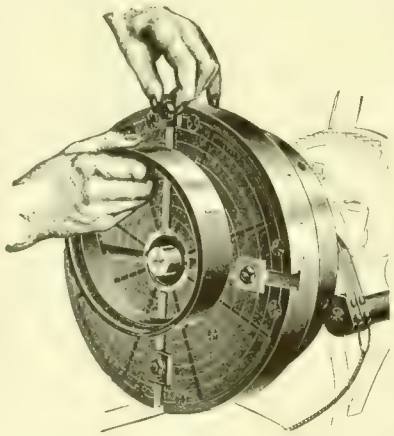
One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.



More than 2000 in use

Magnetic Chucks

for Piston Ring Grinders
Universal Grinders
Surface Grinders
Vertical Milling Machines and Planers

Rotary chuck, sizes 6″ to 36″. Flat chucks, 10″ to 8′ long

Patentees and Sole Manufacturers

O. S. WALKER & CO.

Made in Worcester.

W. H. DeLONG

Manufacturer of

DeLong's Dental Disks

Carborundum Separating Disks and Stump Wheels

Sand, Garnet, Emery, Cuttlefish and Crocus Paper Disks

WORCESTER, MASS.

ESTABLISHED 1829.

PRATT & INMAN

WORCESTER, MASS.

OUR STOCK COMPRISES THE LARGEST ASSORTMENT OF SIZES AND QUALITIES OF STEEL CARRIED BY ANY ONE IN THE UNITED STATES.

SPECIALTIES:
BEST MACHINERY STEEL, LEAD SCREW STEEL
VIKING CRUCIBLE STEEL.

Your Piano

May now be made SELF-PLAYING by the installation of the

Tunstall Piano Player

IMPORTANT FEATURES

BELLOWS. Operate easily
ACTION. Simple, Effective and Durable
CONTROL. Two Levers and One Button; out of sight when not in use, as are also the Pedals
REGISTRATION. Controlled by our own Automatic Device

PRICE COMPLETE $150

Send for Catalogue B

MANUFACTURED BY

Tunstall, Biggar & Tunstall Company

258 Park Avenue, Worcester, Mass.

Dept. B.

Made in Worcester.

WORCESTER'S FINEST HOSTELRY

AUTOMOBILE PARTIES A SPECIALTY

CUISINE PAR EXCELLENCE

200 FRONT STREET Chas. J. Pomeroy, Mgr.

FAMILY SPATS

are often caused by badly-shapen, ill-made, *worse*-fitting clothes. Many stores will buy anything that looks like an overgaiter because it's a little cheaper.

Watch for Cuts in this space next month and note the difference, or better still, call and have a pair made to order.

"RELIANCE" SPATS AND LEGGINS

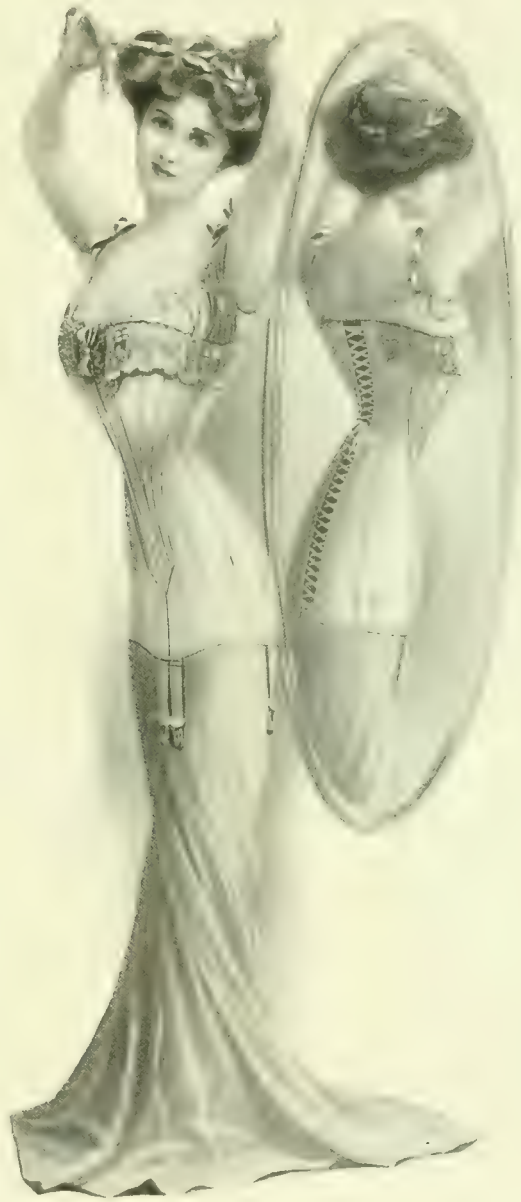
made to fit, and for the whole family. Some bargains in samples and odd pairs.

E. H. EDDY 86 MECHANIC STREET SECOND LOFT

Made in Worcester. Patronize home industries

ONE OF THE NEW DIRECTOIRE SHEATH-FITTING MODELS IN

BON TON CORSETS



BON TON Corsets $12 to $3

Royal Worcester Corsets $3 to $1

SOLD IN WORCESTER BY

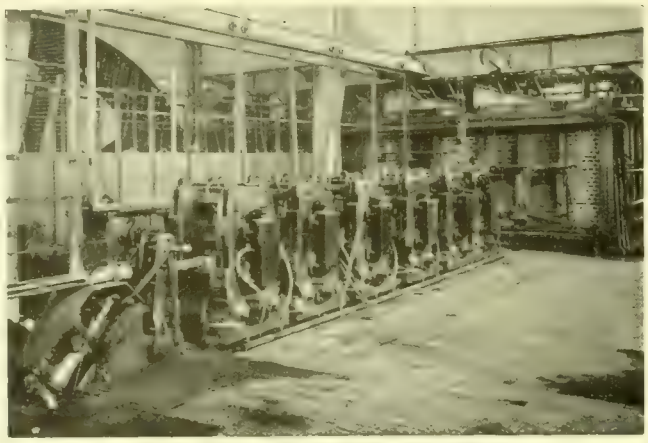
BOSTON STORE (DENHOLM & McKAY CO.)

MANUFACTURED BY

Royal Worcester Corset Co.,

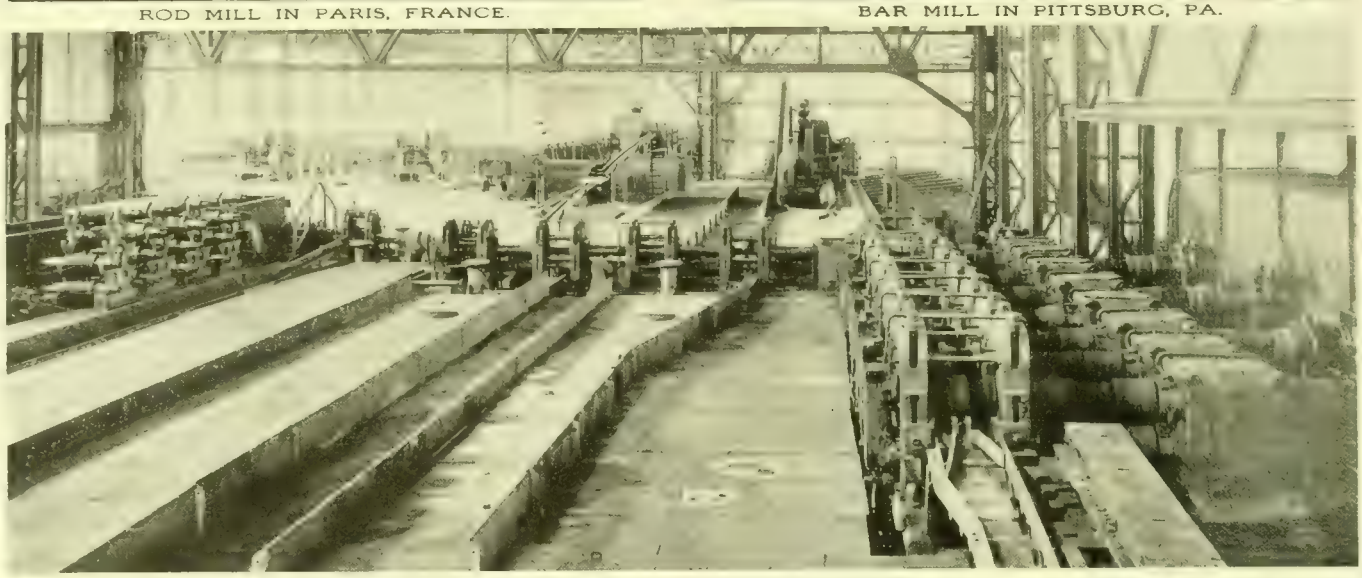
WORCESTER, MASS., U. S. A.

SEND FOR THE 1909 ROYAL BLUE BOOK.

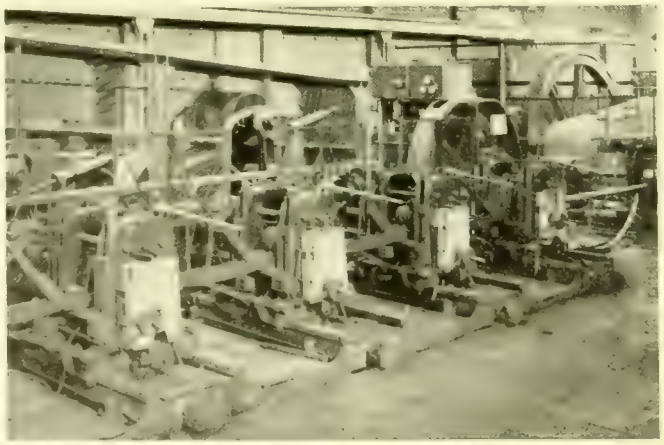


ROD MILL IN PARIS, FRANCE.

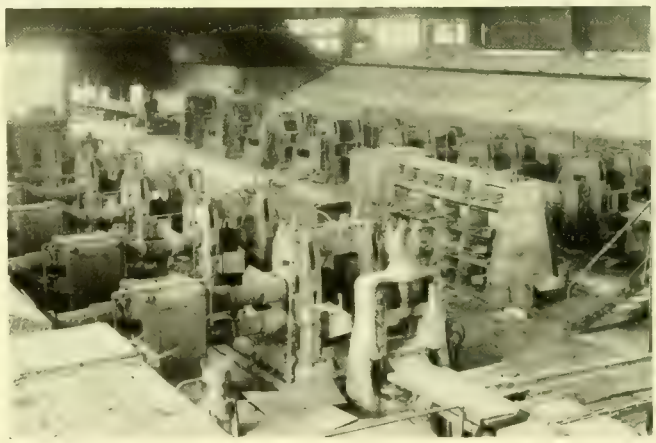
BAR MILL IN PITTSBURG, PA.



BAR MILL IN MEIDERICH, GERMANY.



HOOP MILL IN GERMANY.



BILLET AND SHEET BAR MILLS IN YOUNGSTOWN, O.

A FEW EXAMPLES OF MORGAN MILL INSTALLATIONS AT HOME AND ABROAD

MORGAN CONSTRUCTION CO.,

EUROPEAN OFFICE,
52 RUE DU CONGRES,
BRUSSELS, BELGIUM.

WORCESTER, MASS.

A Comparison of Two Waterproof Belts

These photographs were taken under actual working conditions in the dye-house of a woolen mill near Worcester

This photo shows the present condition of a **"BEST"** Multiple Woven Waterproof Belt after two years' constant service driving a reel over a dye-tub in an atmosphere saturated with steam and water. It is as good as new, shows no signs of wear, and is still giving perfect satisfaction.

This photo shows the condition of a rubber belt after six months' use in the same room, on a similar drive and under identically the same conditions. Its cover is broken and peeled in many places, the underlying fabric exposed and worn and the whole belt is about "all in."

THESE FACTS TELL THE WHOLE STORY

If you are operating a dye-house or bleachery, or running a belt in any wet place, you should use

"BEST" BELTING

Will you not try one at our expense? Every belt fully guaranteed

THE MULTIPLE WOVEN HOSE & RUBBER CO.

Dept. "B" WORCESTER, MASS.

Made in Worcester.

Norton Alundum Plant
Niagara Falls, N. Y.

Works of Norton Co. and Norton Grinding Co.
Worcester, Mass.

Norton Grinding Wheels are known and used in all parts of the world.

Grinding Machinery
Rubbing and Sharpening Stones

Glass Cutting Wheels
Scythe Stones

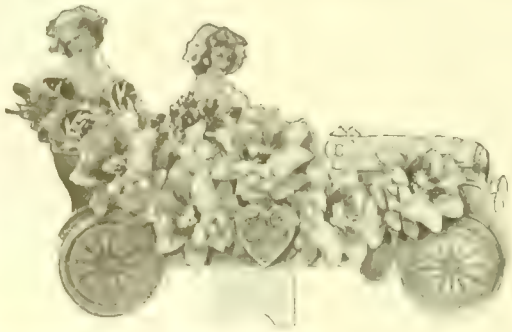
Razor Hones
India Oil Stones

We Manufacture

Cylinder Grinders
Piston Ring Grinders
Internal Grinders, Drill Grinders
Sash Trimmers
Emery Wheel Dressers

THE HEALD MACHINE CO., WORCESTER, MASS.
Works at Greendale

Valentines, Holiday Goods



Easter Novelties

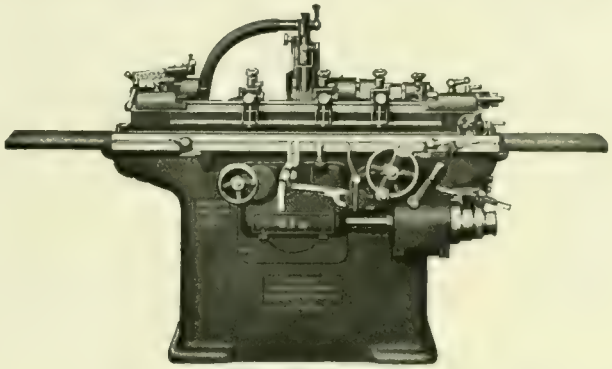
The Geo. C. Whitney Co.

Manufacturers

Office and Factory
69 Union Street

Made in
Worcester

NORTON PLAIN GRINDERS



6″ x 32″ Norton Plain Grinder

are built in various sizes from 6″ swing to take 32″ between centers up to 20″ swing to take 264″ between centers. We are constantly devising new methods and fixtures to enable the operator to increase production.

DESIGN: The best that 20 years' grinding experience can give.

MATERIAL: Only the highest grade of material is used.

WORKMANSHIP: Every piece which enters into these machines must pass a rigid inspection.

Write for Circulars and Prices.

Chicago Store, 48 So. Canal St.
F. W. Horne, Yokohama, Japan.
Ludw. Loewe, London, Berlin, European Agents.

Norton Grinding Company,
Worcester, Mass., U. S. A.

N88

Business Established 1783

J. Russel Marble & Co.

Importers and Manufacturers' Agents

Paints, Oils and Glass

Heavy Chemicals, Starches and Gum

For Cotton, Woolen and Leather Manufacturers, Bleachers and Finishers

Acids

Boston and Worcester

Made in Worcester.

Wilflat

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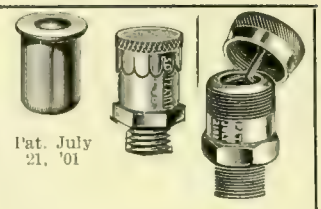

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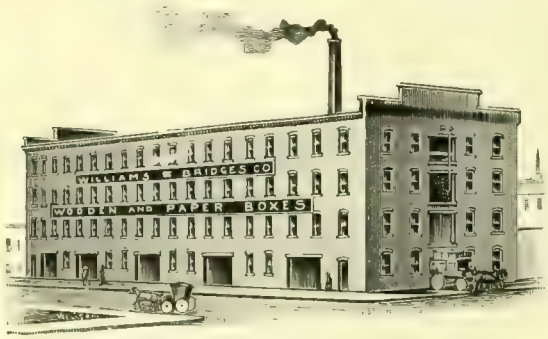

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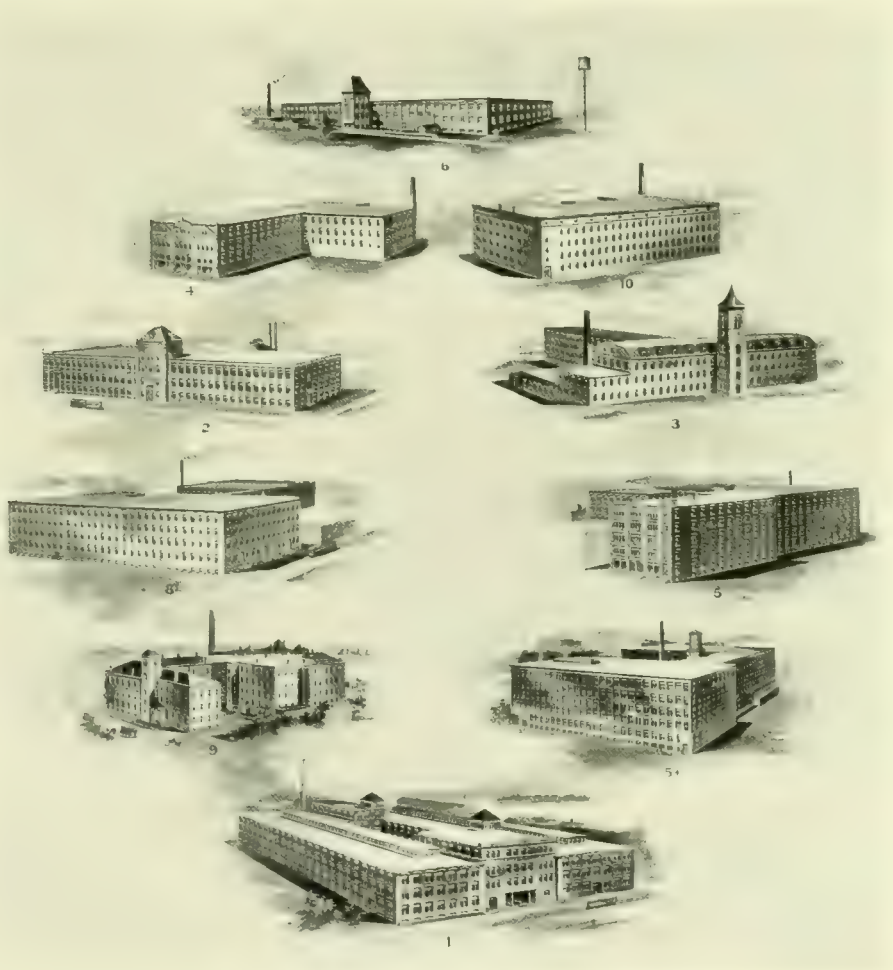

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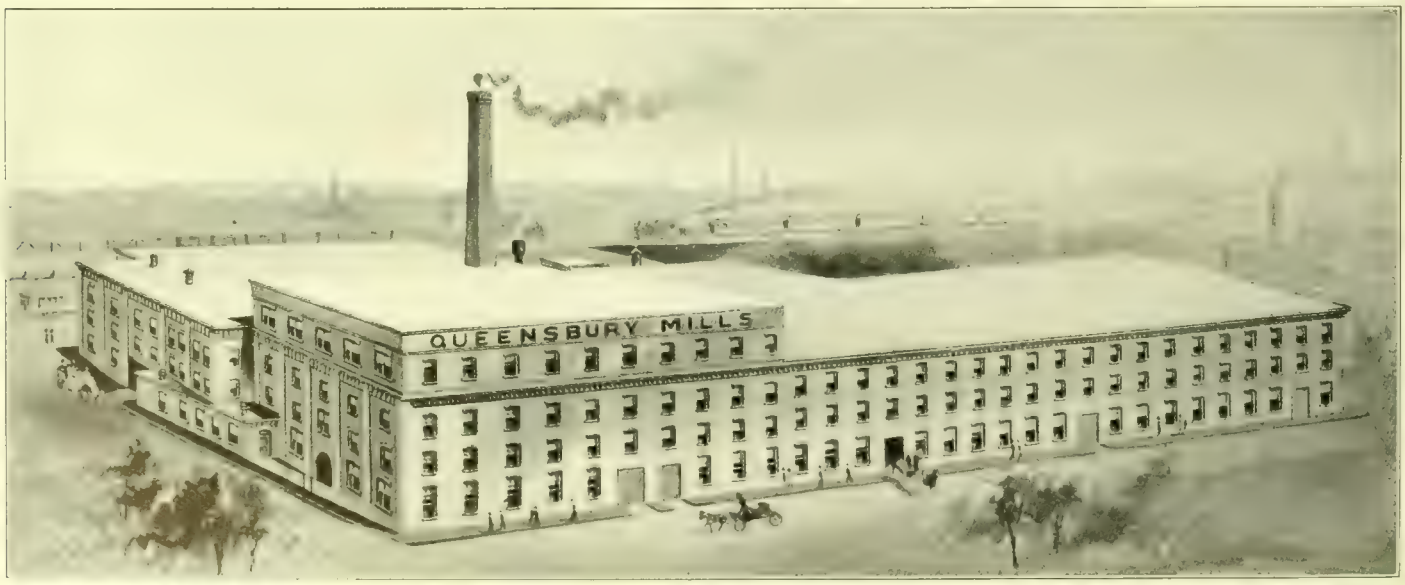

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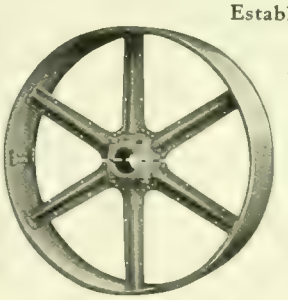

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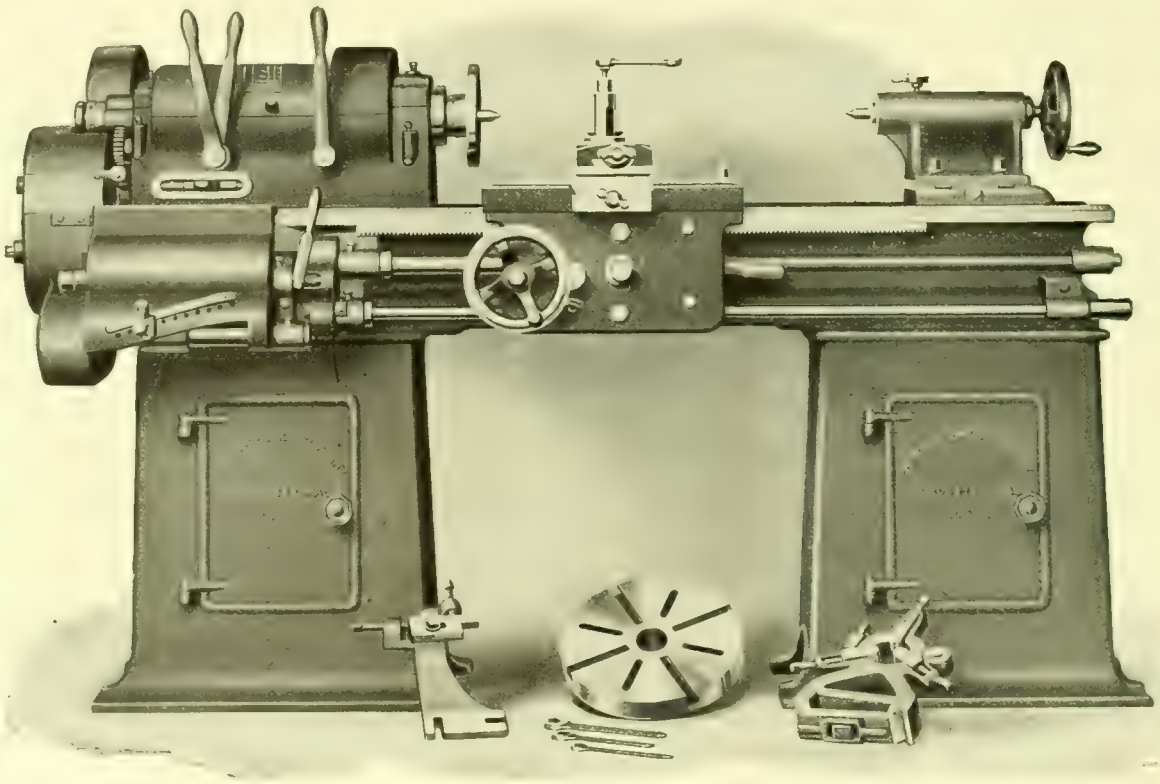

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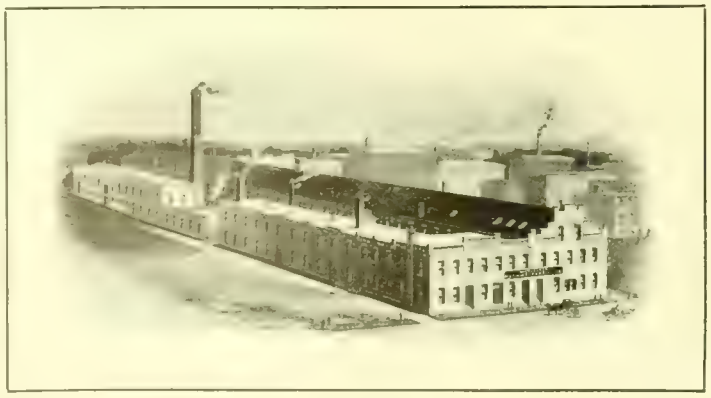

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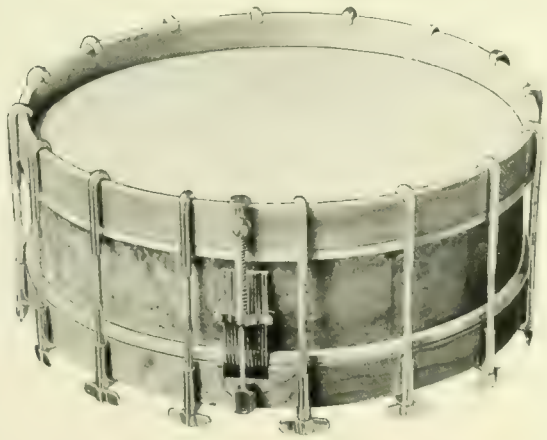

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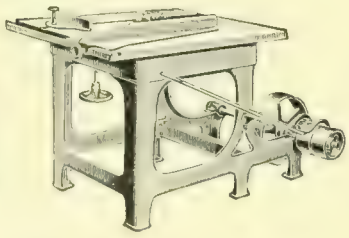

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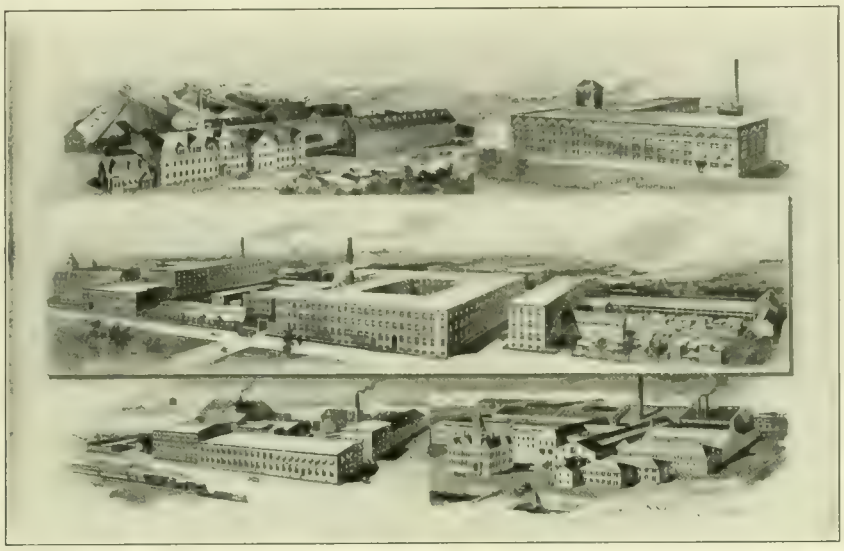

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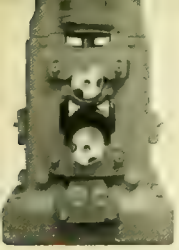

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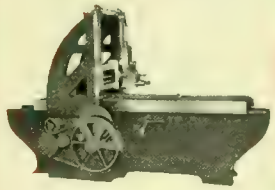

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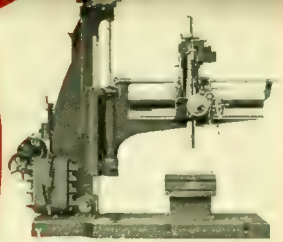

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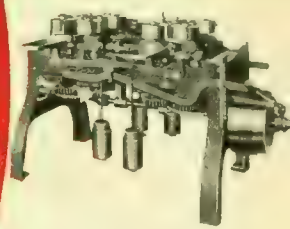

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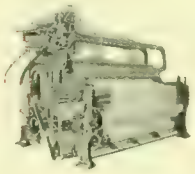

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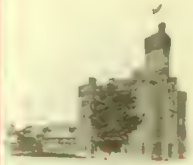

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NORTON GRINDING CO.

The WYMAN & GORDON CO.
DROP FORGINGS

O. S. WALKER & CO.

SURFACE GRINDERS AND MAGNETIC CHUCKS

The Belts to use are the Brands WE make

SPARTAN — Guaranteed to withstand exposure to either hot or cold air, water, steam, oil, gases, and heat generated by excessive pulley friction. Especially adapted for hard service.

SPECIAL PLANER — Waterproof. Made in singles only, but from the very heaviest of centre stock; an ideal belt for heavy work with high speed and small pulleys.

NEPTUNE — Waterproof. A brand of belting that is in daily use in thousands of plants. It is the oldest and best known waterproof leather belting on the market.

HEART — Made from heavy centre stock, a popular belt for general use.

GRAKNIGHT — It, too, is made from centre stock, but of lighter weight than the Heart.

Other Brands for other specific purposes.
Advise us of the conditions under which your belts operate, and we will tell you the brands to use.

The Graton & Knight Mfg. Co. Worcester, Mass., U. S. A.

Oak Leather Tanners and Belt Makers

Established 1851
Capital and Surplus, $1,800,000

Branches and Dealers in the leading manufacturing centres.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

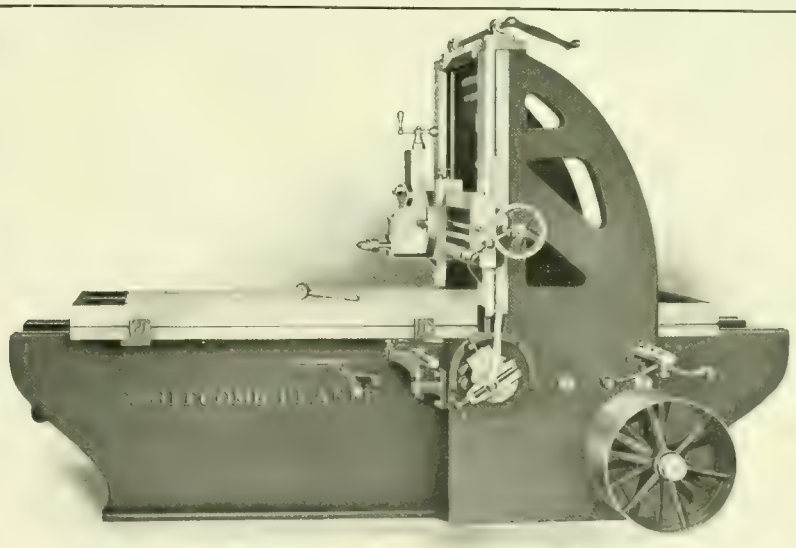
WHITCOMB

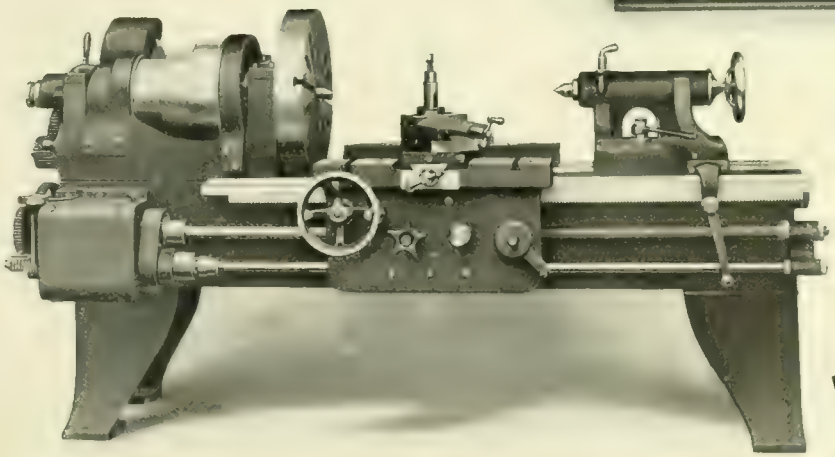
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

Worcester, Mass.

Made in Worcester.

INCORPORATED 1868

WORCESTER TRUST COMPANY

Capital, Surplus and Profits $1,300,000
Total Resources $10,000,000

IN ADDITION TO A GENERAL BANKING BUSINESS

ACTS BY

EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

FINANCIAL AGENT FOR INDIVIDUALS AND CORPORATIONS

Depository Under Plans of Reorganization, Trustee of Corporation Mortgages, Registrar and Transfer Agent

ISSUES

LETTERS OF CREDIT AND FOREIGN EXCHANGE

ACCOUNTS SOLICITED

State Mutual Life Assurance Company

(INCORPORATED 1844)

Assets, January 1, 1909,	$32,540,041.03
Liabilities, January 1, 1909,	$29,843,942.37
Surplus, January 1, 1909,	$2,696,098.66

A. G. BULLOCK, PRESIDENT
BURTON H. WRIGHT, SECRETARY

Worcester, - - - Massachusetts

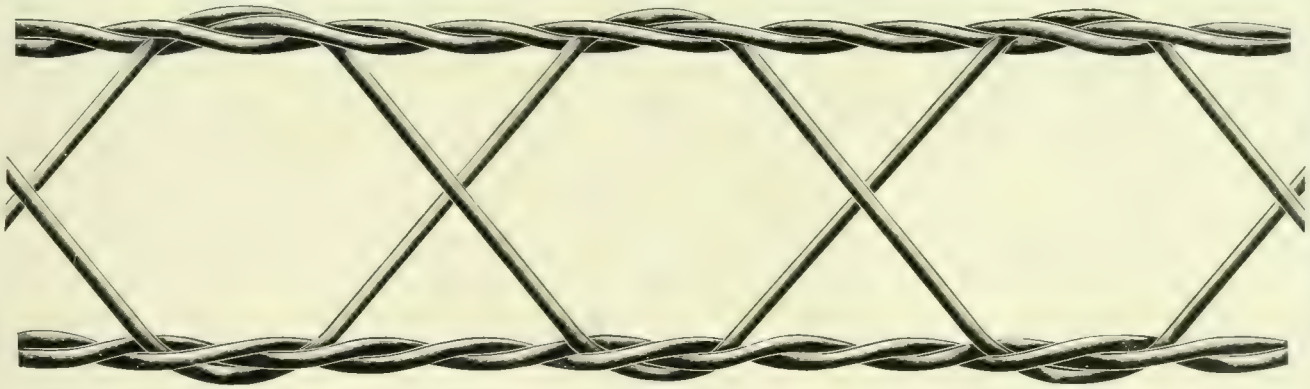
SAFE DEPOSIT VAULTS
WOMEN'S DEPARTMENT
Resources over $4,000,000

Worcester National Bank

FOUNDED 1804

AN OLD INSTITUTION
WITH MODERN
BANKING FACILITIES

JAMES P. HAMILTON, *President* S. D. SPURR, *Cashier* F. M. HEDDEN, *Assistant Cashier*



Truss and Cable Fencing

Made in strands 2, 4 and 6 inches wide

Strength of Truss and strength of Wire Cable combined

A fence fabric to be erected in horizontal strands in such combinations of two and four inch widths as best suit the builder's purpose. If requirements change, strands may be added or taken away and used again elsewhere. A fence which follows the ground line and is especially adapted for rough or uneven land.

Erected and maintained by one man at lowest cost.

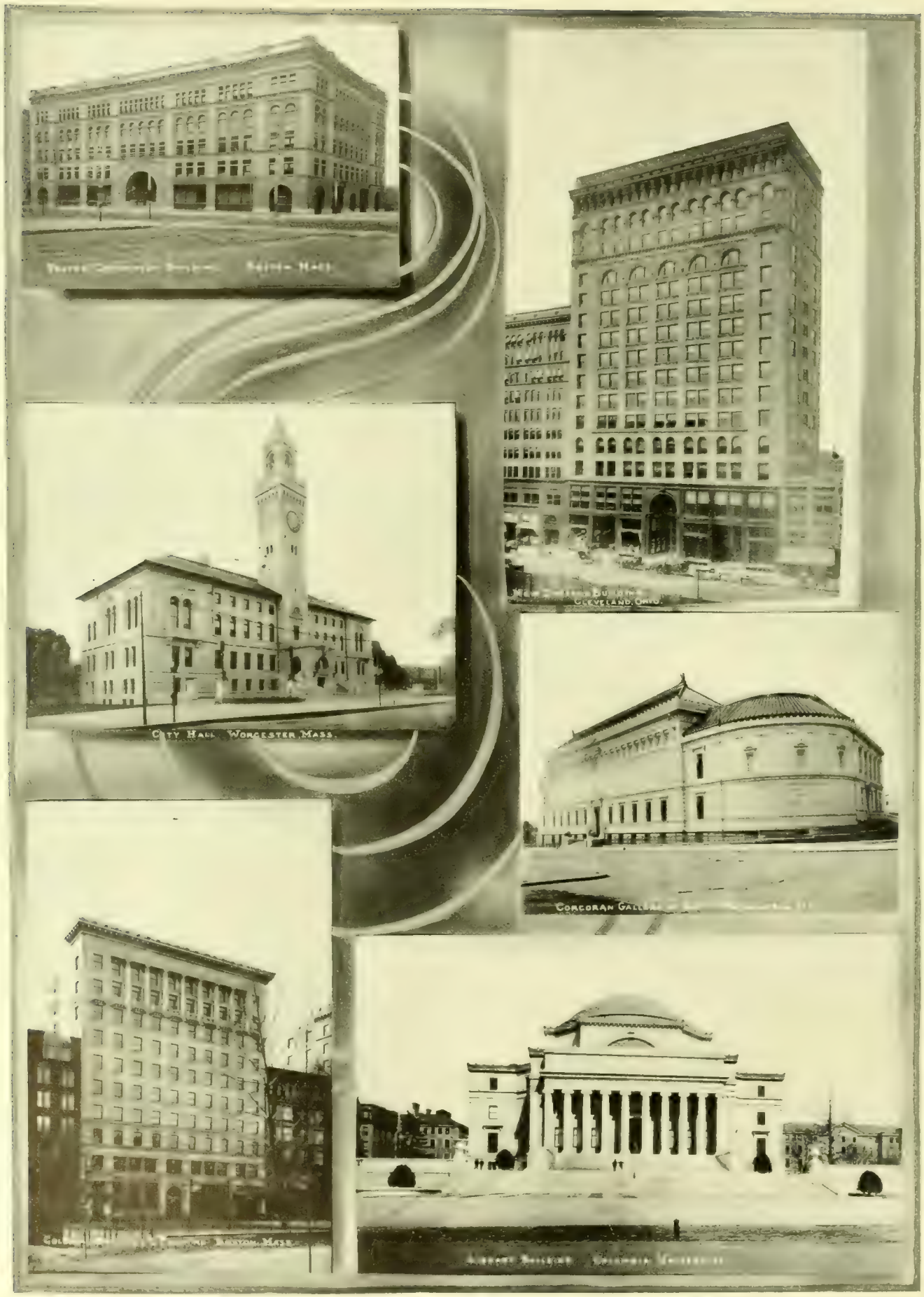
Attractive in appearance and visible enough to be evidence of a substantial fence.

Woven from hard drawn wire and **galvanized after weaving,** which covers the entire fabric with a heavy coating of pure zinc, making the best possible protection against rust.

Put up in flat, thirty-rod coils (weighing from sixty-five to ninety-five pounds each), which may be piled one upon another, 2000 pounds of fence fabric being stored in very small space. A compact stock in convenient units, easily handled in field or warehouse. **Write for catalogue No. 3.**

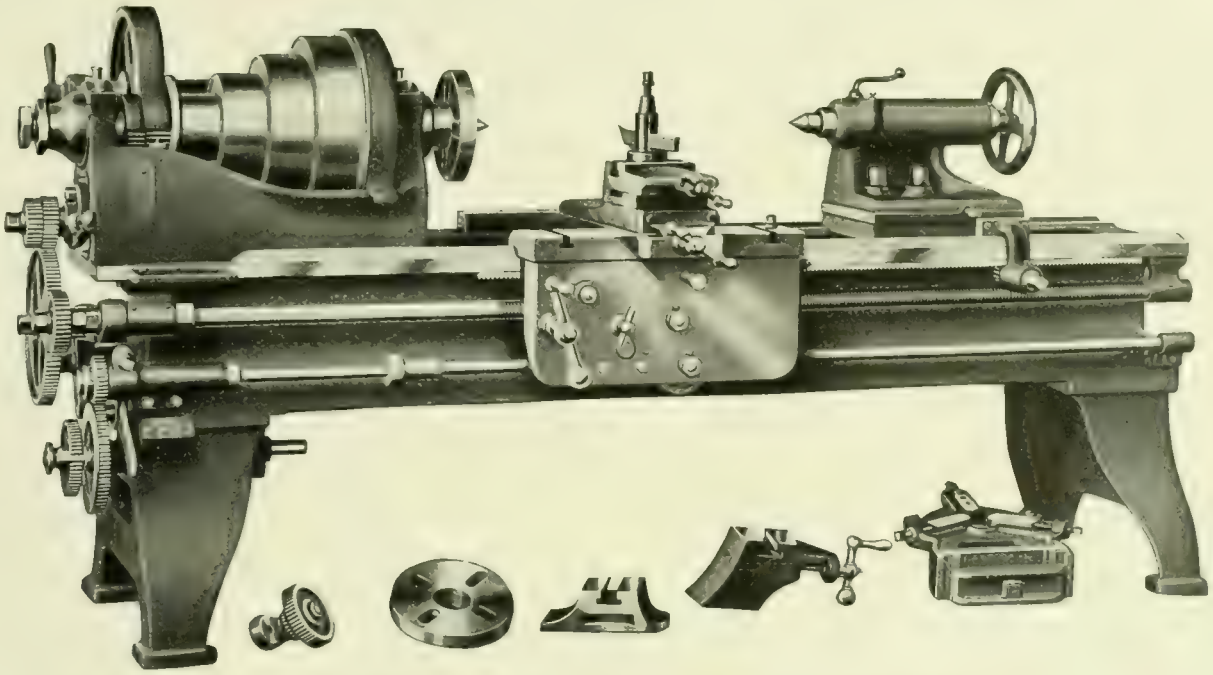
Wright Wire Company, Worcester, Massachusetts

BRANCH WAREHOUSES: New York, Philadelphia, Pittsburg, Chicago, San Francisco



THE NORCROSS BROTHERS COMPANY
GENERAL CONTRACTORS AND BUILDERS
WORCESTER, MASSACHUSETTS

160 Fifth Avenue, New York
Tremont Building, Boston
Industrial Building, Providence
Colorado Building, Washington



The NEW REED LATHES are

HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

HEYWOOD TRADE MARK SHOE 1864

HIGH GRADE SHOES FOR MEN

HEYWOOD TRADE MARK SHOE 1864

1864 HEYWOOD TRADE MARK SHOE 1864 1909

For forty-five years the name "Heywood" on a boot or shoe has been a guarantee of excellence of material and workmanship.

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.

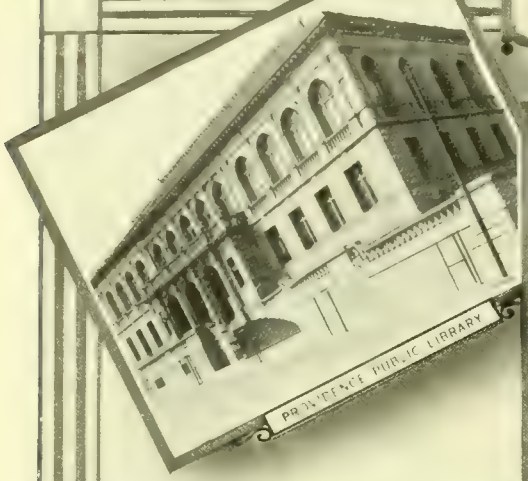
HEYWOOD TRADE MARK SHOE 1864

WORCESTER
BOSTON

J. W. BISHOP CO.
CONTRACTORS

NEW YORK
PROVIDENCE

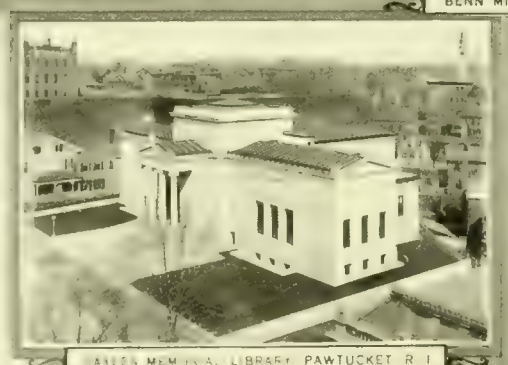
ESTABLISHED
1874
INCORPORATED
1899

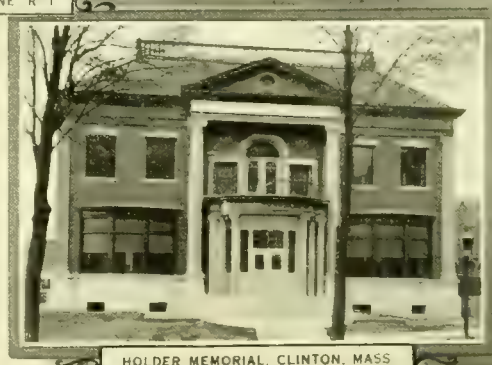

PROVIDENCE PUBLIC LIBRARY

CENTRAL CONG CHURCH PROVIDENCE R I

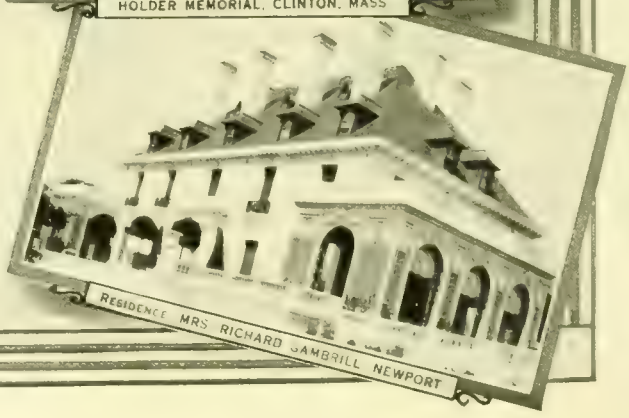
RESIDENCE JOHN E ALEXANDRE LENOX MASS

BENN MILLS GREYSTONE R I


JAMES MEMORIAL LIBRARY PAWTUCKET R I


HOLDER MEMORIAL, CLINTON, MASS

PATTON HALL PRINCETON UNIVERSITY


RESIDENCE MRS RICHARD SAMBRILL NEWPORT

Walden Ratchet Wrench

The Only Ratchet Wrench with No Small Springs or Pawl. Combined Handle, Spring and Pawl
Only Three Parts to this Tool

Ever Have Trouble

from having corners of tire lugs or nuts wear off, and wrench slip?

Use Walden Ratchet

It fits the lug or nut, saves time and temper. Cannot slip. Ratchet works quickly.

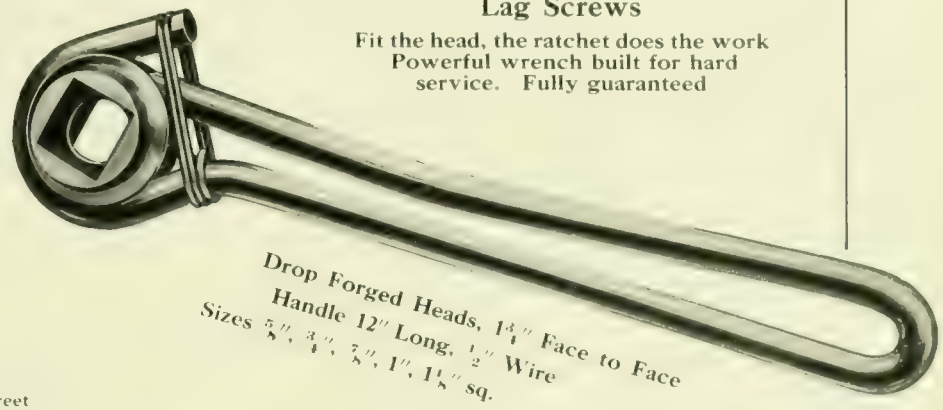
ALL SIZES SQUARE AND HEXAGON OPENINGS

Tire Lug Wrenches, 5″ handle, 35c.
Spark Plug Wrenches, 8″ handle, 75c.

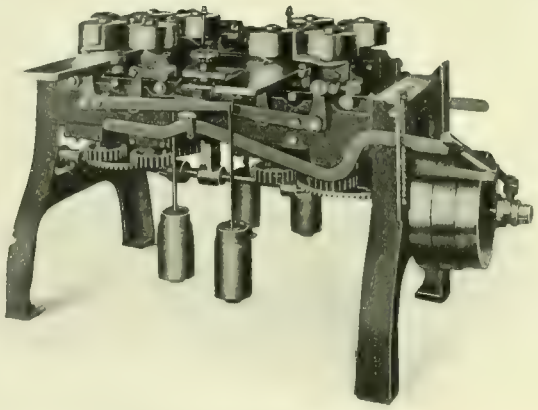
59 Beacon Street, corner Hermon Street

This is the Wrench for Lag Screws

Fit the head, the ratchet does the work
Powerful wrench built for hard service. Fully guaranteed



SHIPPING CASES AND BOXES



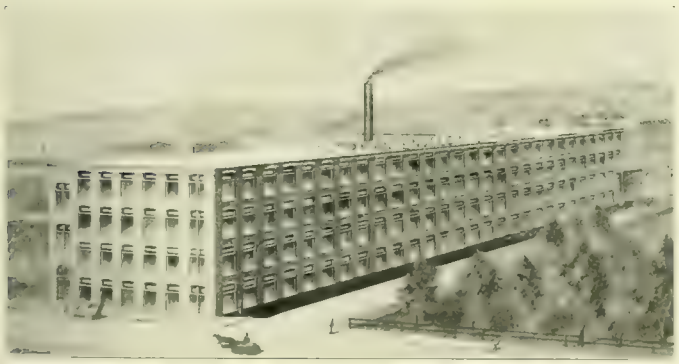
Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.



SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.

Made in Worcester.

COLD PRESSED STEEL AND BRASS MACHINE SCREW

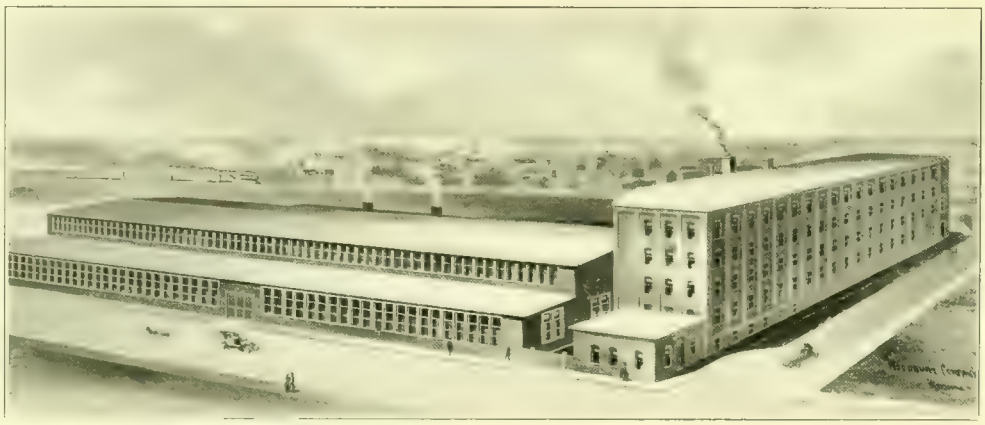
NUTS

Our nuts are made with especial attention to **Accuracy** and **Uniformity** in **Size** and **Finish.** They compare very favorably with **MILLED NUTS.** Our large **Stock** of standard sizes enables us to make Quick Shipments. Let us prove our statements with a trial order.

REED & PRINCE MFG. CO.

Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

Capacity 20 tons a day

L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY

DEPARTMENT OF SPENCER WIRE CO.

NOW IS THE TIME TO CONSIDER AN ORNAMENTAL WIRE OR WROUGHT IRON

FENCE

TELEPHONE OR WRITE AND LET US SEND YOU CATALOGUE AND TELL YOU ABOUT THEM

LAWN GUARD, TRELLIS AND TREE GUARDS

WORCESTER, MASS.

Made in Worcester.

WAS IT INSURED?

That is the question after every fire; but how about the standing of the Company?

We have represented the same Companies for half a century and offer you the best security obtainable and at bottom rates.

Let us advise with you about improvements in your factory which will reduce the cost of your insurance.

Talk with us, please, about your Automobile; we write our own policy.

Factories, Houses, Furniture, Stores, Plate Glass, Boilers, Liability.

GREENE & BATES

405 Main Street **Worcester**

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

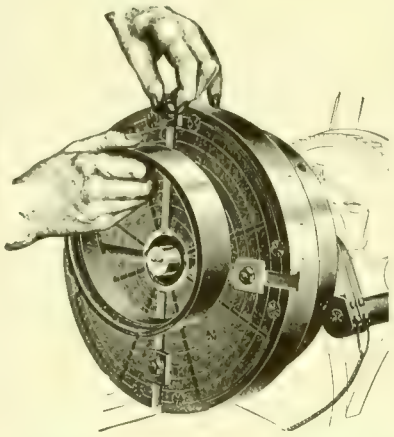
One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.



More than 2000 in use

Magnetic Chucks

for Piston Ring Grinders
Universal Grinders
Surface Grinders
Vertical Milling Machines and Planers

Rotary chuck, sizes 6″ to 36″. Flat chucks, 10″ to 8′ long

Patentees and Sole Manufacturers

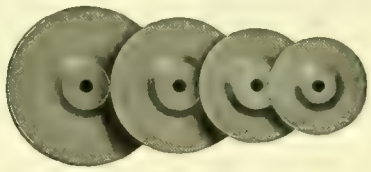
O. S. WALKER & CO.

Made in Worcester.

W. H. DeLONG

Manufacturer of

DeLong's Dental Disks

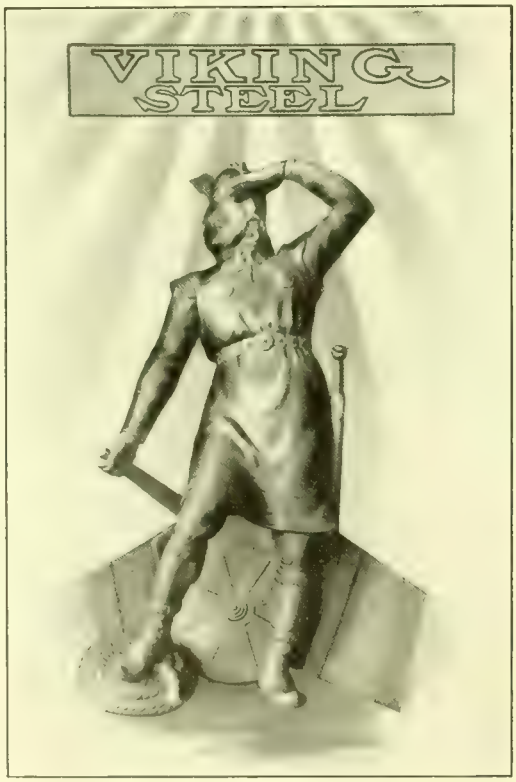


Carborundum Separating Disks and Stump Wheels

Sand, Garnet, Emery, Cuttlefish and Crocus Paper Disks

WORCESTER, Dept. D 3 **MASS.**

Made in Worcester.



ESTABLISHED 1829

PRATT & INMAN

WORCESTER, MASS.

OUR STOCK COMPRISES THE LARGEST ASSORTMENT OF SIZES AND QUALITIES OF STEEL CARRIED BY ANY ONE IN THE UNITED STATES.

SPECIALTIES:
BEST MACHINERY STEEL. LEAD SCREW STEEL
VIKING CRUCIBLE STEEL.

Your Piano

May now be made SELF-PLAYING by the installation of the

Tunstall Piano Player

IMPORTANT FEATURES

BELLOWS. Operate easily
ACTION. Simple, Effective and Durable
CONTROL. Two Levers and One Button; out of sight when not in use, as are also the Pedals
REGISTRATION. Controlled by our own Automatic Device

PRICE COMPLETE $150

Send for Catalogue B

MANUFACTURED BY

Tunstall, Biggar & Tunstall Company

258 Park Avenue, Worcester, Mass.

Dept. B.

Made in Worcester.

BON TON CORSETS

THE HIGHEST STANDARD OF CORSET EXCELLENCE

YOU cannot successfully attain the slender-appearing, sylph-like figure of prevailing fashion until you are scientifically corseted in one of the new BON TON models.

The designers of these renowned corsets have achieved remarkable success with the 1909 patterns, having perfected models which refrain from coercing nature, but conform with it, thus producing absolute harmony between the lines of the ideal figure and the personality of the wearer.

The Price Range is

$3, $4, $5, $6, $7, $8, $10, $12.

SOLD IN WORCESTER ONLY BY

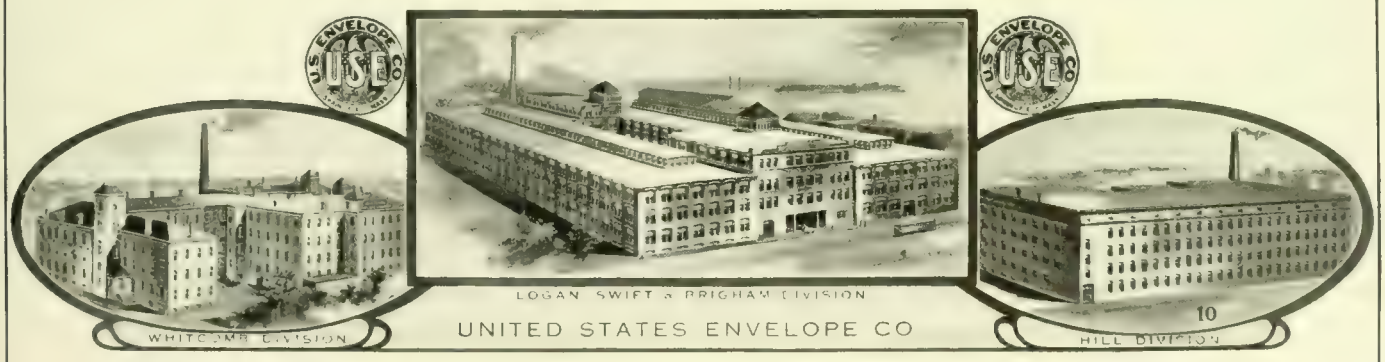
BOSTON STORE
Denholm & McKay Co.

ROYAL WORCESTER CORSET CO.

WORCESTER, MASS., U. S. A.

United States Envelope Company

Manufacturers of Standard **Envelopes**



WORCESTER PLANT OF THE UNITED STATES ENVELOPE COMPANY

The Outlook Envelope

Insures economy and absolute accuracy in the addressing of all your mail matter.

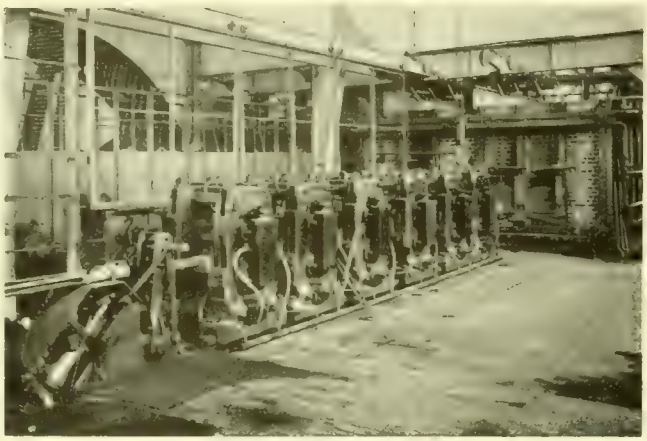
The Improved
Columbian Clasp Envelope

The best and most satisfactory merchandise envelope made.

Specialists in STEEL DIE STAMPING

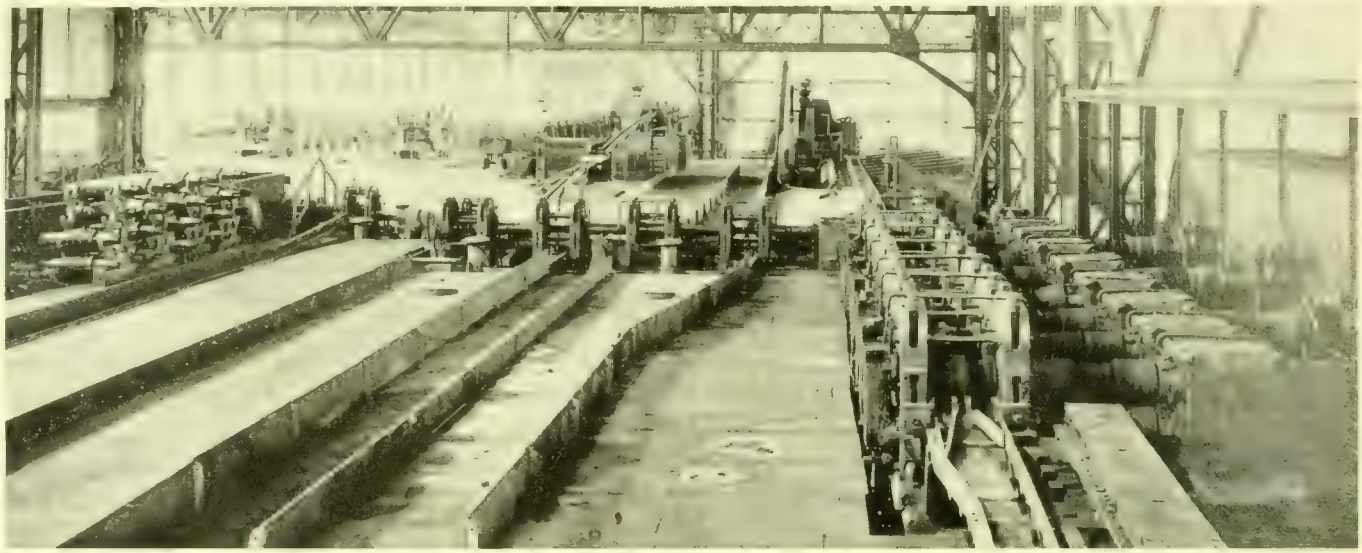
for Commercial Work. Samples and Prices of our Standard Goods furnished by your Stationer or Printer

Made in Worcester.

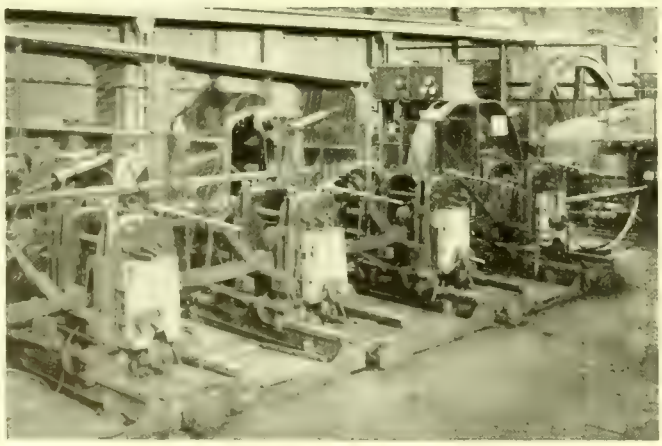


ROD MILL IN PARIS, FRANCE.

BAR MILL IN PITTSBURG, PA.



BAR MILL IN MEIDERICH, GERMANY.



HOOP MILL IN GERMANY.

BILLET AND SHEET BAR MILLS IN YOUNGSTOWN, O

A FEW EXAMPLES OF MORGAN MILL INSTALLATIONS AT HOME AND ABROAD

MORGAN CONSTRUCTION CO.,

EUROPEAN OFFICE,
52 RUE DU CONGRES,
BRUSSELS, BELGIUM.

WORCESTER, MASS.

THE J. F. & W. H. WARREN COMPANY

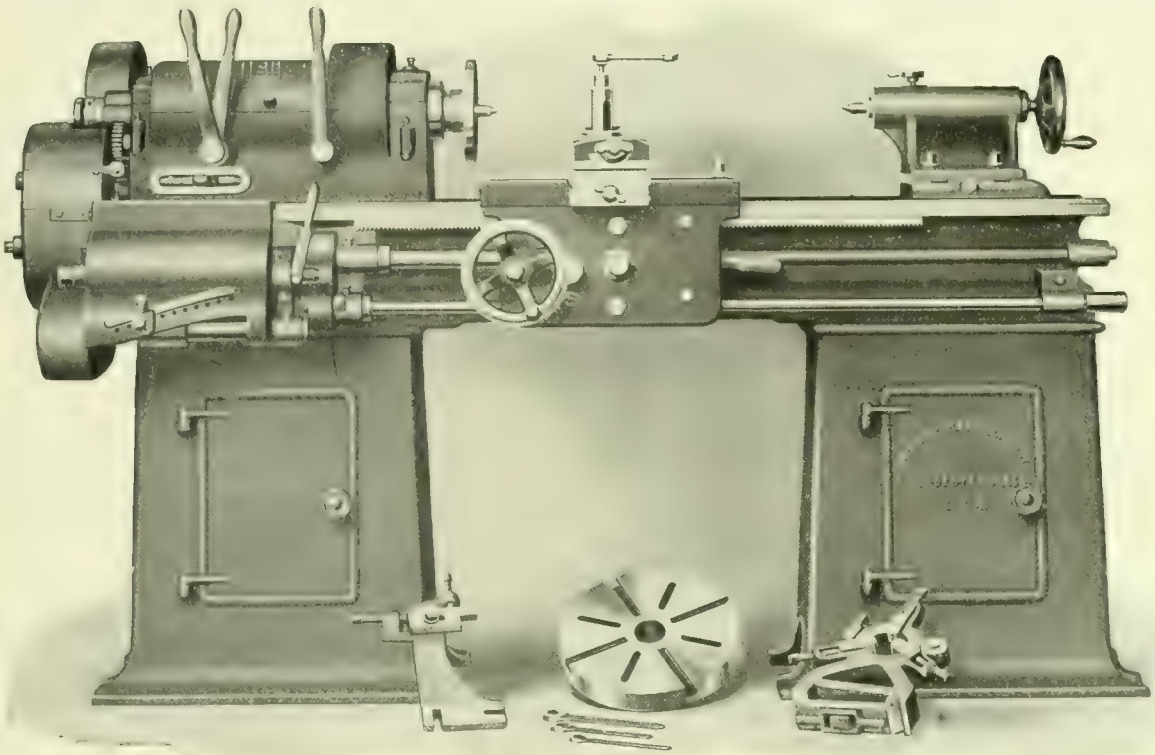
WORCESTER, MASS.

Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery, for Cotton Cones and all hard places and fast drives.

We also make WARREN'S WATER-PERFECT PROOF Leather Belting

Made in Worcester.



See our exhibit at Mechanics Association Industrial and Electrical Exhibit, March 27 to April 3, 1909.

PRENTICE BROTHERS CO., WORCESTER, MASS.

Made in Worcester.

Upright and Radial Drilling Machines and Engine Lathes

Worcester Machine Screw Co.

Branch of the

Standard Screw Company

Makers of

Set Screws, Cap Screws, Machine Screws, Taper Pins, Milled Studs, Special Parts

Beacon and Jackson Streets

Worcester, Massachusetts

Made in Worcester.

Norton Alundum Plant
Niagara Falls, N. Y.

Works of Norton Co. and Norton Grinding Co.
Worcester, Mass.

Norton Grinding Wheels are known and used in all parts of the world.

Grinding Machinery
Rubbing and Sharpening Stones

Glass Cutting Wheels
Scythe Stones

Razor Hones
India Oil Stones

We Manufacture

Cylinder Grinders
Piston Ring Grinders
Internal Grinders, Drill Grinders
Sash Trimmers
Emery Wheel Dressers

THE HEALD MACHINE CO., WORCESTER, MASS.
Works at Greendale

Patients Transferred from House or Train to Hospital, or vice versa, any Distance in State
Ambulance of the Latest Design and Equipment

Experienced Uniformed Men

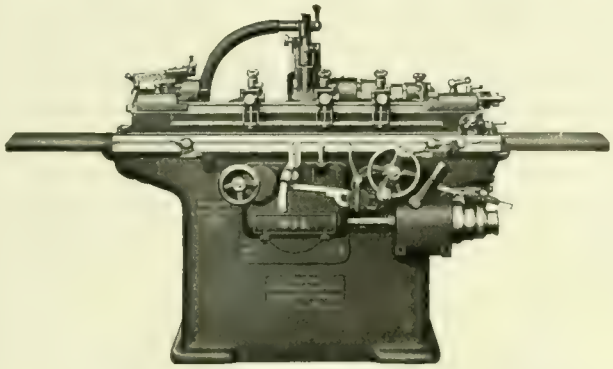
Telephone 1887-1 (Night) 6492

HANSON'S PRIVATE AMBULANCE SERVICE

Prompt and Efficient Service Day or Night

35 Central St., Worcester, Mass.

NORTON PLAIN GRINDERS



6″ x 32″ Norton Plain Grinder

are built in various sizes from 6″ swing to take 32″ between centers up to 20″ swing to take 264″ between centers. We are constantly devising new methods and fixtures to enable the operator to increase production.

DESIGN: The best that 20 years' grinding experience can give.

MATERIAL: Only the highest grade of material is used.

WORKMANSHIP: Every piece which enters into these machines must pass a rigid inspection.

Write for Circulars and Prices.

Chicago Store, 48 So. Canal St.
F. W. Horne, Yokohama, Japan.
Ludw. Loewe, London, Berlin, European Agents.

Norton Grinding Company,
Worcester, Mass., U. S. A.

N88

Business Established 1783

J. Russel Marble & Co.

Importers and Manufacturers' Agents

Paints, Oils and Glass

Heavy Chemicals, Starches and Gum

For Cotton, Woolen and Leather Manufacturers, Bleachers and Finishers

Acids

Boston and Worcester

Made in Worcester.

Wilflat

A thick, heavy paste oil paint—produces a dead flat, egg-shell, semi or full gloss finish; properly thinned with turpentine spreads easily; does not show laps, and is a fine under-coating for enamel. Non-poisonous. Adapted for hospitals, asylums, sanitariums, schools, offices and public buildings.

HOWE PAINT AND COLOR WORKS, Dept. W

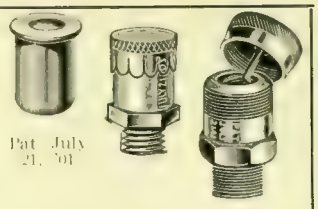
BENNETT

No More Cuss Words in the Dark

If you can get your hand on it you can put the oil in

European Agents, CHARLES CHURCHILL & CO. LONDON, ENGLAND

Send for Samples



Pat. July 21, '01

Bay State Stamping Co., Worcester, Mass.

Made in Worcester.

Bennett Handy Oilers

WM. TURNER, President J. R. TORREY, Treasurer

THE J. R. TORREY RAZOR CO.

Manufacturers of

RAZORS

WORCESTER, MASS., U. S. A.

Made in Worcester.

J. R. TORREY & CO.

Makers of

RAZOR STROPS

WORCESTER, MASS., U. S. A.

Made in Worcester.

W. Henry Wenz John J. Barlow

1 or 1,000,000

ADVERTISING SIGNS

STEEL, WOOD, IRON, BRASS, GLASS, CLOTH

AMERICAN PUBLICITY COMPANY

66 High Street, Worcester

Made in Worcester.

GEO. F. BLAKE JR. & CO.

"HONEST GOODS AT HONEST PRICES"

Steel, Iron and Heavy Hardware

Carriage Makers' and Blacksmiths' Supplies

Junction of Bridge, Mechanic and Foster Sts.

WORCESTER, MASS.

EVERY VARIETY

of WOODEN *and* PAPER

ALSO CLOTH COVERED BOXES

B O X E S

One of the Most Complete Plants in Massachusetts

WILLIAMS & BRIDGES CO.

Manufacturers

72-86 Central St., Worcester, Mass.

Made in Worcester.

Hand Stripping Cards

German and
Domestic Heddles
for Cotton
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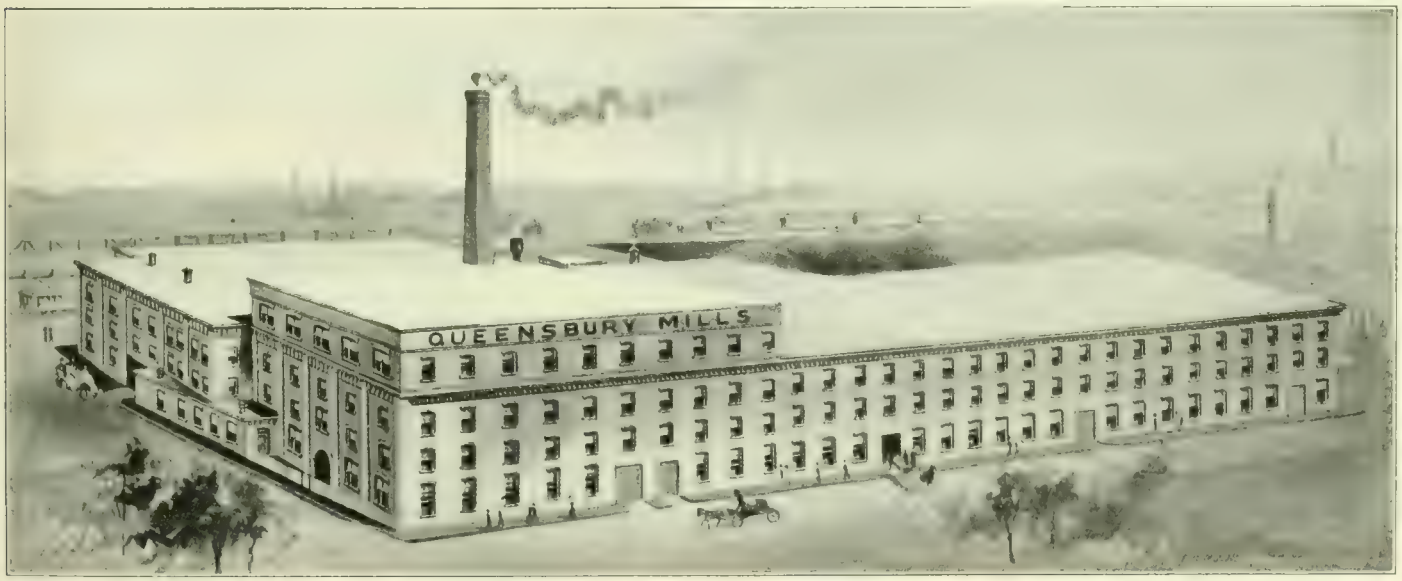

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These photographs were taken under actual working conditions in the dye-house of a woolen mill near Worcester

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This photo shows the condition of a rubber belt after six months' use in the same room, on a similar drive and under identically the same conditions. Its cover is broken and peeled in many places, the underlying fabric exposed and worn and the whole belt is about "all in."

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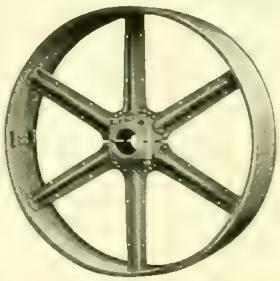

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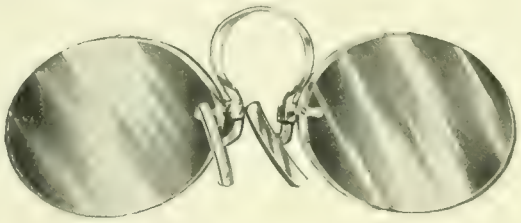

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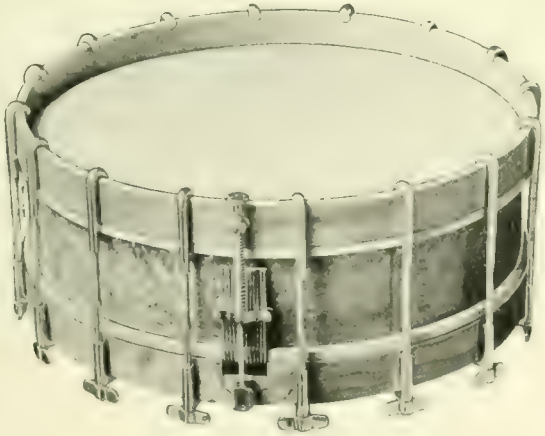

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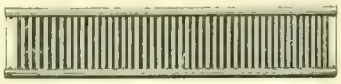
LOOM  REEDS

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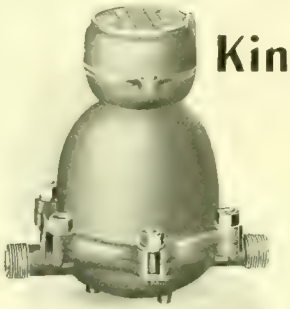

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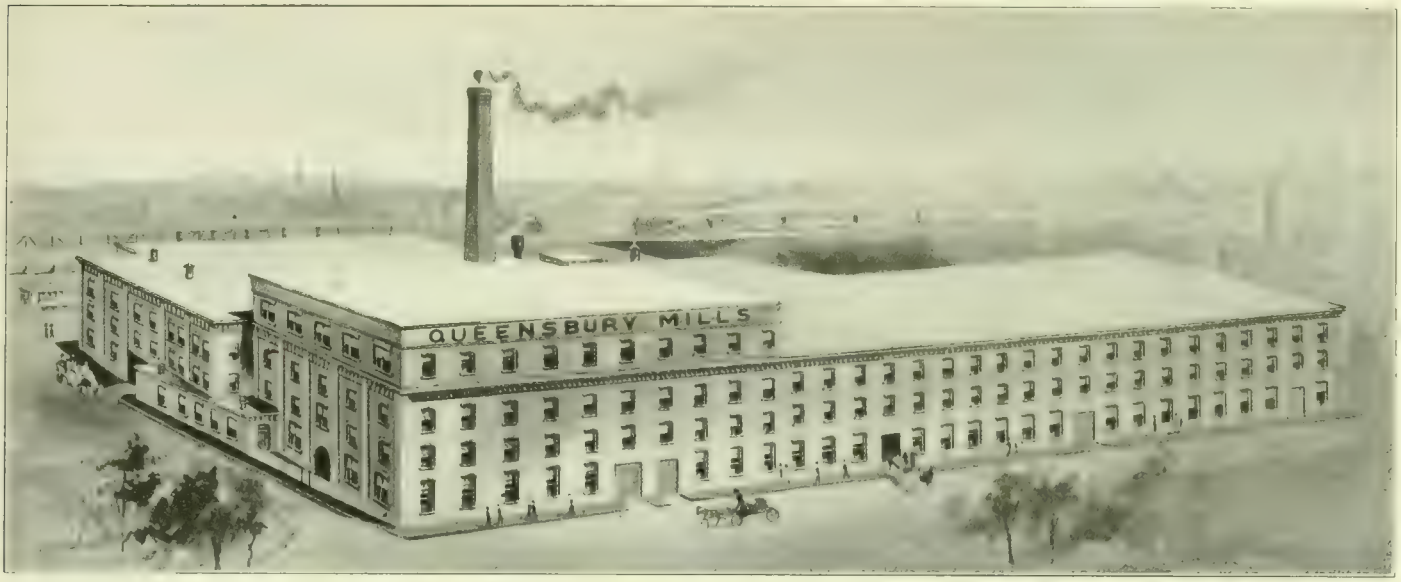

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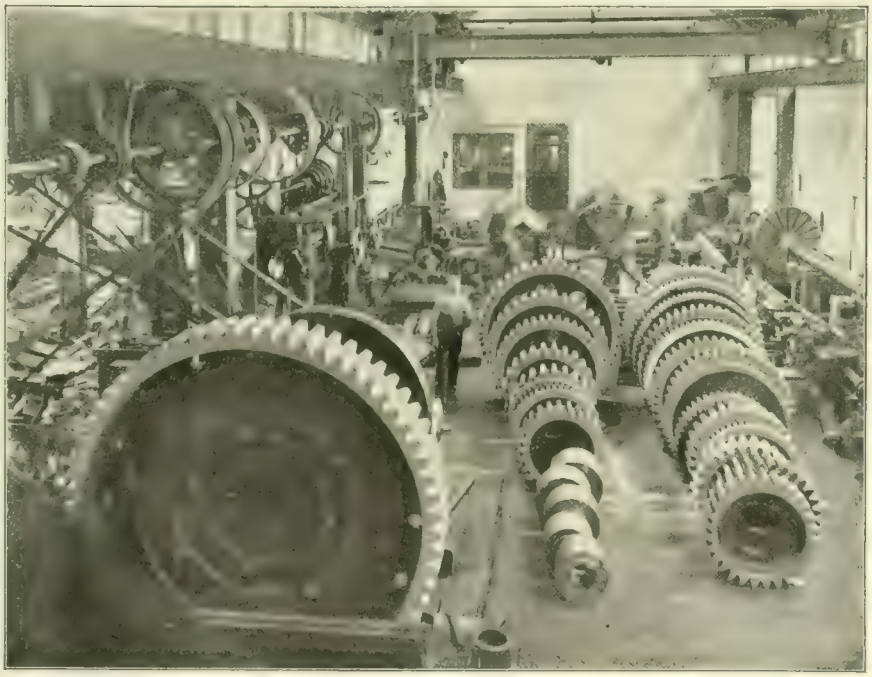

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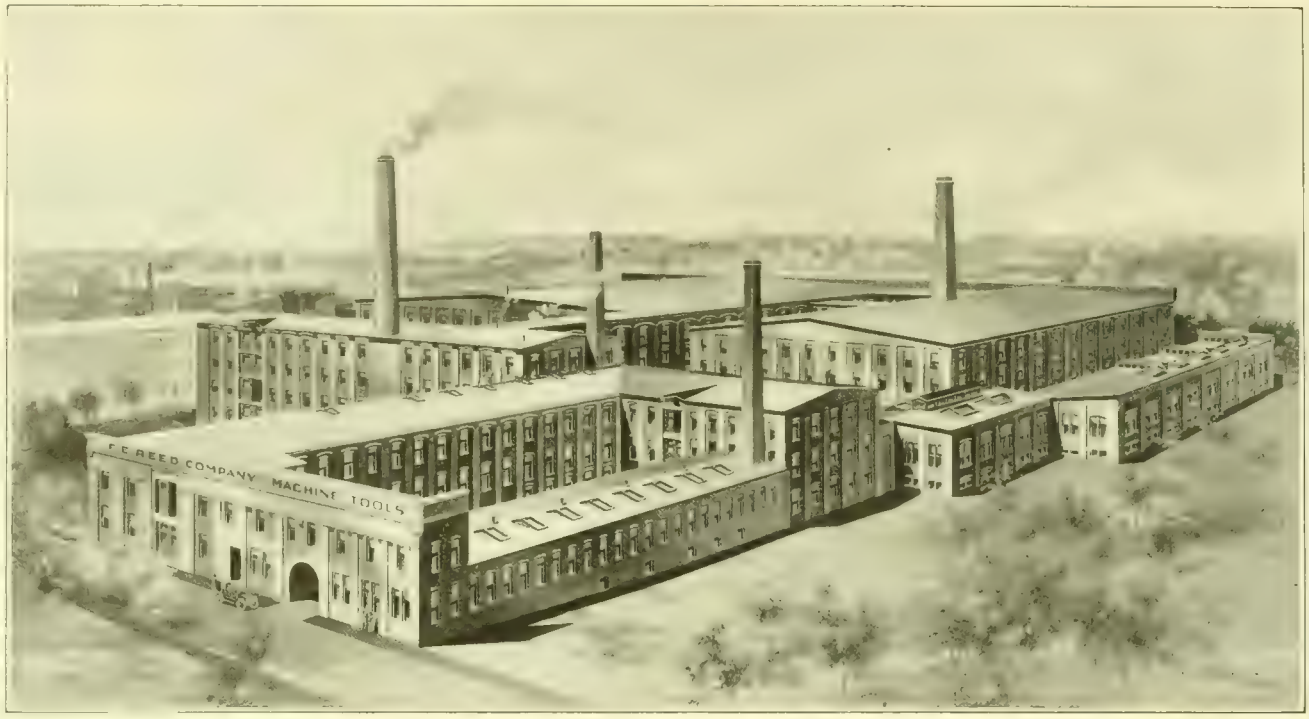

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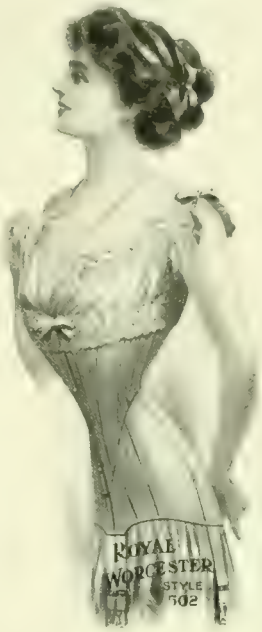

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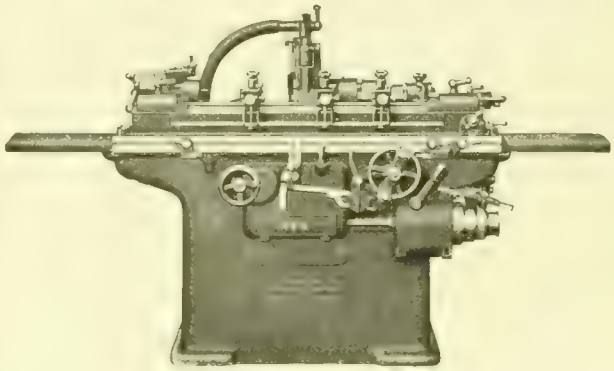

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Business Established 1783

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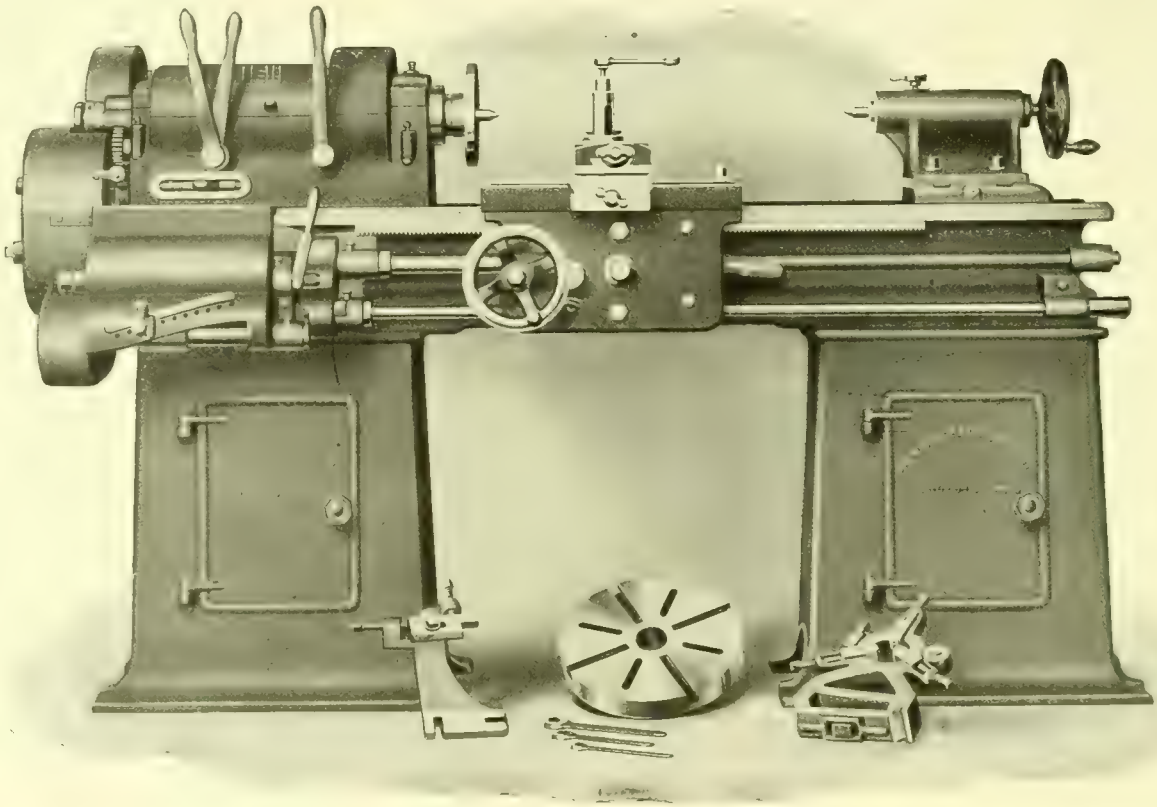

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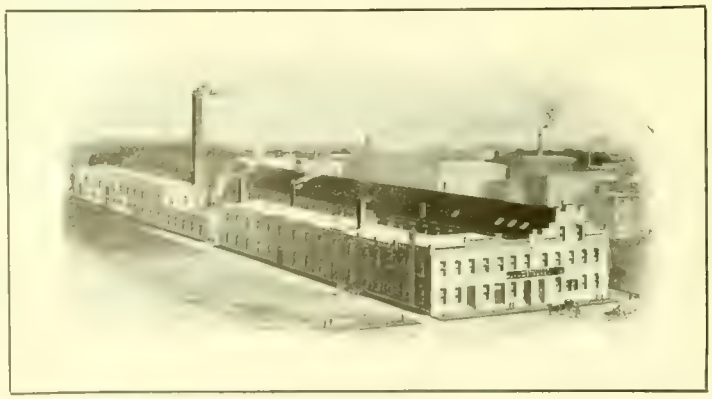

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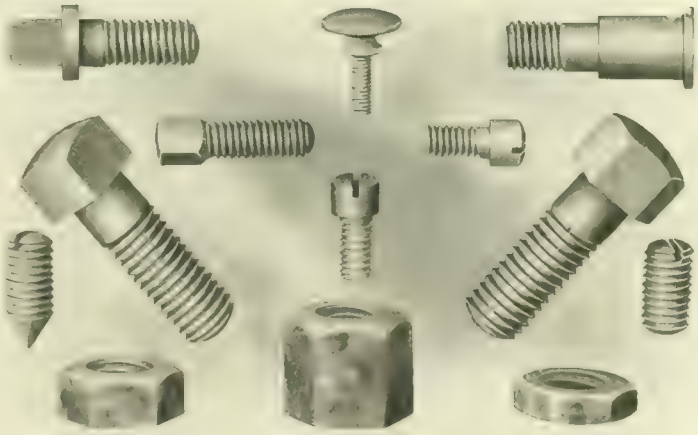

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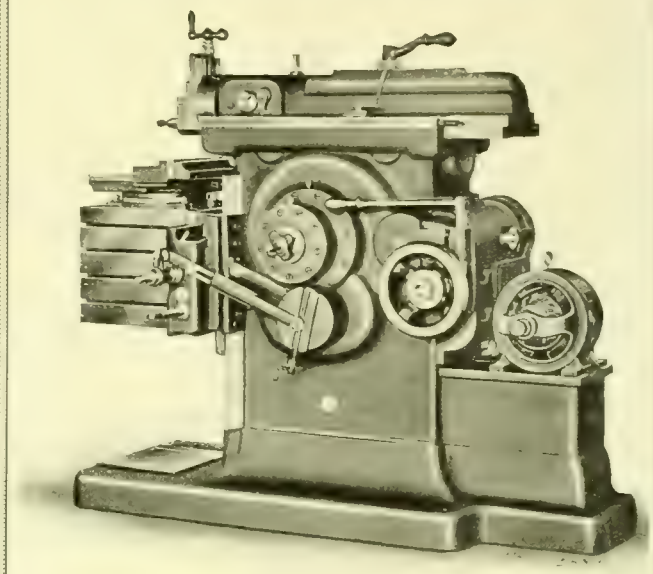

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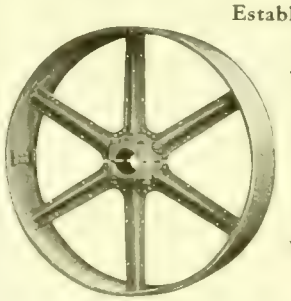

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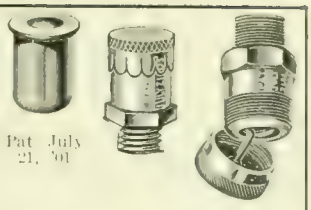

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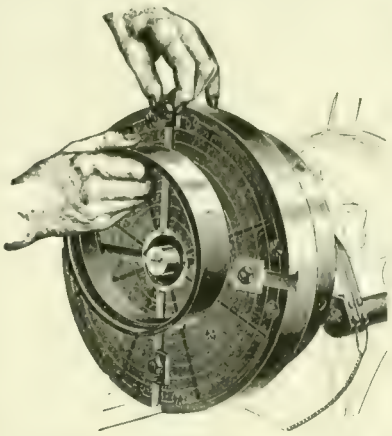

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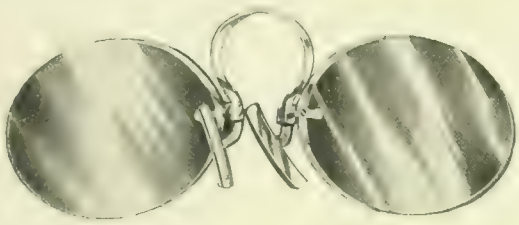

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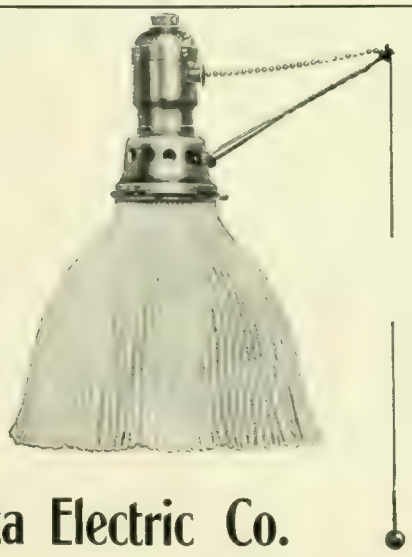

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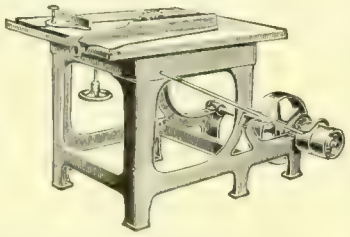

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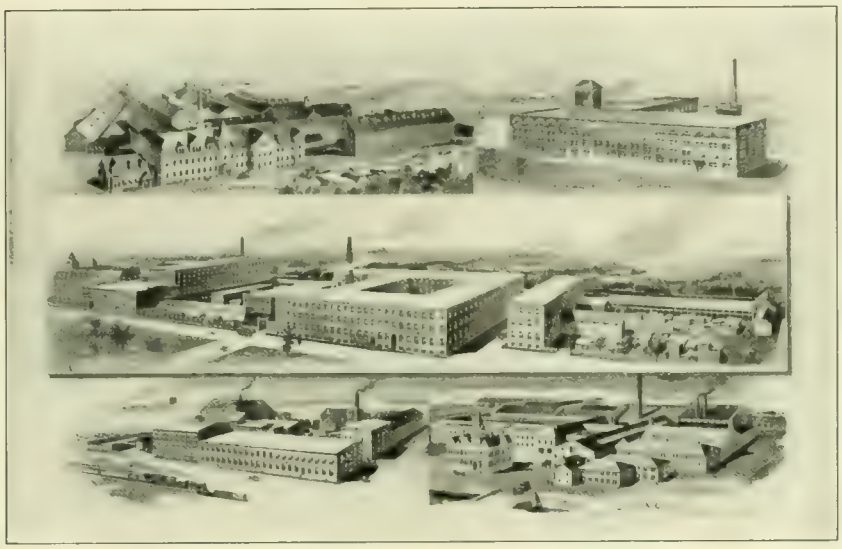

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15,000 acres now planted to rubber on the combined La Zacualpa properties.

The No. 1 Plantation, now completely financed, has been established nine years.

Shares in the No. 1 Plantation participating in production are now on a heavy dividend basis, averaging over 15 per cent net per annum.

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H. M. FOWLER, Representative
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17″ 22″ 24″ 26″ 30″

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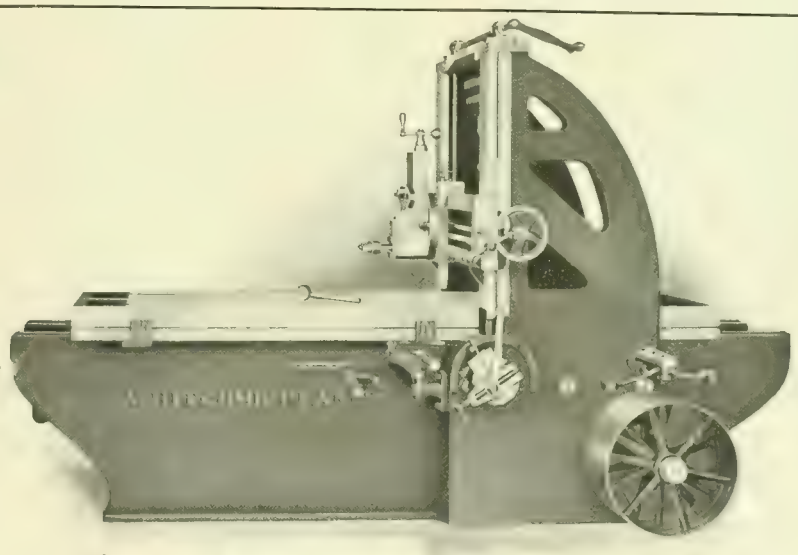

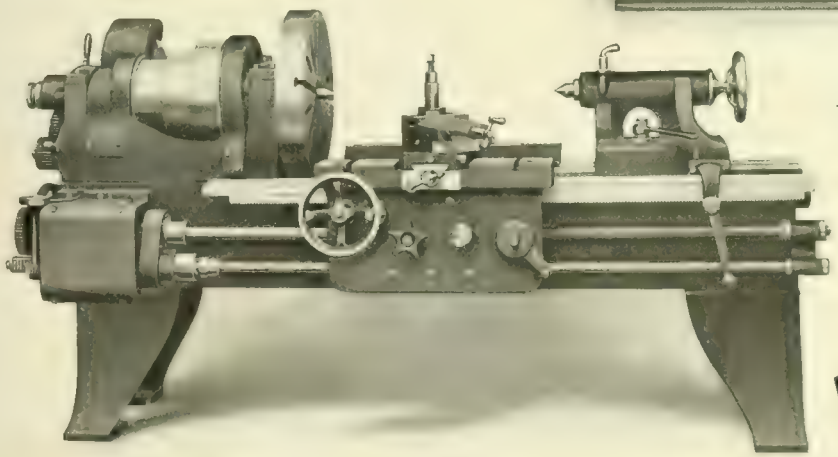

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EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

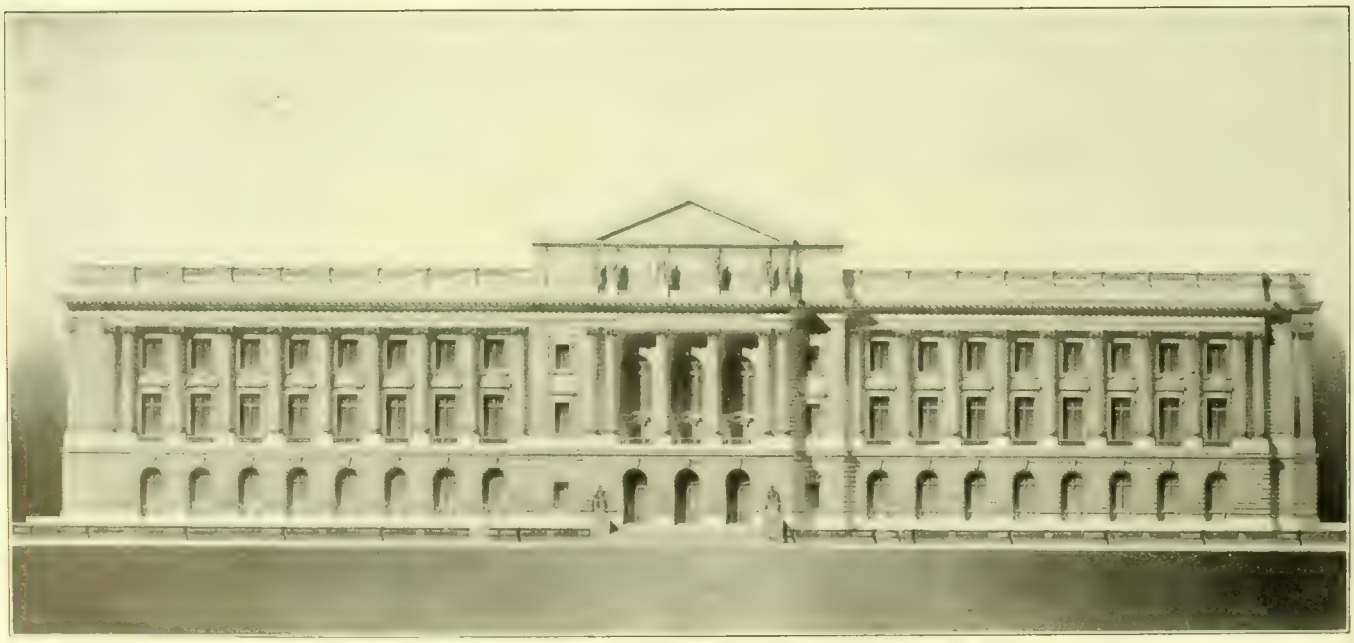
FINANCIAL AGENT FOR INDIVIDUALS AND CORPORATIONS

Depository Under Plans of Reorganization, Trustee of Corporation Mortgages, Registrar and Transfer Agent

ISSUES

LETTERS OF CREDIT AND FOREIGN EXCHANGE

ACCOUNTS SOLICITED



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MILFORD, MASS., PINK GRANITE

furnished by

WEBB PINK GRANITE COMPANY

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Resources over $4,000,000

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WIRE CLOTH
Wire Clothes Lines
Picture Cord
Coal and Sand Screens
Foundry Riddles
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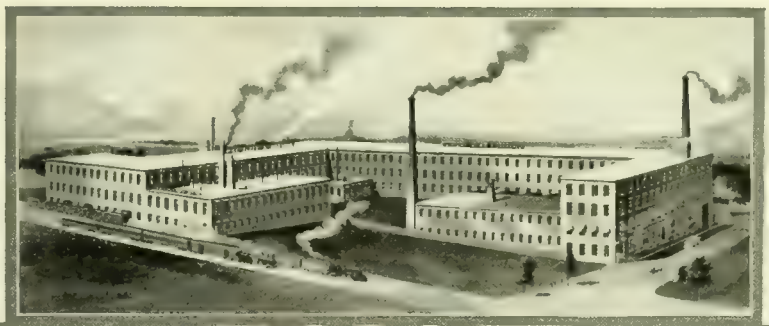
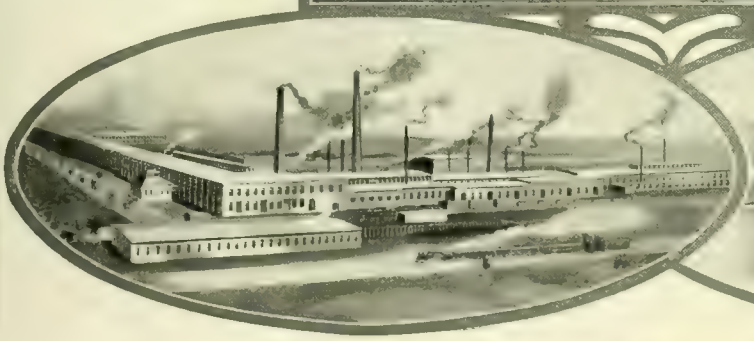


POULTRY NETTING
Wire Rope Staples
Flower Bed Guard
and Trellis
Wire Fencing
Elevator Cabs and
Enclosures



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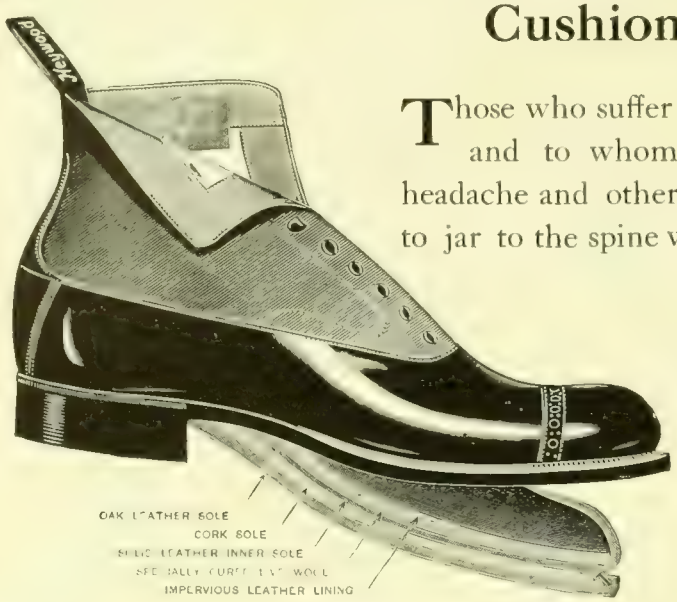

Those who suffer from tender feet and to whom walking means headache and other complaints due to jar to the spine will find comfort, health and rest from this perfect fitting, stylish shoe.

THE Foot DOCTOR TRADE MARK

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State Mutual Life Assurance Company

(Incorporated 1844)

Assets, January 1, 1909,	$32,540,041.03
Liabilities, January 1, 1909,	$29,843,942.37
Surplus, January 1, 1909,	$2,696,098 66

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, - - - Massachusetts

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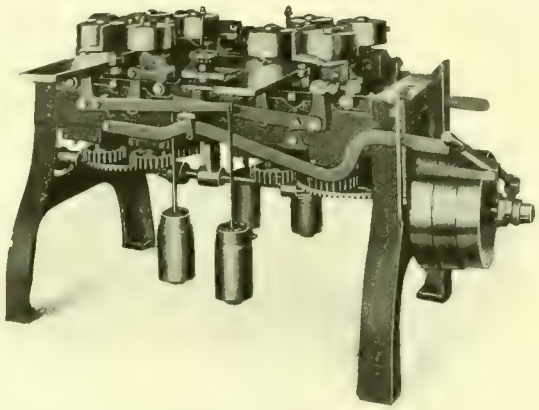

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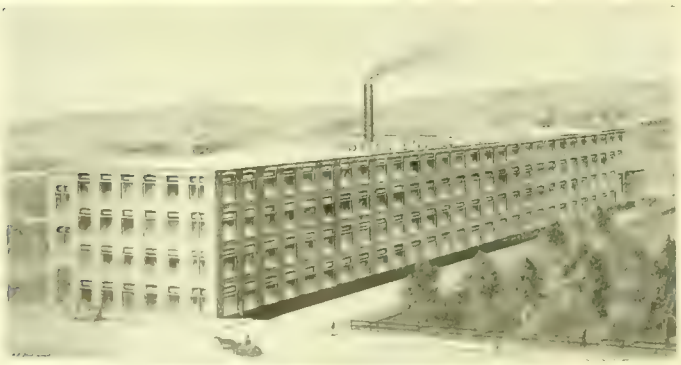

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All Kinds and Sizes of Envelopes

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Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
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Made in Worcester.

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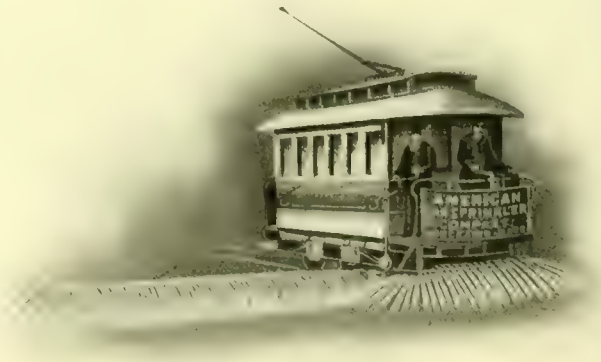

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THE WORCESTER MAGAZINE

VOL. XII. FEBRUARY, 1909 No. 2

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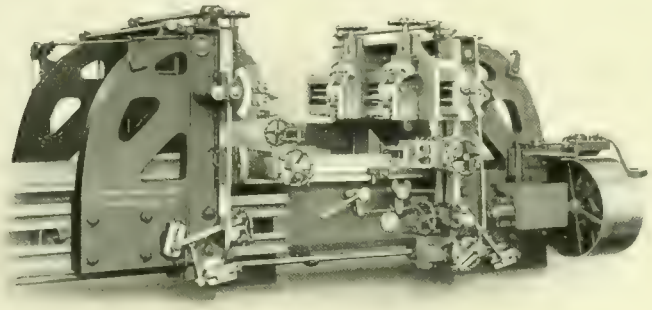
ESTABLISHED IN 1887



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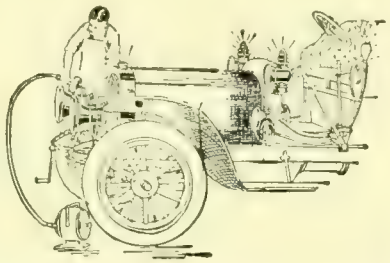

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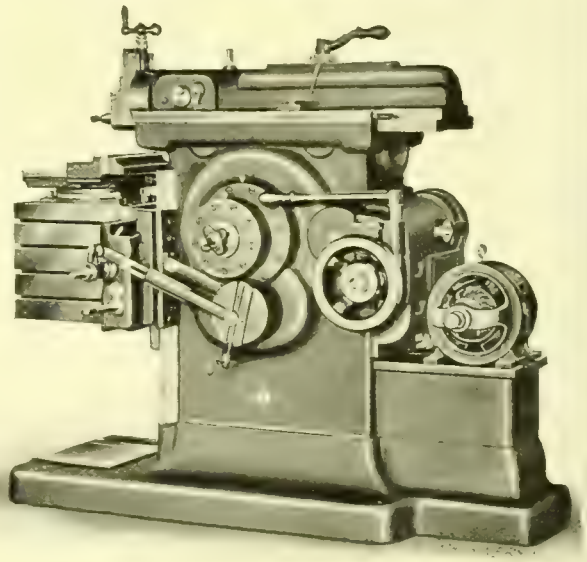

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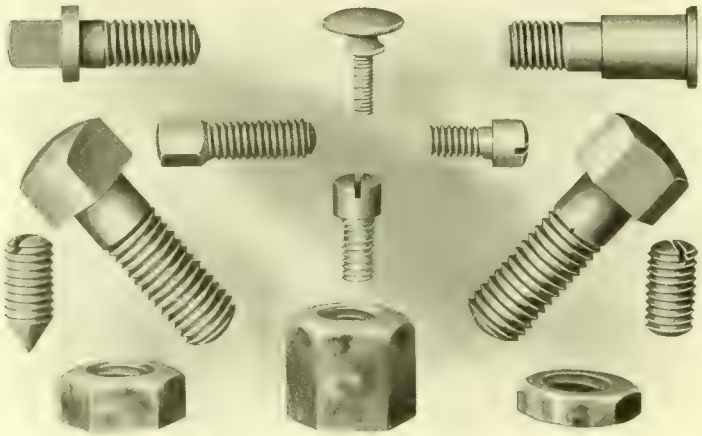

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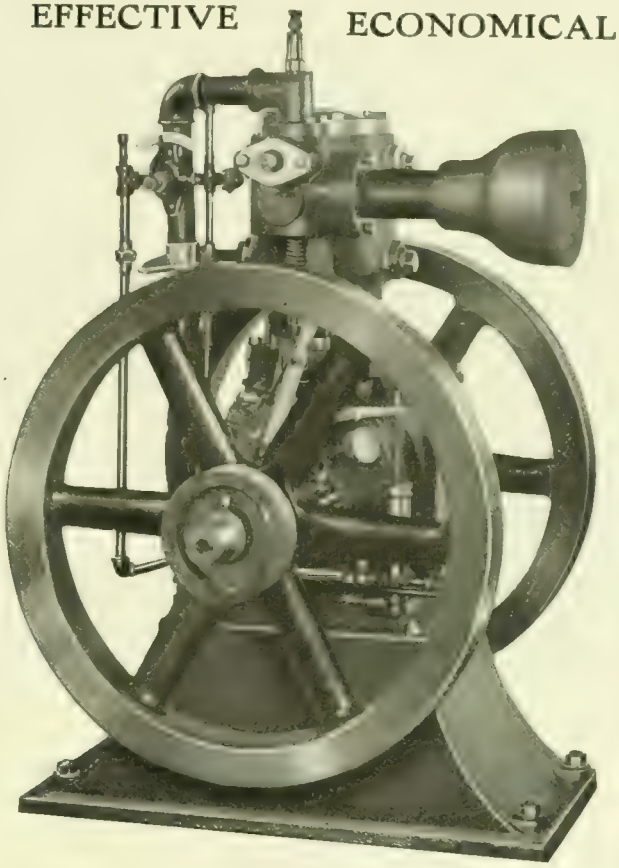

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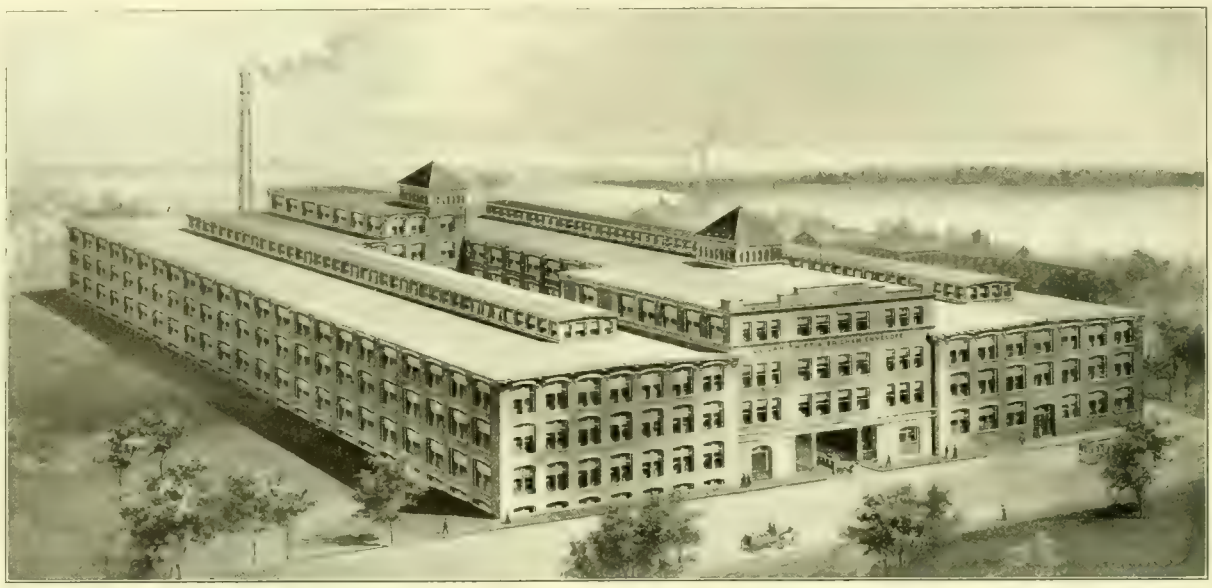

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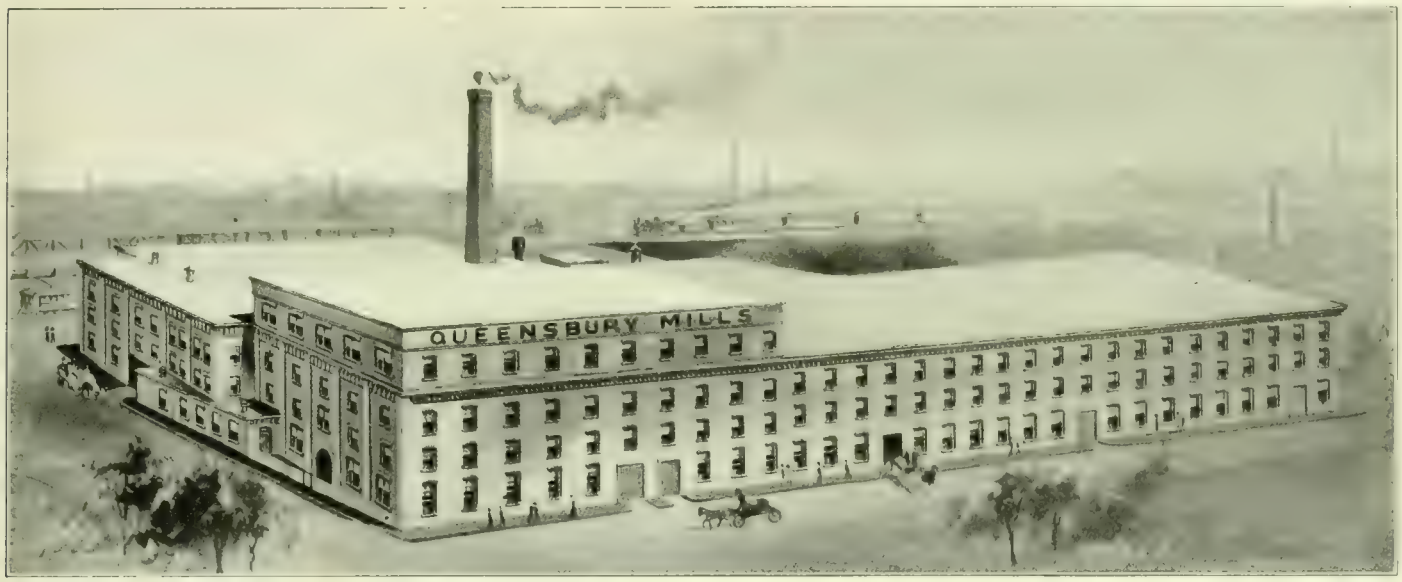

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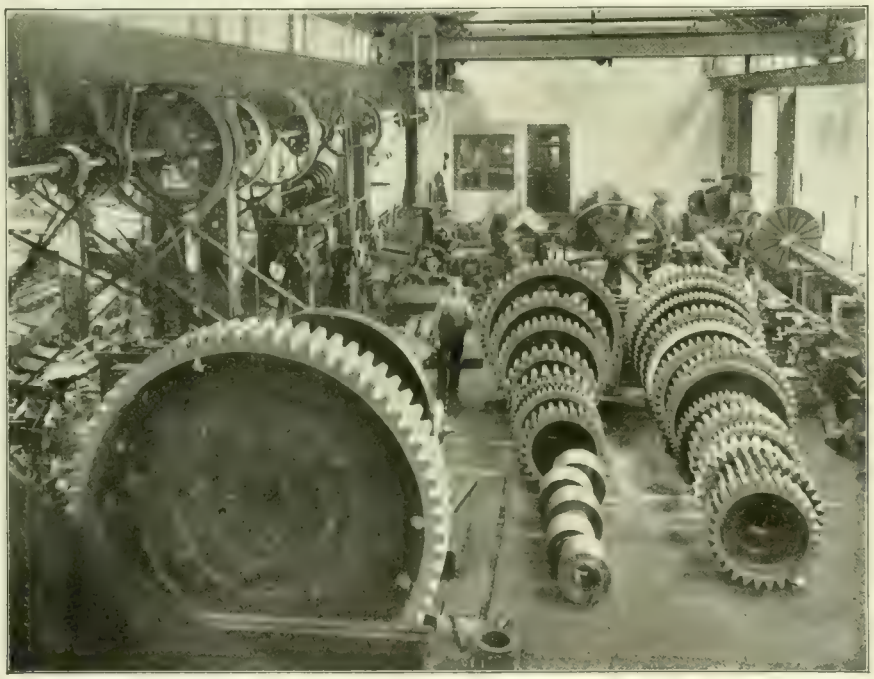

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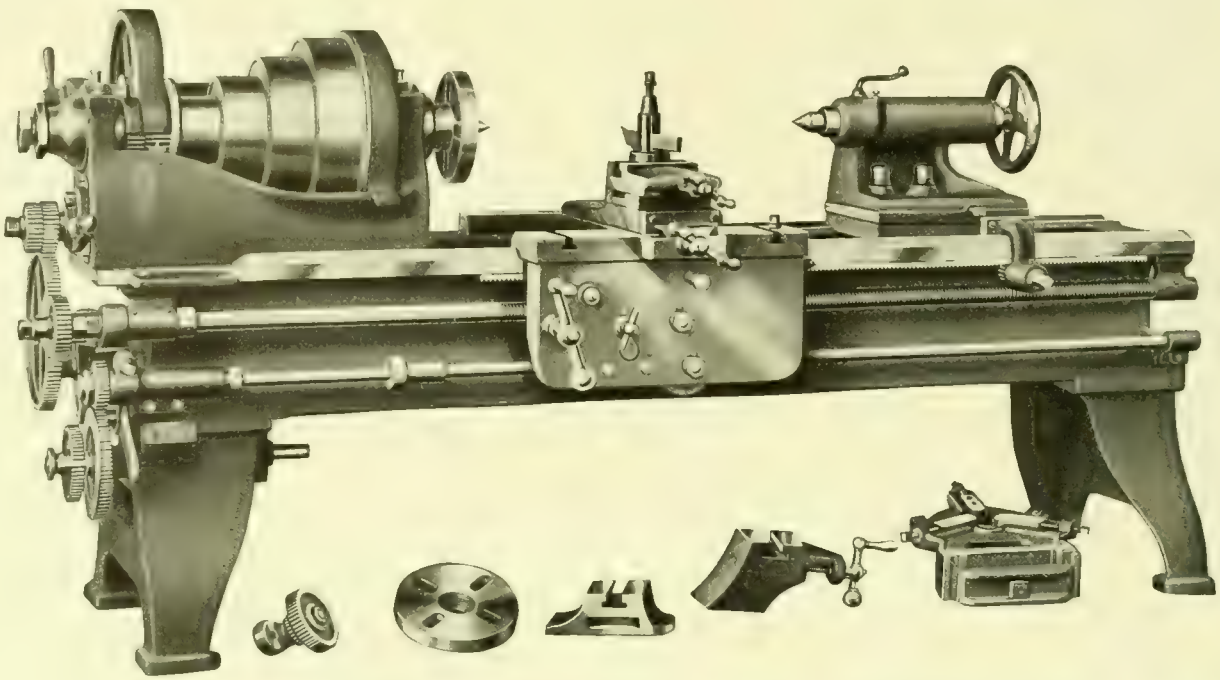

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FOR ALL FIGURES

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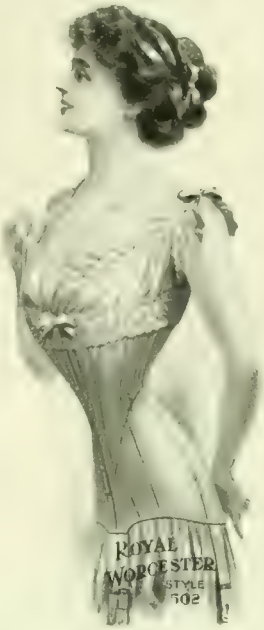

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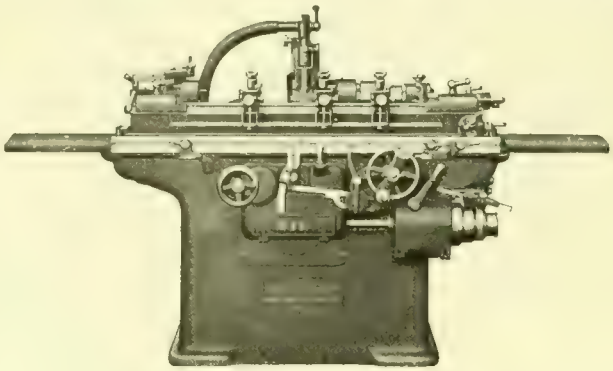

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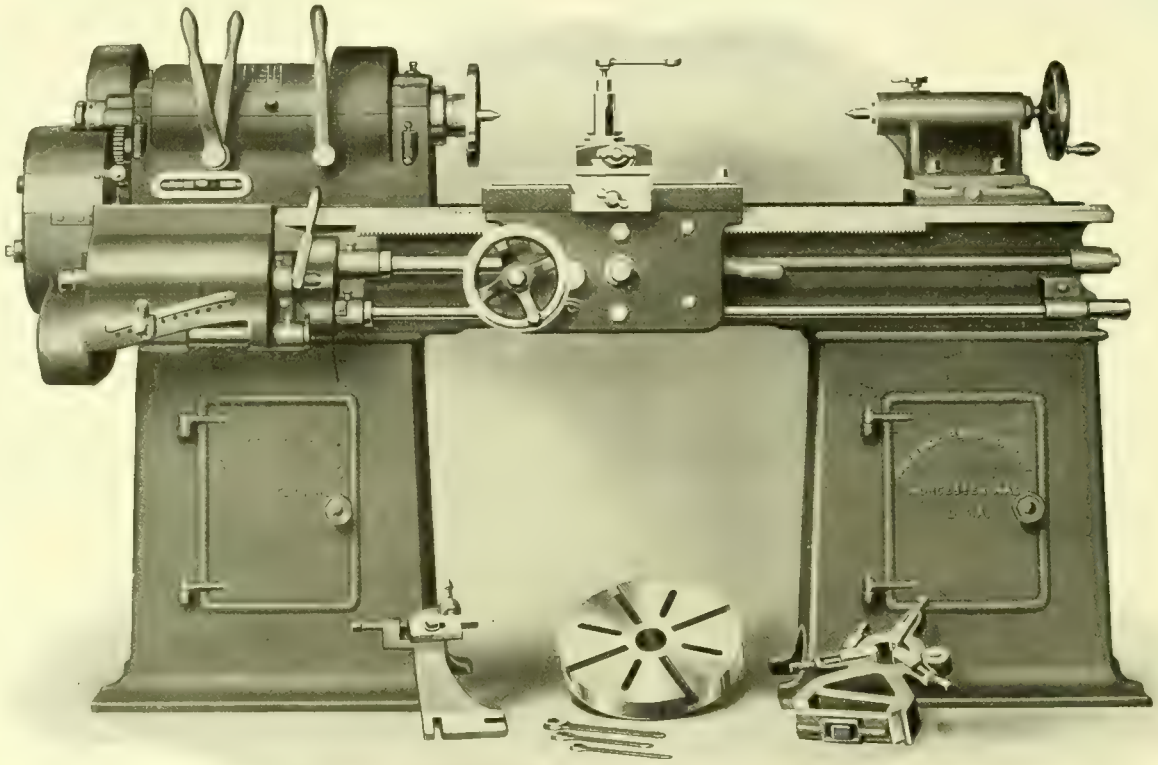

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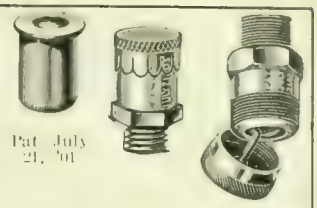

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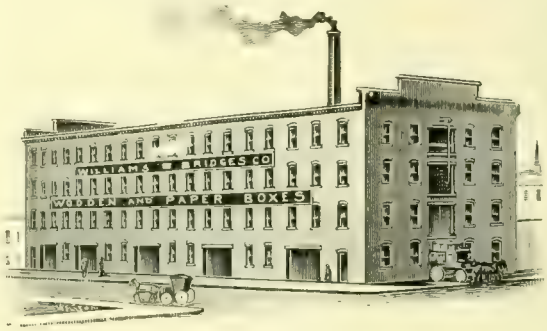

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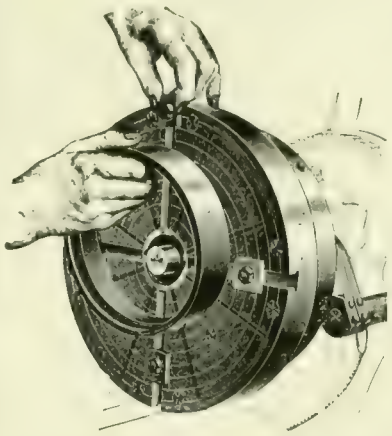

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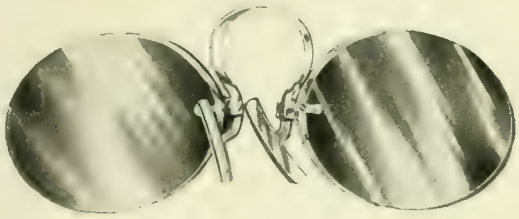

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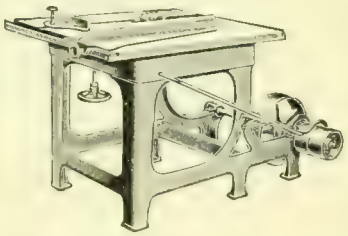

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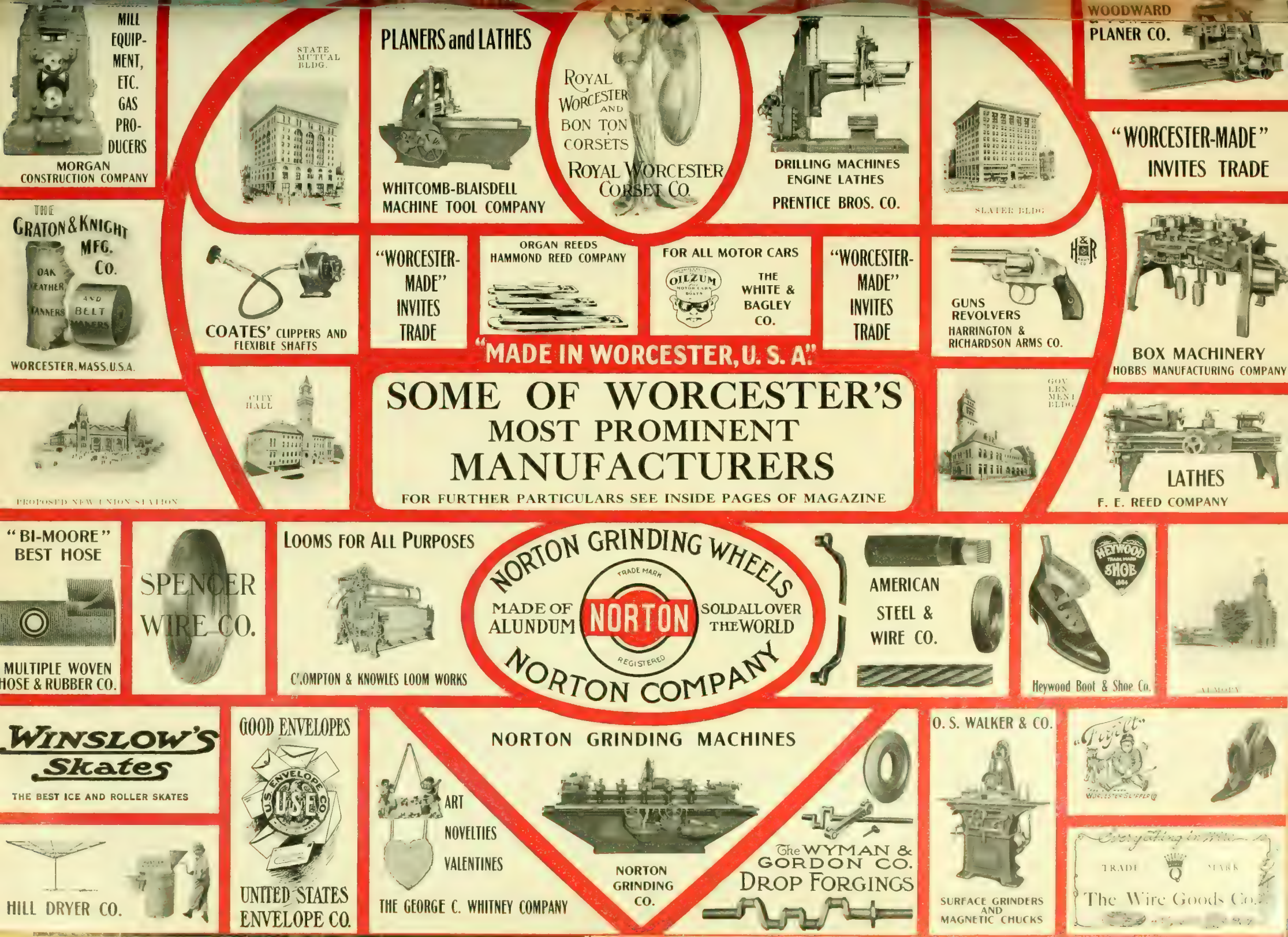
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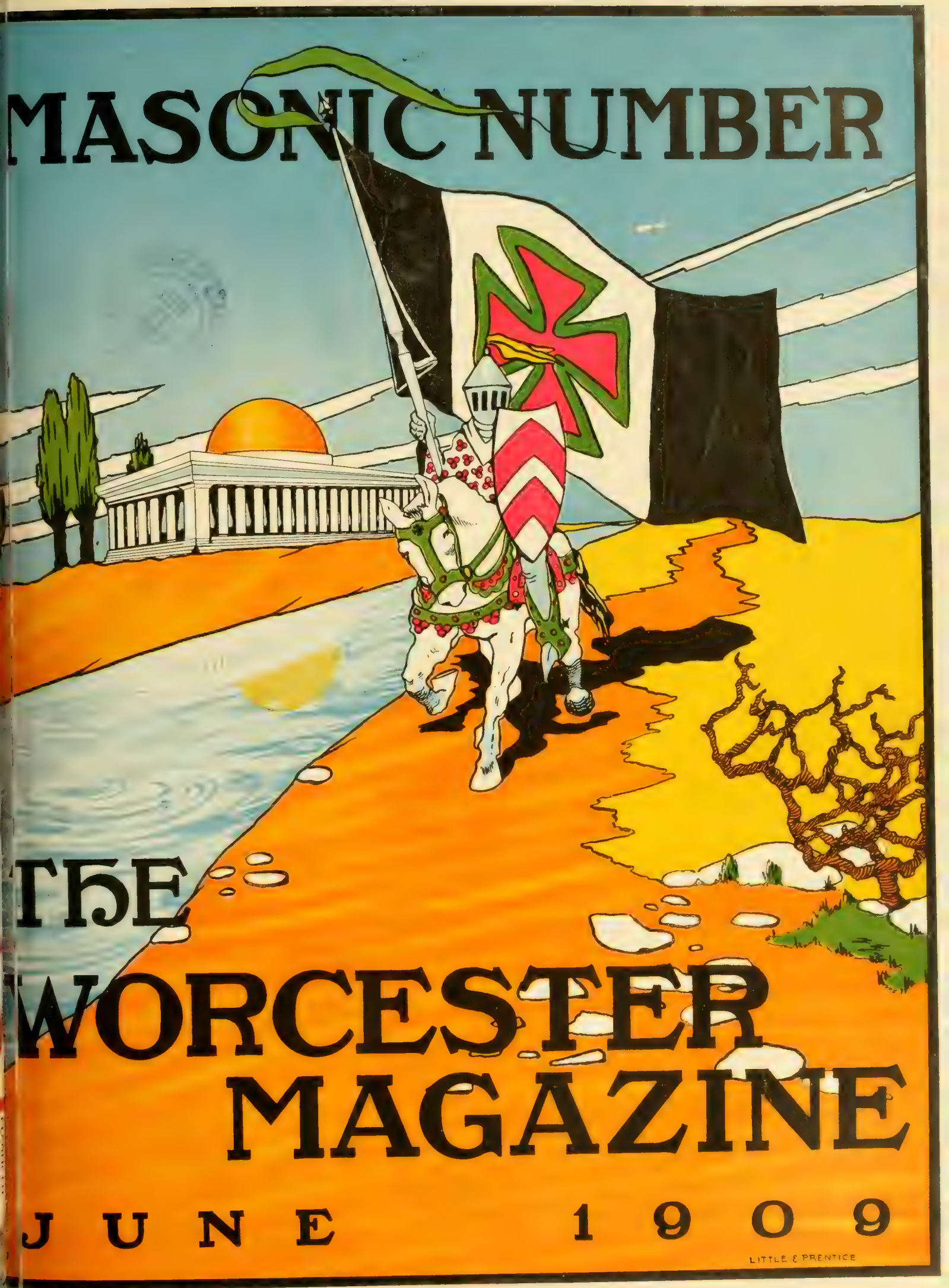

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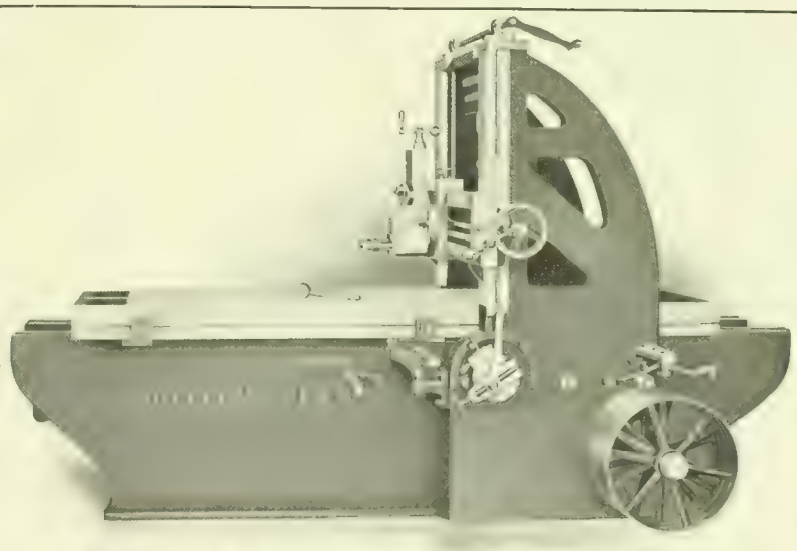

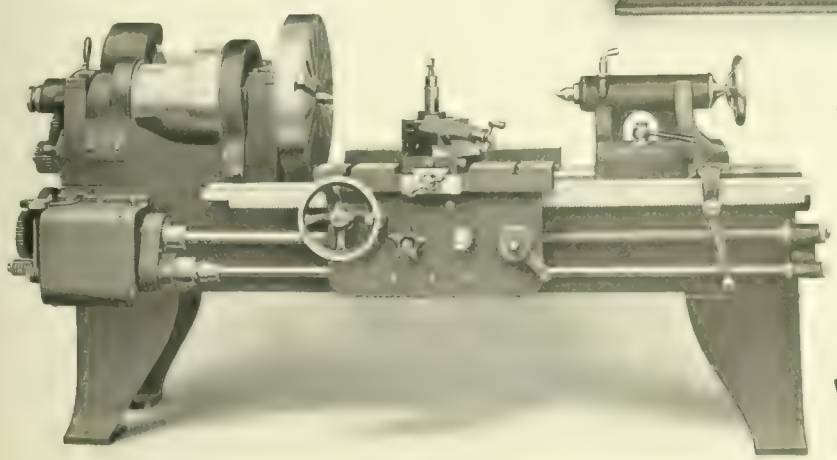

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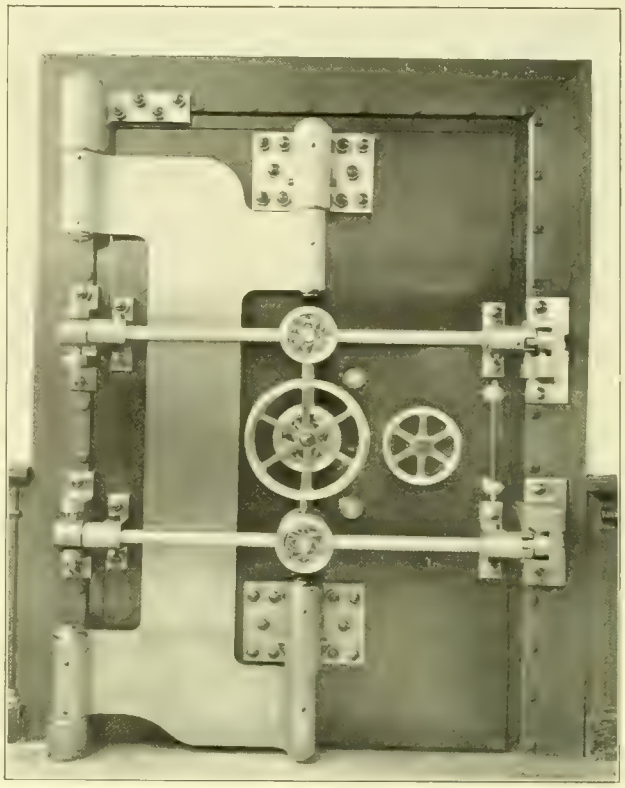

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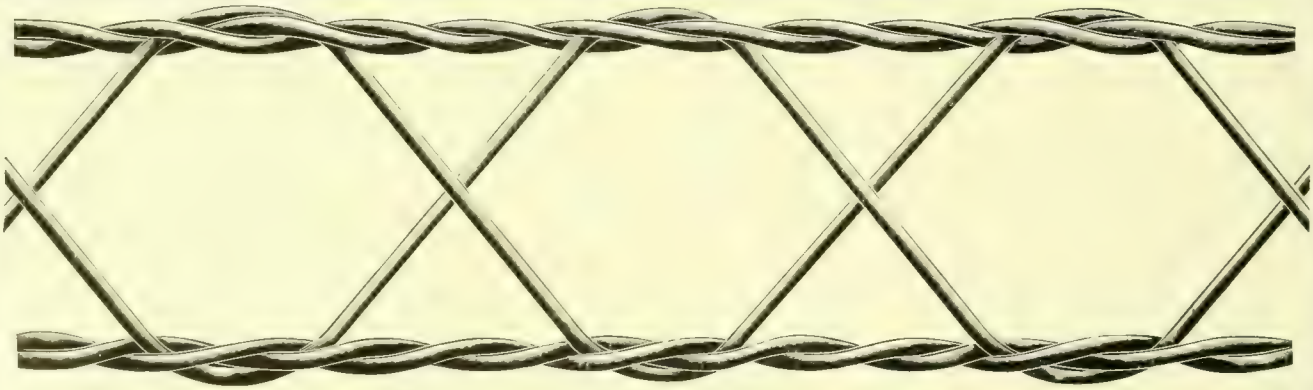

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Put up in flat, thirty-rod coils (weighing from sixty-five to ninety-five pounds each), which may be piled one upon another, 2000 pounds of fence fabric being stored in very small space. A compact stock in convenient units, easily handled in field or warehouse. **Write for catalogue No. 3.**

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BRANCH WAREHOUSES: New York, Philadelphia, Pittsburg, Chicago, San Francisco

INCORPORATED 1868

WORCESTER TRUST COMPANY

Capital, Surplus and Profits $1,300,000
Total Resources $10,000,000

IN ADDITION TO A GENERAL BANKING BUSINESS

ACTS AS

EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

FINANCIAL AGENT FOR INDIVIDUALS AND CORPORATIONS

Depository Under Plans of Reorganization, Trustee of Corporation Mortgages, Registrar and Transfer Agent

ISSUES

LETTERS OF CREDIT AND FOREIGN EXCHANGE

ACCOUNTS SOLICITED

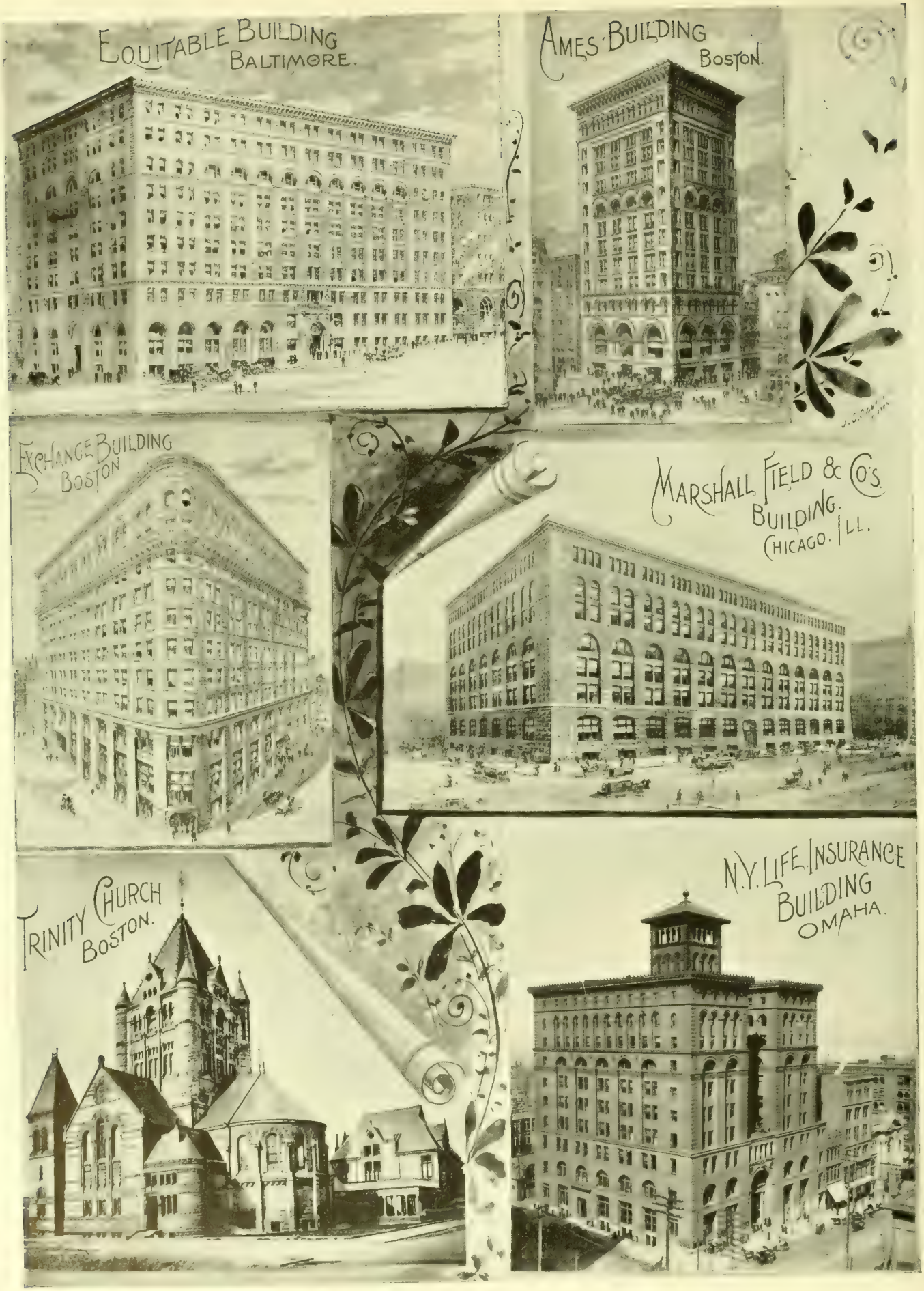
State Mutual Life Assurance Company

(INCORPORATED 1844)

Assets, Jan. 1, 1909, $32,540,041.03
Liabilities, Jan. 1, 1909, $29,843,942.37
Surplus, Jan. 1, 1909, $2,696,098.66

A. G. BULLOCK, PRESIDENT
BURTON H. WRIGHT, SECRETARY

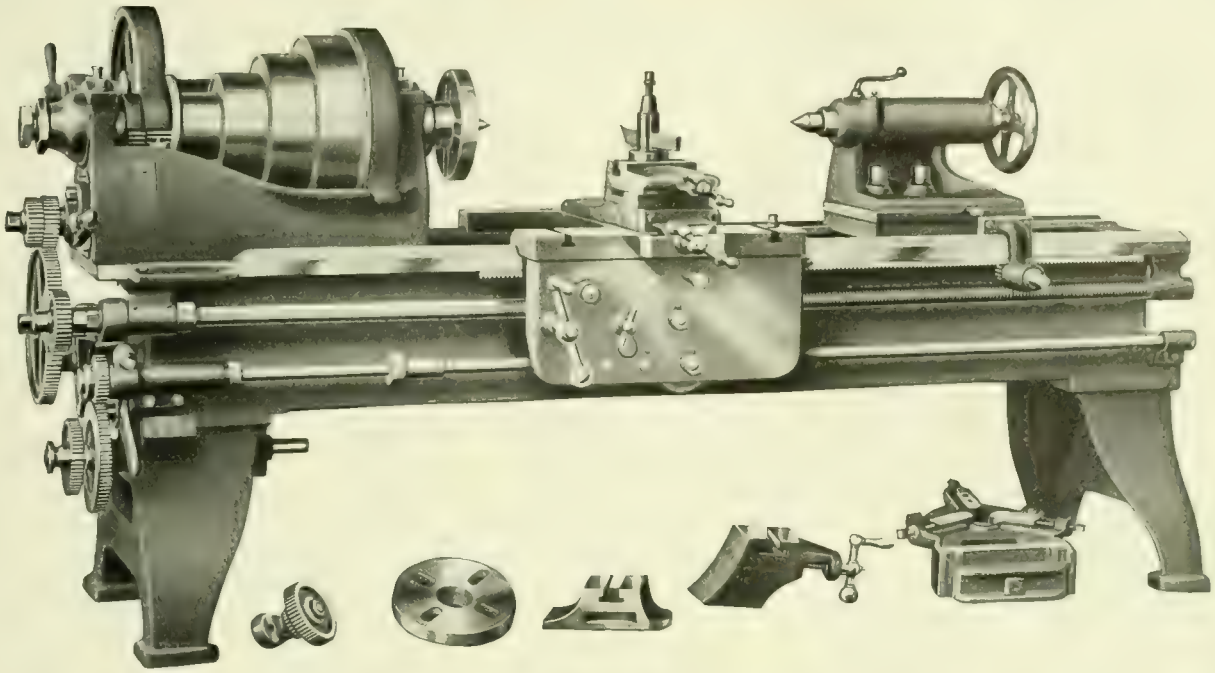
Worcester, Massachusetts



THE NORCROSS BROTHERS COMPANY
GENERAL CONTRACTORS AND BUILDERS
WORCESTER, MASSACHUSETTS

160 FIFTH AVENUE, NEW YORK
TREMONT BUILDING, BOSTON

INDUSTRIAL BUILDING, PROVIDENCE
COLORADO BUILDING, WASHINGTON



The NEW REED LATHES are
HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

HEYWOOD TRADE MARK SHOE 1864

HIGH GRADE SHOES FOR MEN

HEYWOOD TRADE MARK SHOE 1864

1864 HEYWOOD TRADE MARK SHOE 1864 1909

"Heywood Shoes Wear"

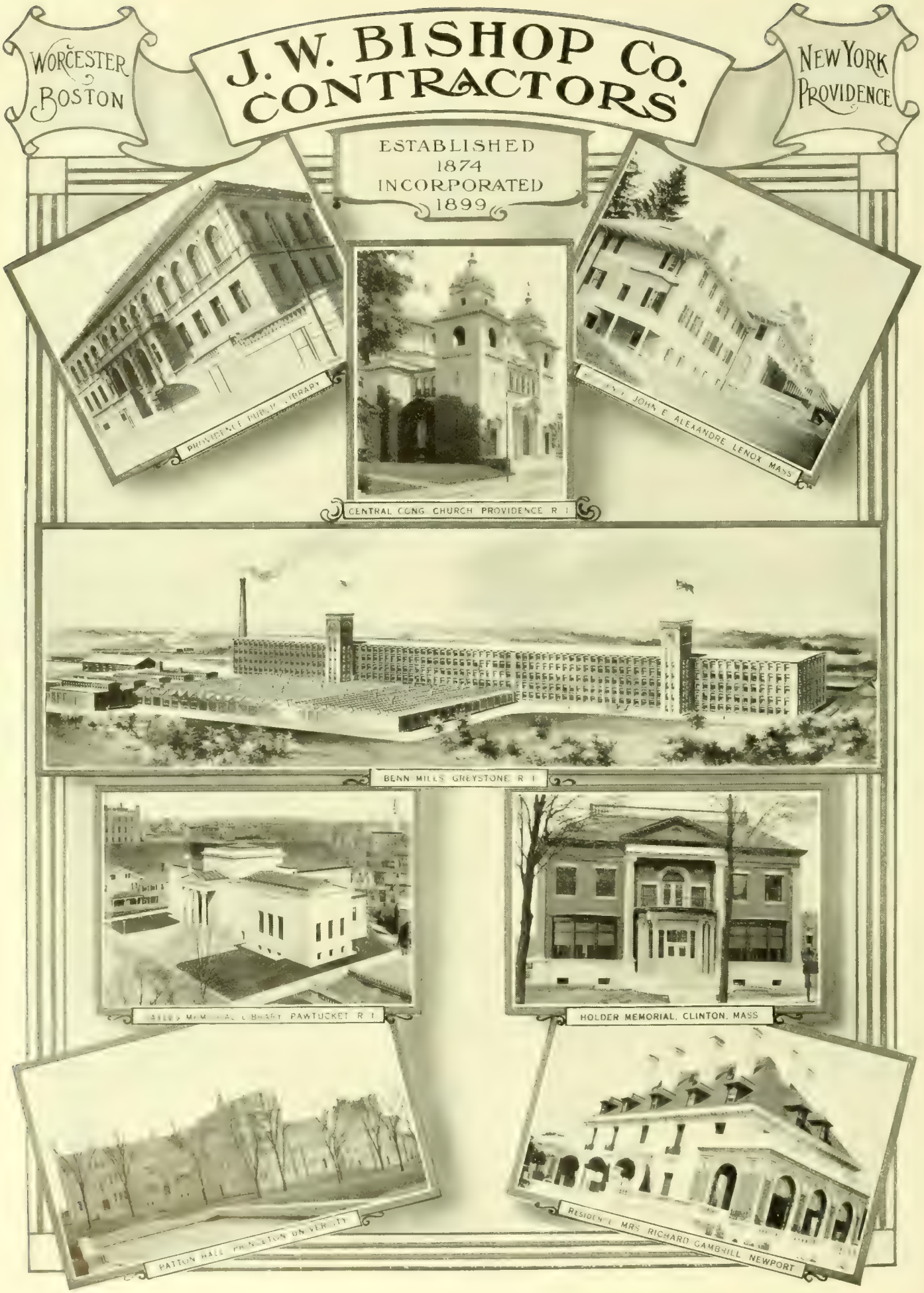
Our Trade Mark
is a Guarantee

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.


WORCESTER
BOSTON
J. W. BISHOP Co.
CONTRACTORS
NEW YORK
PROVIDENCE
ESTABLISHED
1874
INCORPORATED
1899
PROVIDENCE PUBLIC LIBRARY
CENTRAL CONG CHURCH PROVIDENCE R I
JOHN E ALEXANDRE LENOX MASS
BENN MILLS GREYSTONE R I
HOLDER MEMORIAL, CLINTON, MASS
PATTON HALL PRINCETON UNIVERSITY
RESIDENCE MRS RICHARD GAMBRILL NEWPORT

HILL'S IMPROVED AUTOMOBILE SPECIALTIES

The Auto Drip Pan for Garage Use,
Heavy Galvanized Sheet Steel with Heavy
Steel Rod inside of Rim

Oily Waste Cans, Self-Closing, Round
and Half Round

Auto Gasoline Measures
Auto Gasoline Funnels

Made in Various Shapes

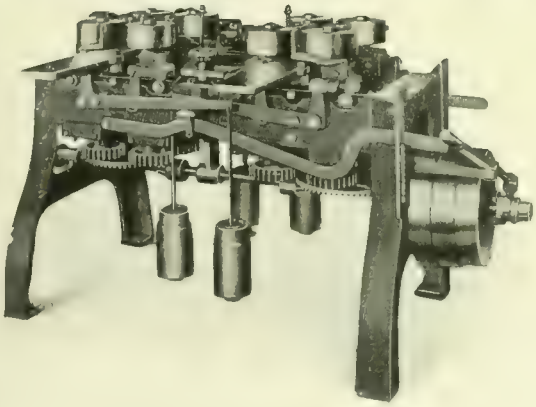
Also Combination Measure and Funnel

The Largest Manufacturers of Clothes
Dryers in the World

Manufactured by
Dept. S

HILL DRYER COMPANY, Worcester

SHIPPING CASES AND BOXES



Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.

SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.
Made in Worcester.

COLD PRESSED STEEL AND BRASS MACHINE SCREW

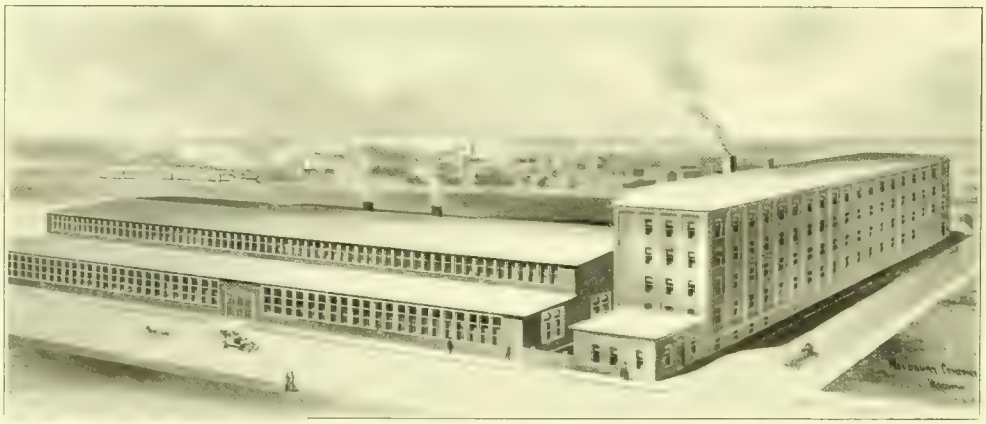
NUTS

Our nuts are made with especial attention to **Accuracy** and **Uniformity** in **Size** and **Finish.** They compare very favorably with **MILLED NUTS.** Our large **Stock** of standard sizes enables us to make Quick Shipments. Let us prove our statements with a trial order.

REED & PRINCE MFG. CO.

Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

Capacity 20 tons a day

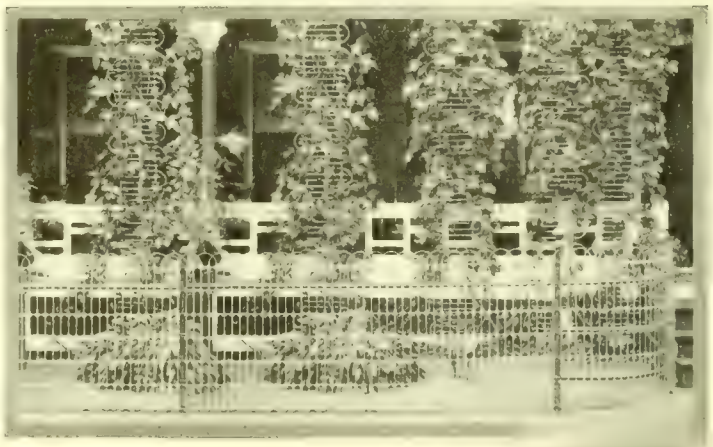
L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY

DEPARTMENT OF SPENCER WIRE COMPANY

We furnish and erect complete Ornamental Fences of Wire or Wrought Iron



Flower Bed Guard, Trellis, Tree Guards Rubbish Baskets for Parks and Cemeteries.

80 WEBSTER ST., WORCESTER, MASS.

A. S. LOWELL CO.

353-355 Main St., Cor. Foster

First and Third Floors

Millinery Exclusively

The Largest Millinery Store
in the East

The Latest Paris and New York
Fashions for Summer Wear
Now Showing

Second Floor

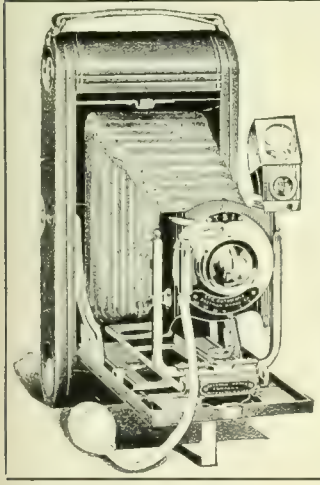
Coats, Suits, Skirts, Waists

A Complete Line of this Season's
Best Styles

DIRECT IMPORTERS — RETAIL AND WHOLESALE

New York Office:
821 Broadway

Paris Office:
117 Faubourg Poissonniere



Professional and Amateur Photographic Apparatus, Materials and Chemicals

"There is no kodak but the Eastman Kodak"
—and we keep kodaks

WHEATON & BOWERS

Photographic Department

366 Main Street, Worcester

WHEATON
The Camera Man

MARCUS L. FOSTER, Pres. and Treas.

HENRY H. DYKE, Gen. Manage

STONE & FOSTER LUMBER CO.

LUMBER

For All Purposes

Corner Central and Union Streets,
WORCESTER, MASS.

Telephone 4380, 4381

HOTEL STANDISH

WORCESTER, MASS

NEW AND ATTRACTIVE

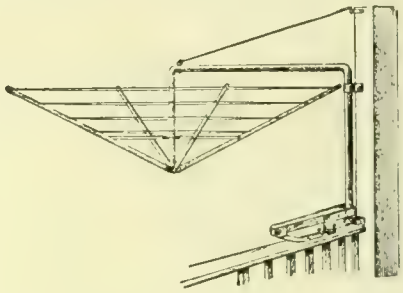
On direct route between Boston and New York. Catering to permanent and transient guests.

ROOMS WITH OR WITHOUT BATHS

The VICTOR Improved

Roller Bearing Clothes Reels

Ash
Chutes,
Sifters,
Etc.



Manufactured by The R. W. Robinson Co.

86 Foster Street

Telephone 6019 Agents Wanted

FOR YOUR HOUSE

WORCESTER, MASS.

W. Henry Wenz John J. Barlow

1 or 1,000,000

ADVERTISING SIGNS

STEEL, WOOD, IRON, BRASS, GLASS, CLOTH

AMERICAN PUBLICITY COMPANY

Made in Worcester. 66 High Street, Worcester

C. B. POST, Prop.

Thoroughness and Skillfulness

To become a first-class Watchmaker you would learn of one who knows how to make a watch; to learn Business or Shorthand thoroughly go to

The Worcester Business Institute

We know how to teach these essential features of a business education

Gentlemen teachers at the head of all Departments

NEVER SURRENDER Hosiery

The only brand of hose which has stood the test of years

In spite of the continuous advertising of all kinds of hosiery for men, women and children with so-called "guarantees," **Never Surrender Hose** continue to hold the confidence of the largest part of the community.

A new specialty has been added this season in women's silk lisle "N. S." hosiery

They come in *black and stylish tans—just like silk* in appearance; the acme of comfort, and of wonderful durability. We guarantee these and all regular kinds by giving a new pair to any one who has a reasonable complaint to make—that is *our* way of doing it.

Never Surrender Hose come in *all black* or with *white soles* in all sizes for men, women and children in cotton or lisle thread.

One Price
One Excellence } **3 pairs for $1**

Sold only by the *original* proprietors

Barnard, Sumner & Putnam Co.

Worcester, Mass.

B. C. FISKE, PREST. W. W. CARTER, TREAS. E. S. STROUT, SEC

FISKE-CARTER CONSTRUCTION CO.

BUILDERS

OFFICES
11 FOSTER ST., WORCESTER
SPARTANBURG, S. C.

WORCESTER, MASS.

The Royal Worcester Case Arch Support Shoe

FOR MEN AND WOMEN
Price $5.00 and $6.00 per pair

The only practical shoe that is adapted for and prevents falling arches.

See the point?

Home of the Royal Worcester Case Arch Support Shoe

Business men who are constantly on their feet in their daily walks of life appreciate the comforts of this shoe.

Manufactured and Sold by

The Chas. Chase Shoe Co.

40 Thomas St., Worcester, Mass.

The Store of Consistent Progress, Ware-Pratt Co., Men's and Boys' Clothing

Slater Building, Worcester, Mass.

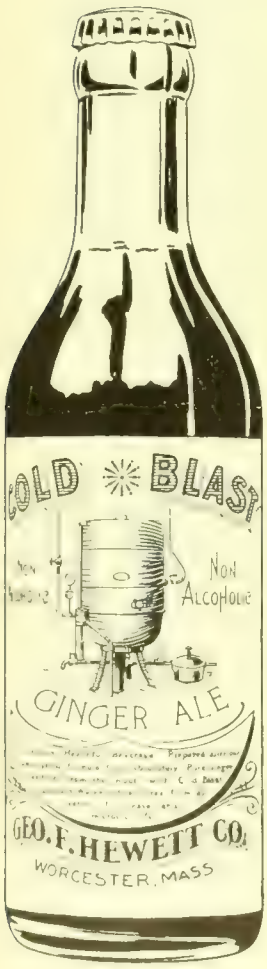
"Made in Worcester"

EMERSON'S OLD-TIME SOUVENIR GROUPED-

POST CARDS

The Card shown is one of a set of 15 **just issued.** They are not only artistic and attractive, but the grouping of ancient and modern views shows time's changes in Worcester, which gives them an **educational** and **historical** value. Printed in Doubletone "Cameo Art Brown." **Price 25 cents.** If your dealer cannot furnish these Cards write or telephone your order **now** and get the complete set by return mail. **Wm. A. Emerson,** Publisher, 8½ Lincoln Avenue, Worcester, Mass.

Telephone 2473-5



Drink the Best

COLD BLAST GINGER ALE

Is the pinnacle of perfection as far as tonics go. The call for the imported brands has decreased materially since we placed our famous Cold Blast Ginger Ale on the market—because it is only BEST sold. Superior quality always gains recognition.

PUREOXIA, the purest of all distilled waters, is used in the making of Cold Blast Ginger Ale. That's why it has that "something" taste pleasing to the palate.

Delivered in any part of the city at 75 cts. per case of 24 bottles.

We have granted to the

George F. Hewett Company, Worcester, Mass.

the exclusive franchise for Worcester County to bottle

HIRES

The Charles E. Hires Company, Philadelphia

Delivered in any part of the city at $1.10 per case of 24 bottles. 30 cents refunded on return of case and bottles.

George F. Hewett Company

41, 43, 45 WALDO STREET

Worcester, Massachusetts

Telephone 2455

Not a drink that merely ***tastes*** good, but one that adds to the joy of it all by refreshing, by cooling, by cheering, by satisfying.

Hires

5¢

Carbonated in bottles.

Going to Seattle

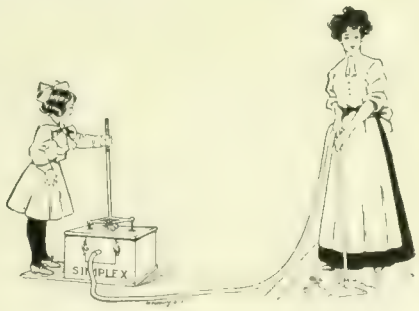
Join the Board of Trade special train—Party leaving Worcester August 4th—Everything first-class—Stop-overs at all principal points—The best chance ever offered to visit the Great West.

Send for Itinerary

JOHN L. SEWALL
Secretary Board of Trade

or

HEALY'S TICKET AGENCY,
368 Main Street.



Kendall-Simplex Vacuum Cleaner

Patent Pending

The "Kendall-Simplex" is a veritable little Vacuum System, scientific, efficient, dustless. Every home that prizes health and cleanliness ought to have one. It cleans clean.

Keeps every inch of everything pure, sweet, clean and healthful

Cleans within—beneath—behind. Sweeps—cleans—dusts in just one operation. The delight of the housewife who takes pride in her home.

Fully Guaranteed, $25.00
Sold by leading Dealers

O. S. Kendall & Son

564 Main Street Manufacturers **Worcester, Mass.**

People's Savings Bank

Incorporated May 13, 1864

452 MAIN STREET, WORCESTER, MASS.

Deposits of $1 to $1000 received and put upon interest on February, May, August and November 1st.

Dividends payable and compounded semi-annually on February and August 2d.

DEPOSITS RECEIVED SATURDAY EVENING, 6 to 8 o'clock, in addition to usual hours.

BANKING BY MAIL receives prompt attention. Write for forms.

SAMUEL R. HEYWOOD, President

CHARLES M. BENT, Treasurer

Headquarters 20th Annual Convention Supreme Council, M. O. V. P. E. R., June 10th and 11th, 1909.

PRESTEEL

Better than Ordinary Stampings

Light and Heavy Deep Drawing, Cold Rolling

For All Machine Parts.

AUTOGENOUS WELDING

For Automobiles and all machine parts using the oxy-acetylene blow pipe, producing hottest flame known, 6300°, thoroughly uniting iron, steel, copper, cast iron, aluminum, etc. This department has been busy all winter repairing cast-iron automobile cylinders, aluminum crank cases, steel crank shafts, and other machine parts, accomplishing what could have been done in no other way. A method for putting on metal removed by mistake or accident.

Worcester Pressed Steel Company

Main Office and Factory
WORCESTER, MASS.

Chicago Office
1064 MONADNOCK BLOCK

No home is complete without a lawn, and lawn requisites are a specialty with us. We issue a complete catalogue of these and other farm and garden supplies and mail it free to any one asking for it. There is no **lawn mower made just like or just as good as the Knollwood.** Come in and see it or send for catalogue.

ROSS BROS. CO.

90-92 Front St. Worcester, Mass.

Spend your Vacation

on the

Cool, Clean, Exhilarating Trolley

Special excursions every week

The cheapest and best way to enjoy the Summer

Boston and Worcester Trolley Air Line

FURNITURE

CARPETS

RUGS

DRAPERIES

QUAKER RANGES

EDDY REFRIGERATORS

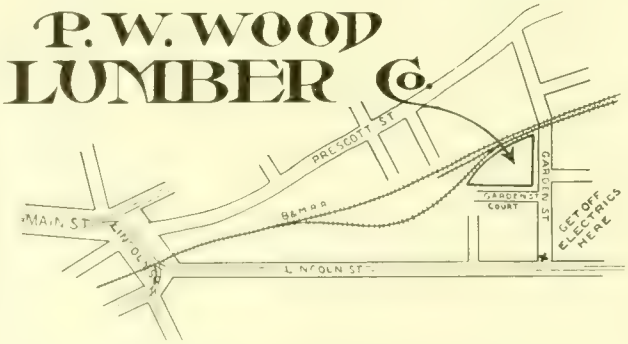
Grand-Rapids-Made Furniture our Specialty

We carry the largest stock of fine and medium grade house furnishings to be found in Worcester, every piece of which carries our own as well as the maker's guarantee.

DODGE FURNITURE CO.

615, 617, 619 Main St.

P. W. WOOD LUMBER Co.



SUCCESSORS TO WORCESTER LUMBER CO.

All kinds of

LUMBER

For Building and Shop Work carried in Stock

Telephone 3095

11 GARDEN ST.,
WORCESTER, MASS.

BESSE, BRYANT CO.

THE STORE of Besse, Bryant Co. is the Worcester branch of the famous Besse System, a chain of forty odd retail stores located in New England and the West. These stores are united under one management with large offices in Boston, and buy such immense quantities of Men's and Boys' Clothing, Footwear, Trunks, etc., they can offer their customers a big saving in prices over the average store. Besse, Bryant Co. now occupy the entire block at **22** and **24 FRONT ST.**, having recently installed a large passenger elevator of the most modern type to convey their patrons safely and rapidly from one department to another.

The **Street Floor** is given over to the sale of

Men's Clothing, Hats and Furnishings,

while the **Basement** is fitted up as a

Trunk and Bag Department.

Hundreds of Trunks, Leather Bags and Suit Cases are sold here each season, together with Men's Overalls, Barber Coats, Auto Dusters, etc.

On the **second floor** is located the largest and finest equipped

Children's Clothing Department

in New England. The entire floor is fitted up in a most inviting manner, and a complete stock of up-to-date novelties in Girls' Coats, Boys' Knee Pant Suits, Reefers, Caps, Neckwear, etc., is constantly being shown. The mothers of Worcester should feel very proud and appreciative of this department, as it is equal to the juvenile departments of New York and other large cities.

The entire **third floor** is the Worcester home of the

Besse System Shoes

for Men, Women or Children. This is also a beautiful department, and the stock is purchased in large quantities at Semi-annual Buying Conventions, same as the Clothing. Besse, Bryant Co. have been located in Worcester about 18 years, and show a very healthy average increase in amount of business each year.

WAS IT INSURED?

That is the question after every fire; but how about the standing of the Company?

We have represented the same Companies for half a century and offer you the best security obtainable and at bottom rates.

Let us advise with you about improvements in your factory which will reduce the cost of your insurance.

Talk with us, please, about your Automobile; we write our own policy.

Factories, Houses, Furniture, Stores, Plate Glass, Boilers, Liability.

GREENE & BATES

405 Main Street **Worcester**

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

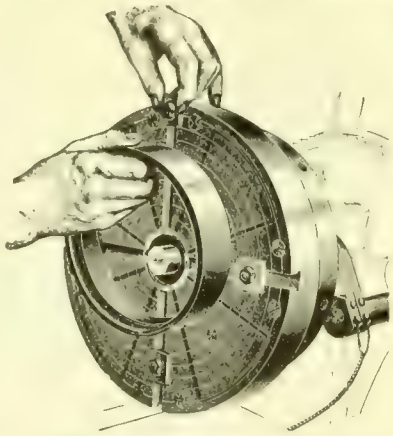
One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.



More than 2000 in use

Magnetic Chucks

for Piston Ring Grinders
Universal Grinders
Surface Grinders
Vertical Milling Machines and Planers

Rotary chuck, sizes 6″ to 36″. Flat chucks, 10″ to 8′ long

Patentees and Sole Manufacturers

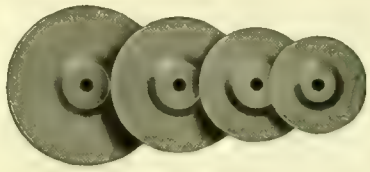
O. S. WALKER & CO.

Made in Worcester.

W. H. DeLONG

Manufacturer of

DeLong's Dental Disks



Carborundum Separating Disks and Stump Wheels

Sand, Garnet, Emery, Cuttlefish and Crocus Paper Disks

WORCESTER, Dept. D 3 **MASS.**

Made in Worcester.

ESTABLISHED 1829.

PRATT & INMAN

WORCESTER, MASS.

OUR STOCK COMPRISES THE LARGEST ASSORTMENT OF SIZES AND QUALITIES OF STEEL CARRIED BY ANY ONE IN THE UNITED STATES.

SPECIALTIES:
BEST MACHINERY STEEL, LEAD SCREW STEEL
VIKING CRUCIBLE STEEL.

Your Piano

May now be made SELF-PLAYING by the installation of the

Tunstall Piano Player

IMPORTANT FEATURES

BELLOWS. Operate easily
ACTION. Simple, Effective and Durable
CONTROL. Two Levers and One Button; out of sight when not in use, as are also the Pedals
REGISTRATION. Controlled by our own Automatic Device

PRICE COMPLETE $150

Send for Catalogue B

MANUFACTURED BY

Tunstall, Biggar & Tunstall Company

258 Park Avenue, Worcester, Mass.

Dept. B.
Made in Worcester.

United States Envelope Company

Manufacturers of Standard **Envelopes**

WORCESTER PLANT OF THE UNITED STATES ENVELOPE COMPANY

The Outlook Envelope

Insures economy and absolute accuracy in the addressing of all your mail matter.

The Improved
Columbian Clasp Envelope

The best and most satisfactory merchandise envelope made.

Specialists in STEEL DIE STAMPING

for Commercial Work. Samples and Prices of our Standard Goods furnished by your Stationer or Printer

Made in Worcester.

Hand Stripping Cards

German and Domestic Heddles for Cotton and Woolen Mills

Revolving Top Flats remounted Fillets redrawn.

Quality sells our Goods

Phone 1070
Local and Long Distance

Dept. C-H
44-46 Vine St.
Worcester, Mass.

Established 1866
Incorporated 1888

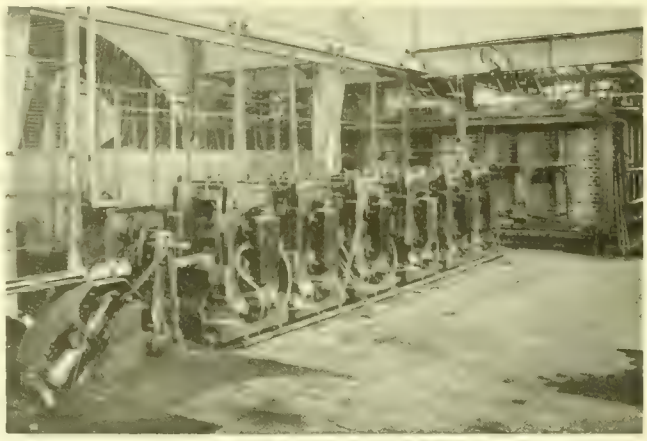
A. H. Howard, *Pres. and Mgr.*
Herbert Midgley, *Supt.*

HOWARD BROS. MFG. CO.

Manufacturers of

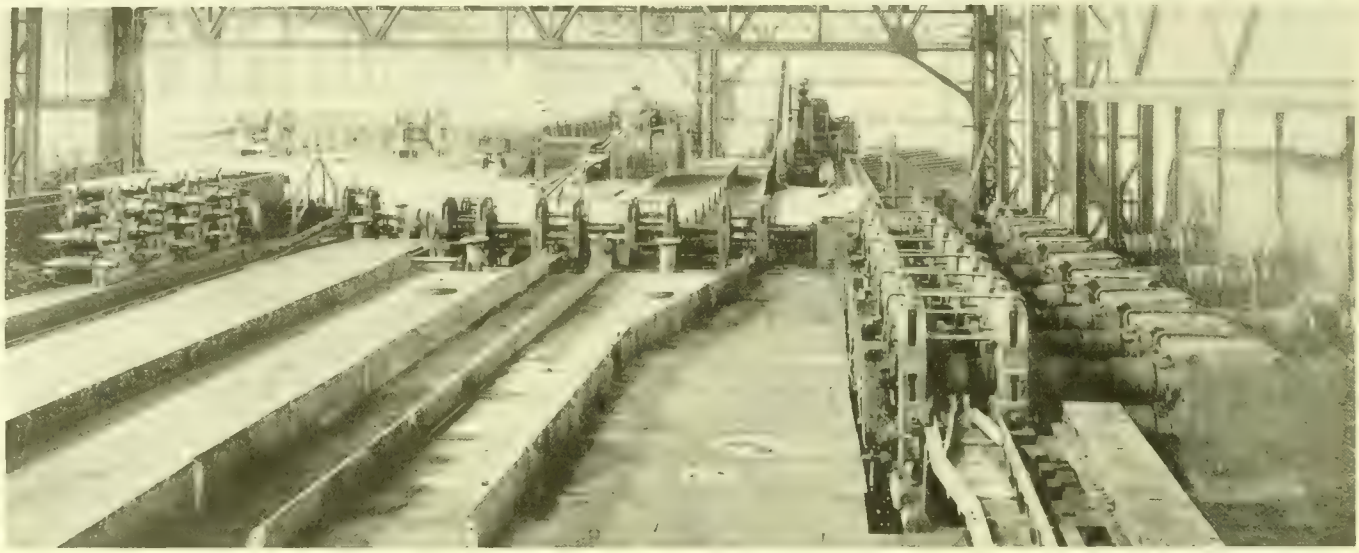
Card Clothing

Made in Worcester.

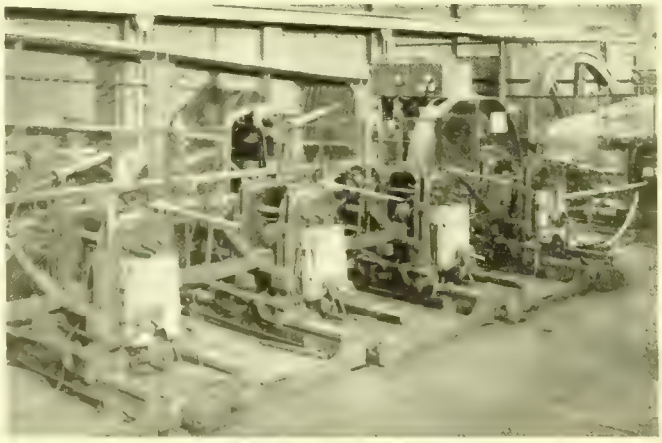


ROD MILL IN PARIS, FRANCE.

BAR MILL IN PITTSBURG, PA.



BAR MILL IN MEIDERICH, GERMANY.



HOOP MILL IN GERMANY.

BILLET AND SHEET BAR MILLS IN YOUNGSTOWN, O.

A FEW EXAMPLES OF MORGAN MILL INSTALLATIONS AT HOME AND ABROAD

MORGAN CONSTRUCTION CO.,

EUROPEAN OFFICE,
52 RUE DU CONGRES,
BRUSSELS, BELGIUM

WORCESTER, MASS.

Made in Worcester.

THE J. F. & W. H. WARREN COMPANY

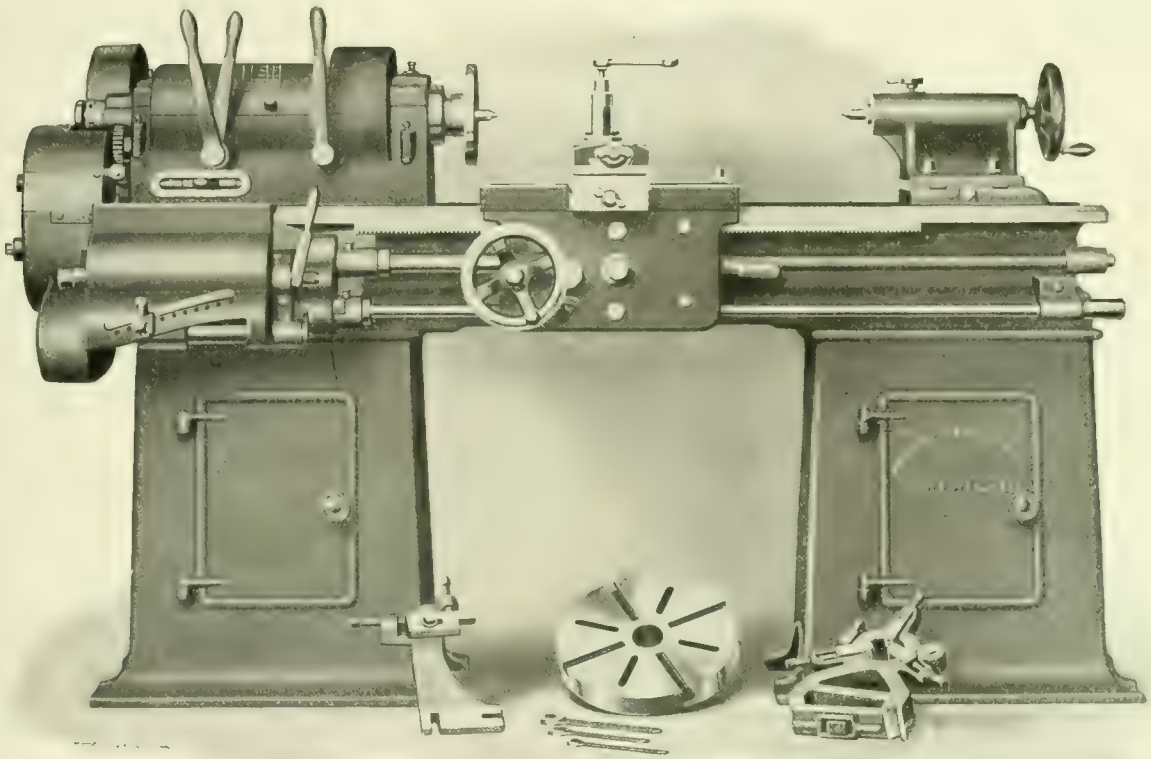
WORCESTER, MASS.

Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery, for Cotton Cones and all hard places and fast drives.

We also make WARREN'S WATER-PERFECT PROOF Leather Belting

Made in Worcester.



See our exhibit at Mechanics Association Industrial and Electrical Exhibit, March 27 to April 3, 1909.

PRENTICE BROTHERS CO., WORCESTER, MASS.

Made in Worcester.

Upright and Radial Drilling Machines and Engine Lathes

Worcester Machine Screw Co.

Branch of the

Standard Screw Company

Makers of

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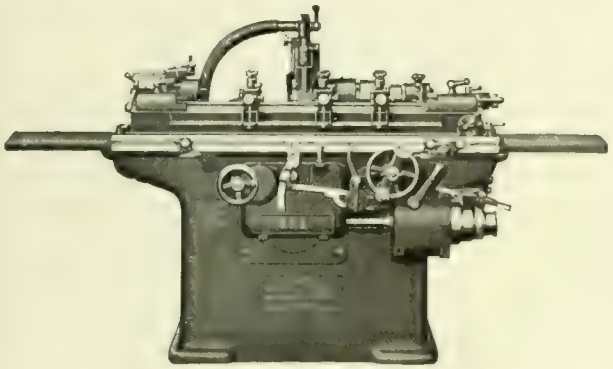

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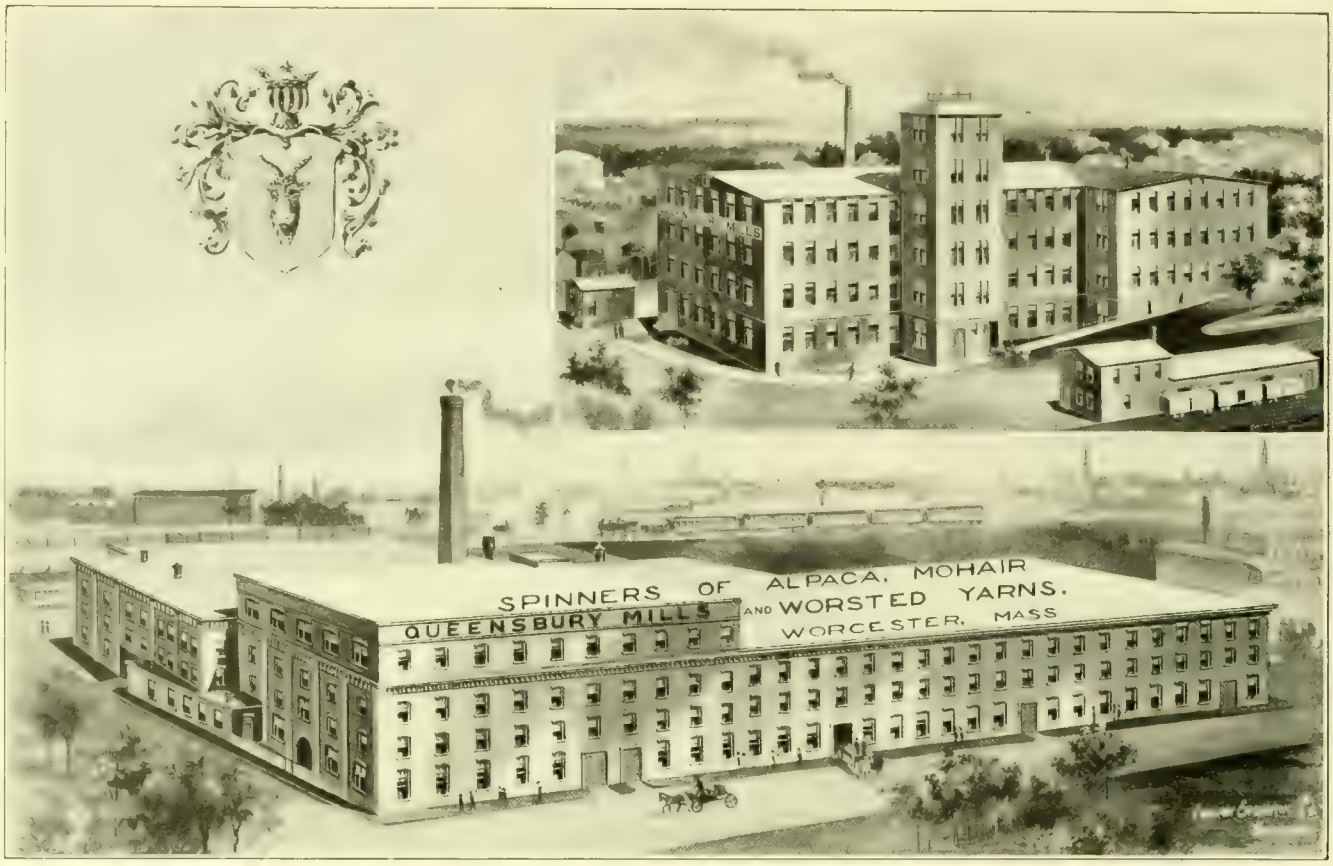

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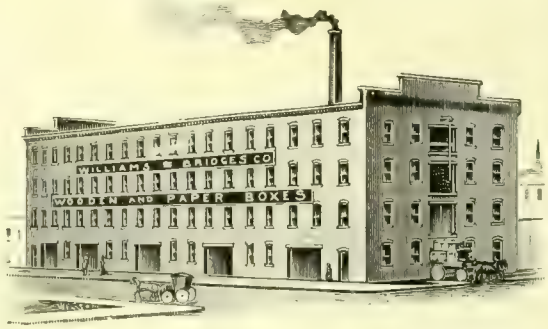

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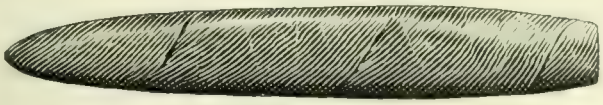

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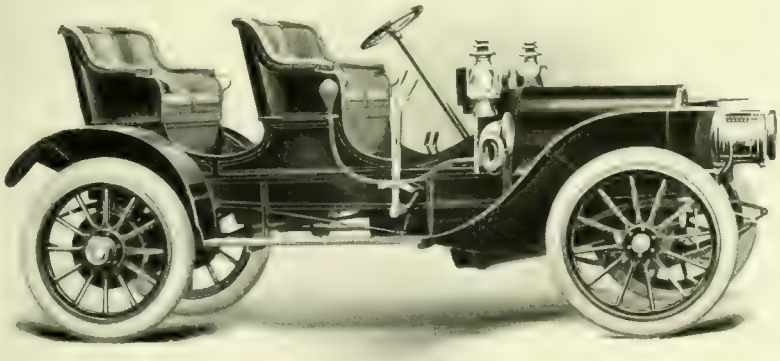

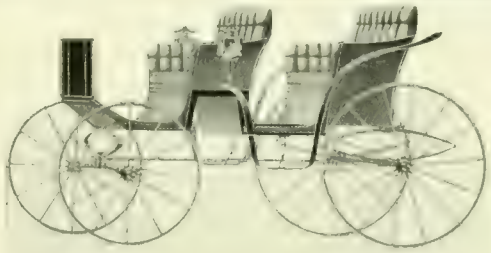

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A Comparison of Two Waterproof Belts

These photographs were taken under actual working conditions in the dye-house of a woolen mill near Worcester

This photo shows the present condition of a **"BEST"** Multiple Woven Waterproof Belt after two years' constant service driving a reel over a dye-tub in an atmosphere saturated with steam and water. It is as good as new, shows no signs of wear, and is still giving perfect satisfaction.

This photo shows the condition of a rubber belt after six months' use in the same room, on a similar drive and under identically the same conditions. Its cover is broken and peeled in many places, the underlying fabric exposed and worn and the whole belt is about "all in."

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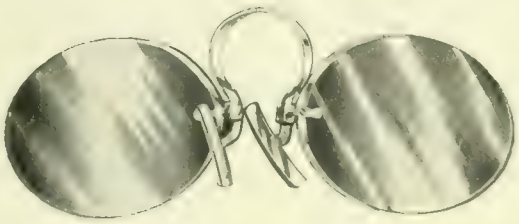

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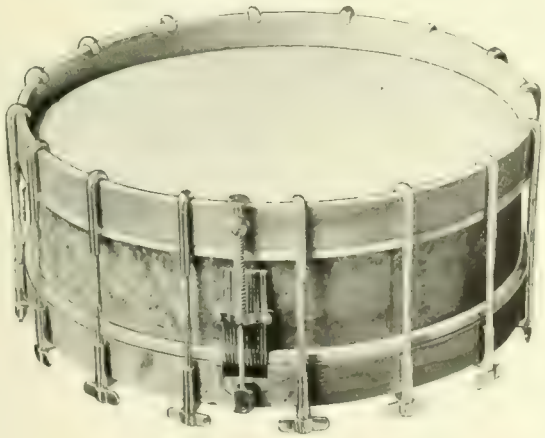

BETTER THAN THE BEST

Dept. K **WALBERG & AUGE** Manufacturers WORCESTER

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Established 1869 Incorporated 1906

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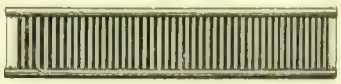
LOOM  REEDS

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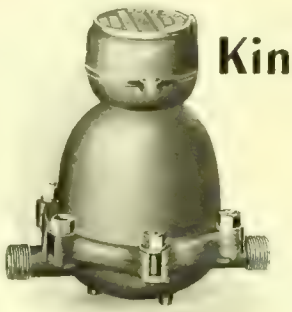

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Do you want the Best DRAWING TABLE

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Jackson Street Foundry

Light and Heavy
IRON CASTINGS

J. A. COLVIN, Proprietor

52 Jackson St., Worcester, Mass.

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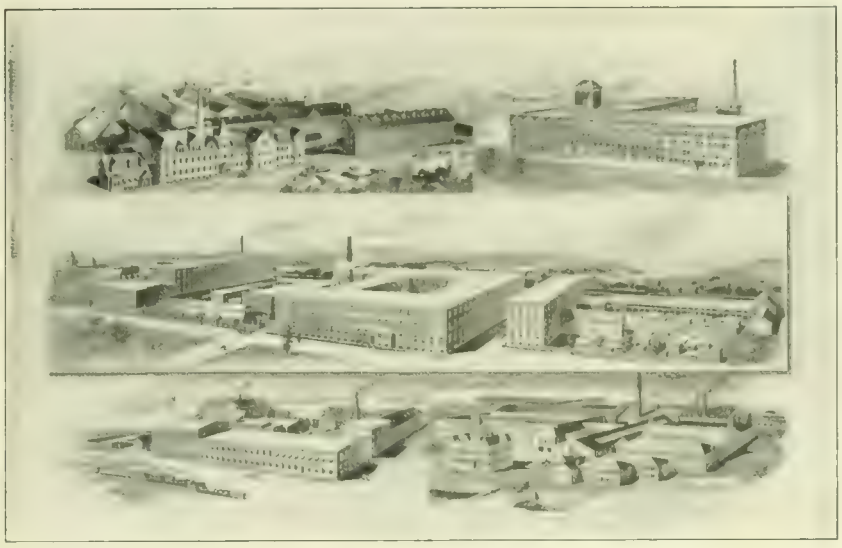
THE BLANCHARD PRESS WORCESTER MASS.

A LOOM FOR EVERY FABRIC



Everything that may be woven by power—practically every kind of fabric used by civilized beings—is produced on looms built in these works.

Woolens and worsteds, silks, velvets, ribbons, cotton goods of every description, carpets and rugs, mattings and hammocks, belting and webbing, furnish an idea of the great variety of our weaving machinery.

In addition are dobbies, jacquards and supplies built in all of the different plants.

CROMPTON & KNOWLES LOOM WORKS,

WORCESTER, PROVIDENCE AND PHILADELPHIA.

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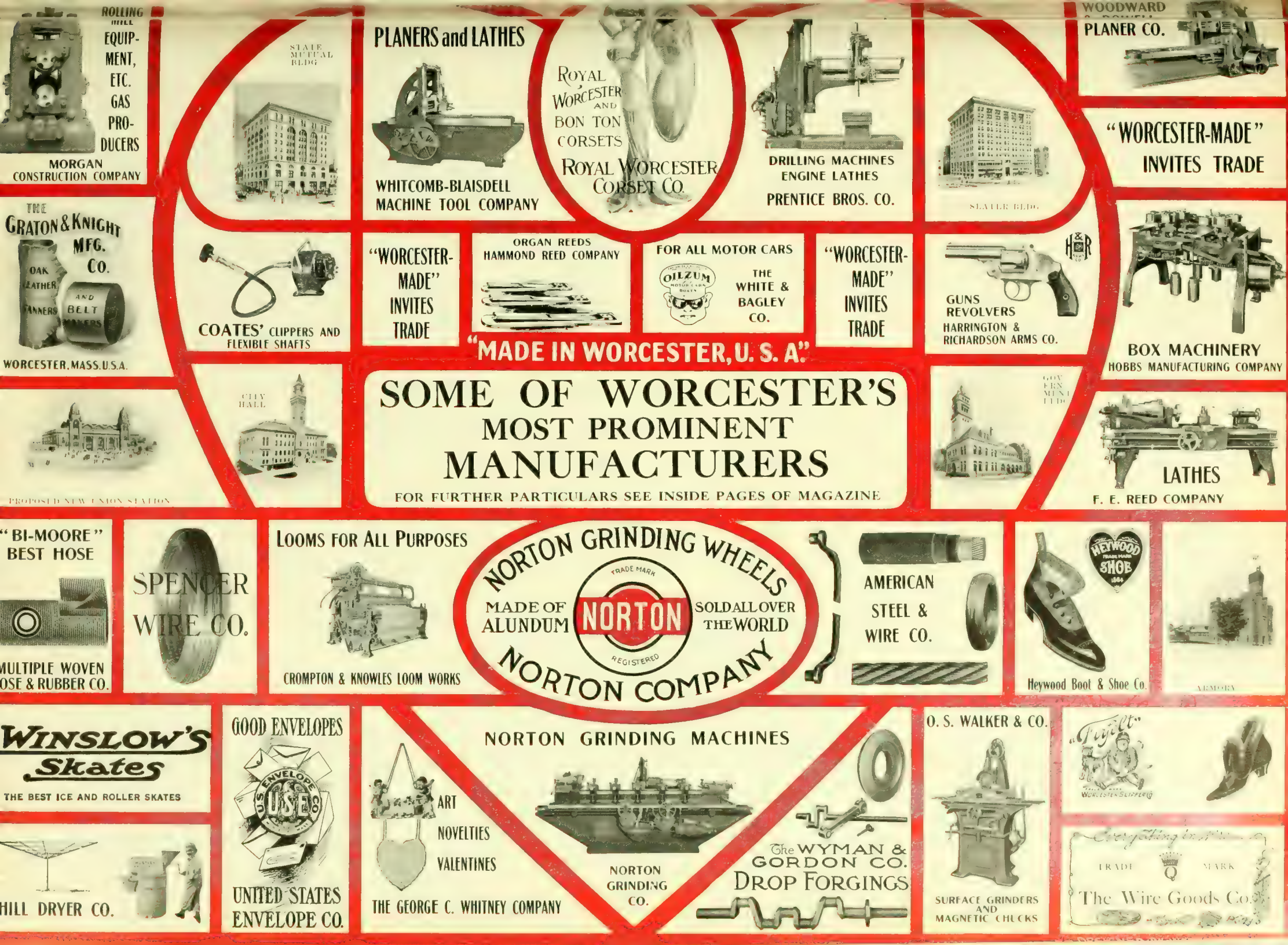
A Multigraph Letter is not an imitation letter. It is typewritten upon your business stationery, one or thousands of copies exactly alike, and will place you in communication with thousands of buyers in your particular line.

Let us make one or a series of these letters. Place your order to-day, and you can mail your letters on the morrow.

F. S. Blanchard & Co., *Day Bldg., 6 Walnut St.*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"WORCESTER-MADE" INVITES TRADE
THE GRATON & KNIGHT MFG. CO.
OAK LEATHER TANNERS AND BELT MAKERS
WORCESTER, MASS. U.S.A.
COATES' CLIPPERS AND FLEXIBLE SHAFTS
"WORCESTER-MADE" INVITES TRADE
ORGAN REEDS HAMMOND REED COMPANY
FOR ALL MOTOR CARS
OILZUM
THE WHITE & BAGLEY CO.
"WORCESTER-MADE" INVITES TRADE
GUNS REVOLVERS
HARRINGTON & RICHARDSON ARMS CO.
BOX MACHINERY
HOBBS MANUFACTURING COMPANY
"MADE IN WORCESTER, U. S. A."
PROPOSED NEW UNION STATION
CITY HALL
SOME OF WORCESTER'S MOST PROMINENT MANUFACTURERS
FOR FURTHER PARTICULARS SEE INSIDE PAGES OF MAGAZINE
GOVERNMENT BLDG
LATHES
F. E. REED COMPANY
"BI-MOORE" BEST HOSE
MULTIPLE WOVEN HOSE & RUBBER CO.
SPENCER WIRE CO.
LOOMS FOR ALL PURPOSES
CROMPTON & KNOWLES LOOM WORKS
NORTON GRINDING WHEELS
MADE OF ALUNDUM
TRADE MARK NORTON REGISTERED
SOLD ALL OVER THE WORLD
NORTON COMPANY
AMERICAN STEEL & WIRE CO.
HEYWOOD SHOE
Heywood Boot & Shoe Co.
MEMORY
WINSLOW'S Skates
THE BEST ICE AND ROLLER SKATES
GOOD ENVELOPES
U.S. ENVELOPE CO.
UNITED STATES ENVELOPE CO.
NORTON GRINDING MACHINES
ART
NOVELTIES
VALENTINES
THE GEORGE C. WHITNEY COMPANY
NORTON GRINDING CO.
The WYMAN & GORDON CO.
DROP FORGINGS
O. S. WALKER & CO.
SURFACE GRINDERS AND MAGNETIC CHUCKS
"Pigeon"
WORCESTER SLIPPER CO
HILL DRYER CO.
TRADE MARK
The Wire Goods Co.

ONE COPY RECEIVED

The W. J. Woods Co.
Worcester, Mass.

The W. J. Woods Co.
Springfield, Mass.

Woods Woman's Shop, Inc.
420 Main St., Worcester, Mass.

The W. J. Woods Company

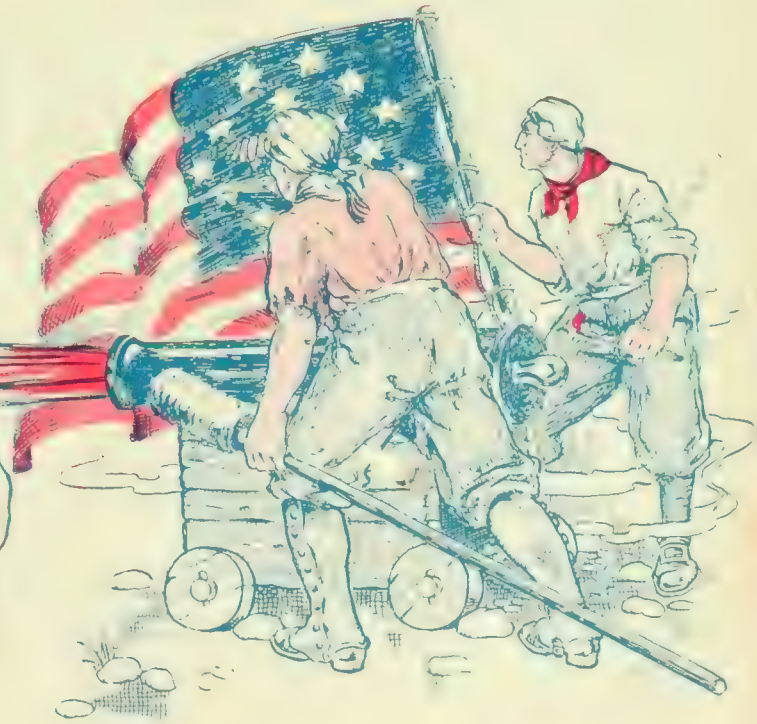
Men's and Boys' Outfitters

Incorporated 1894

Worcester, Massachusetts

BOOM
YOUR BUSINESS

And Remember
that Advertising Designs made by the
CARLTON·ENGRAVING·Co
will help the Boom along·····We furnish
Attractive and Catchy ideas, and make
the very finest Printing Plates·····
418 MAIN ST., WORCESTER, MASS.
TEL. 4055



Plant of the Crompton & Knowles Loom Works at Worcester, covering 13 acres of ground.

Every department on these 13 acres may be reached by, or connect with, the lines of the New England Telephone & Telegraph Company, by means of that great business economy,

The Private Branch Telephone Exchange

This switchboard is the key to the situation. All calls are handled here—whether inward or outward. The manager is thus in touch with every department of his organization.

A branch exchange is true economy in any manufacturing plant, large or small. One of its great features is FREE AND UNLIMITED INTERCOMMUNICATION between different departments or offices.

If you are in doubt as to the efficiency of your telephone equipment call our manager, and he will send an expert to give your plant a FREE TELEPHONE SURVEY.

New England Telephone and Telegraph Company

The Belts to use are the Brands WE make

SPARTAN — Guaranteed to withstand exposure to either hot or cold air, water, steam, oil, gases, and heat generated by excessive pulley friction. Especially adapted for hard service.

SPECIAL PLANER — Waterproof. Made in singles only, but from the very heaviest of centre stock; an ideal belt for heavy work with high speed and small pulleys.

NEPTUNE — Waterproof. A brand of belting that is in daily use in thousands of plants. It is the oldest and best known waterproof leather belting on the market.

HEART — Made from heavy centre stock, a popular belt for general use.

GRAKNIGHT — It, too, is made from centre stock, but of lighter weight than the Heart.

Other Brands for other specific purposes.
Advise us of the conditions under which your belts operate, and we will tell you the brands to use.

The Graton & Knight Mfg. Co. Worcester, Mass., U. S. A.

Oak Leather Tanners and Belt Makers

Established 1851
Capital and Surplus, $1,800,000

Branches and Dealers in the leading manufacturing centres.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

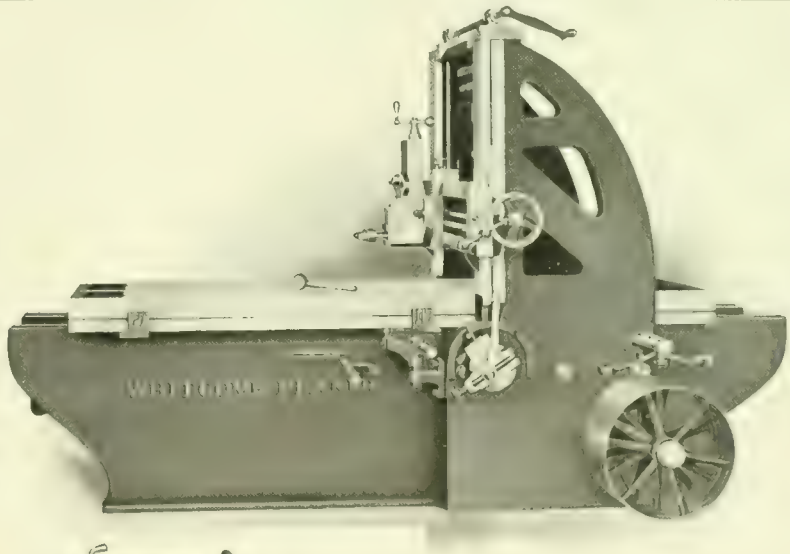
WHITCOMB

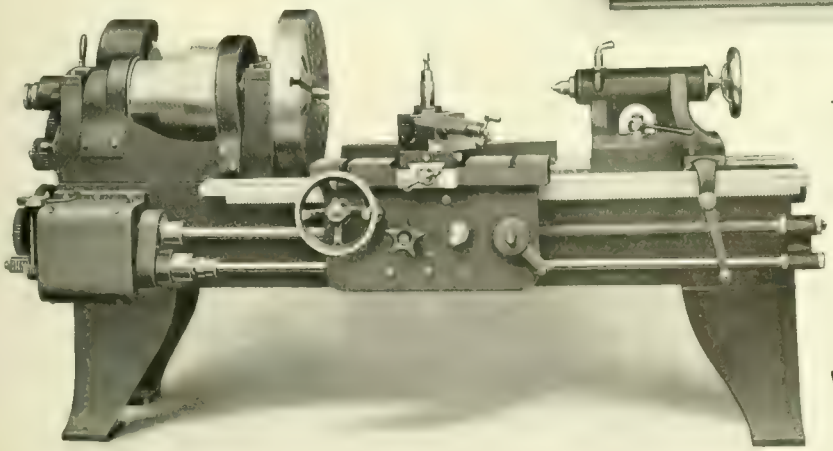
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

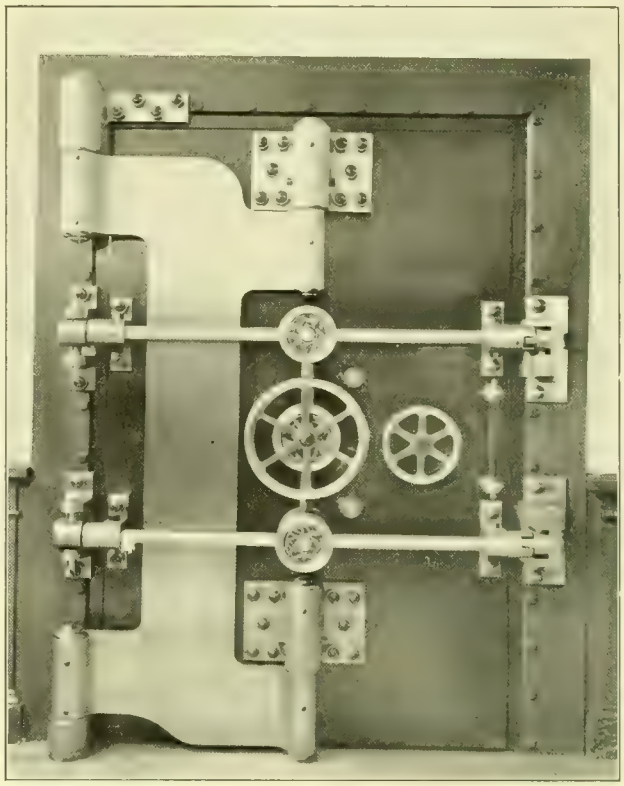
Worcester, Mass.

Made in Worcester.

Vacation Period

Anxiety concerning the safety of valuable papers, jewelry, silver-plate and other articles may be avoided by renting a safe-deposit box in our fire and burglar proof vaults at $4 per annum.

VALUABLE PACKAGES may be stored in our storage vaults for a small monthly charge.



Worcester National Bank

FOUNDED 1804

JAMES P. HAMILTON, *President* S. D. SPURR, *Cashier* F. M. HEDDEN, *Assistant Cashier*

TRUSS AND CABLE WIRE FENCE

Galvanized After Weaving. "Rust-proof for Twenty Years."

Attractive and Substantial.

Build your fence in horizontal strands which follow the ground line up hill or down dale, and fit the land like a glove.

Build few or many strands to suit yourself and your requirements. If conditions change strands may be added or taken away and used again elsewhere.

Two and 4-inch for fence, 6-inch for trellis; 30 rods in a roll.

Truss and Cable Gates to match.

Write for Catalogue No. 3.

Wright Wire Company

Worcester, Massachusetts

Warehouses: New York, Philadelphia, Chicago, San Francisco

INCORPORATED 1868

WORCESTER TRUST COMPANY

Capital, Surplus and Profits $1,300,000
Total Resources $10,000,000

IN ADDITION TO A GENERAL BANKING BUSINESS

ACTS AS

EXECUTOR, ADMINISTRATOR, GUARDIAN, TRUSTEE

FINANCIAL AGENT FOR INDIVIDUALS AND CORPORATIONS

Depository Under Plans of Reorganization, Trustee of Corporation Mortgages, Registrar and Transfer Agent

ISSUES

LETTERS OF CREDIT AND FOREIGN EXCHANGE

ACCOUNTS SOLICITED

State Mutual Life Assurance Company

(INCORPORATED 1844)

Assets, Jan. 1, 1909, $32,540,041.03
Liabilities, Jan. 1, 1909, $29,843,942.37
Surplus, Jan. 1, 1909, $2,696,098.66

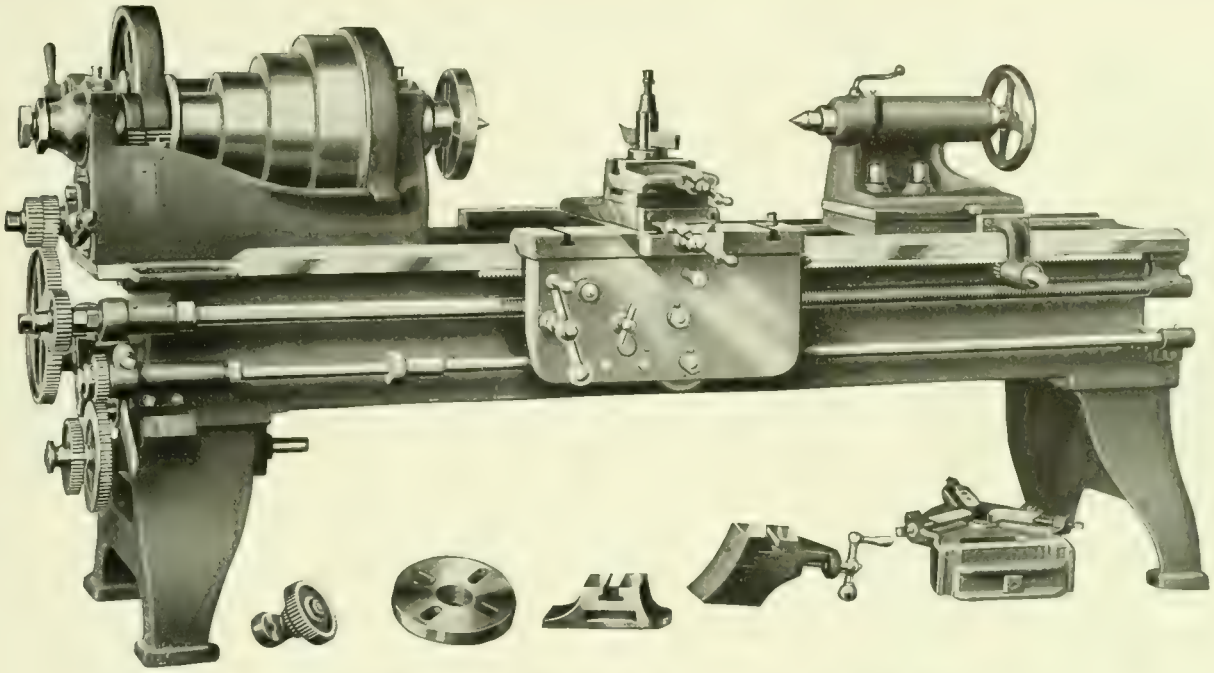
A. G. BULLOCK, PRESIDENT
BURTON H. WRIGHT, SECRETARY

Worcester, Massachusetts

ASK FOR THIS IMPRINT

It is a guarantee of quality superior and satisfying, lending value intrinsic to things printable, adding tone to your advertising and associating it with the highest class of publicity.

F. S. BLANCHARD & CO.
PRINTERS WORCESTER



The NEW REED LATHES are
HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

HEYWOOD TRADE MARK SHOE 1884

HIGH GRADE SHOES FOR MEN

HEYWOOD TRADE MARK SHOE 1864

1864 HEYWOOD TRADE MARK SHOE 1864 1909

"Heywood Shoes Wear"

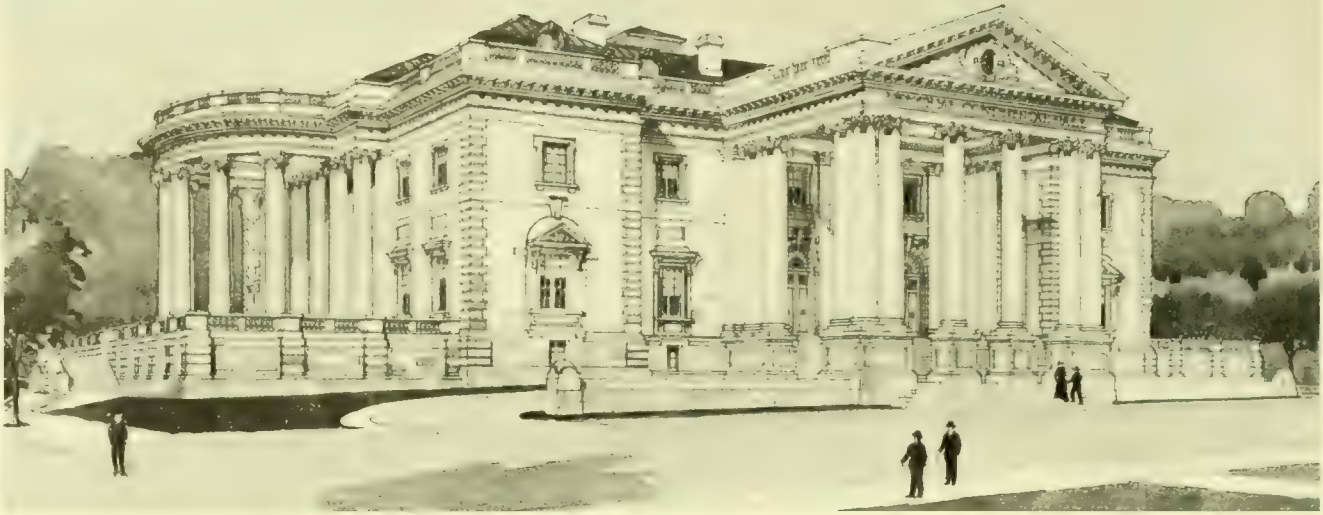
Our Trade Mark
is a Guarantee

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.



MEMORIAL CONTINENTAL HALL, FOR THE NATIONAL SOCIETY, DAUGHTERS OF THE AMERICAN REVOLUTION, WASHINGTON, D. C.

Edward Pearce Casey, Architect **The Norcross Brothers Co., Builders**

Exterior of Plateau White Marble from

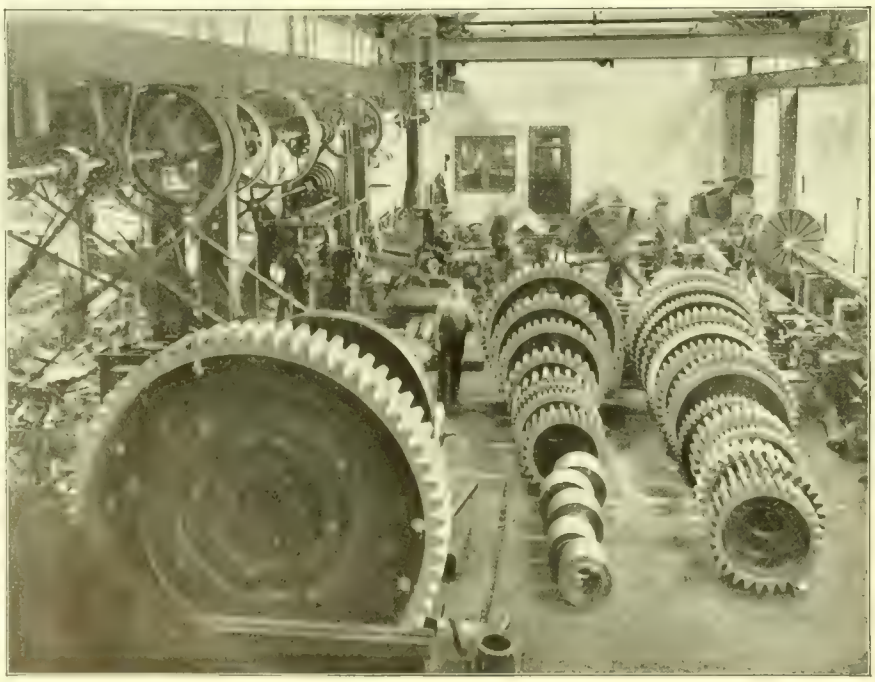
NORCROSS-WEST MARBLE CO., DORSET, VT.

THE NORCROSS BROTHERS COMPANY

General Contractors and Builders

Worcester, Massachusetts

160 Fifth Avenue, NEW YORK Tremont Building, BOSTON Colorado Building, WASHINGTON Industrial Building, PROVIDENCE



GEAR PLANING—BEVEL, SPUR AND SPIRAL GEARS

CONTINUOUS ROLLING MILLS for Billets, Merchant Bar, Small Structural Shapes, Skelp, Hoop, Cotton Tie and Wire Rods

CONTINUOUS GAS PRODUCERS

CONTINUOUS HEATING FURNACES

BYDLIE REVERSING VALVES

WIRE DRAWING PLANTS complete

52 Rue du Congres
Brussels, Belgium

MORGAN CONSTRUCTION COMPANY

WORCESTER
MASSACHUSETTS

Made in Worcester.

Over 500,000 Users Testify to the Merits of

HILL'S CLOTHES DRYERS

SEND FOR ILLUSTRATED BOOKLETS

HILL'S CHAMPION LAWN CLOTHES DRYER

ALSO MANUFACTURERS OF

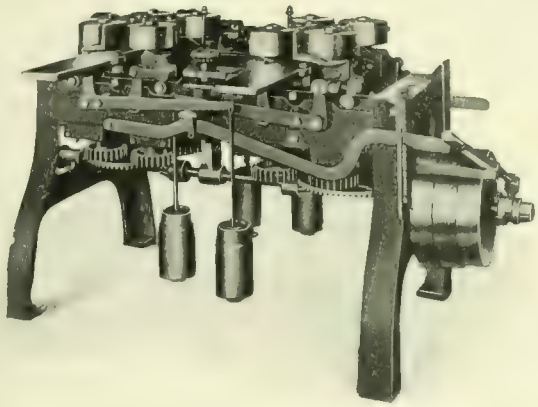
HILL'S HUSKER SHELLER

HILL'S BALCONY CLOTHES DRYER

HILL DRYER CO.
Worcester, Mass.

The Largest Manufacturers in the World

SHIPPING CASES AND BOXES



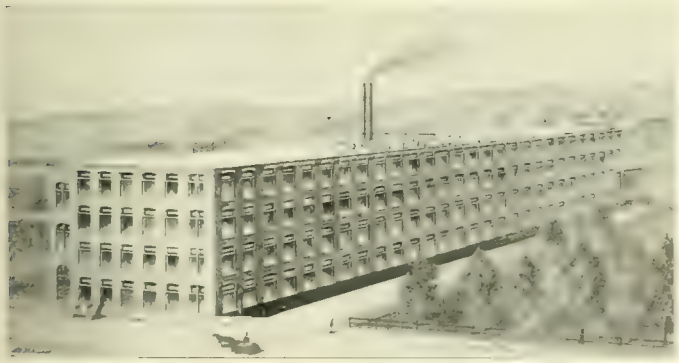
Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.



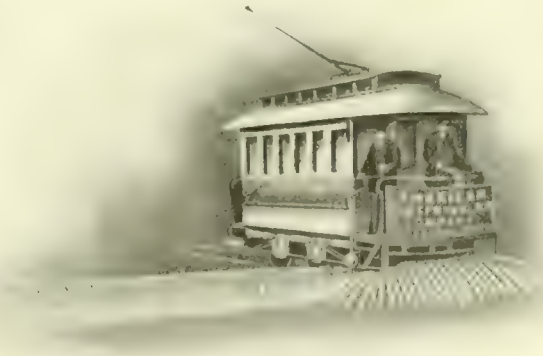
SHERMAN ENVELOPE CO.
Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST



AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.

Made in Worcester.

COLD PRESSED STEEL AND BRASS MACHINE SCREW

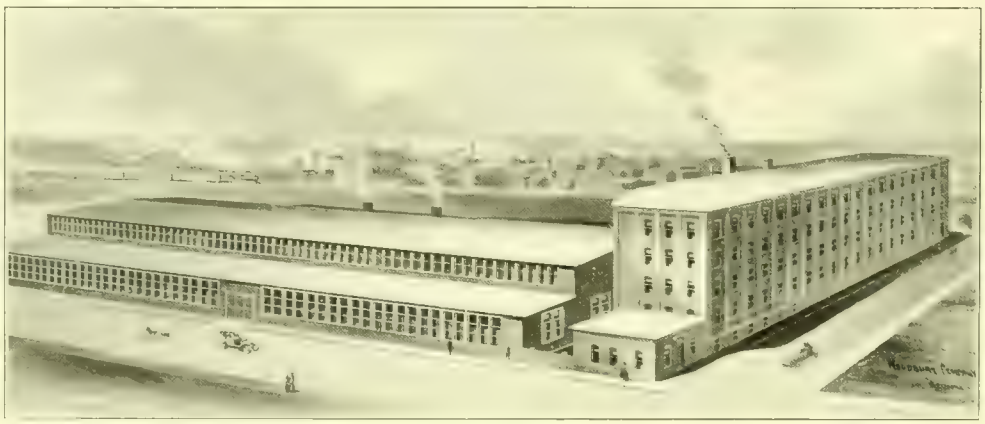
NUTS

Our nuts are made with especial attention to **Accuracy** and **Uniformity** in **Size** and **Finish.** They compare very favorably with **MILLED NUTS.** Our large **Stock** of standard sizes enables us to make Quick Shipments. Let us prove our statements with a trial order.

REED & PRINCE MFG. CO.

Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

Capacity 20 tons a day

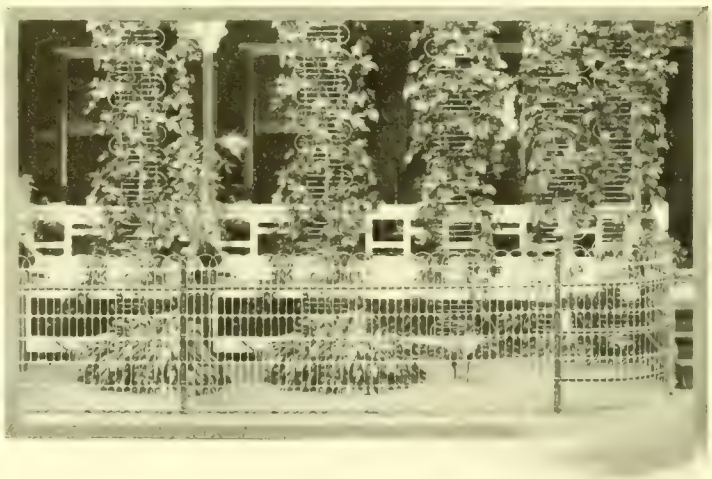
L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY

DEPARTMENT OF SPENCER WIRE COMPANY

We furnish and erect complete Ornamental Fences of Wire or Wrought Iron



Flower Bed Guard, Trellis, Tree Guards Rubbish Baskets for Parks and Cemeteries.

80 WEBSTER ST., WORCESTER, MASS.

THE AUDITORIUM.

ROYAL WORCESTER ADJUSTO CORSETS

IF you are very stout and wish to conceal the excess flesh, as fashion decrees, you *must* wear an ADJUSTO.

If you are of the full-figure type and would appear stylish and graceful, just *try* the ADJUSTO.

And if you are of only medium build, but require *special support* and *extra corset strength*, the ADJUSTO will meet every requirement.

(Batiste or coutil), PRICE, $3.

BOSTON STORE
Denholm & McKay Co.

SOLE WORCESTER AGENTS ALSO FOR

BON TON CORSETS FROM $3 UP
ROYAL WORCESTER CORSETS $1 TO $3

Telephone
1620

L. W. Locke, Manager

TAXICAB SERVICE CO.

One Passenger, Half Mile or Fraction, 30 cents. Half Mile to One Mile, 40 cents. Two miles, 80 cents. Each additional Passenger, and Children 7 to 12, Half Rates. Waiting each 6 minutes, 10 cents.

CALLING AND SHOPPING TRIPS

	Two Passengers	Four Passengers
One Hour	$2.00	$3.00
Two Hours	3.50	4.25

THEATRE PARTIES ROUND TRIP

	Two Passengers	Four Passengers
1 Mile Circle	$2.00	$3.00
1½ Mile Circle	3.00	4.00

Business Men's City Trips, $3.00 per hour. Touring, $4.00 per hour; $3.00 each additional hour; $25.00 per day 10 hours. Automobiles Rented by Day or Month.

ALL NIGHT SERVICE PUTNAM & THURSTON RESTAURANT.

GOING TO SEATTLE?

A chance of a life-time to visit the great Alaska-Yukon-Pacific Exposition at Seattle, Washington.

Under the auspices of the Board of Trade. Stops have been arranged at all principal points in the West.

To secure space it is necessary to register at once.

HEALY'S TICKET AGENCY

368 MAIN STREET
WORCESTER, MASS.

B. C. FISKE, PREST. W. W. CARTER, TREAS. E. S. STROUT, SEC.

FISKE-CARTER CONSTRUCTION CO.

BUILDERS

OFFICES
11 FOSTER ST., WORCESTER
SPARTANBURG, S. C.

WORCESTER, MASS.

START A BANK ACCOUNT

and you establish an asset that time or conditions cannot depreciate in the

People's Savings Bank

452 Main St., Worcester, Mass.

Interest Days

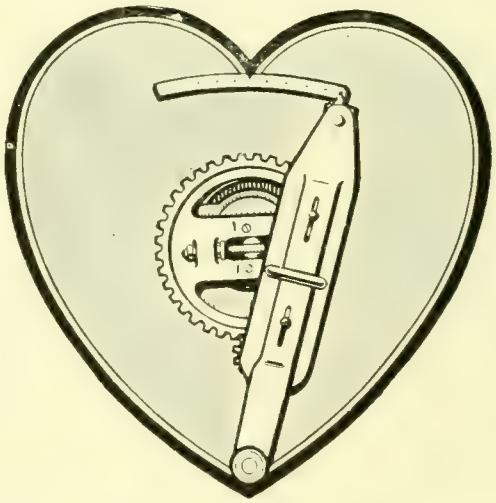
February, May, August and November 1st

Deposits and withdrawals may be made by mail

OPEN FOR DEPOSIT

Saturday Evening, 6 to 8 p. m.

SAMUEL R. HEYWOOD, President
CHARLES M. BENT, Treasurer



The Heart of a Shaper is its Crank

Before buying a shaper, look carefully into the construction of the crank. The Plain Crank Shaper is a losing buy. It cannot keep up in production.

The Stockbridge Two-Piece Crank

has set new standards for shaper production. Are you still using a Plain Crank? There are reasons why you should change. Ask us.

STOCKBRIDGE MACHINE CO.
WORCESTER, MASS.

WAS IT INSURED?

That is the question after every fire; but how about the standing of the Company?

We have represented the same Companies for half a century and offer you the best security obtainable and at bottom rates.

Let us advise with you about improvements in your factory which will reduce the cost of your insurance.

Talk with us, please, about your Automobile; we write our own policy.

Factories, Houses, Furniture, Stores, Plate Glass, Boilers, Liability.

GREENE & BATES

405 Main Street **Worcester**

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.

WORCESTER'S FINEST HOSTELRY

AUTOMOBILE PARTIES A SPECIALTY

CUISINE PAR EXCELLENCE

200 FRONT STREET Chas. J. Pomeroy, Mgr.

Light and Heavy Sheet Metal Stamping

Deep Drawing, Cold Rolling

for Automobiles, Motorcycles, Bicycles, and all Machine Parts.

Twenty-six years' experience developing this one specialty. The largest press of its kind in this country; capacity 1000 tons, stroke 18". The first autogenous welding plant manufactured in this country. The largest annealing oven this side of Pittsburgh. Heaviest cold rolling mill in Massachusetts. And still we handle small work to advantage.

Worcester Pressed Steel Co.

Main Office and Factory
WORCESTER, MASS.

Chicago Office:
1064 Monadnock Block

A WORLD-WIDE AUDIENCE LISTENS TO THE STORY OF WORCESTER'S INDUSTRIAL ACHIEVEMENTS THROUGH THESE COLUMNS.

Hammond Reed Company

Manufacturers of

Organ Reeds,
Reed Boards
and other
Organ Supplies

Telegraph and Cable Address,
"Reeds," Worcester, Mass., U. S. A.

WORCESTER, MASS.

Made in Worcester.

THE J. F. & W. H. WARREN COMPANY

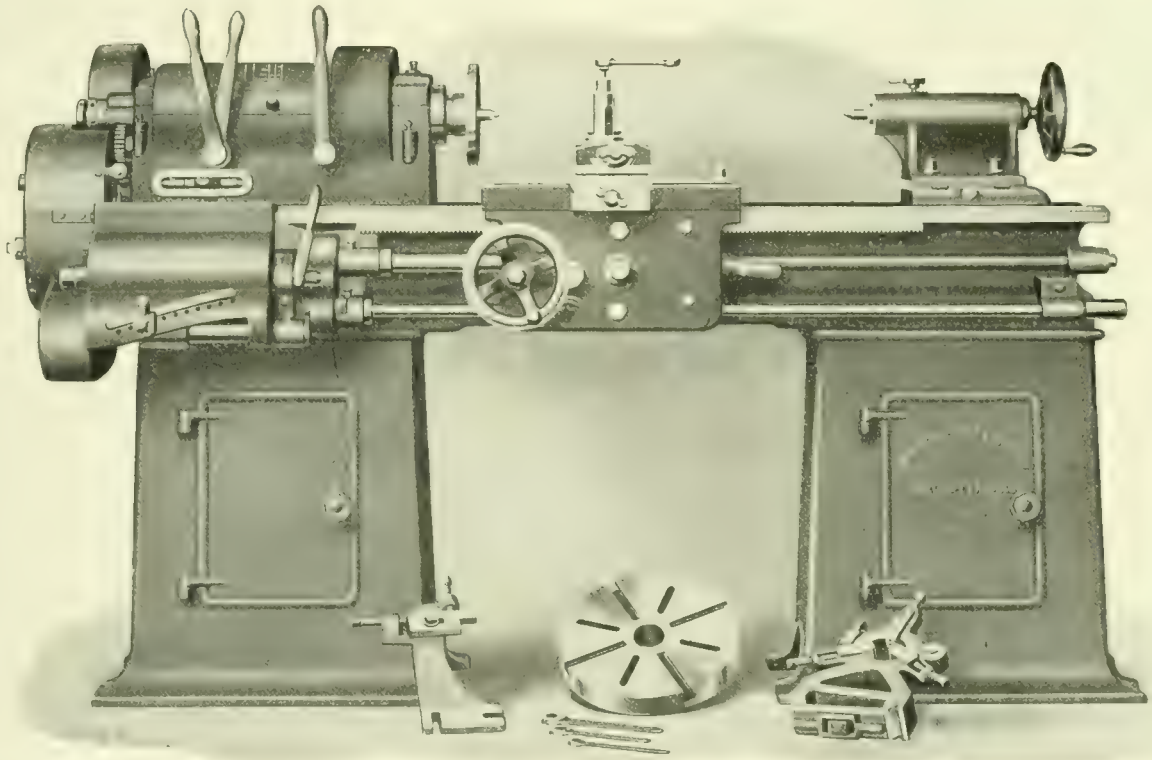
WORCESTER, MASS.

Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery,
for Cotton Cones and all hard places and fast drives.

We also make WARREN'S WATER-PERFECT PROOF Leather Belting

Made in Worcester.



PRENTICE BROTHERS CO., WORCESTER, MASS.

Made in Worcester.

Upright and Radial Drilling Machines and Engine Lathes

Worcester Machine Screw Co.

Branch of the

Standard Screw Company

Makers of

Set Screws, Cap Screws, Machine Screws,
Taper Pins, Milled Studs, Special Parts

Beacon and Jackson Streets
Worcester, Massachusetts

Made in Worcester.

HOTEL STANDISH

WORCESTER, MASS.

—

NEW AND ATTRACTIVE

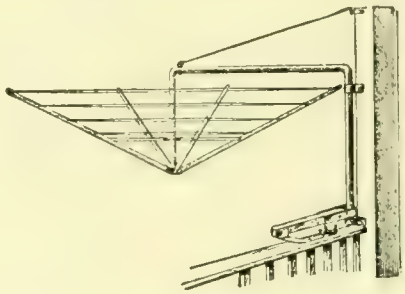
On direct route between Boston and New York. Catering to permanent and transient guests.

ROOMS WITH OR WITHOUT BATHS

The VICTOR Improved

Roller Bearing Clothes Reels

Ash
Chutes,
Sifters,
Etc.



Manufactured by **The R. W. Robinson Co.**

86 Foster Street

Telephone 6019 — Agents Wanted

FOR YOUR HOUSE

WORCESTER, MASS.

C. B. POST, Prop.

Thoroughness and Skillfulness

To become a first-class Watchmaker you would learn of one who knows how to make a watch; to learn Business or Shorthand thoroughly go to

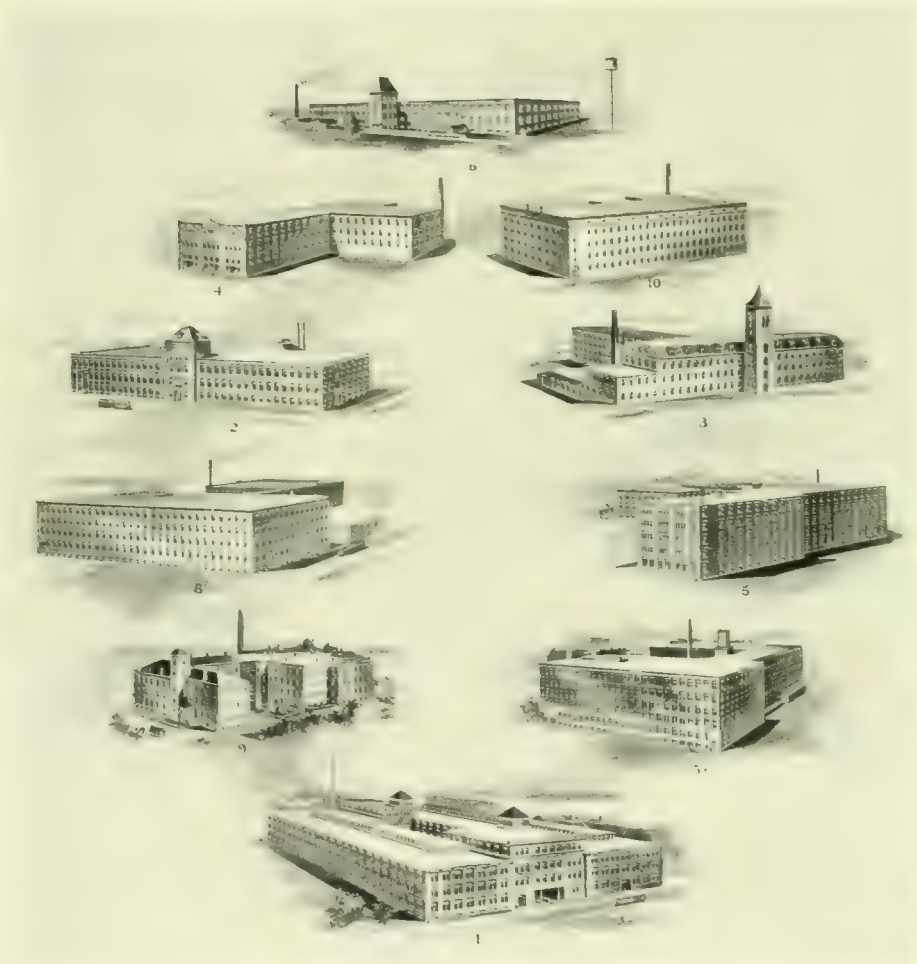
The Worcester Business Institute

We know how to teach these essential features of a business education

Gentlemen teachers at the head of all Departments

The United States Envelope Company

Makers of Good Envelopes



MANUFACTURING PLANTS
OF THE
UNITED STATES ENVELOPE COMPANY

No. 1	Logan, Swift & Brigham Envelope Co. Div.,	Worcester, Mass.
No. 2	United States Envelope Co.,	Holyoke, Mass.
No. 3	White, Corbin & Co. Div.,	Rockville, Conn.
No. 4	Plimpton Mfg. Co. Div.,	Hartford, Conn.
No. 5	Morgan Envelope Co. Div.,	Springfield, Mass.
No. 5	New Factory now under construction,	Springfield, Mass.
No. 6	National Envelope Co. Div.,	Waukegan, Ill.
No. 8	P. P. Kellogg & Co. Div.,	Springfield, Mass.
No. 9	Whitcomb Envelope Co. Div.,	Worcester, Mass.
No. 10	W. H. Hill Envelope Co. Div.,	Worcester, Mass.

Norton Alundum Plant
Niagara Falls, N. Y.

Works of Norton Co. and Norton Grinding Co.
Worcester, Mass.

Norton Grinding Wheels are known and used in all parts of the world.

Grinding Machinery
Rubbing and Sharpening Stones

Glass Cutting Wheels
Scythe Stones

Razor Hones
India Oil Stones

Made in Worcester.

Spend your Vacation

on the

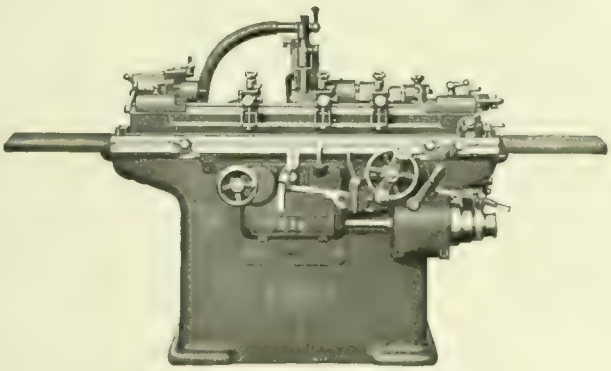
Cool, Clean, Exhilarating Trolley

Special excursions every week

The cheapest and best way to enjoy the Summer

Boston and Worcester Trolley Air Line

NORTON PLAIN GRINDERS



6″ x 32″ Norton Plain Grinder

are built in various sizes from 6″ swing to take 32″ between centers up to 20″ swing to take 264″ between centers. We are constantly devising new methods and fixtures to enable the operator to increase production.

DESIGN: The best that 20 years' grinding experience can give.

MATERIAL: Only the highest grade of material is used.

WORKMANSHIP: Every piece which enters into these machines must pass a rigid inspection.

Write for Circulars and Prices.

Chicago Store, 48 So. Canal St.
F. W. Horne, Yokohama, Japan.
Ludw. Loewe, London, Berlin, European Agents.

Norton Grinding Company,
Worcester, Mass., U. S. A.

Made in Worcester.

N88

Hand Stripping Cards

German and Domestic Heddles for Cotton and Woolen Mills

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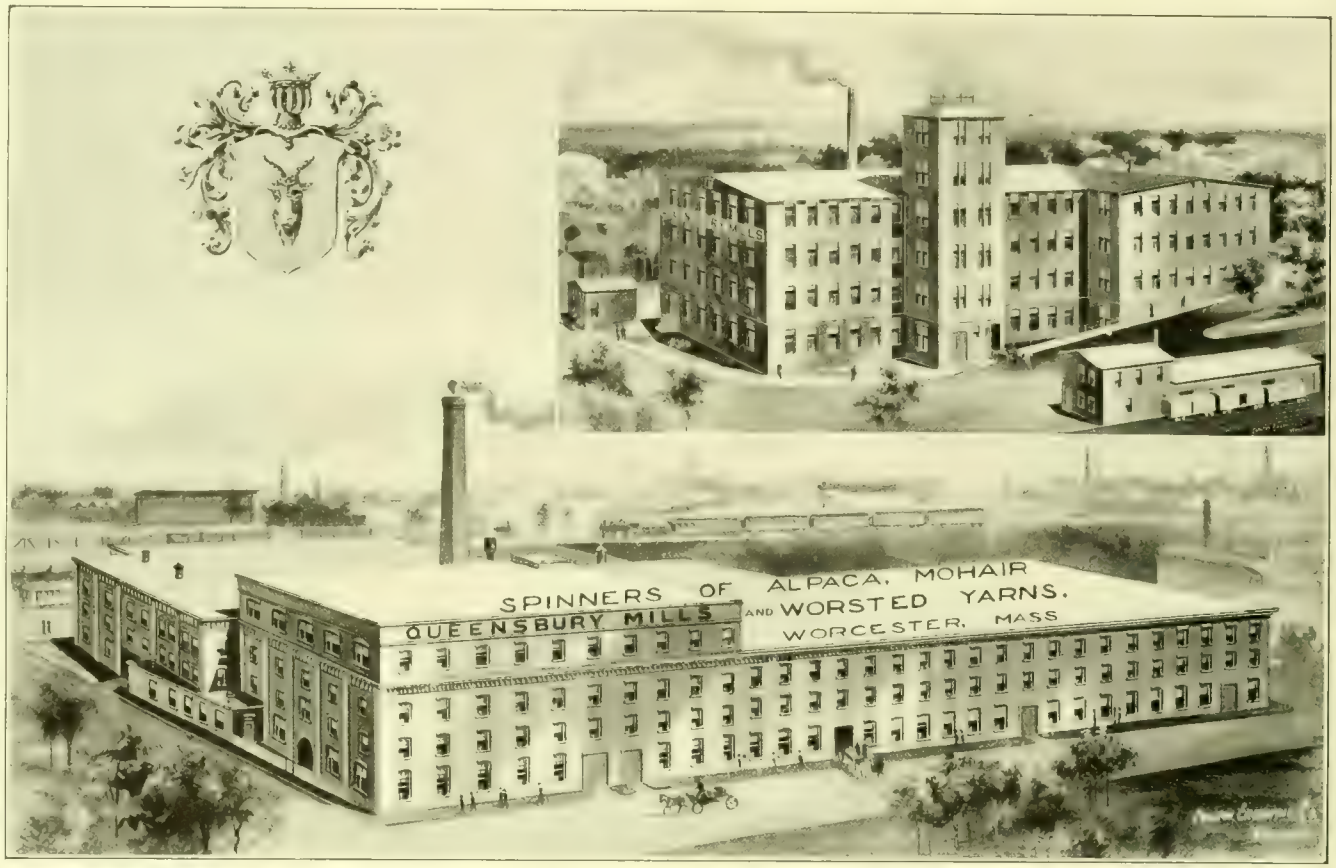

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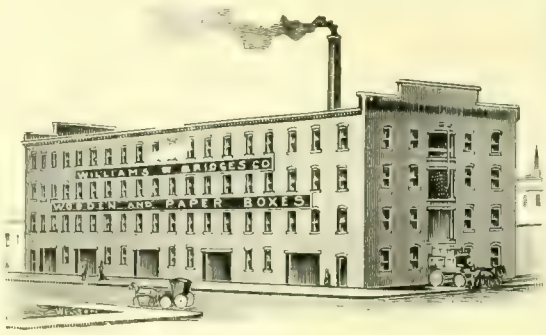

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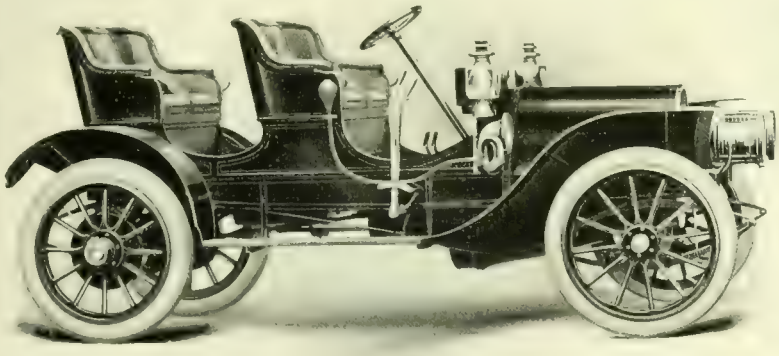

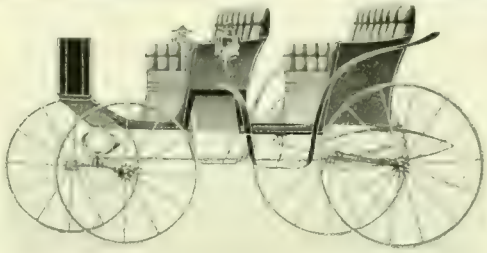

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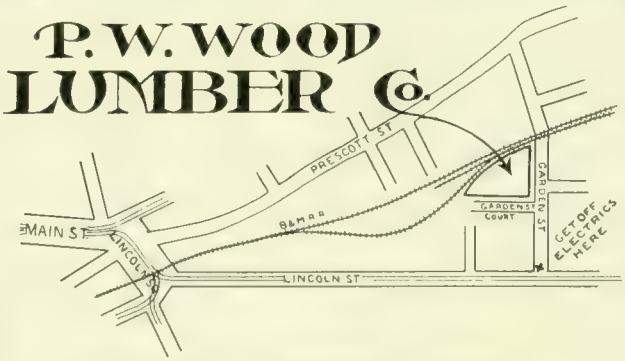

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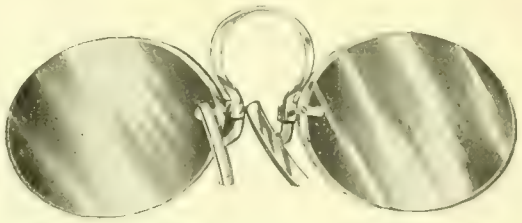

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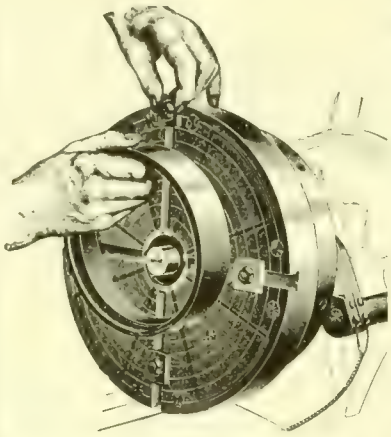

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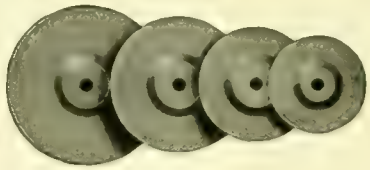

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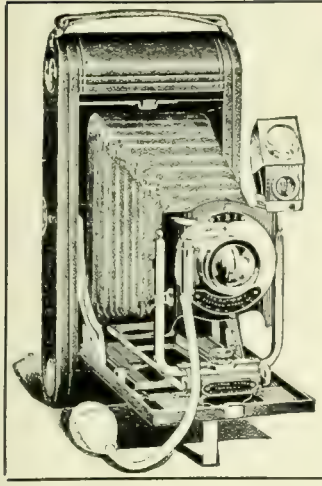

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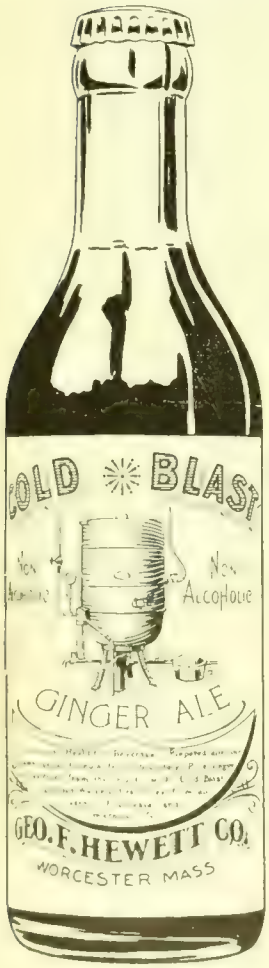

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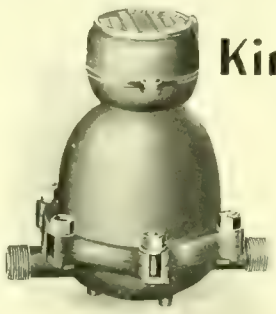

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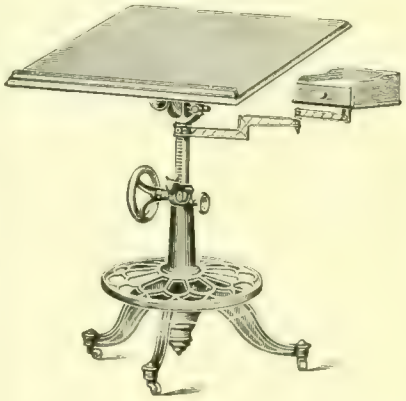

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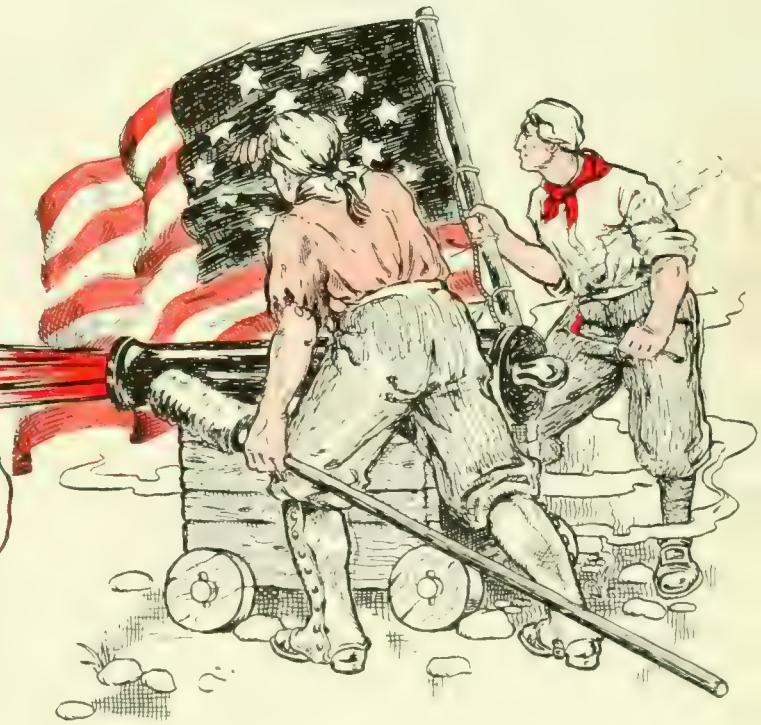

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GOOD ENVELOPES

U.S. ENVELOPE CO. USE

UNITED STATES ENVELOPE CO.

ART NOVELTIES VALENTINES

THE GEORGE C. WHITNEY COMPANY

NORTON GRINDING MACHINES

NORTON GRINDING CO.

The WYMAN & GORDON CO.

DROP FORGINGS

O. S. WALKER & CO.

SURFACE GRINDERS AND

"Fright"

Everything in Wire

TRADE MARK

The Wire Goods Co.

DRYER CO.

The Belts to use are the Brands WE make

SPARTAN — Guaranteed to withstand exposure to either hot or cold air, water, steam, oil, gases, and heat generated by excessive pulley friction. Especially adapted for hard service.

SPECIAL PLANER — Waterproof. Made in singles only, but from the very heaviest of centre stock; an ideal belt for heavy work with high speed and small pulleys.

NEPTUNE — Waterproof. A brand of belting that is in daily use in thousands of plants. It is the oldest and best known waterproof leather belting on the market.

HEART — Made from heavy centre stock, a popular belt for general use.

GRAKNIGHT — It, too, is made from centre stock, but of lighter weight than the Heart.

Other Brands for other specific purposes.
Advise us of the conditions under which your belts operate, and we will tell you the brands to use.

The Graton & Knight Mfg. Co. Worcester, Mass., U. S. A.

Oak Leather Tanners and Belt Makers

Established 1851
Capital and Surplus, $1,800,000

Made in Worcester.

Branches and Dealers in the leading manufacturing centres.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

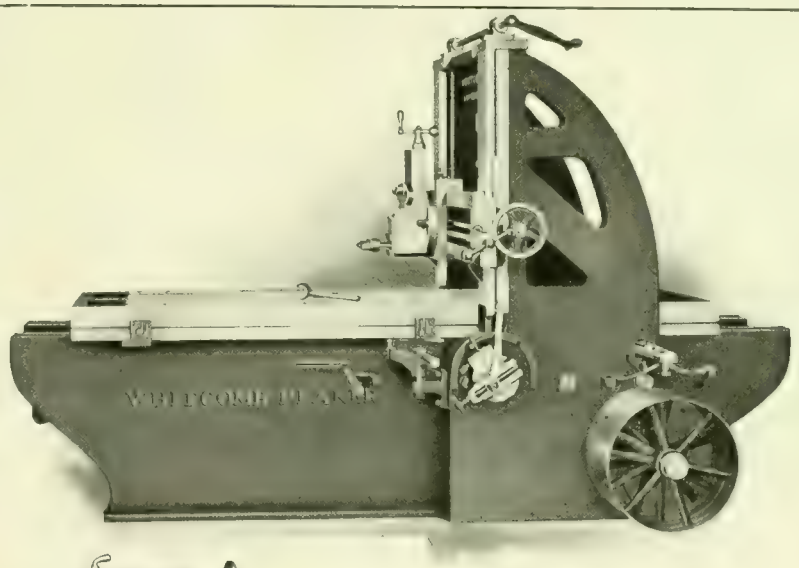
WHITCOMB

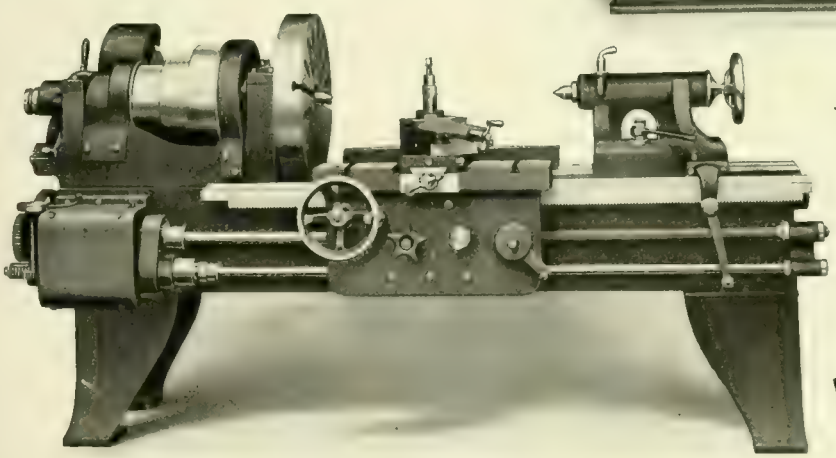
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

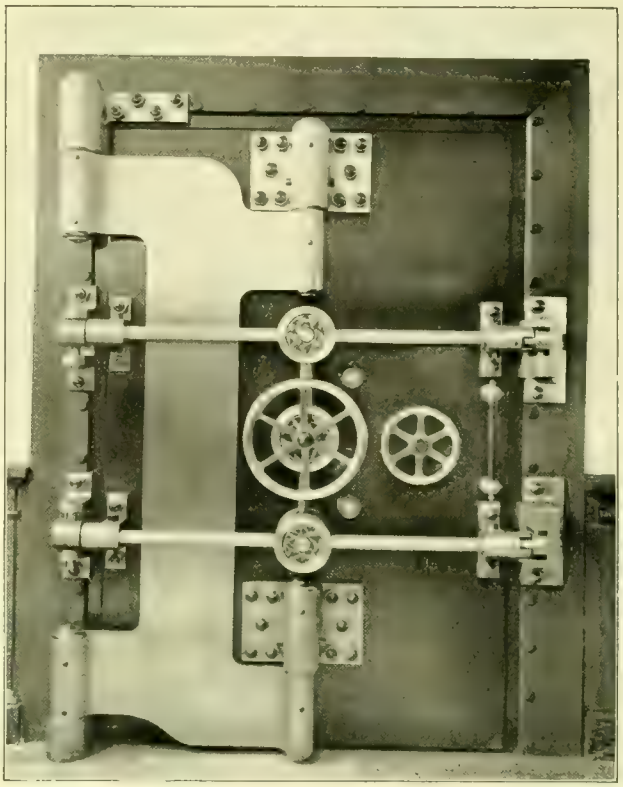
Worcester, Mass.

Made in Worcester.

Vacation Period

Anxiety concerning the safety of valuable papers, jewelry, silver-plate and other articles may be avoided by renting a safe-deposit box in our fire and burglar proof vaults at $4 per annum.

VALUABLE PACKAGES may be stored in our storage vaults for a small monthly charge.



Worcester National Bank

FOUNDED 1804

JAMES P. HAMILTON, *President* S. D. SPURR, *Cashier* F. M. HEDDEN, *Assistant Cashier*

TRUSS AND CABLE WIRE FENCE

Galvanized After Weaving. "Rust-proof for Twenty Years."

Attractive and Substantial.

Build your fence in horizontal strands which follow the ground line up hill or down dale, and fit the land like a glove.

Build few or many strands to suit yourself and your requirements. If conditions change strands may be added or taken away and used again elsewhere.

Two and 4-inch for fence, 6-inch for trellis; 30 rods in a roll.

Truss and Cable Gates to match.

Write for Catalogue No. 3.

Wright Wire Company

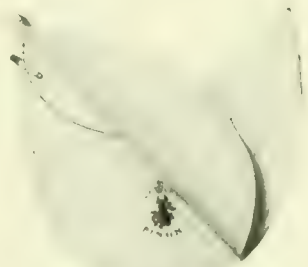
Worcester, Massachusetts

Warehouses: New York, Philadelphia, Chicago, San Francisco

"DE VARS" Quality

"DE VARS" American Maid Hose-Supporters

"DE VARS" E. Z. B. Suspenders



"DE VARS" Pinon Dress Shields

Made in all sizes and styles

Remember that "DE VARS" is on the BEST Hose-supporters, Suspenders and Shields

American Narrow Fabric Co.

MANUFACTURERS

Worcester, Mass.

SEATTLE CHICAGO NEW YORK BALTIMORE

State Mutual Life Assurance Company

(Incorporated 1844)

Assets, Jan. 1, 1909,	$32,540,041.03
Liabilities, Jan. 1, 1909,	$29,843,942.37
Surplus, Jan. 1, 1909,	$2,696,098.66

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, Massachusetts

AN APPRECIATION

H F CAMPBELL, SUPT.

WORCESTER
MECHANICAL AND ELECTRICAL
EXPOSITION

MARCH 27 TO APRIL 3, 1909

UNDER THE AUSPICES OF THE WORCESTER COUNTY
MECHANICS ASSOCIATION

MECHANICS HALL
WORCESTER, MASS.,

May 1, 1909.

The Carlton Engraving Co.

Worcester, Mass.

Gentlemen:-

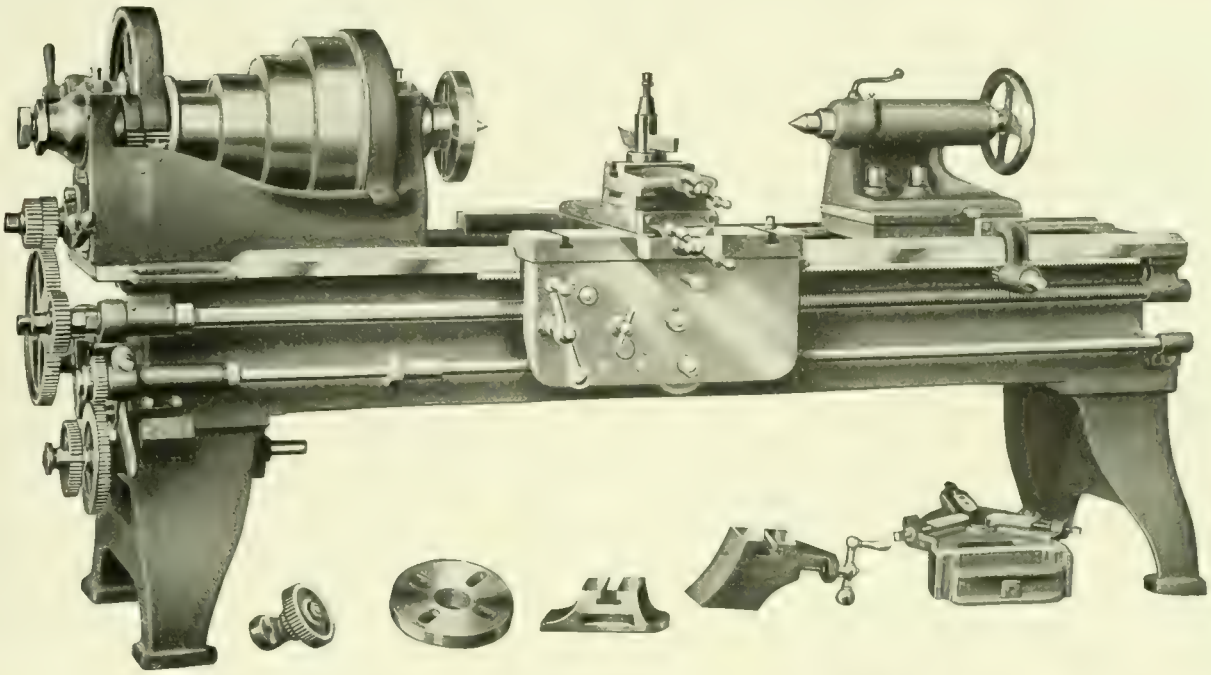
In looking over the last issue of the Worcester Magazine I was struck by the excellence of the workmanship on the cuts used to illustrate the exhibits and our exhibition. I find that the praise for this excellent work is due to your firm and I wish to extend to you my congratulations.

With all my experience with exhibitions in different parts of the country, I have never found better cuts used than those furnished by your firm. Should I ever be connected with other exhibitions in your vicinity I assure you that I hope the Carlton Engraving Co. will receive the contract for furnishing all half tone cuts used in advertising the exhibitions and illustrating the exhibits after the close of the show.

Yours truly,

H. F. Campbell Supt.

CARLTON ENG. CO.
MAKERS OF FINE PRINTING PLATES
WORCESTER



The NEW REED LATHES are

HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

Made in Worcester.

HEYWOOD TRADE MARK SHOE 1864

HIGH GRADE SHOES FOR MEN

HEYWOOD TRADE MARK SHOE 1864

1864 HEYWOOD TRADE MARK SHOE 1864 1909

"Heywood Shoes Wear"

Our Trade Mark
is a Guarantee

Heywood Boot & Shoe Co.

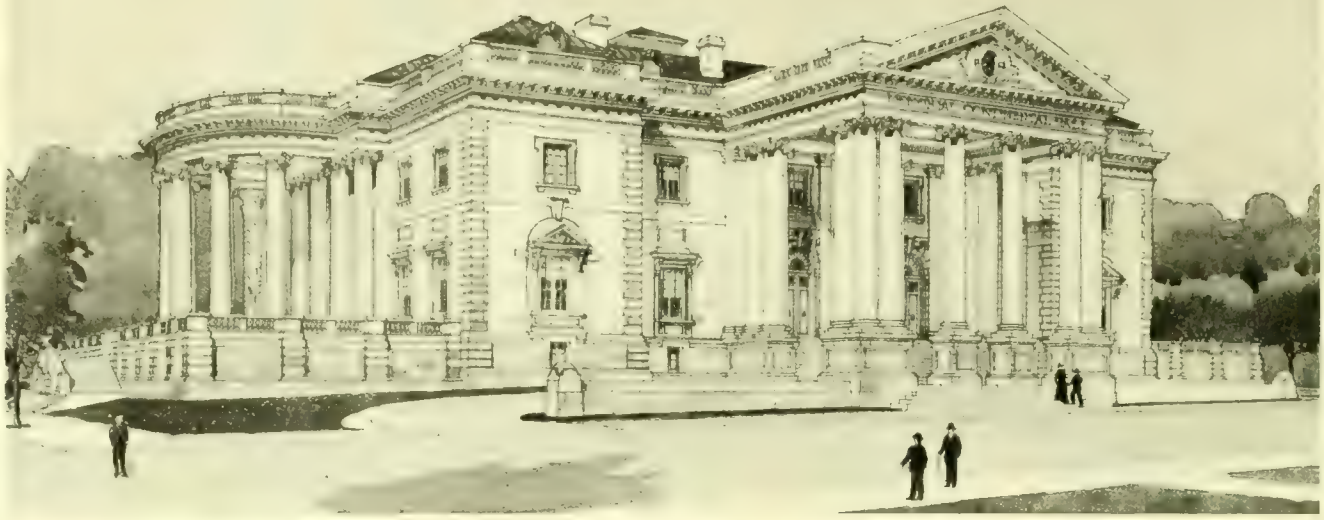
Manufacturers

HEYWOOD TRADE MARK SHOE 1864

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

HEYWOOD TRADE MARK SHOE 1864

Made in Worcester.



MEMORIAL CONTINENTAL HALL, FOR THE NATIONAL SOCIETY, DAUGHTERS OF THE AMERICAN REVOLUTION, WASHINGTON, D. C.

Edward Pearce Casey, Architect **The Norcross Brothers Co., Builders**

Exterior of Plateau White Marble from

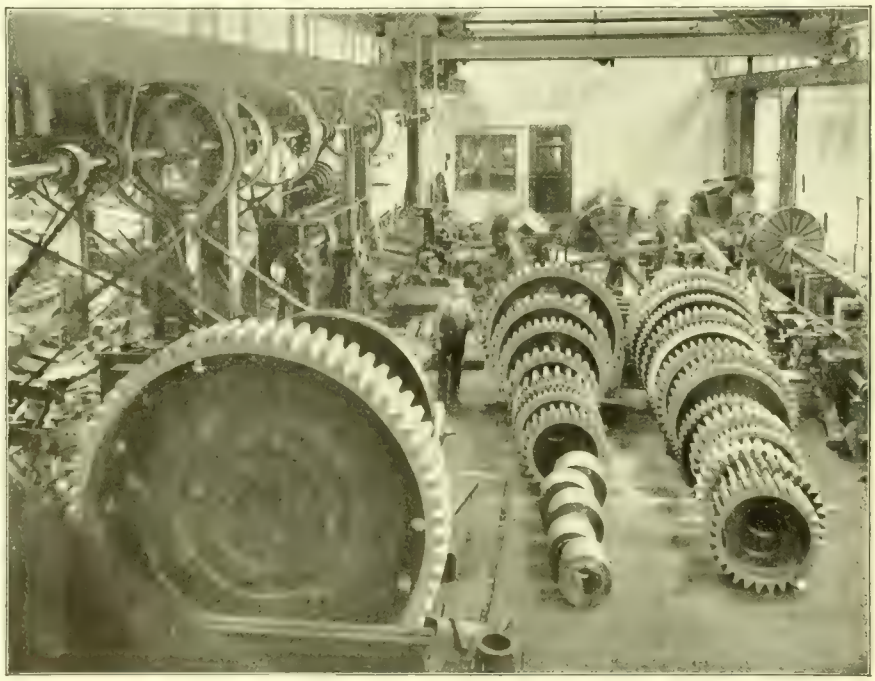
NORCROSS-WEST MARBLE CO., DORSET, VT.

THE NORCROSS BROTHERS COMPANY

General Contractors and Builders

Worcester, Massachusetts

160 Fifth Avenue, NEW YORK Tremont Building, BOSTON Colorado Building, WASHINGTON Industrial Building, PROVIDENCE



GEAR PLANING—BEVEL, SPUR AND SPIRAL GEARS

CONTINUOUS ROLLING MILLS for Billets, Merchant Bar, Small Structural Shapes, Skelp, Hoop, Cotton Tie and Wire Rods

CONTINUOUS GAS PRODUCERS

CONTINUOUS HEATING FURNACES

BYDLIE REVERSING VALVES

WIRE DRAWING PLANTS complete

52 Rue du Congres
Brussels, Belgium

MORGAN CONSTRUCTION COMPANY

WORCESTER
MASSACHUSETTS

Made in Worcester.

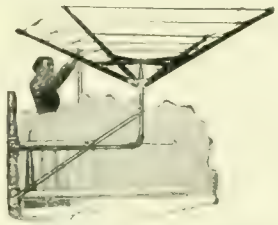
Over 500,000 Users Testify to the Merits of

HILL'S CLOTHES DRYERS

SEND FOR ILLUSTRATED BOOKLETS

THE HILL CANTON SANITARY LAUNDRY DRYER

HILL'S CHAMPION LAWN CLOTHES DRYER



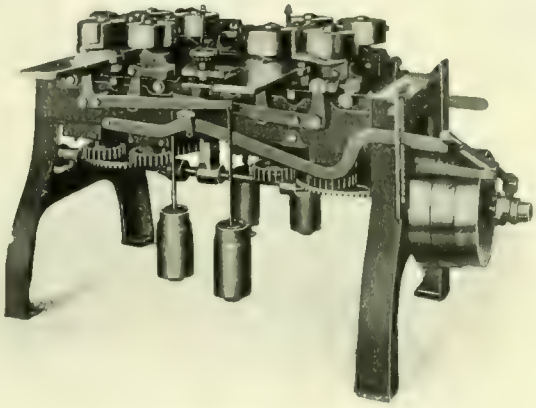
HILL'S BALCONY CLOTHES DRYER

Made in Worcester.

HILL DRYER CO.
Worcester, Mass.

The Largest Manufacturers of Clothes Dryers in the World

SHIPPING CASES AND BOXES



Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.

SHERMAN ENVELOPE CO.
Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.

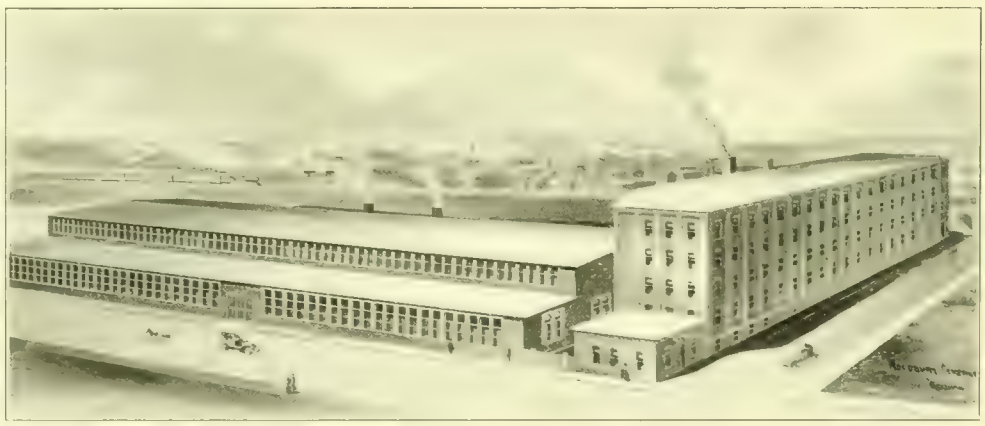
Made in Worcester.

Wood Screws
Machine Screws
Taps and Dies
Stove Bolts
Tire Bolts
Cap Screws
Set Screws
Small Nuts
Rivets and Burrs
Hanger Bolts
Chair and Stove Rods
Screw Machine Products
Special Products from Wire
Sheet Metal and Castings
Made in Worcester.

INSTANT SHIPMENT
of Stock Goods

REED & PRINCE MFG. CO.
Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

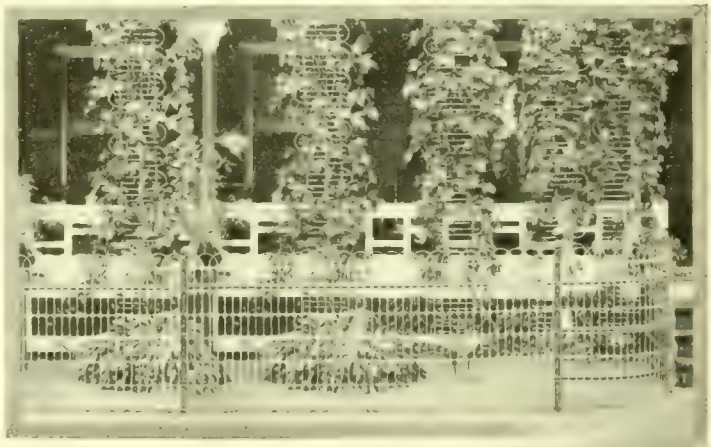
Capacity 20 tons a day

L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY
DEPARTMENT OF SPENCER WIRE COMPANY

We furnish and erect complete Ornamental Fences of Wire or Wrought Iron



Flower Bed Guard,
Trellis,
Tree Guards
Rubbish Baskets for Parks and Cemeteries.

80 WEBSTER ST., WORCESTER, MASS.

Made in Worcester.

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier*

Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.

GEO. F. BLAKE JR. & CO.

"HONEST GOODS AT HONEST PRICES"

Steel, Iron and Heavy Hardware

Carriage Makers' and Blacksmiths' Supplies

Junction of Bridge, Mechanic and Foster Sts.

WORCESTER, MASS.

EVERY VARIETY

of **WOODEN** *and* **PAPER**

ALSO CLOTH COVERED **BOXES**

B O X E S

One of the Most Complete Plants in Massachusetts

WILLIAMS & BRIDGES CO.

Manufacturers

72-86 Central St., Worcester, Mass.

Made in Worcester.

TYLER'S BUSINESS COLLEGE

The Modern Commercial School of Worcester

Exercise wisdom in selecting a school. Consider impartially and critically all essential elements of **a Real School.**

Remember that the **Best School** is not the one which advertises itself as such. Pay particular attention to facts and throw out all boastful claims that have no **Real Value.**

Tyler's Business College, now beautifully located in the new **Slater Building,** offers an exceptional opportunity to young men and women who are desirous of entering the business world, and who appreciate expert instruction, proper surroundings and associations.

Special work, reviewing, examining and completing courses begun in High Schools and other Business Schools are features given careful attention in this school.

The school assists its graduates in obtaining desirable positions, and through this assistance students are enabled to go direct from the school into business employment without loss of time. Former graduates who may need help in securing positions are always gladly given the needed assistance.

COURSES

Commercial Course

Bookkeeping, Penmanship,
Commercial Arithmetic,
Commercial Correspondence,
Commercial Law,
Spelling and Defining.

Stenographic Course

Pitman or Munson Shorthand,
Typewriting (Sight or Touch Method),
Correspondence, English, Spelling,
Filing, Cataloguing, Mimeographing,
Multigraphing, Letter-press Copying.

Commercial Teachers' Full Course

This course includes all the subjects in above courses and is arranged for High School, Normal School and College Graduates, also teachers who wish to change their line of work.

Civil Service Course

This course prepares for the various Government examinations.

Special Course

This course is open to persons who for reasons cannot take the regular course. The studies and hours are adjusted to suit the needs of the pupil.

Public Stenography, Typewriting, Multigraphing

Terms and more extended information will be given by mail or through interviews at the offices of the school, **Slater Building.** Office open every week-day and evening during August.

EDNA I. TYLER,
Principal

Telephones: 5012, 6337, 1797-3

THE J. F. & W. H. WARREN COMPANY

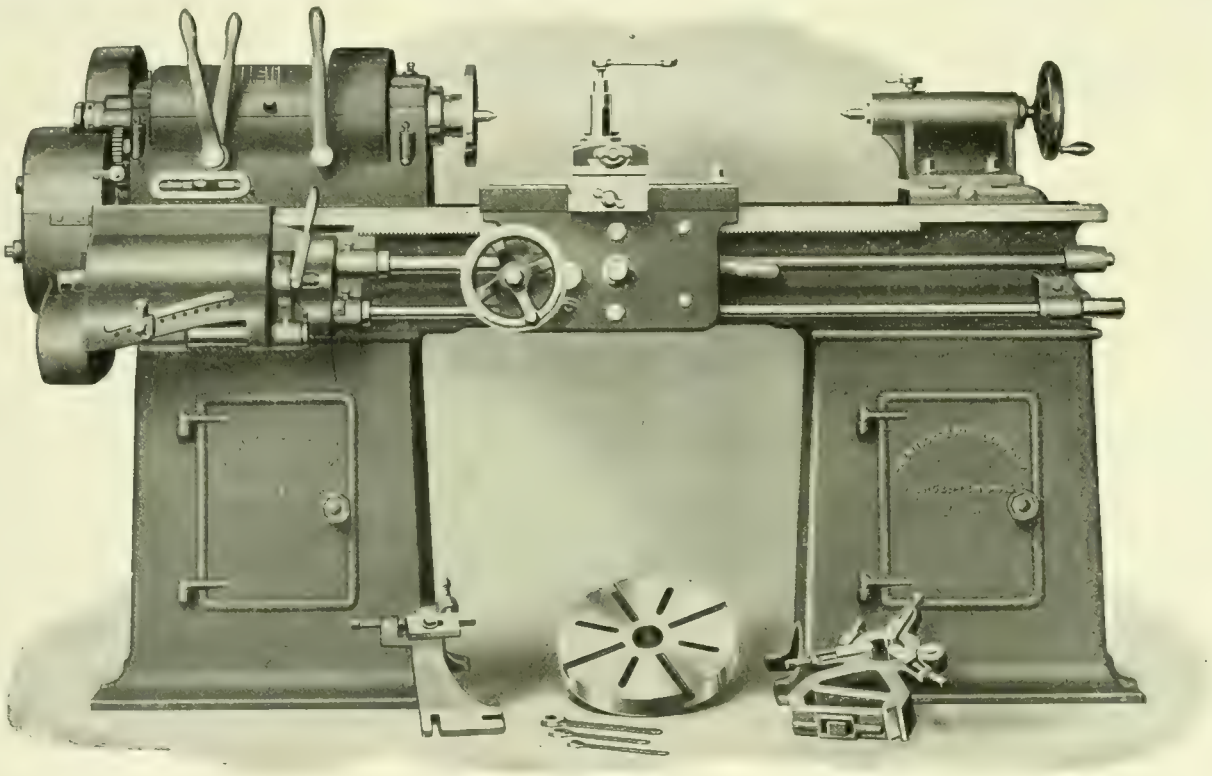
WORCESTER, MASS.

Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery, for Cotton Cones and all hard places and fast drives.

We also make WARREN'S WATER-PERFECT PROOF Leather Belting

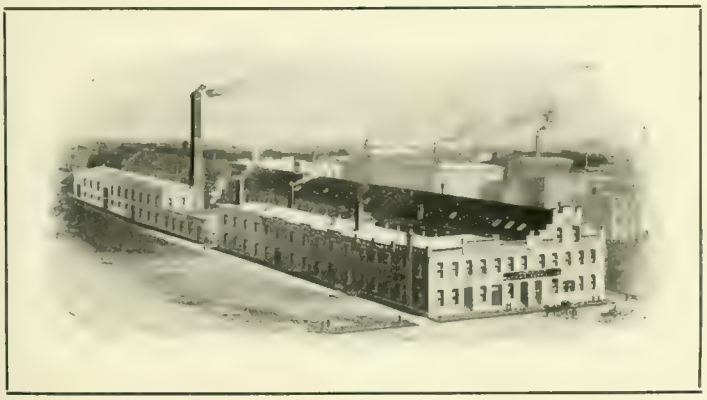
Made in Worcester.



PRENTICE BROTHERS CO., WORCESTER, MASS.

Made in Worcester.

Upright and Radial Drilling Machines and Engine Lathes



Worcester Machine Screw Co.

Branch of the

Standard Screw Company

Makers of

Set Screws, Cap Screws, Machine Screws, Taper Pins, Milled Studs, Special Parts

Beacon and Jackson Streets

Worcester, Massachusetts

Made in Worcester.

HOTEL STANDISH

WORCESTER, MASS.

—

NEW AND ATTRACTIVE

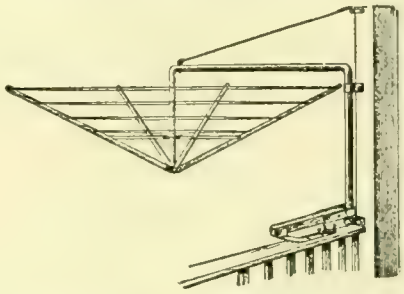
On direct route between Boston and New York. Catering to permanent and transient guests.

ROOMS WITH OR WITHOUT BATHS

The VICTOR Improved

Roller Bearing Clothes Reels

Ash
Chutes,
Sifters,
Etc.



Manufactured by **The R. W. Robinson Co.**

86 Foster Street

Telephone 6019 — Agents Wanted

FOR YOUR HOUSE

WORCESTER, MASS.

C. B. POST, Prop.

Thoroughness and Skillfulness

To become a first-class Watchmaker you would learn of one who knows how to make a watch; to learn Business or Shorthand thoroughly go to

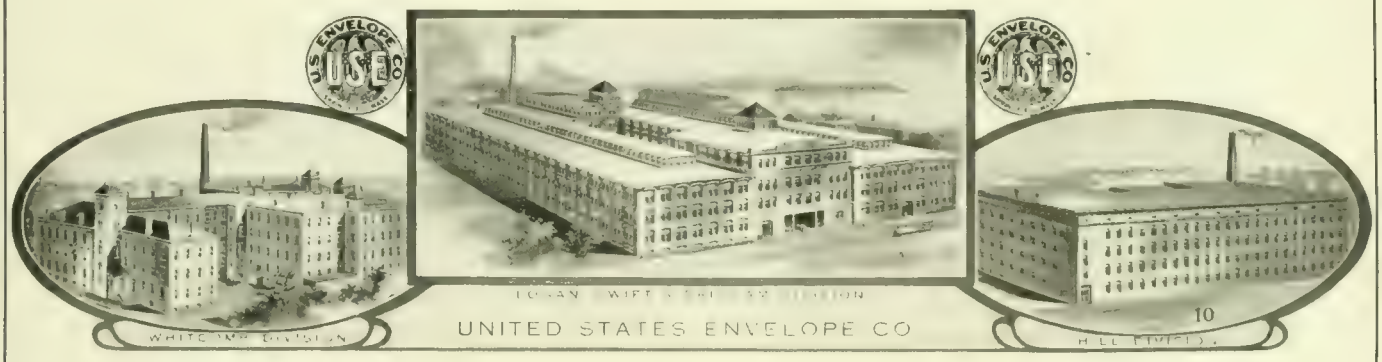
The Worcester Business Institute

We know how to teach these essential features of a business education

Gentlemen teachers at the head of all Departments

United States Envelope Company

Manufacturers of Standard **Envelopes**



WORCESTER PLANT OF THE UNITED STATES ENVELOPE COMPANY

The Outlook Envelope

Insures economy and absolute accuracy in the addressing of all your mail matter.

The Improved

Columbian Clasp Envelope

The best and most satisfactory merchandise envelope made.

Specialists in STEEL DIE STAMPING

for Commercial Work. Samples and Prices of our Standard Goods furnished by your Stationer or Printer

Made in Worcester.

B. C. FISKE, PRES'T. W. W. CARTER, TREAS. E. S. STROUT, SEC.

FISKE-CARTER CONSTRUCTION CO.

BUILDERS

OFFICES
11 FOSTER ST., WORCESTER
SPARTANBURG, S. C.

WORCESTER, MASS.

Norton Alundum Plant
Niagara Falls, N. Y.

Works of Norton Co. and Norton Grinding Co.
Worcester, Mass.

Norton Grinding Wheels are known and used in all parts of the world.

Grinding Machinery
Rubbing and Sharpening Stones

Glass Cutting Wheels
Scythe Stones

Razor Hones
India Oil Stones

Made in Worcester.

Spend your Vacation

on the

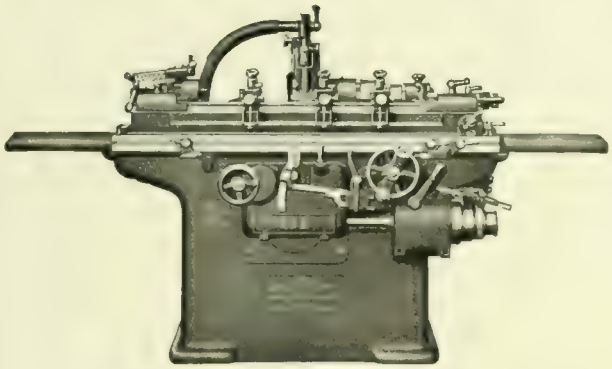
Cool, Clean, Exhilarating Trolley

Special excursions every week

The cheapest and best way to enjoy the Summer

Boston and Worcester Trolley Air Line

NORTON PLAIN GRINDERS



6″ x 32″ Norton Plain Grinder

are built in various sizes from 6″ swing to take 32″ between centers up to 20″ swing to take 264″ between centers. We are constantly devising new methods and fixtures to enable the operator to increase production.

DESIGN:
The best that 20 years' grinding experience can give.

MATERIAL:
Only the highest grade of material is used.

WORKMANSHIP:
Every piece which enters into these machines must pass a rigid inspection.

Write for Circulars and Prices.

Chicago Store, 48 So. Canal St.
F. W. Horne, Yokohama, Japan.
Ludw. Loewe, London, Berlin, European Agents.

Norton Grinding Company,
Worcester, Mass., U. S. A.

Made in Worcester.

N88

Hand Stripping Cards

German and Domestic Heddles for Cotton and Woolen Mills

Revolving Top Flats remounted Fillets redrawn.

Quality sells our Goods

Phone 1070
Local and Long Distance

Dept. C-H
44-46 Vine St.
Worcester, Mass.

Made in Worcester.

ESTABLISHED 1866
INCORPORATED 1888

A. H. Howard, *Pres. and Mgr.*
Herbert Midgley, *Supt.*

HOWARD BROS. MFG. CO.

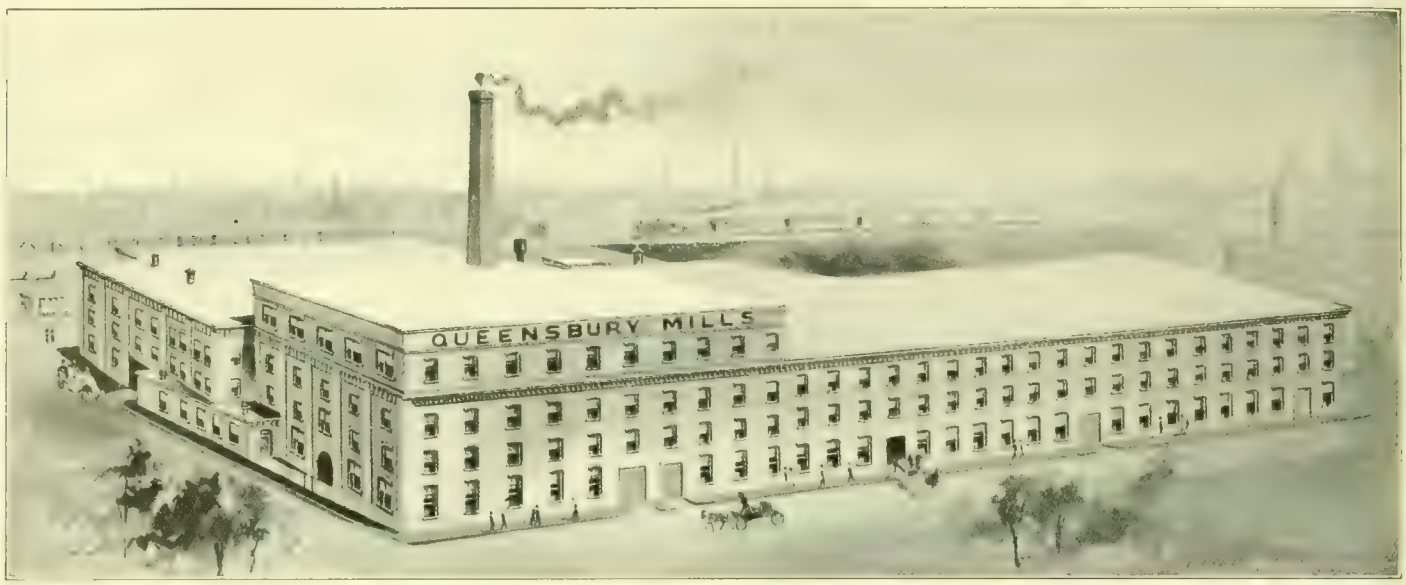
Manufacturers of

Card Clothing

H. HODGSON,
President and Treasurer

QUEENSBURY MILLS

FRED HODGSON,
Gen'l Manager



Combers and Spinners of

MOHAIR, ALPACA and
LUSTRE YARNS

WORCESTER,

Made in Worcester.

Manufacturers of

MOHAIR DRESS GOODS
and COAT LININGS

MASSACHUSETTS

FOR RENT. Above factory, corner Jackson and Beacon Streets. **70,000** square feet. Modern equipment. Steam-electric power plant.

J. E. & A. E. ESTABROOK, Worcester, Mass.

Salerosas

Favoritas Size

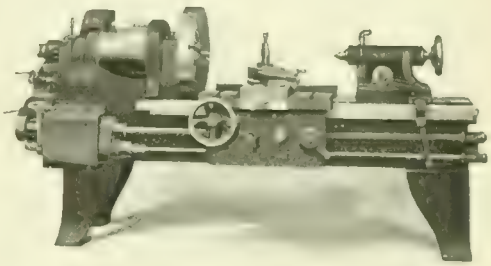
Of the eleven gradations of shapes and sizes of Salerosas, there is a shape and a size to fit every occasion.

Favoritas, 50 in a box, **$7.00 per 100.**

Estabrook & Eaton

416 Main Street
WORCESTER, MASS.

Start Right



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E. B. LUCE

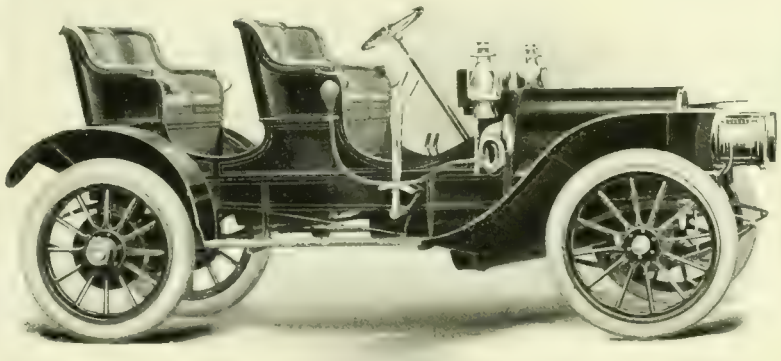
Expert photographer of machinery, tools and all commercial work

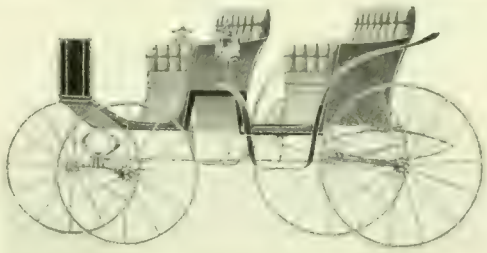
TELEPHONE

Walker Building

Good Work - Fair Prices

For Automobile and Carriage Painting





Carriage Building
Repairing
Scientific Horse-shoeing

A. E. HAYER

548 Park Avenue

Telephone 1816 **Near Coes Sq.**

Made in Worcester.

Established 1857

John J. Adams,

(Successor to A. M. HOWE)

Manufacturer of Finest Quality

CUTTING DIES

of every description

For Leather, Paper, Cloth and Rubber.

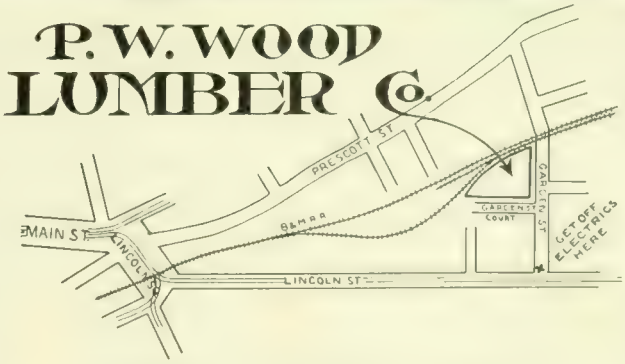
Nos. 81 and 85 Mechanic St., Worcester Mass.

Boston Office, 50 Lincoln Street. (Wednesday.)

Long Distance Telephone, 220

Made in Worcester.

P. W. WOOD LUMBER Co.



SUCCESSORS TO WORCESTER LUMBER CO.

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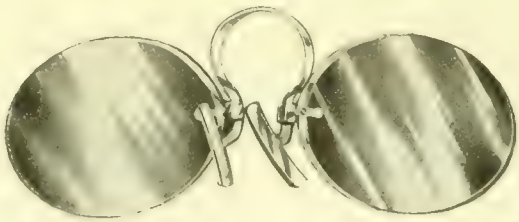

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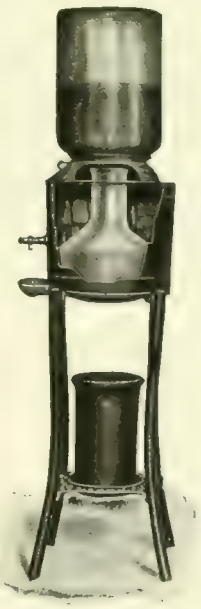

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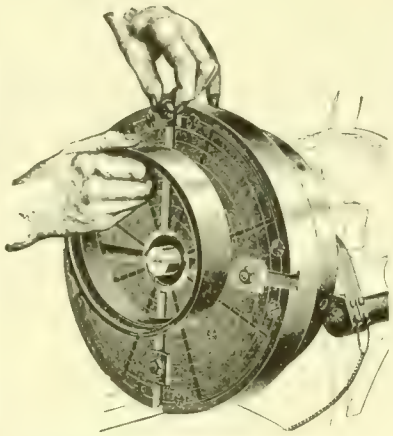

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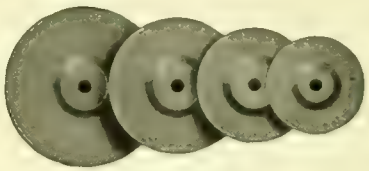

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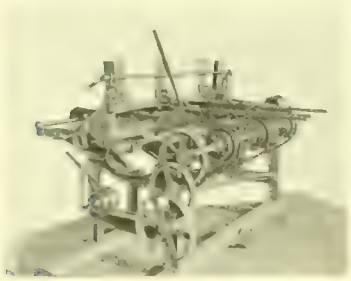

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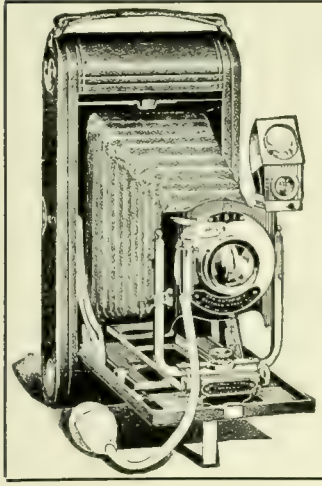

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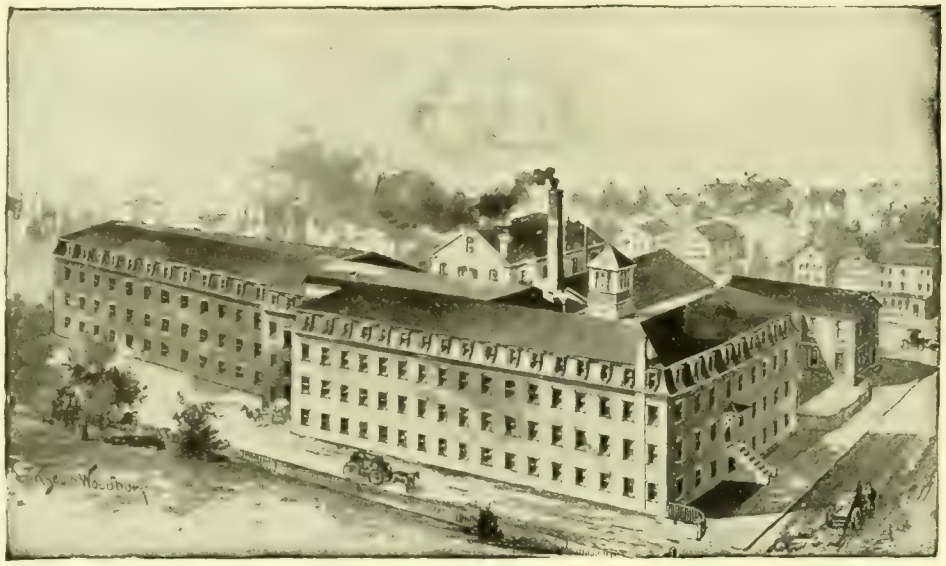

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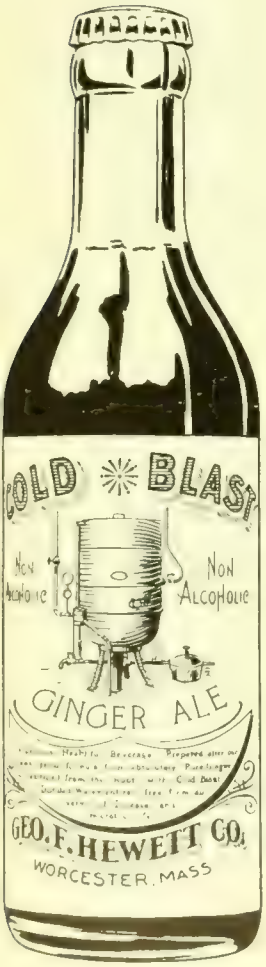

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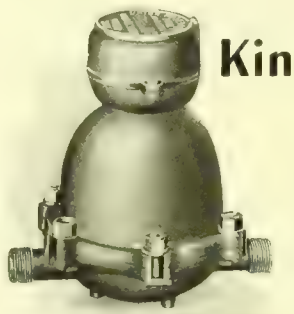

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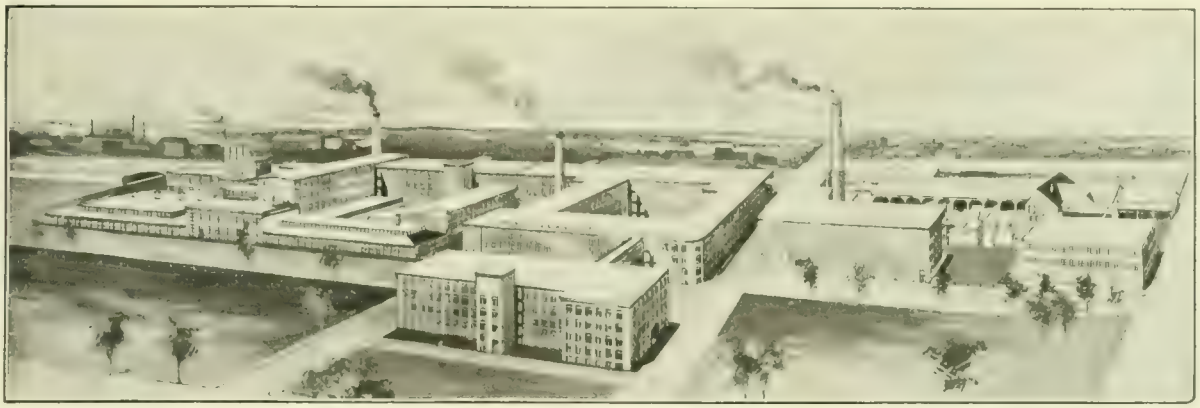

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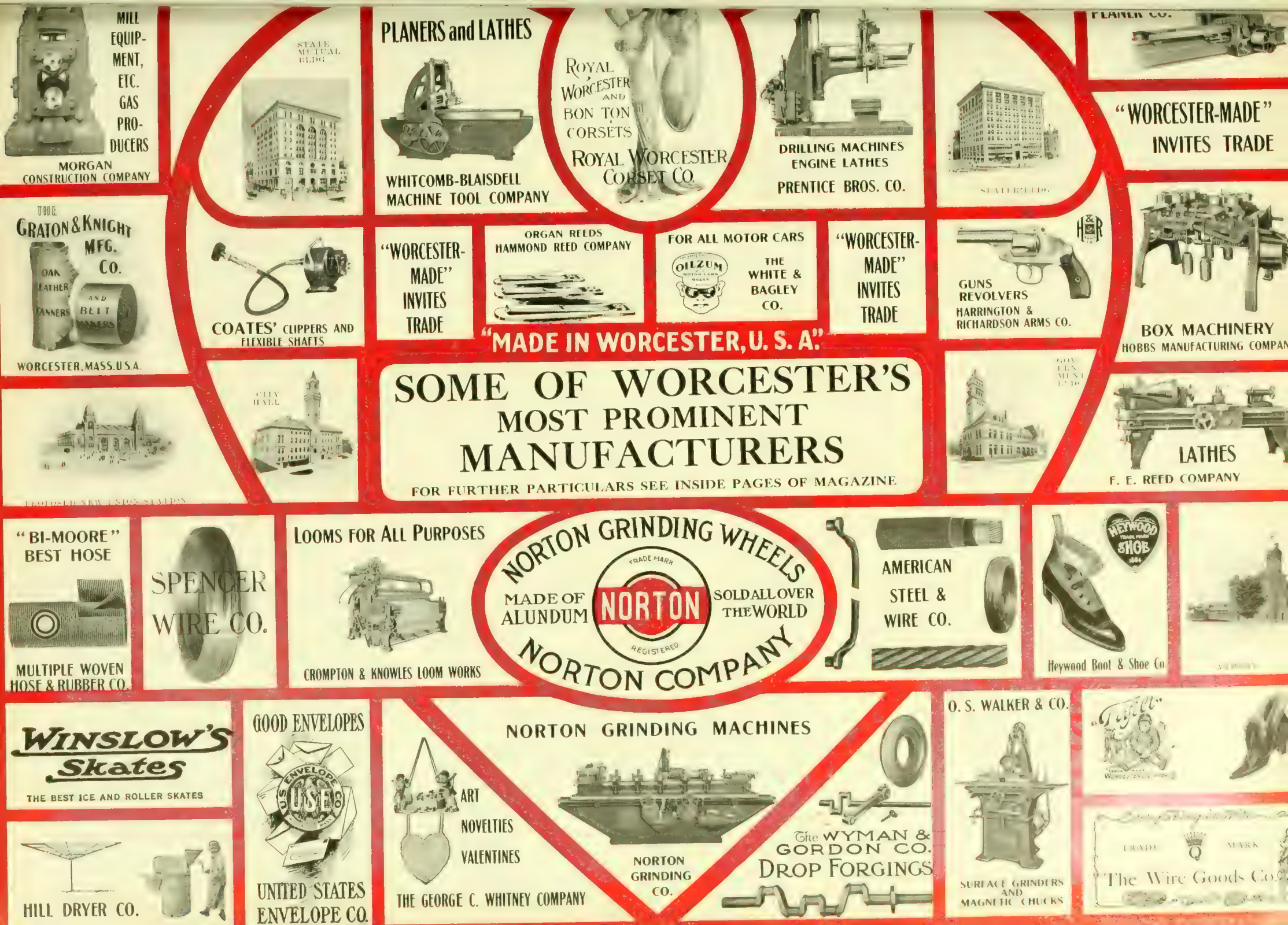
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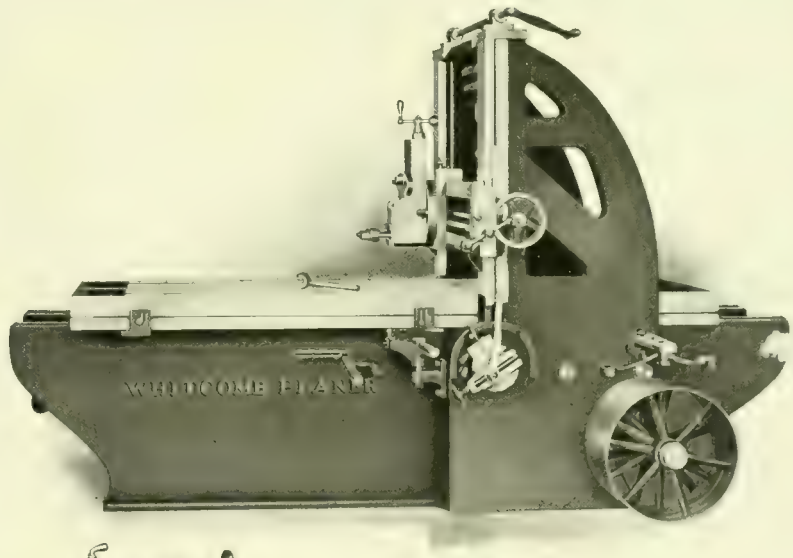

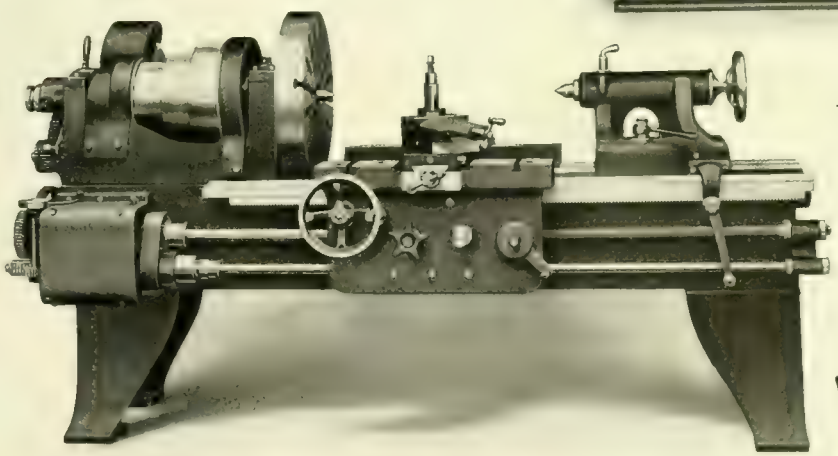

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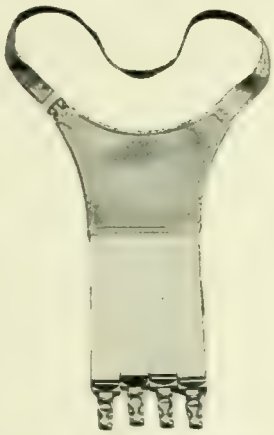

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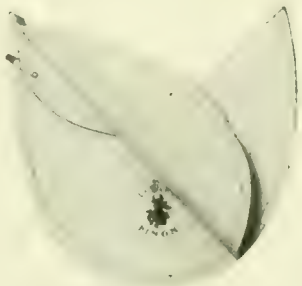


"DE VARS" Pinon Dress Shields

Made in all sizes and styles

Remember that "DE VARS" is on the BEST Hose-supporters, Suspenders and Shields

American Narrow Fabric Co.

MANUFACTURERS

Worcester, Mass.

SEATTLE CHICAGO NEW YORK BALTIMORE

State Mutual Life Assurance Company

(Incorporated 1844)

Assets, Jan. 1, 1909, $32,540,041.03
Liabilities, Jan. 1, 1909, $29,843,942.37
Surplus, Jan. 1, 1909, $2,696,098.66

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, Massachusetts

AN APPRECIATION

H F CAMPBELL, SUPT.

WORCESTER
MECHANICAL AND ELECTRICAL
EXPOSITION

MARCH 27 TO APRIL 3, 1909

UNDER THE AUSPICES OF THE WORCESTER COUNTY
MECHANICS ASSOCIATION

MECHANICS HALL
WORCESTER, MASS.,

May 1, 1909.

The Carlton Engraving Co.

Worcester, Mass.

Gentlemen:-

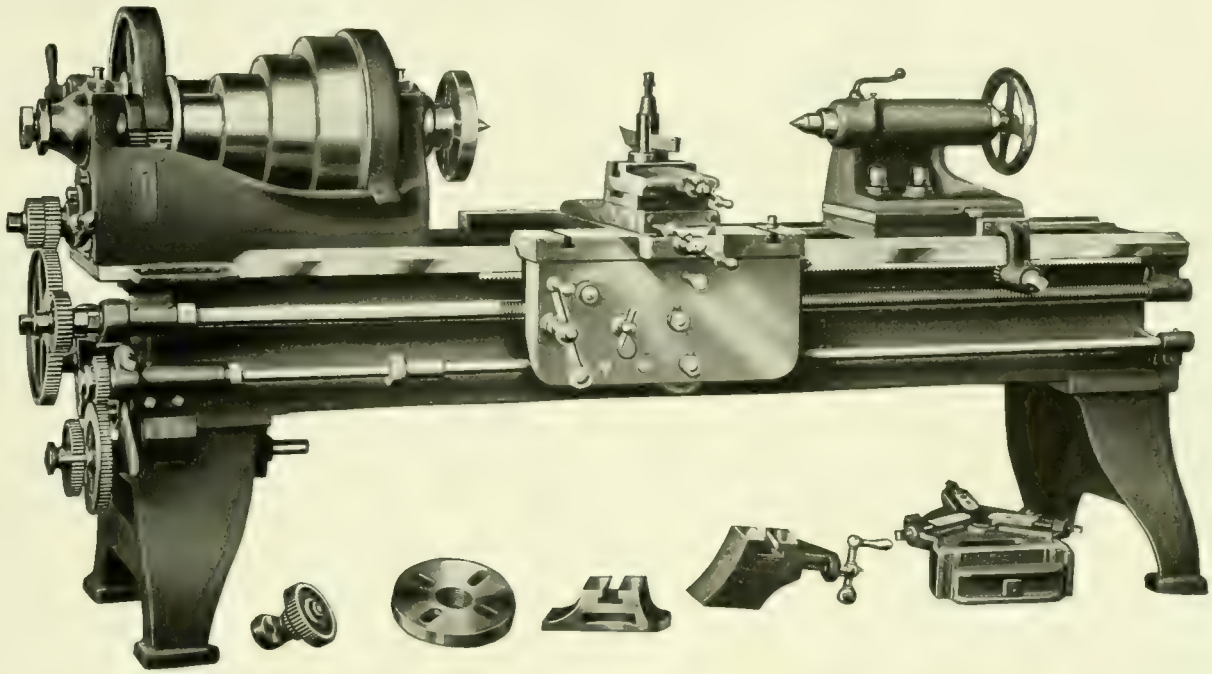
In looking over the last issue of the Worcester Magazine I was struck by the excellence of the workmanship on the cuts used to illustrate the exhibits and our exhibition. I find that the praise for this excellent work is due to your firm and I wish to extend to you my congratulations.

With all my experience with exhibitions in different parts of the country, I have never found better cuts used than those furnished by your firm. Should I ever be connected with other exhibitions in your vicinity I assure you that I hope the Carlton Engraving Co. will receive the contract for furnishing all half tone cuts used in advertising the exhibitions and illustrating the exhibits after the close of the show.

Yours truly,

H. F. Campbell Supt.

CARLTON ENGRAVING CO.
MAKERS OF FINE PRINTING PLATES
WORCESTER



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Speed Lathes. Manual Training Lathes

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Made in Worcester.

Our Arch Support Shoe

is scientifically designed for the relief and cure of broken down and weak arches.

Foreign Sales Agents:

E. Coleman & Co.
Manchester, England

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Buenos Aires,
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Pattesson & Ruhfus
Melbourne, Australia

Arch Support Shoe

Sold by the leading retail stores in all parts of the United States.

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.

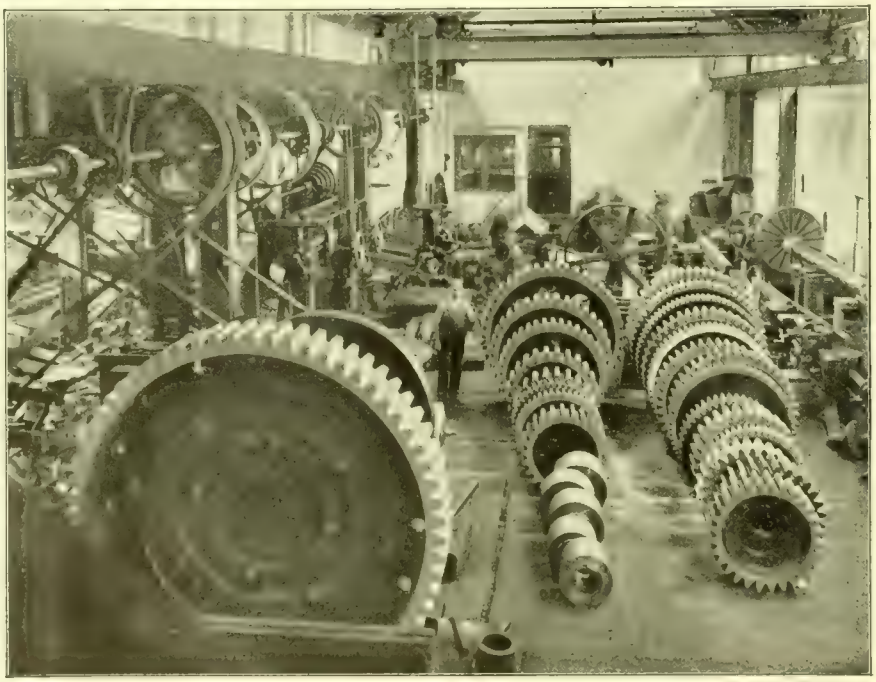
Craig Street Facade, Bank of Montreal, Montreal, Quebec
McKim, Mead & White, Architects.

The Norcross Brothers Company, Builders.

The Norcross Brothers Company

General Contractors and Builders

New York
Boston
Providence
Washington
Worcester



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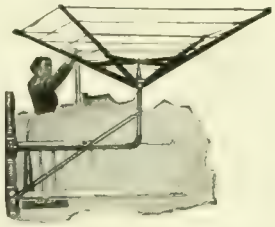

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THE HILL-CANION SANITARY LAUNDRY DRYER

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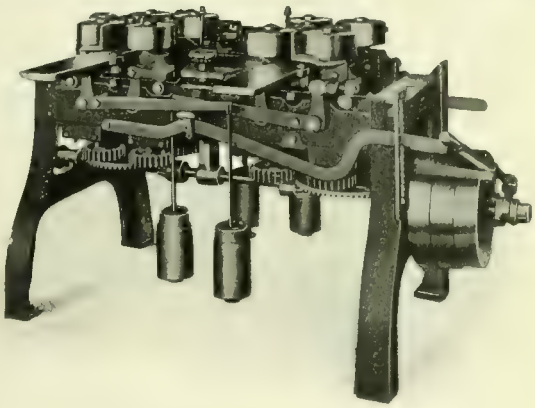

Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
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Matching Machines

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Made in Worcester.

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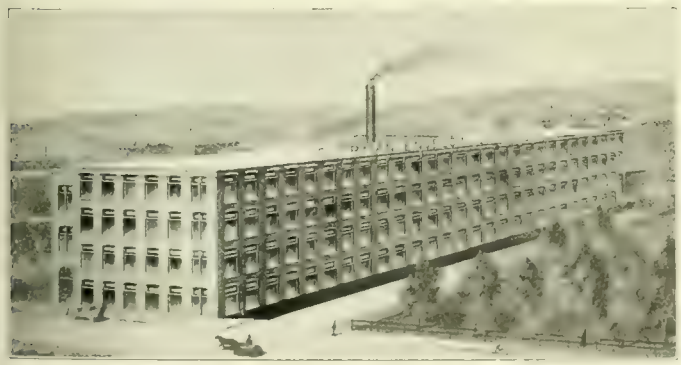

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Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

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Our Envelopes are made from Standard Grades and Weights of Paper
The Sherman SINEGRAPHIC Envelope, a great time and money saver
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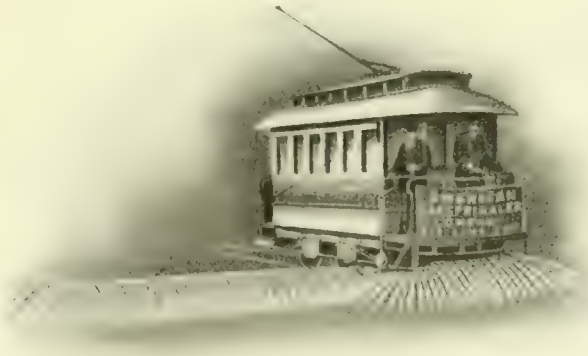
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST



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Machine Screws,
Taps and Dies,
Stove Bolts,
Tire Bolts,
Cap Screws,
Set Screws,
Small Nuts,
Rivets and Burrs,
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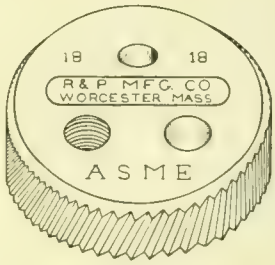

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Special Gages.

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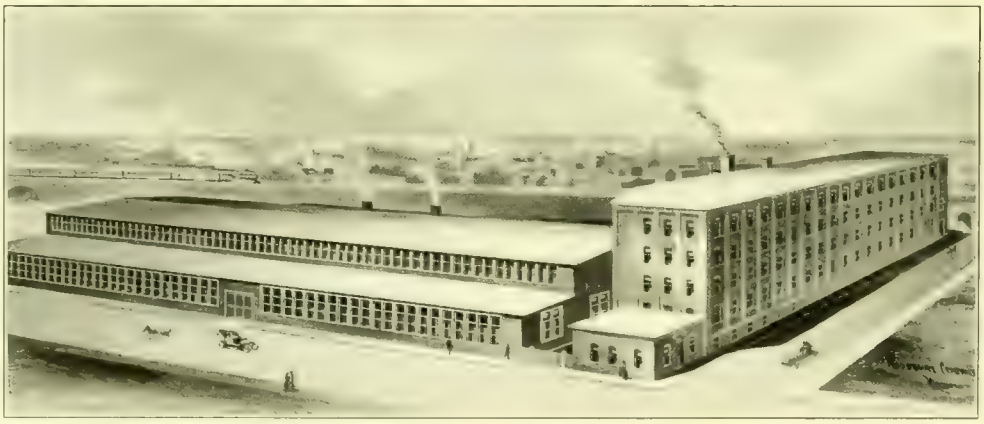

Our Castings are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings up to 15 tons

Capacity 20 tons a day

L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

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We furnish and erect
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Ornamental Fences
of Wire
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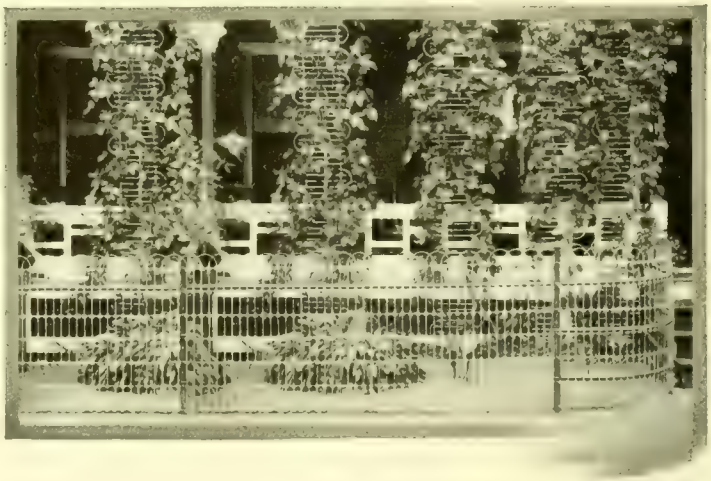

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Rubbish Baskets for Parks
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First-class Factory Sites

For plants already established and doing good business, but not satisfied with existing location, or

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(Marked A and B on the Plan)

The tract marked A is the largest tract of land in Worcester, equally near to City Hall, which has

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Sewer
City Water
Large Water Supply
Spur Track Available
Electric Car Accommodations

This tract of land has a frontage of over 700 feet upon the Blackstone River, which furnishes abundance of water for general manufacturing purposes, and water sufficient for use in a power plant using compound condensing or turbine engines—the same water which is so used in the power house which operates all the electric roads of Worcester, requiring about 2000 gallons of water a minute. Spur track can be obtained from the Boston & Albany Railroad. This land is just the same distance from City Hall that Webster Square is.

MARVIN M. TAYLOR
State Mutual Building Worcester, Mass.

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Located in the new SLATER BUILDING, a centre of business activity, is *Ideal* and *Exceptional*, not only in location and equipment, but because it possesses a faculty of college and university trained specialists who are enthusiastic teachers of experience.

Many parents are now trying to decide *what school*, which is all-important to the welfare of their son or daughter. The chief difficulty which presents itself, in most cases, is the lack of suitable information concerning the various schools. A great amount can be procured, it is true, but it is not of the right quality.

Much of the advertising done by business schools nowadays is boastful, bold, and misleading. Because of this fact we desire to inform the public that we consider integrity of prime importance. A boastful person is usually suspected of trying to support his business with words. We consider actions of greater weight. The work we are doing in our school will stand on its own merits.

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Geo. F. Hewett Co.
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Leland & Co.
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Excelsior Mills
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Lewandos Dye House
West Collection Agency
Cranska Thread Co.
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National Cash Register Co.
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Catholic Messenger
Telegram Pub. Co.
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Worcester Evening Gazette
North Works American Steel & Wire Co.
South " " " "
Morgan Motor Truck Co.
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Worcester Window Cleaning Co.
Independent Pharmaceutical Co.
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For Tired Feet

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Light and Heavy Sheet Metal Stamping

Deep Drawing, Cold Rolling

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Superior facilities for Autogenous welding, Electro-Plating, Casehardening, Annealing, Rolling, Stamping, Punching, Shearing, Drawing and Machining all sheet metals.

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Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
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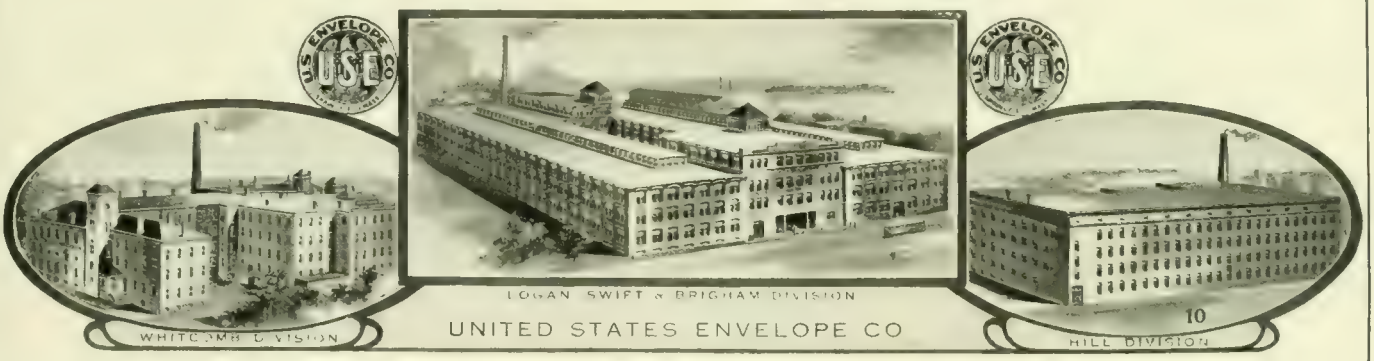
Manufacturers of Standard **Envelopes**



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The Improved

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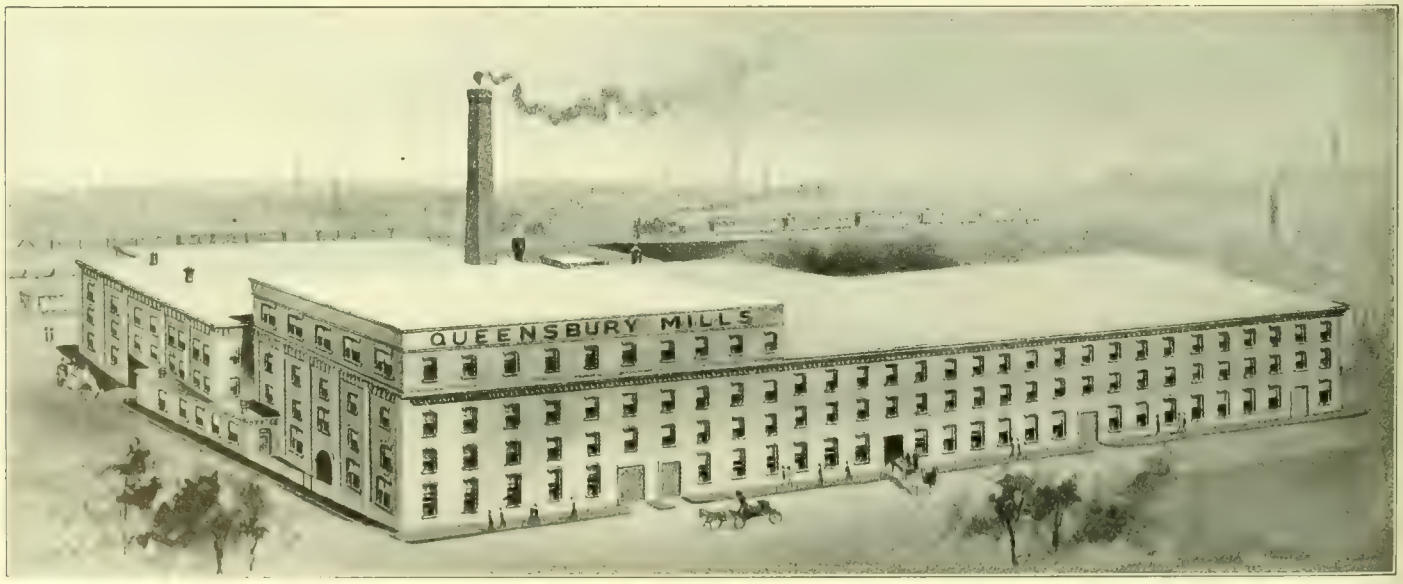

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LUSTRE YARNS

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Manufacturers of

MOHAIR DRESS GOODS
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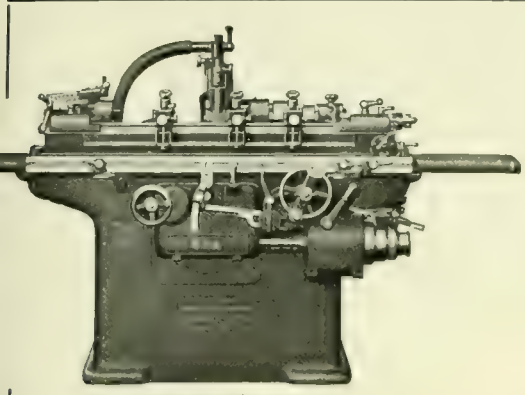

6" x 32" Grinder

We are

Manufacturers of Plain Machines for cylindrical grinding. Universal Tool and Cutter Grinders, Bench and Floor Grinders.

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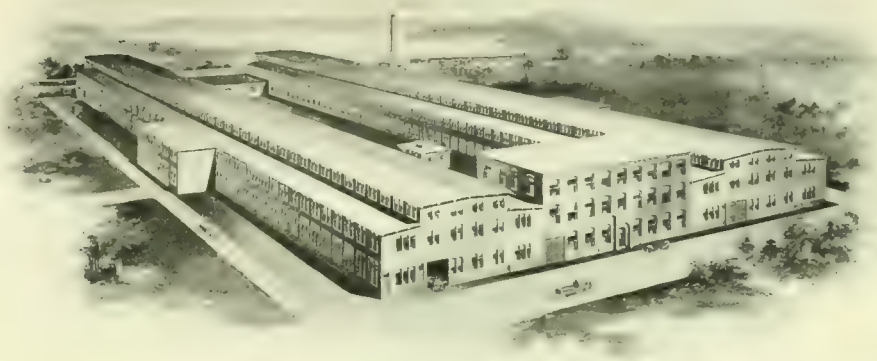

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Quality sells our Goods

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INCORPORATED 1888

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Manufacturers of

Card Clothing

THE J. F. & W. H. WARREN COMPANY

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Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery,
for Cotton Cones and all hard places and fast drives.

We also make WARREN'S WATER-PERFECT PROOF Leather Belting

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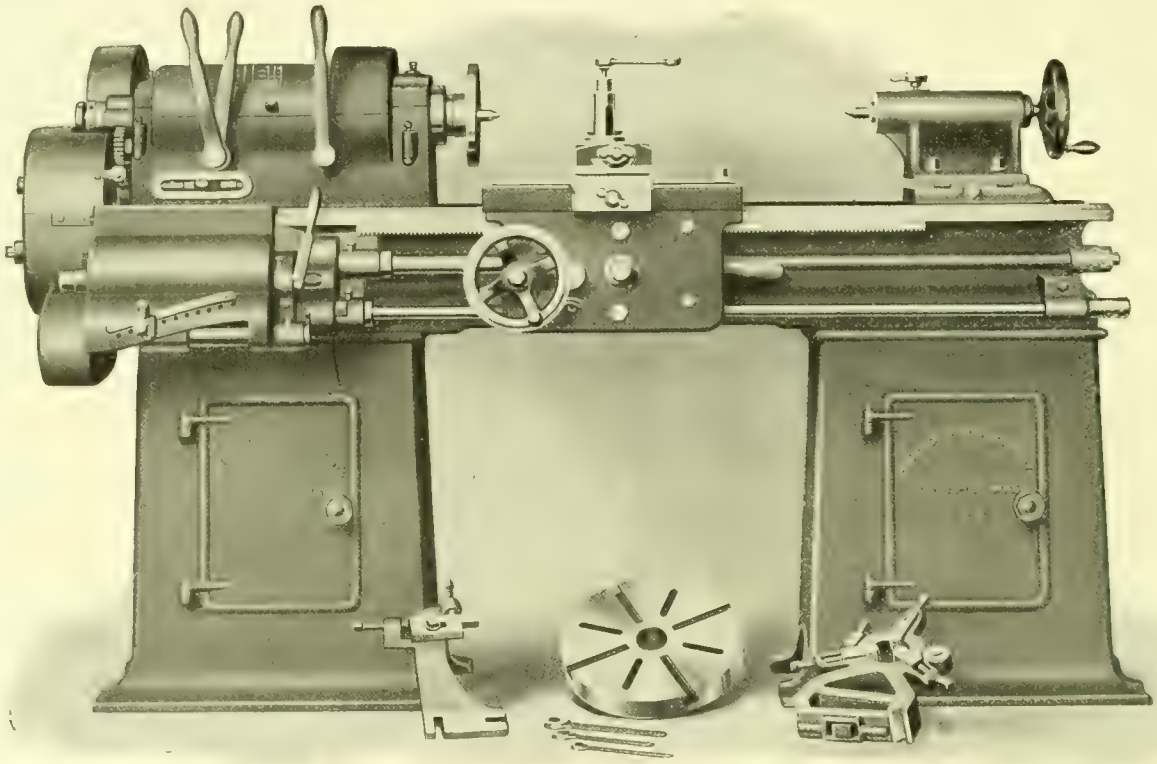

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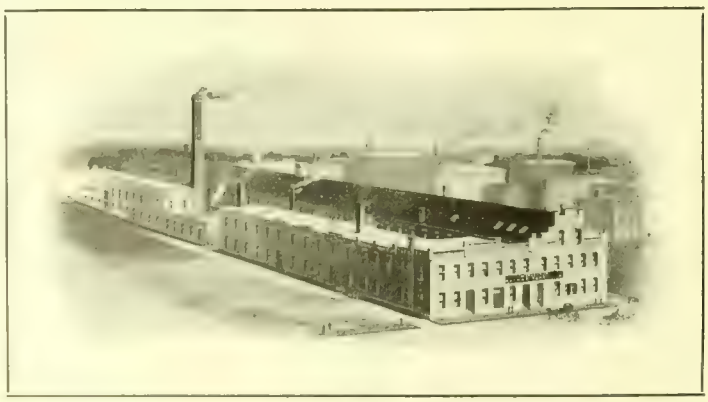
Upright and Radial Drilling Machines and Engine Lathes



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Branch of the

Standard Screw Company

Makers of

Set Screws, Cap Screws, Machine Screws,
Taper Pins, Milled Studs, Special Parts

Beacon and Jackson Streets
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Made in Worcester.

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The Agency
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"Made in Worcester"

For California or
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Address, giving full particulars

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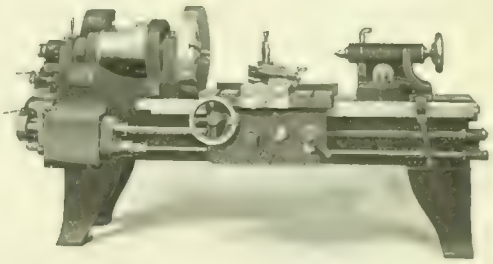
Start Right



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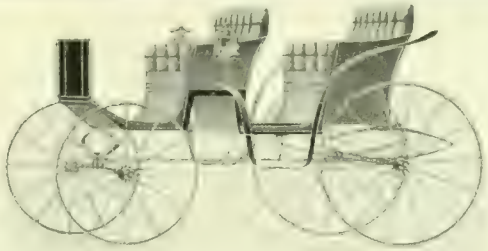

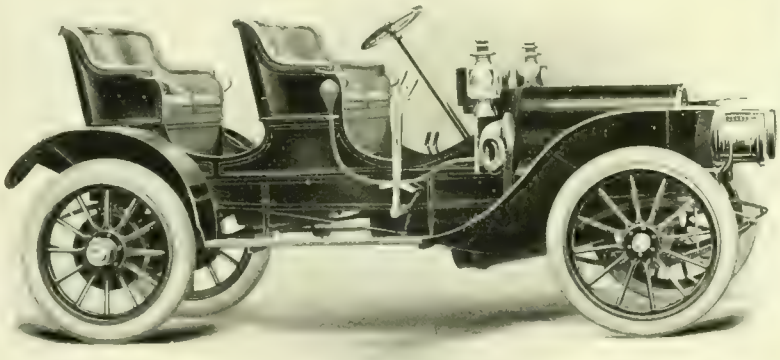

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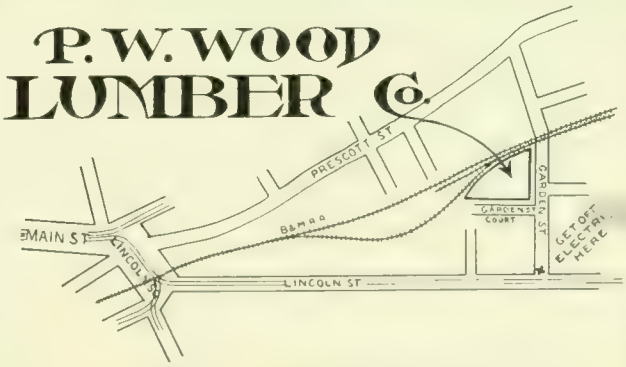

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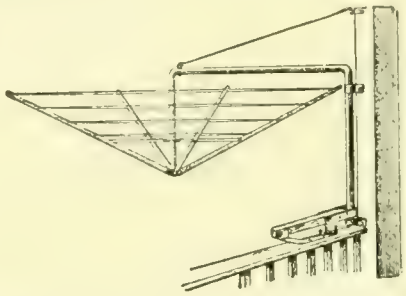

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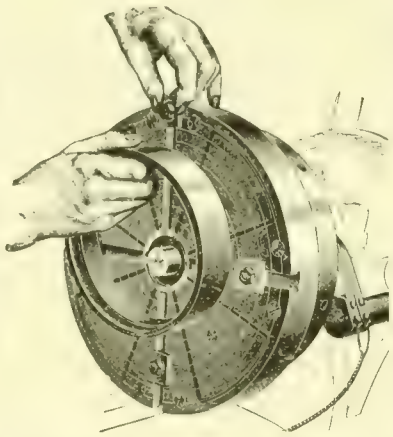

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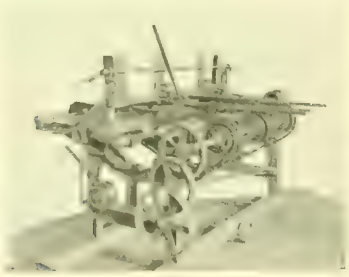

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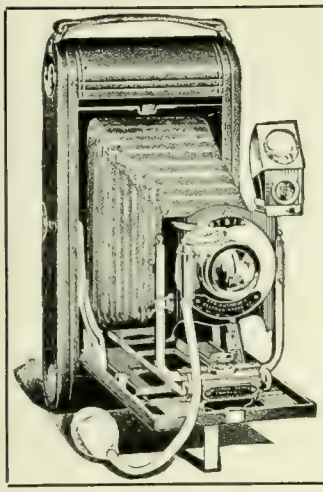

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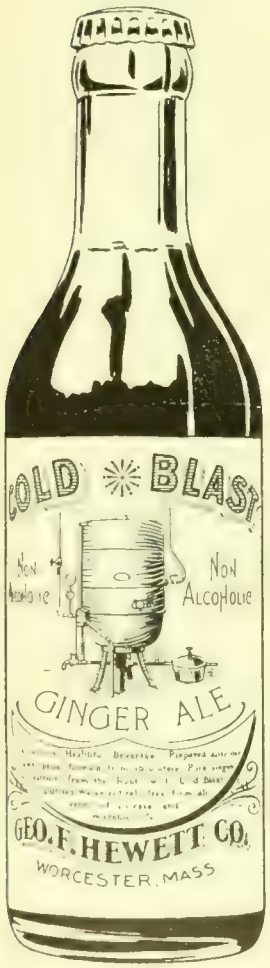

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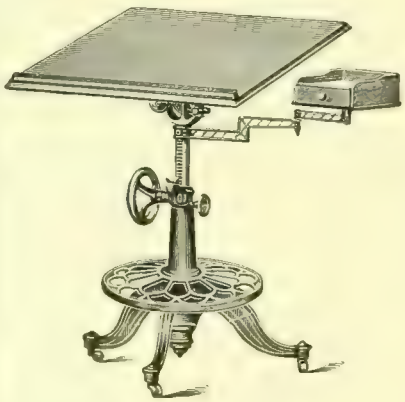

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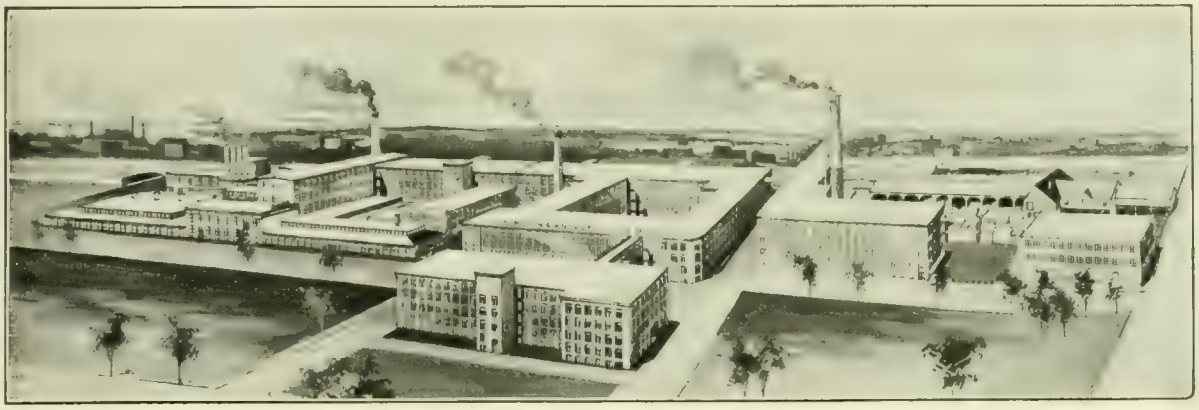

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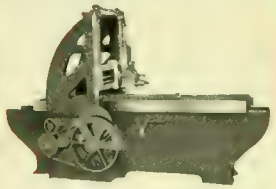

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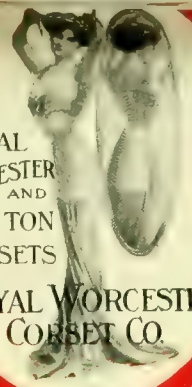

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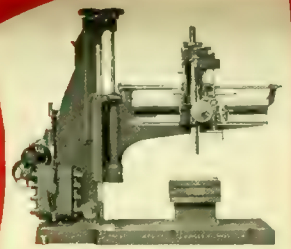

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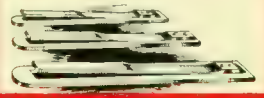

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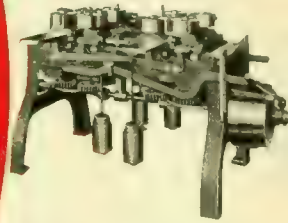

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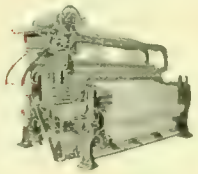

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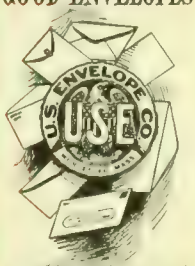

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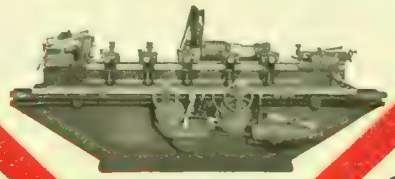

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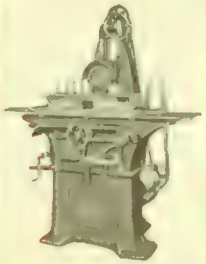

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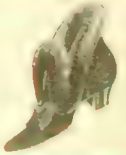
WORCESTER SLIPPER



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Everything in Wire

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The Wire Goods Co.

The Belts to use are the Brands WE make

SPARTAN — Guaranteed to withstand exposure to either hot or cold air, water, steam, oil, gases, and heat generated by excessive pulley friction. Especially adapted for hard service.

SPECIAL PLANER — Waterproof. Made in singles only, but from the very heaviest of centre stock; an ideal belt for heavy work with high speed and small pulleys.

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GRAKNIGHT — It, too, is made from centre stock, but of lighter weight than the Heart.

Other Brands for other specific purposes.
Advise us of the conditions under which your belts operate, and we will tell you the brands to use.

The Graton & Knight Mfg. Co. Worcester, Mass., U. S. A.

Oak Leather Tanners and Belt Makers

Established 1851
Capital and Surplus, $1,800,000

Made in Worcester.

Branches and Dealers in the leading manufacturing centres.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

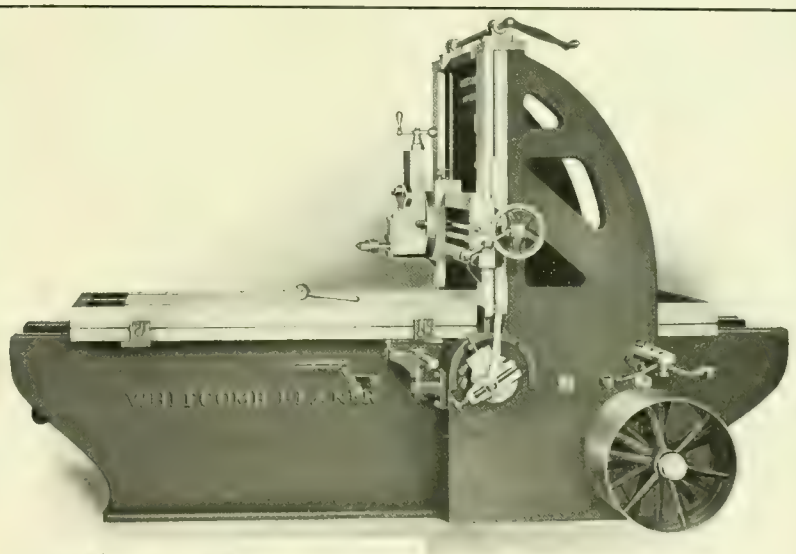
WHITCOMB

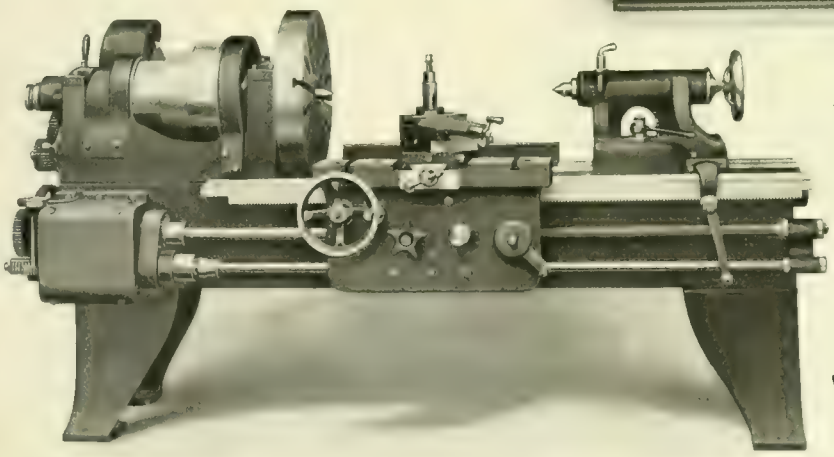
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

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Whitcomb-Blaisdell Machine Tool Co.

Worcester, Mass.

Made in Worcester.

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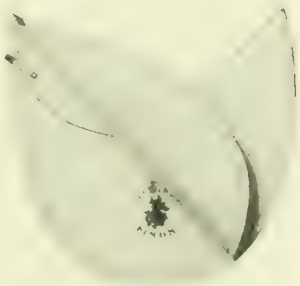
"DE VARS" E. Z. B. Suspenders



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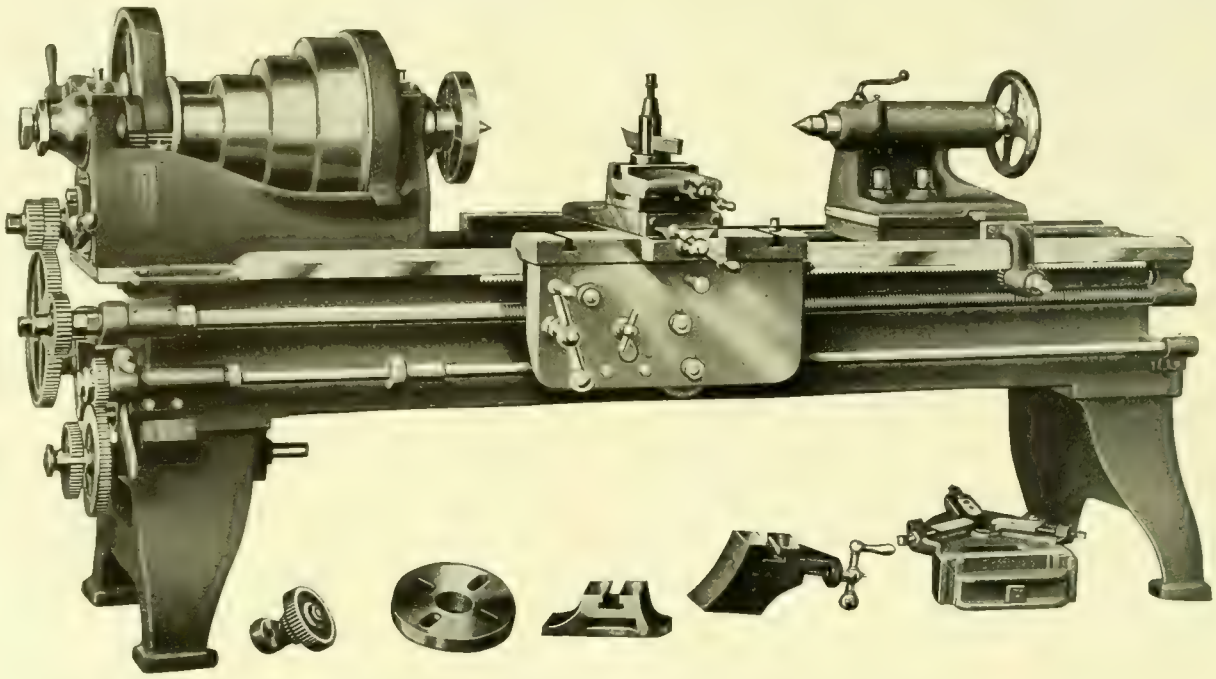

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Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
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Our Arch Support Shoe

is scientifically designed for the relief and cure of broken down and weak arches.

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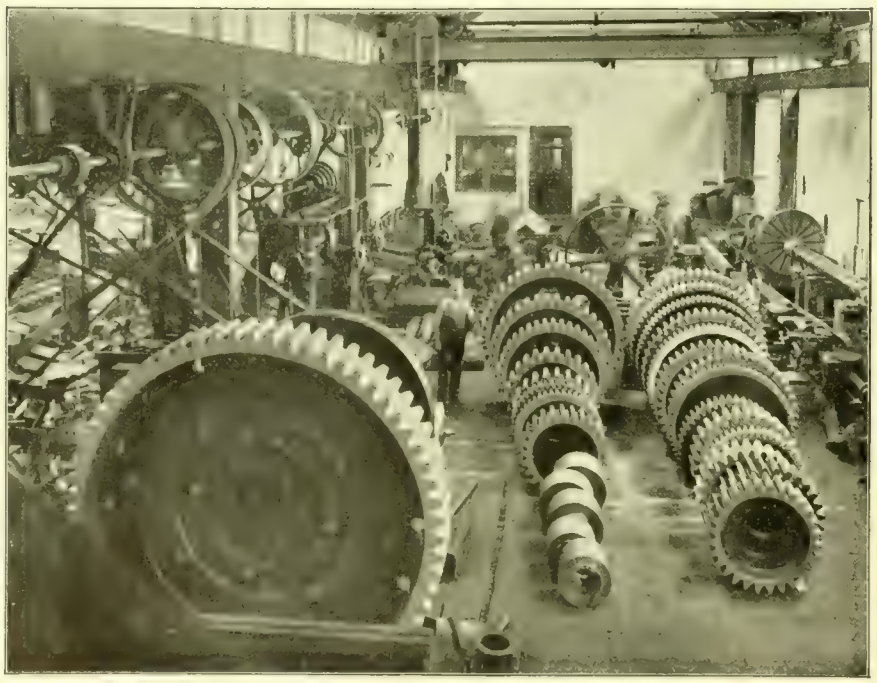

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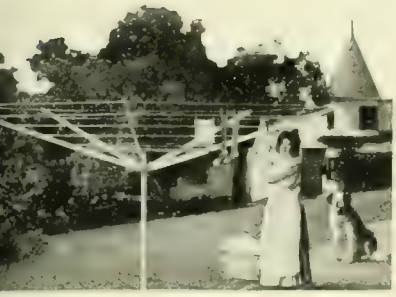

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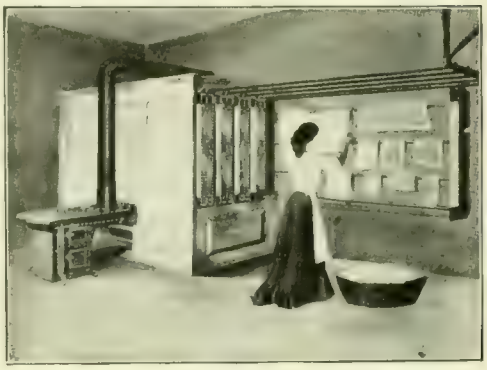

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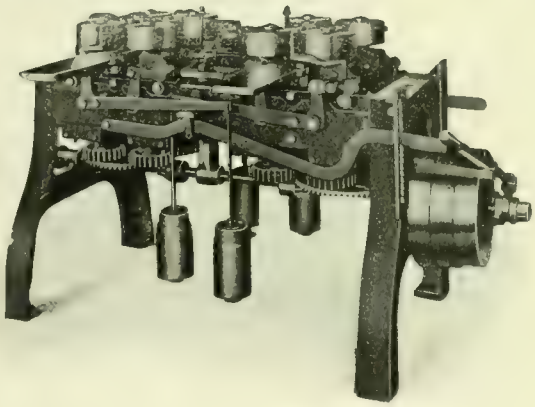

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Everything needful for making
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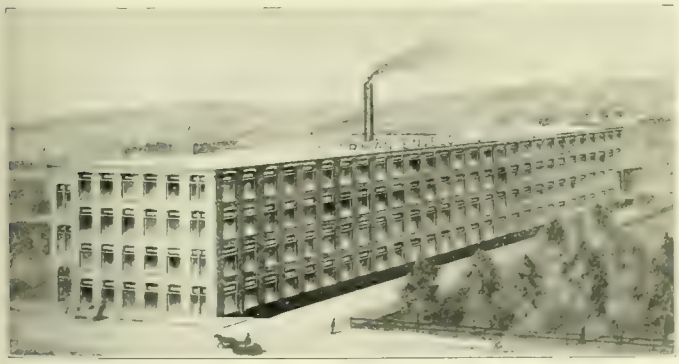

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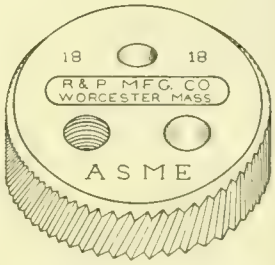

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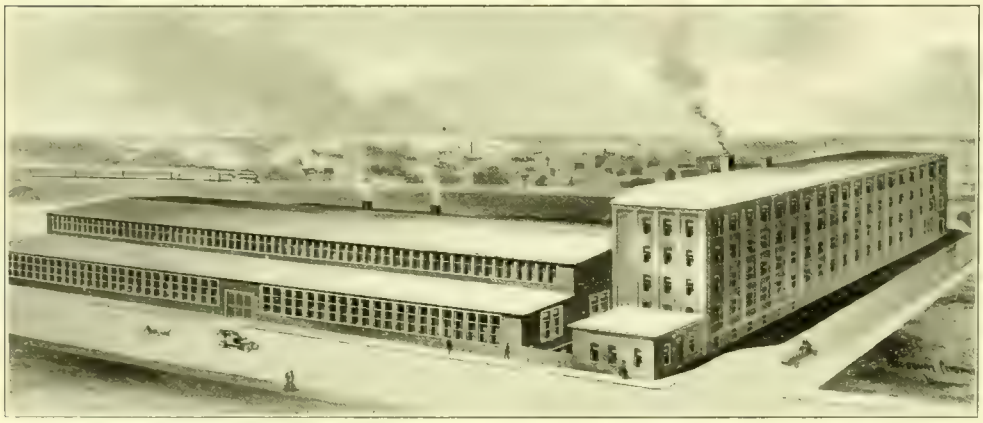

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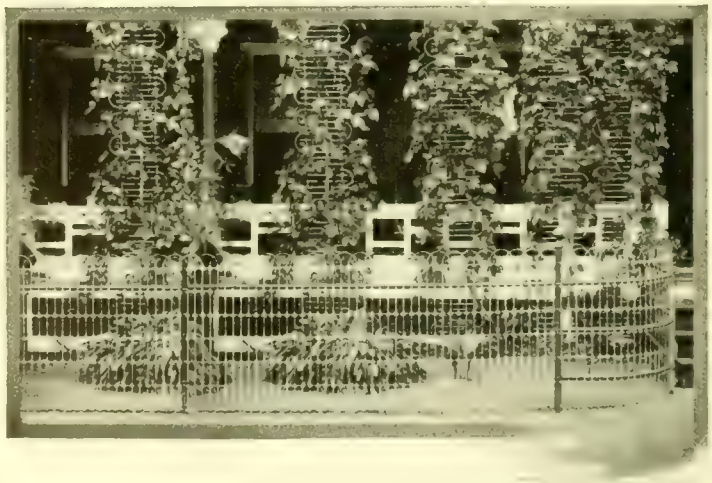

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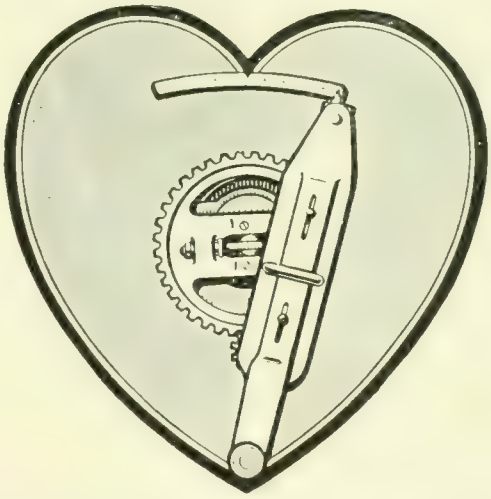

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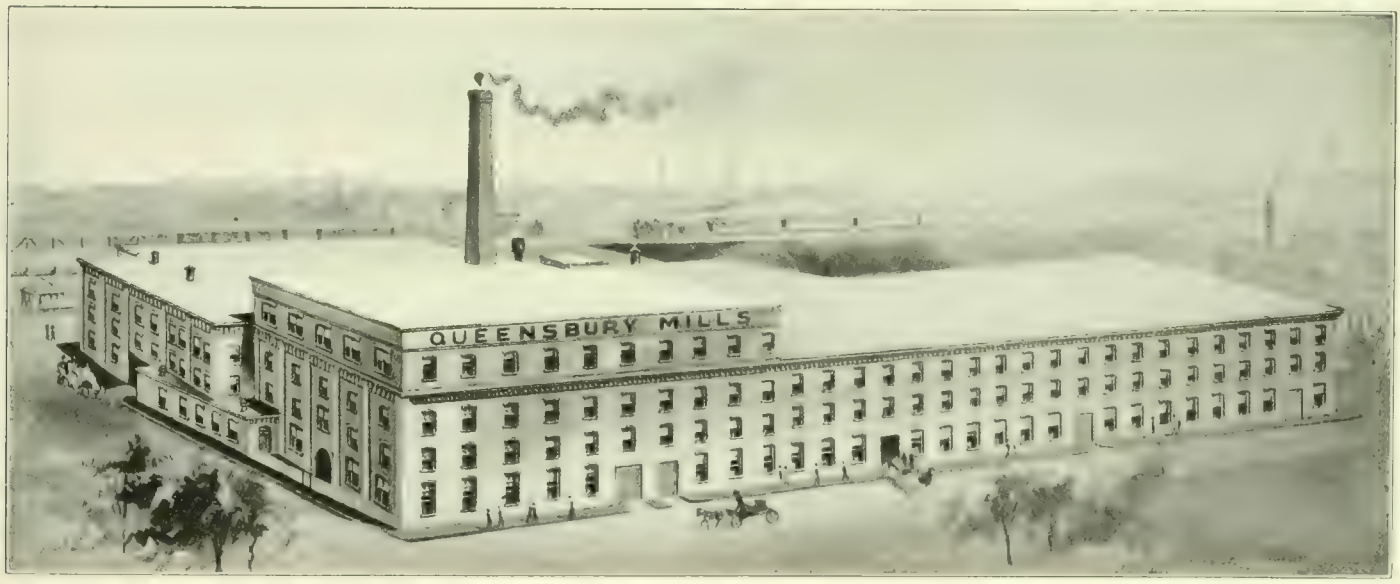

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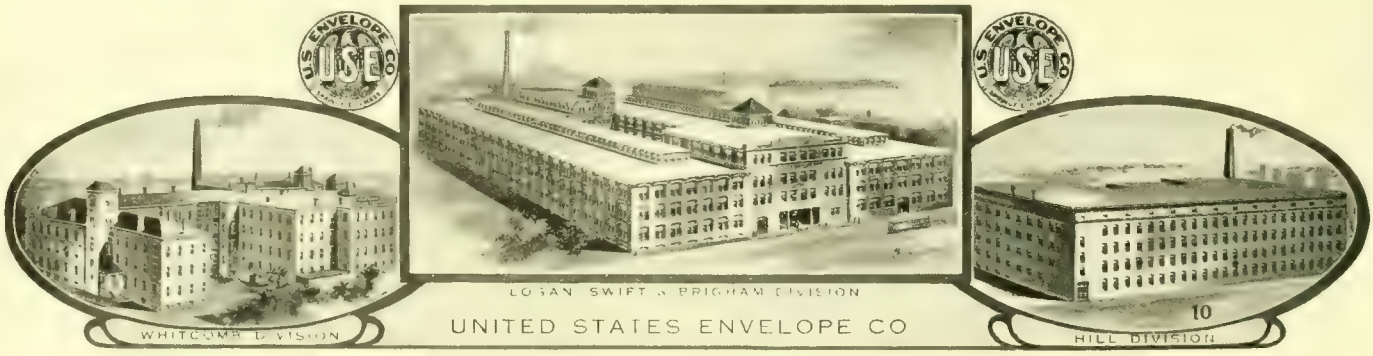

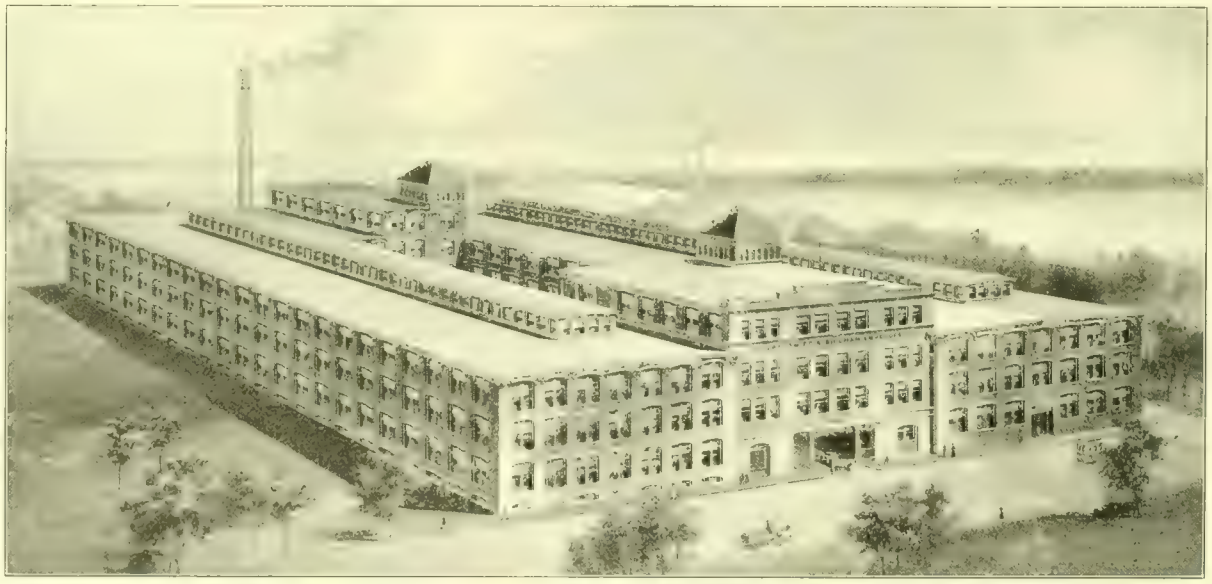

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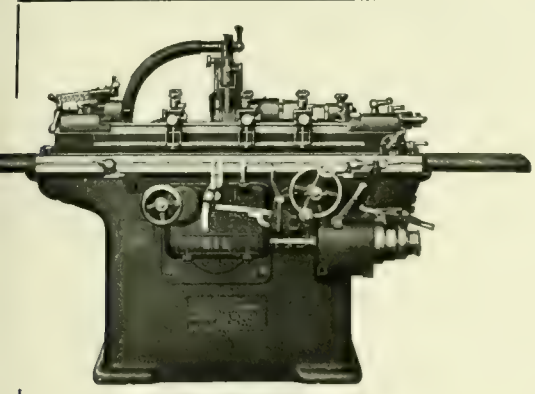

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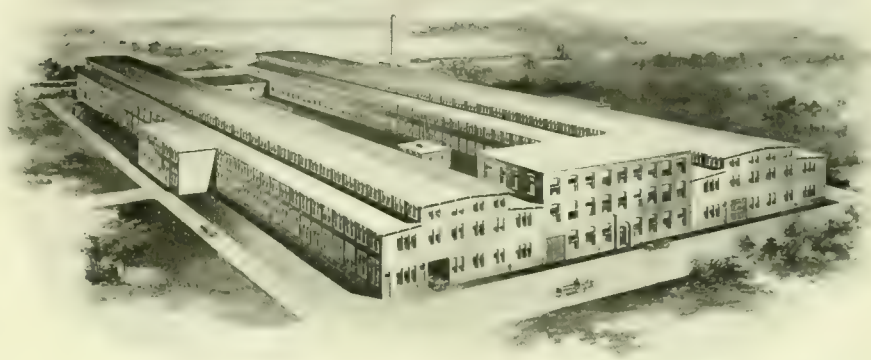

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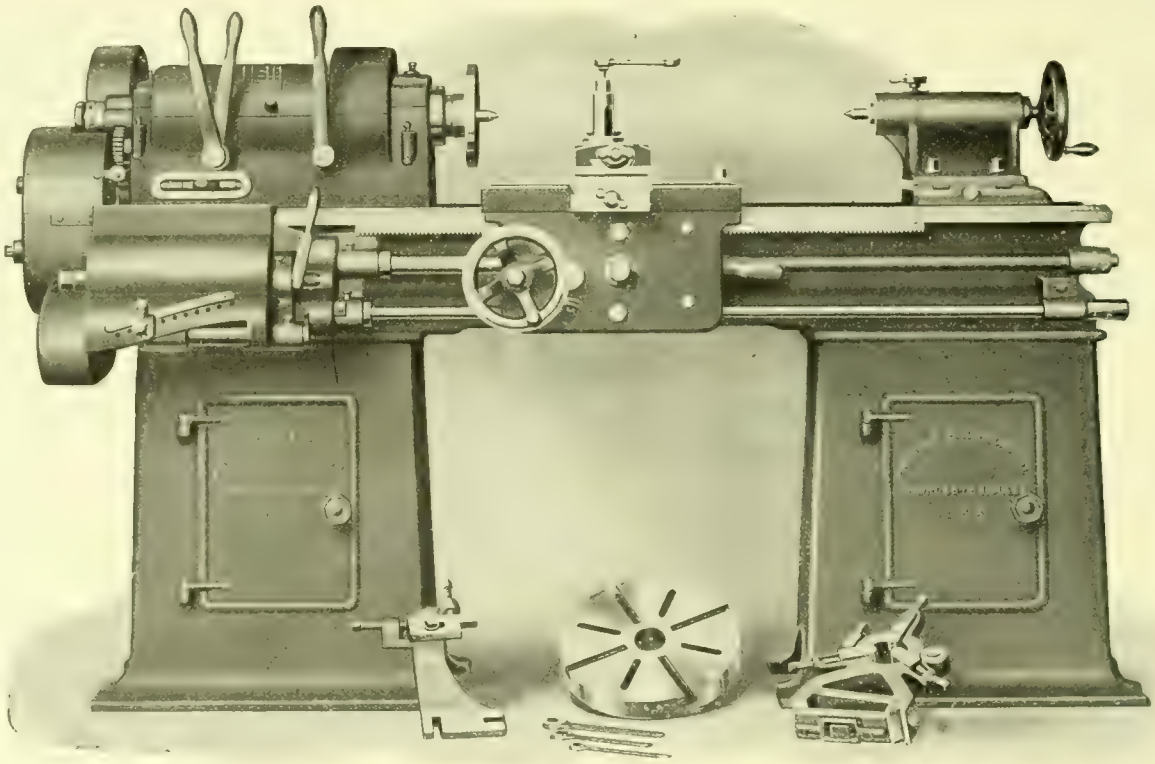

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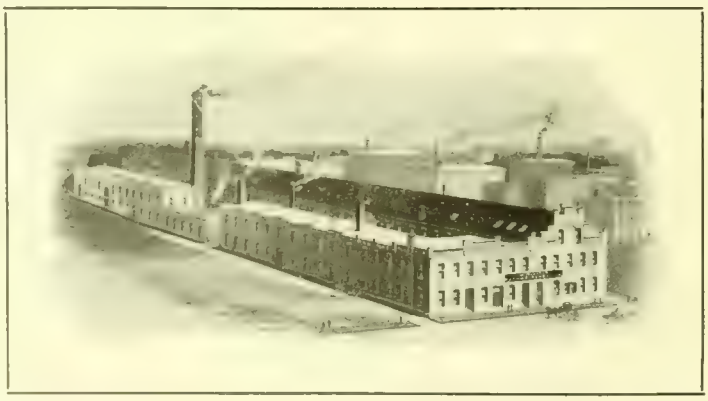

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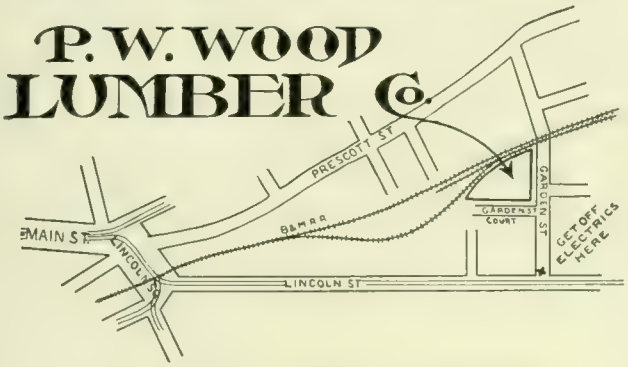

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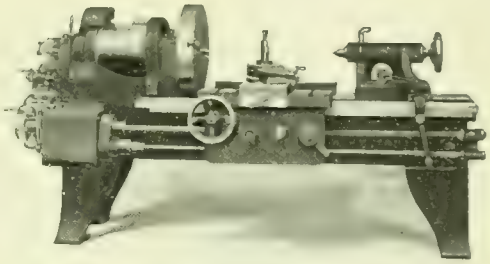

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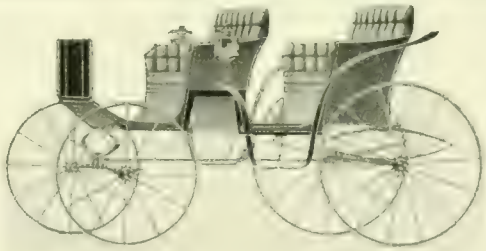

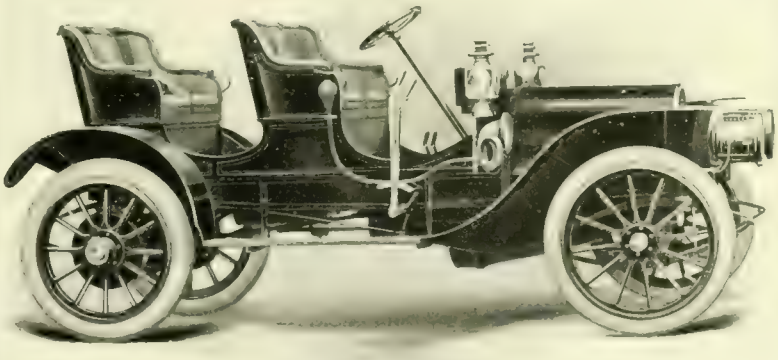

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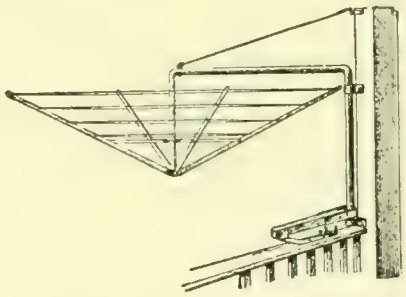

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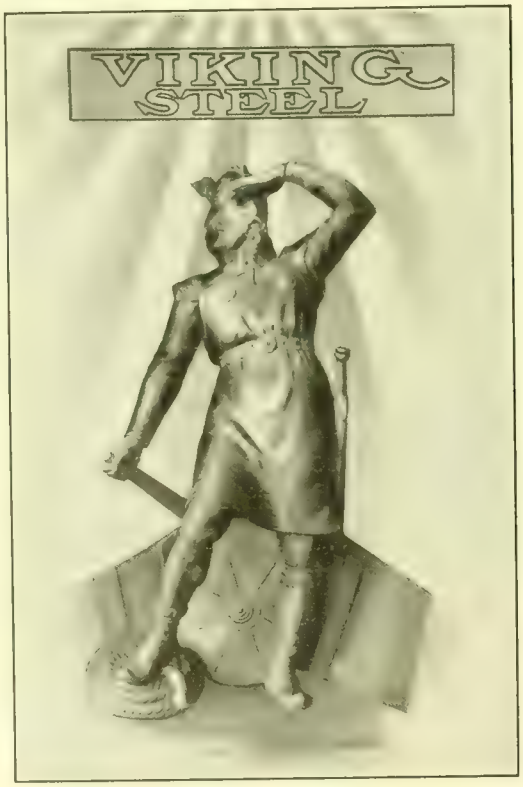

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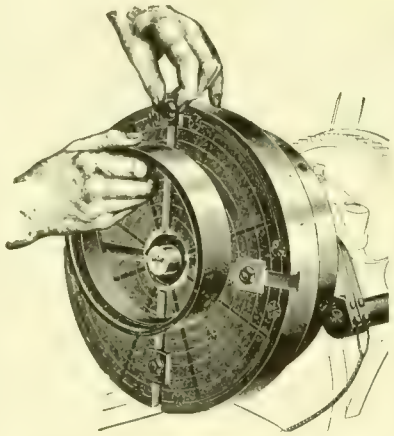

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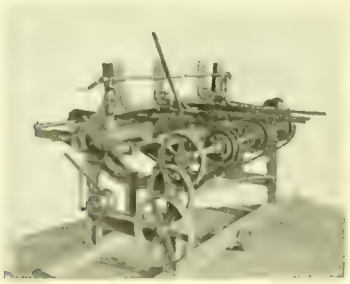

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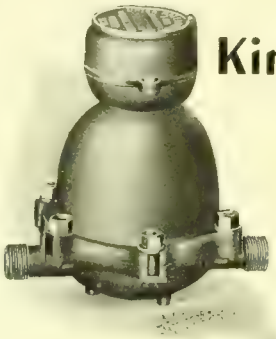

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IRON CASTINGS

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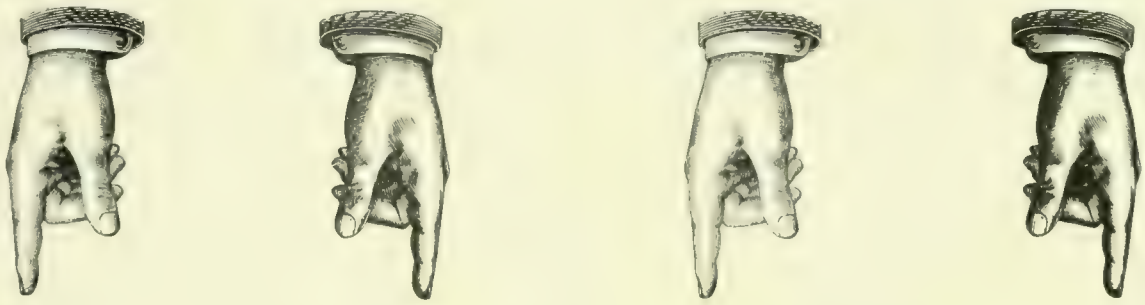

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17″ 22″ 24″ 26″ 30″

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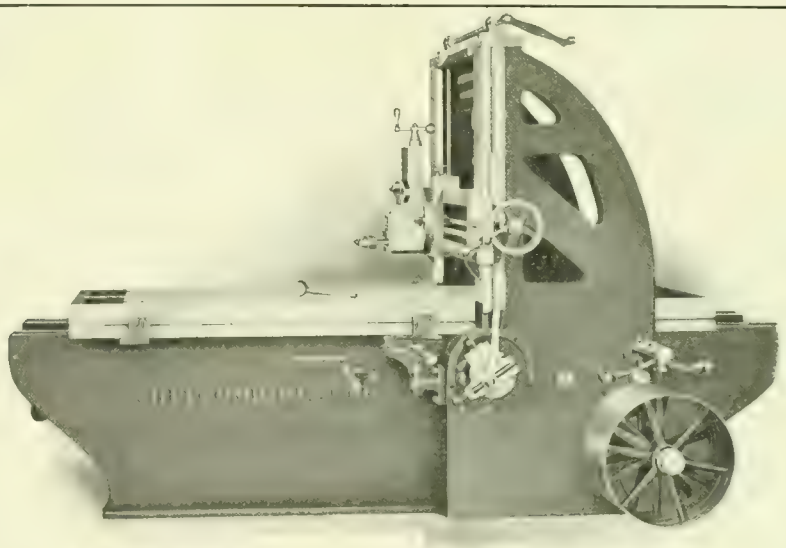

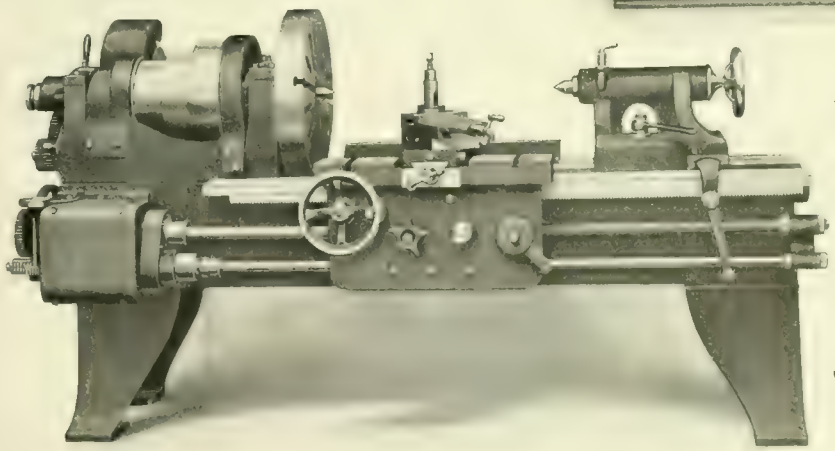

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"DE VARS" Quality

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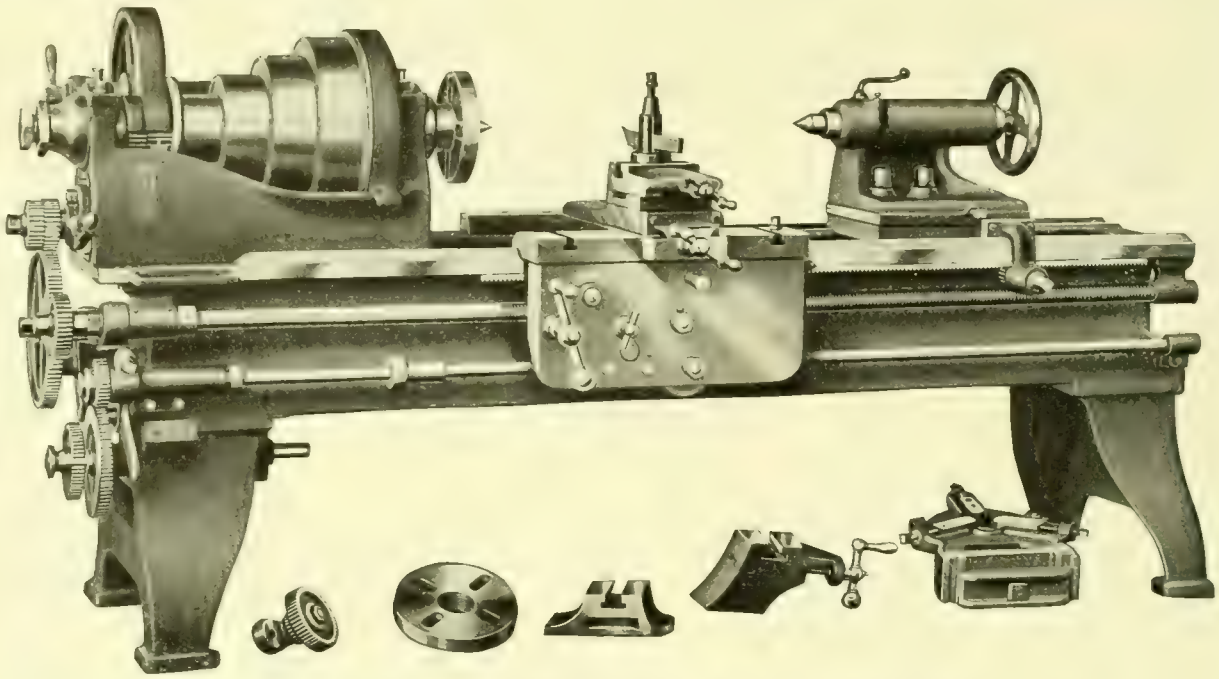
A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, Massachusetts



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SEND FOR ILLUSTRATED BOOKLETS

Hill's Champion Lawn Clothes Dryer

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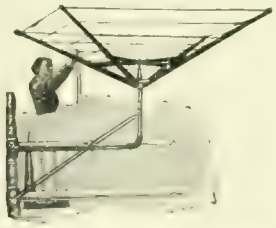

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The Hill Canton Sanitary Laundry Dryer

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The Largest Manufacturers of Clothes Dryers in the World

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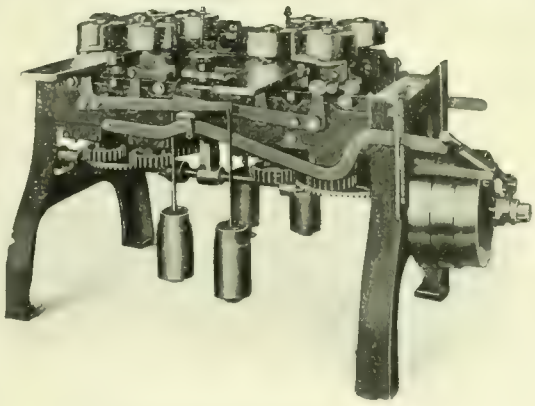

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Everything needful for making
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Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

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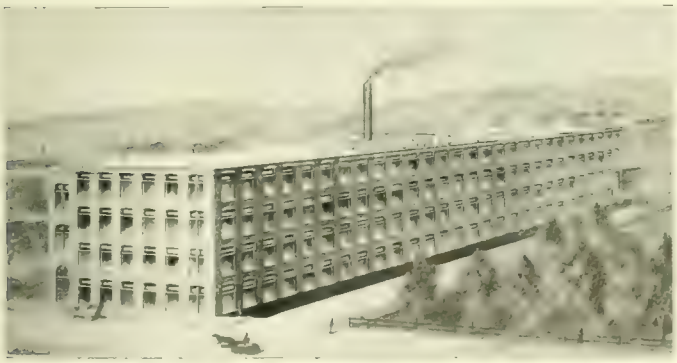

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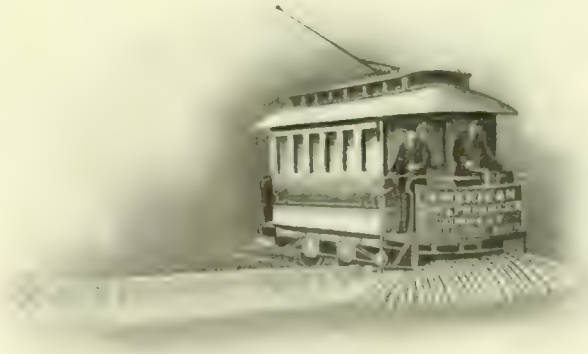

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Providence
Washington
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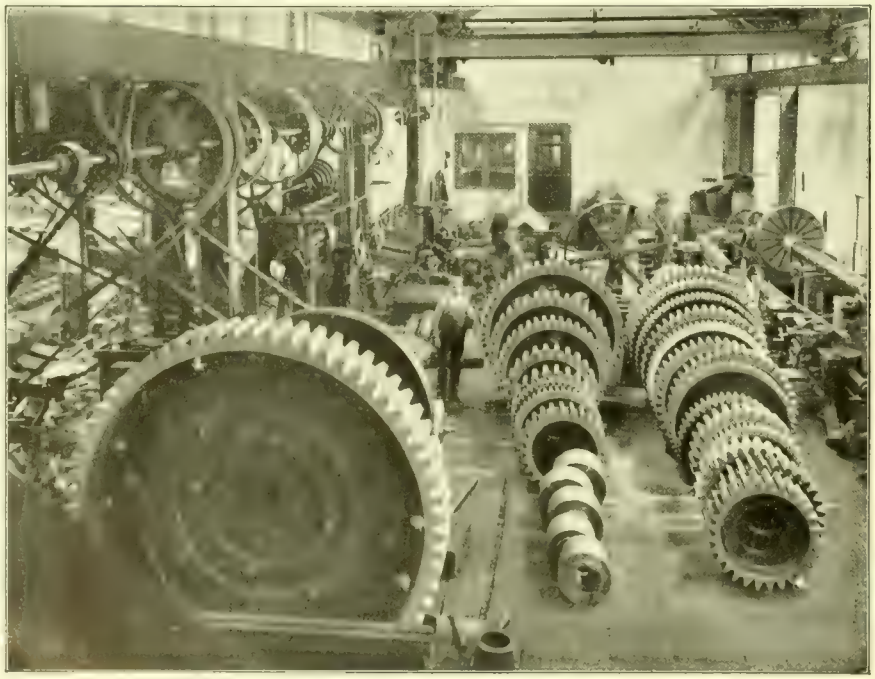

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Established 1869 Incorporated 1906

The Whitaker Reed Co.

LOOM REEDS

For weaving Cotton and Woolen Goods, Carpets, Wire Cloth, Rattan, Etc.

Royal King Travelers Belt Hooks
Mill Wire Goods

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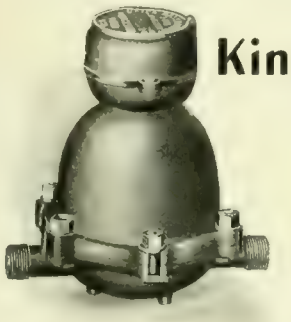

The King Disc Meter

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Best Material and Workmanship

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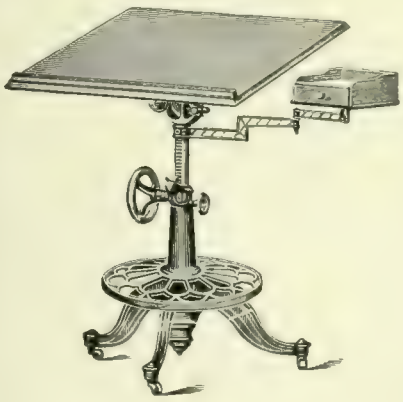

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If so send for Illustrated catalogue and prices.

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13 Hermon St.
Worcester, Mass.

Jackson Street Foundry

Light and Heavy
IRON CASTINGS

J. A. COLVIN, Proprietor

52 Jackson St., Worcester, Mass.

Made in Worcester.

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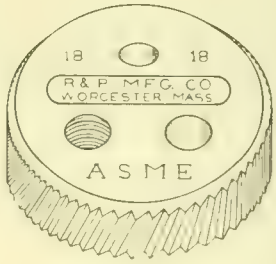
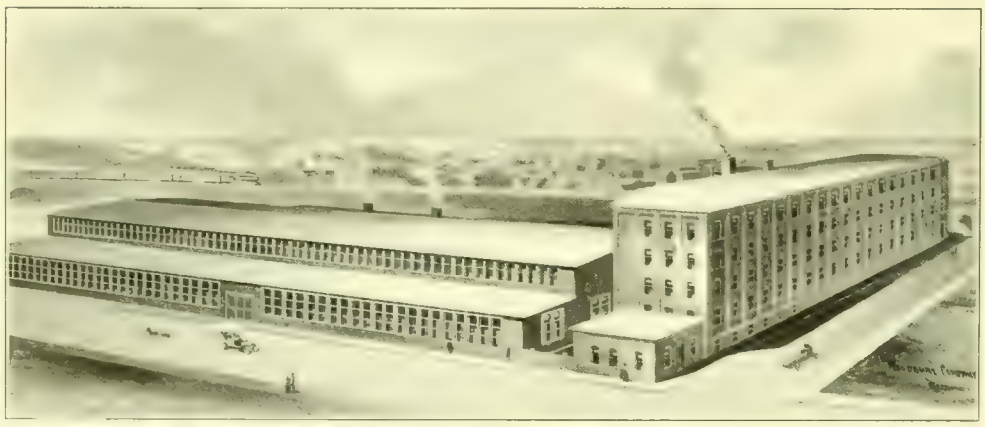
Wood Screws,
Machine Screws,
Taps and Dies,
Stove Bolts,
Tire Bolts,
Cap Screws,
Set Screws,
Small Nuts,
Rivets and Burrs,
Hanger Bolts,
Chair and Stove Rods.



Machine Screw Gages.
Special Gages.

REED & PRINCE MFG. CO.
Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



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are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings
up to 15 tons

Capacity 20 tons a day

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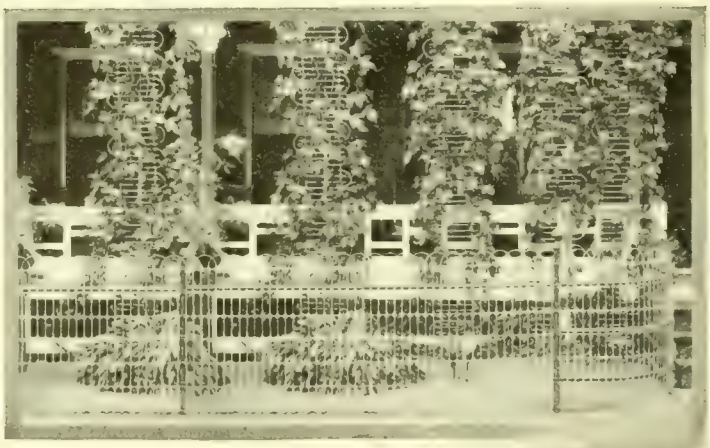
DEPARTMENT OF SPENCER WIRE COMPANY

We furnish and erect
complete
Ornamental Fences
of Wire
or Wrought Iron



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Made in Worcester.

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of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

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W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

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WILLIAMS & BRIDGES CO.

Manufacturers

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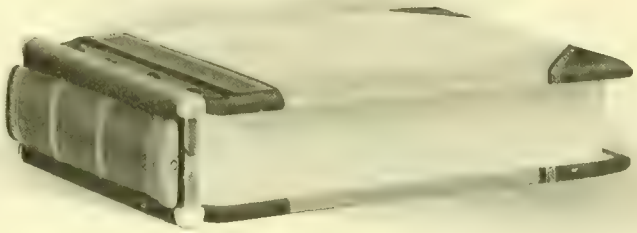
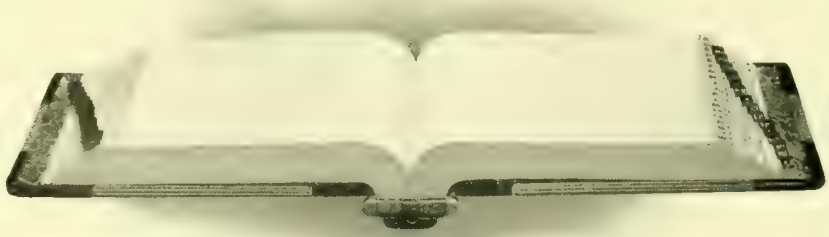


BINDERS FOR ALL KINDS OF

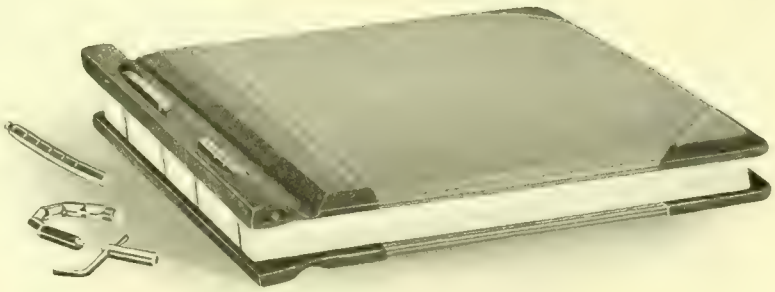
SHEETS

FOR

ALL KINDS OF BINDERS



LOOSE LEAF AND CARD SYSTEMS



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(INC.)

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Worcester, Mass.

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People's Savings Bank

452 Main St., Worcester, Mass.

Is Absolutely Safe and Always Available

Quarter Days:
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Deposits and withdrawals may be made by mail

Bank open for deposits Saturday evening, 6 to 8

Samuel R. Heywood, *President*
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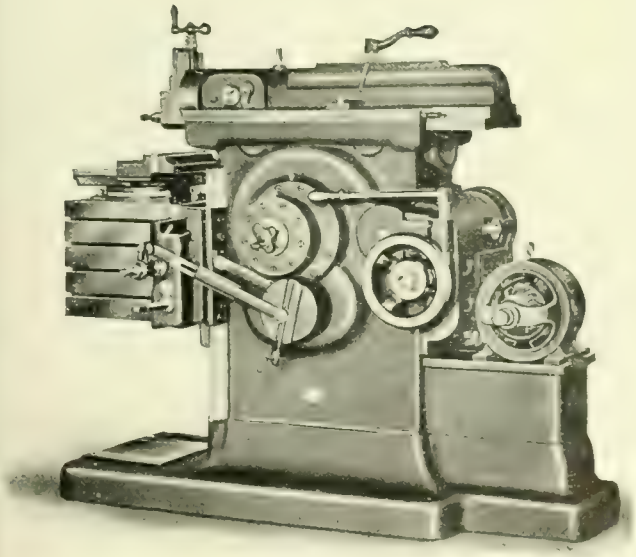

A Shaper because of the quantity and quality of work that it will turn out puts shaper-production on a new and higher level.

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BON TON CORSETS

are universally recognized as the ultra-fashionable high-grade corsets of the present day. All the better grades are boned with WALOHN, the wonderful indestructible boning that will not break, warp or rust. *Price, $3 to $12*

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are absolutely the *best medium-priced* corsets the world has ever known. They are the accepted standard of authentic style, perfect fit and workmanship, and are boned with best quality non-rustable wire. *Price, $1 to $3*

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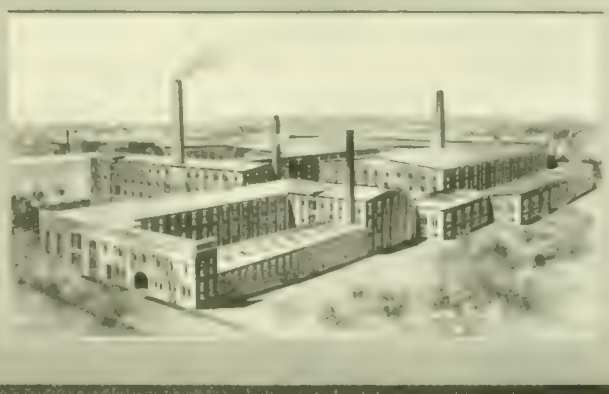

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Everything the best that money and brains can produce.

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Norton Grinding Wheels are known and used in all parts of the world.

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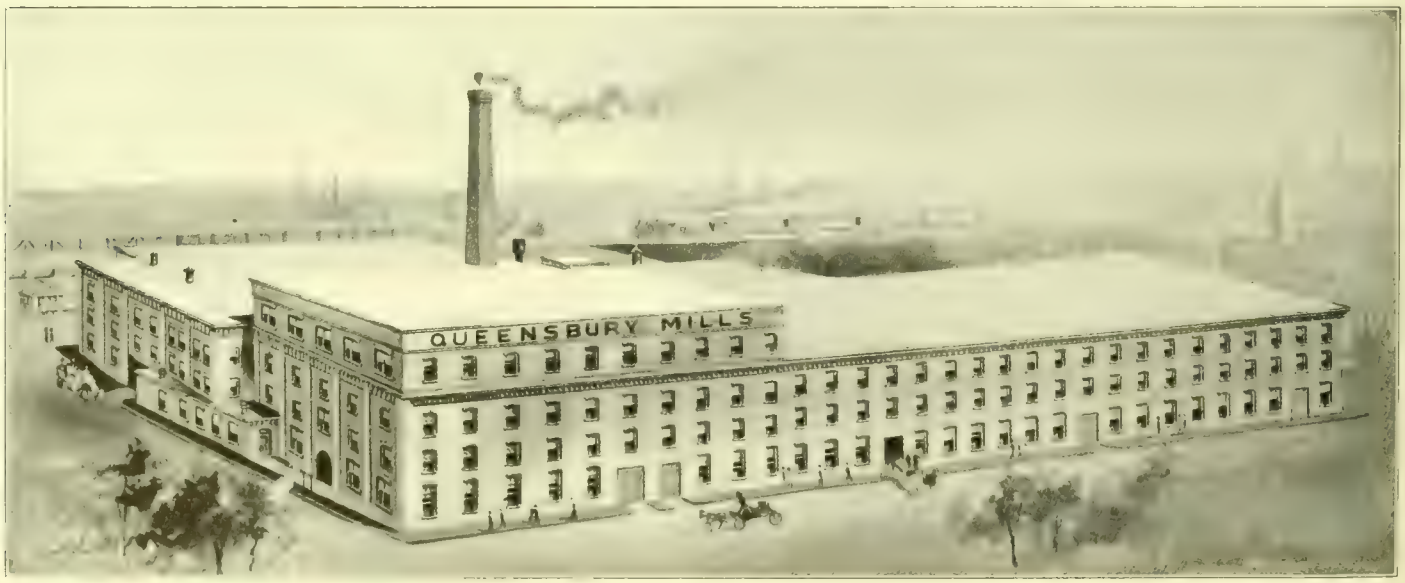

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Manufacturers of

MOHAIR DRESS GOODS
and COAT LININGS

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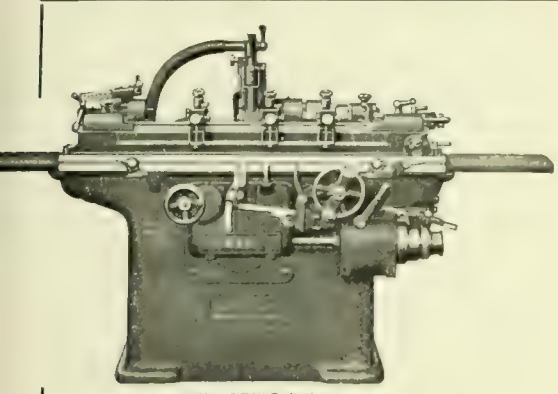

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Manufacturers of Plain Machines for cylindrical grinding. Universal Tool and Cutter Grinders, Bench and Floor Grinders.

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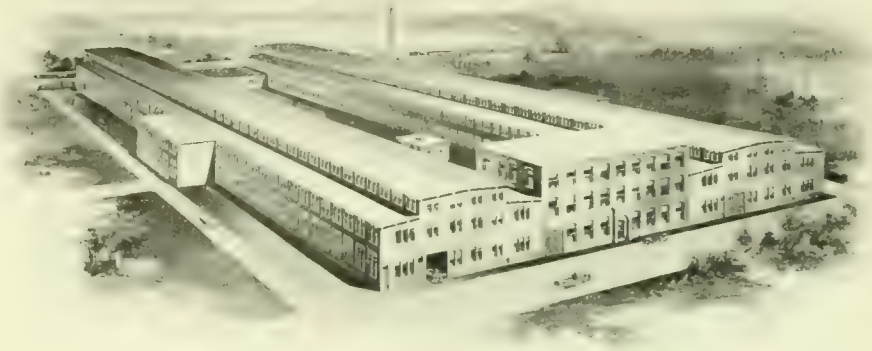

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Card Clothing

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Sole Makers of B TRADE AND MARK F Leather Belting

Beats the best Oak Belting for Wood-Working Machinery,
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We also make WARREN'S WATER-PERFECT PROOF Leather Belting

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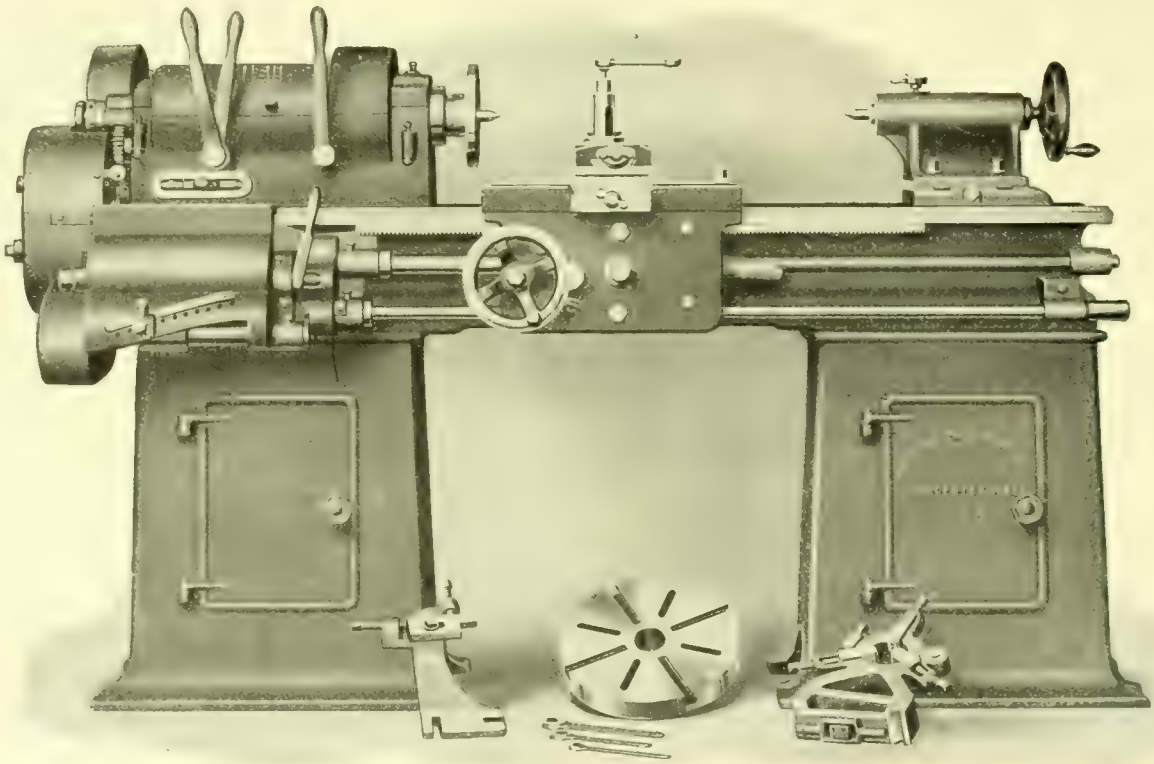

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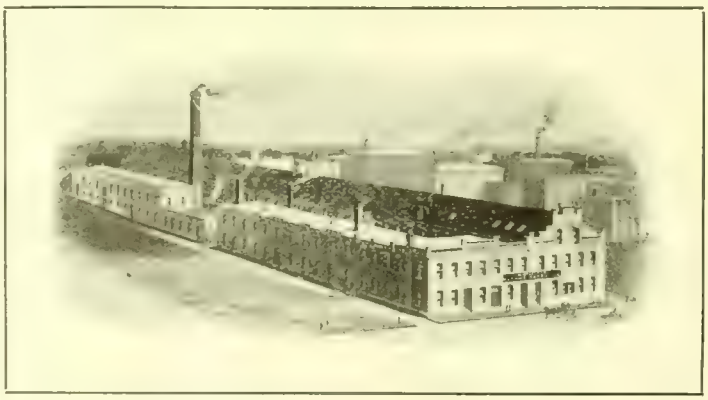

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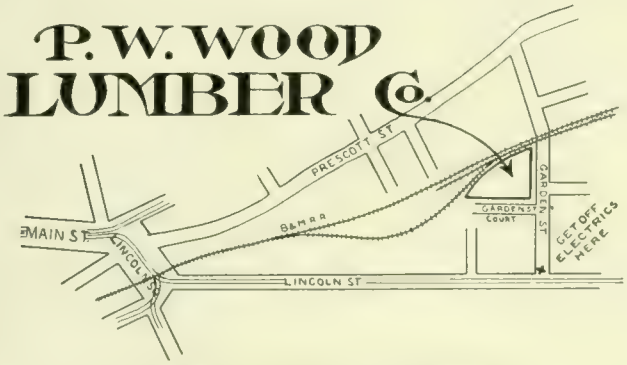

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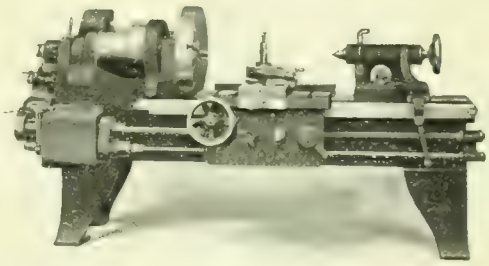

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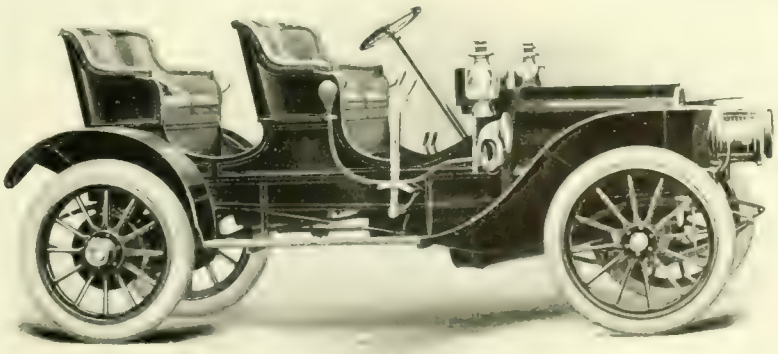
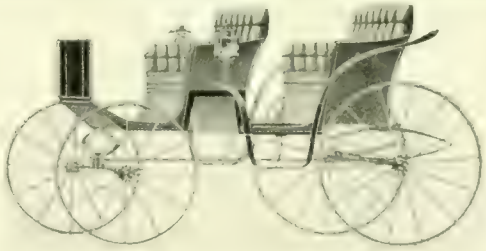
For Automobile and Carriage Painting





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Repairing
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Near Coes Sq.

The VICTOR Improved

Roller Bearing Clothes Reels

Ash
Chutes,
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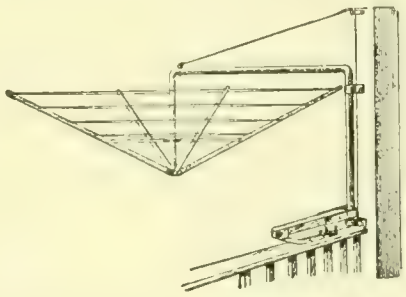
Etc.



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BEST MACHINERY STEEL. LEAD SCREW STEEL
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Junction of Bridge, Mechanic and Foster Sts.

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of any size or kind

We also have the best equipped Brass Foundry in Worcester County, and can furnish bronze, brass, lead, aluminum and manganese bronze castings at short notice.

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Special attention given to the Manufacture of High Grade

Machinery Castings

Tainter and Gardner Streets
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It is the Face Value that Counts

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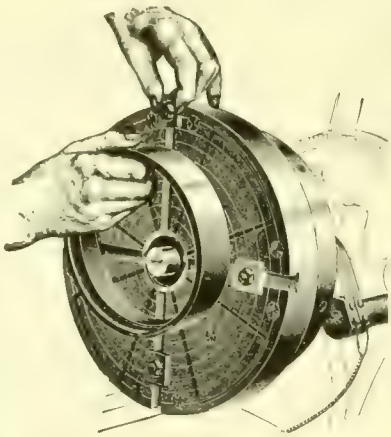

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Rotary chuck, sizes 6″ to 36″. Flat chucks, 10″ to 8′ long

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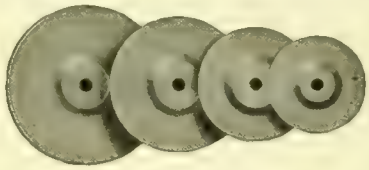
W. H. DeLONG

Manufacturer of

DeLong's Dental Disks



Carborundum Separating Disks and Stump Wheels

Sand, Garnet, Emery, Cuttlefish and Crocus Paper Disks

WORCESTER, Dept. D 3 **MASS.**

Made in Worcester.

HUDSON BELTING CO.

WORCESTER, MASS.

Manufacturers of

LEATHER BELTING

Pure Oak Bark tanned, best quality.

Dynamo, waterproof and any special belts made to order.

Harness Leather · Mill Strapping · Rubber Belting
Canvas Belting · Belt Lacing · Belt Hooks
Wood Split Pulleys

Office and Factory, 1-3 Eaton Place.

Made in Worcester.

ADAMS & POWERS

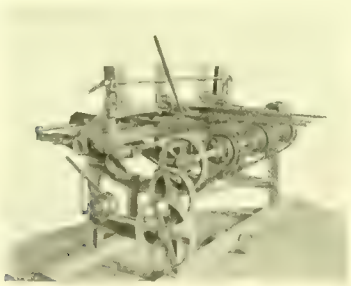
Dealers in

Doors, Sash, Blinds, and Builders' Finish, Window Frames, Mouldings, Etc.

Estimates from plans furnished

150-158 Union Street. Worcester, Mass.

Made in Worcester.



COMMERCIAL PHOTOGRAPHY.

DAVIS & RIGGS
206 MAIN ST.
WORCESTER, MASS.

Absolutely Pure

Sparkling Polar Water
and
White Seal Ginger Ale

BOTTLED AT THE SPRING

Full line of

Carbonated Beverages

Pure Syrups and Saratoga Natural Gas

Leicester Polar Spring Co.
28 Myrtle St. Telephone

C. H. CLARENDEN, Mgr.

Polar Spring Water on Draught at Board of Trade Rooms

Made in Worcester.

We Manufacture

Cylinder Grinders
Piston Ring Grinders
Internal Grinders, Drill Grinders
Sash Trimmers
Emery Wheel Dressers

THE HEALD MACHINE CO., WORCESTER, MASS.
Works at Greendale

Made in Worcester.

PATINS WINSLOW'S

LES MEILLEURS PATINS ET PATINS A ROULETTE

Nous avons la plus grande usine du monde pour la fabrication des patins à glace et à roulettes. Nos marchandises sont "Standard" et sont employées dans tous les pays civilisés du monde.

Nous envoyons franco, sur demande, notre catalogue donnant les dessins et une description détaillée de tous les patins que nous fabriquons. Lorsque vous nous écrirez, dites-nous si ce sont les patins à glace ou à roulettes qui vous intéressent.

Adresse Télégraphique: "WINSLOW-WORCESTER." Codes: Lieber's and Western Union (Edition Universelle).

THE SAMUEL WINSLOW SKATE MFG. CO.

SALLES DE VENTE
NEW YORK, 51 RUE CHAMBERS
LONDON, 8 LONG LANE, E. C.

FACTORY ET MAIN OFFICE
WORCESTER, MASS., U. S. A.

WORTH Cushion Sole SHOE

MEN WOMEN

For Tired Feet

WATER PROOF SOLE

A Mattress for the Foot

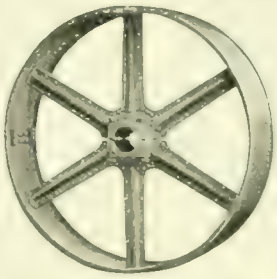
RETAIL STORE,
573 Main Street.

THE CUMMINGS CO. INC. Mf'rs. Worcester, Mass.

W. H. Crawford J. T. Brierly

CRAWFORD & CO.

Established 1847



New and Second Hand

Woolen Machinery

Wool Stock and Everything in Mill Supplies

The Improved Worcester Shoddy Picker

Wood Split Pulleys with Iron Centre, Pressed Steel Pulleys, Belting, Lace Leather, Cordage, Packings, etc.

663 and 665 Main St., Worcester, Mass.

Made in Worcester.

G. L. Brownell,

Builder of

IMPROVED TWISTING AND SPINNING MACHINERY

For making Hard or Soft Twines, Lines, and Cordage. Wet or Dry Twist, from Cotton, Linen, Hemp, Manila, Sisal, Paper, Silk, Jute, Hair, Wool, etc.

Nos. 49 and 51 Union Street,

Worcester Massachusetts

Please address Station A.

Made in Worcester.

United States Envelope Company

Manufacturers of Standard **Envelopes**

WORCESTER PLANT OF THE UNITED STATES ENVELOPE COMPANY

The Outlook Envelope

Insures economy and absolute accuracy in the addressing of all your mail matter.

The Improved
Columbian Clasp Envelope

The best and most satisfactory merchandise envelope made.

Specialists in STEEL DIE STAMPING

for Commercial Work. Samples and Prices of our Standard Goods furnished by your Stationer or Printer

Made in Worcester.

THE
MULTIPLE WOVEN HOSE & RUBBER CO.

WORCESTER, MASS., U. S. A.

"BEST"

Solid, Multiple Woven

WATERPROOF BELTING

For Machine Shops, Woolen Mills, Cotton Mills, Dye Houses, Saw Mills, Paper Mills, Bleacheries, Brick Yards, Cement Works, and any description of Drive where Power is to be transmitted, Indoors or Outdoors.

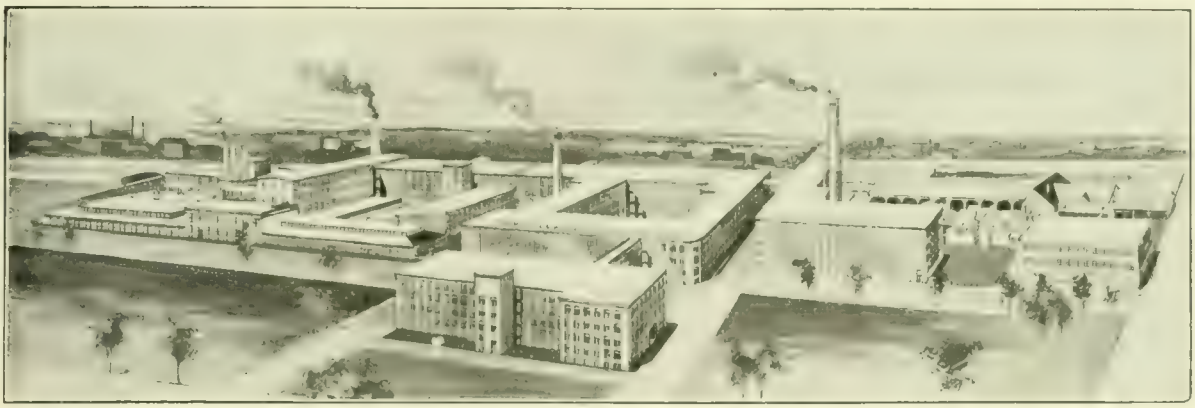
Write for Samples.

9 Summer Street.

Made in Worcester.

THE BLANCHARD PRESS, WORCESTER, MASS.

A LOOM FOR EVERY FABRIC



WORCESTER PLANT.

Everything that may be woven by power—practically every kind of fabric used by civilized beings—is produced on looms built in these works.

Woolens and worsteds, silks, velvets, ribbons, cotton goods of every description, carpets and rugs, mattings and hammocks, belting and webbing, furnish an idea of the great variety of our weaving machinery.

In addition are dobbies, jacquards and supplies built in all of the different plants.

CROMPTON & KNOWLES LOOM WORKS,

WORCESTER, PROVIDENCE AND PHILADELPHIA.

Business is Booming!

It's just as we thought—the fore-handed man has been busy and placed his order for Printing, realizing that the great American people are beginning to buy goods. *Now is the time to take Opportunity* by the nape of the neck and make him shell out. Redouble your efforts. Pound away at the trade with the best **Printed Matter** you can afford—and, as a matter of fact, you cannot afford any other than the best. Send for us by mail, 'phone or wire and we will help you fix up that Catalogue or Booklet in short order so you can get your share of the general prosperity.

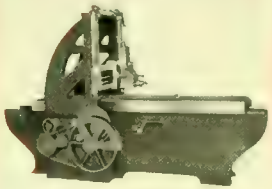
F. S. Blanchard & Co., Worcester, Mass.

ROLLING MILL EQUIPMENT, ETC. GAS PRODUCERS

MORGAN CONSTRUCTION COMPANY

STATE MUTUAL BLDG.

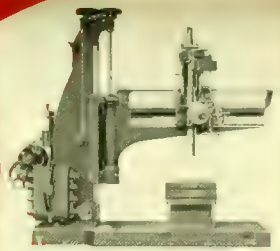
PLANERS and LATHES



WHITCOMB-BLAISDELL MACHINE TOOL COMPANY

ROYAL WORCESTER AND BON TON CORSETS

ROYAL WORCESTER CORSET CO.



DRILLING MACHINES
ENGINE LATHES

PRENTICE BROS. CO.

SLATER BLDG.

WOODWARD & POWELL PLANER CO.

"WORCESTER-MADE" INVITES TRADE

THE GRATON & KNIGHT MFG. CO.

WORCESTER, MASS. U.S.A.

COATES' CLIPPERS AND FLEXIBLE SHAFTS

"WORCESTER-MADE" INVITES TRADE

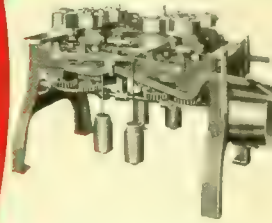
ORGAN REEDS
HAMMOND REED COMPANY

FOR ALL MOTOR CARS

THE WHITE & BAGLEY CO.

"WORCESTER-MADE" INVITES TRADE

GUNS
REVOLVERS
HARRINGTON & RICHARDSON ARMS CO.



BOX MACHINERY
HOBBS MANUFACTURING COMPANY

"MADE IN WORCESTER, U. S. A."

PROPOSED NEW UNION STATION

CITY HALL

SOME OF WORCESTER'S MOST PROMINENT MANUFACTURERS

FOR FURTHER PARTICULARS SEE INSIDE PAGES OF MAGAZINE

GOVERNMENT BLDG.

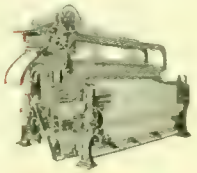
LATHES
F. E. REED COMPANY

"BI-MOORE" BEST HOSE

MULTIPLE WOVEN HOSE & RUBBER CO.

SPENCER WIRE CO.

LOOMS FOR ALL PURPOSES



CROMPTON & KNOWLES LOOM WORKS

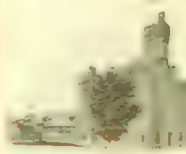
NORTON GRINDING WHEELS

MADE OF ALUNDUM — TRADE MARK NORTON REGISTERED — SOLD ALL OVER THE WORLD

NORTON COMPANY

AMERICAN STEEL & WIRE CO.

Heywood Boot & Shoe Co.



WINSLOW'S Skates

THE BEST ICE AND ROLLER SKATES

HILL DRYER CO.

GOOD ENVELOPES

UNITED STATES ENVELOPE CO.

ART
NOVELTIES
VALENTINES

THE GEORGE C. WHITNEY COMPANY

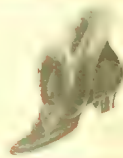
NORTON GRINDING MACHINES

NORTON GRINDING CO.

The WYMAN & GORDON CO.
DROP FORGINGS

O. S. WALKER & CO.

SURFACE GRINDERS AND MAGNETIC CHUCKS



Everything in the
TRADE MARK
The Wire Goods Co.

The Belts to use are the Brands WE make

SPARTAN — Guaranteed to withstand exposure to either hot or cold air, water, steam, oil, gases, and heat generated by excessive pulley friction. Especially adapted for hard service.

SPECIAL PLANER — Waterproof. Made in singles only, but from the very heaviest of centre stock; an ideal belt for heavy work with high speed and small pulleys.

NEPTUNE — Waterproof. A brand of belting that is in daily use in thousands of plants. It is the oldest and best known waterproof leather belting on the market.

HEART — Made from heavy centre stock, a popular belt for general use.

GRAKNIGHT — It, too, is made from centre stock, but of lighter weight than the Heart.

Other Brands for other specific purposes.
Advise us of the conditions under which your belts operate, and we will tell you the brands to use.

The Graton & Knight Mfg. Co. Worcester, Mass., U. S. A.

Oak Leather Tanners and Belt Makers

Established 1851
Capital and Surplus, $1,800,000

Made in Worcester.

Branches and Dealers in the leading manufacturing centres.

SECOND-BELT DRIVE PLANERS

are peculiarly adapted to all classes of work requiring speed and accuracy, as they do away with all shock and jar, and results are large and finish perfect.

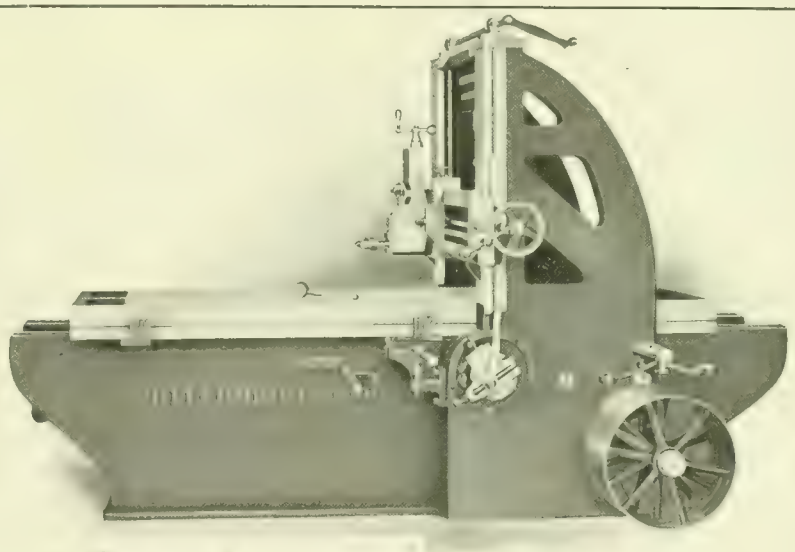
WHITCOMB

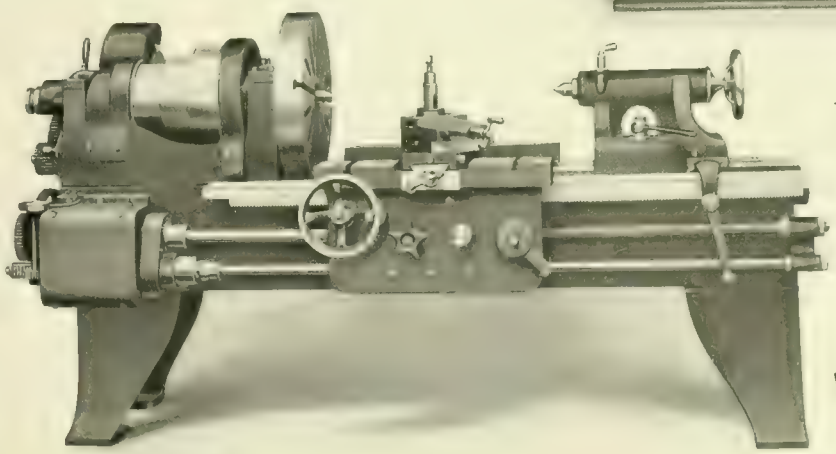
Planers

17″ 22″ 24″ 26″ 30″

Lathes

13″ 16″ 18″ 20″ 24″





THREE-STEP CONES, DOUBLE BACK GEARS

make these lathes rank among the greatest producers in their line.

Satisfaction Guaranteed

BLAISDELL

Whitcomb-Blaisdell Machine Tool Co.

Worcester, Mass.

Made in Worcester.

Bank Block

Interior Banking Rooms

(The Oldest Bank in Worcester)

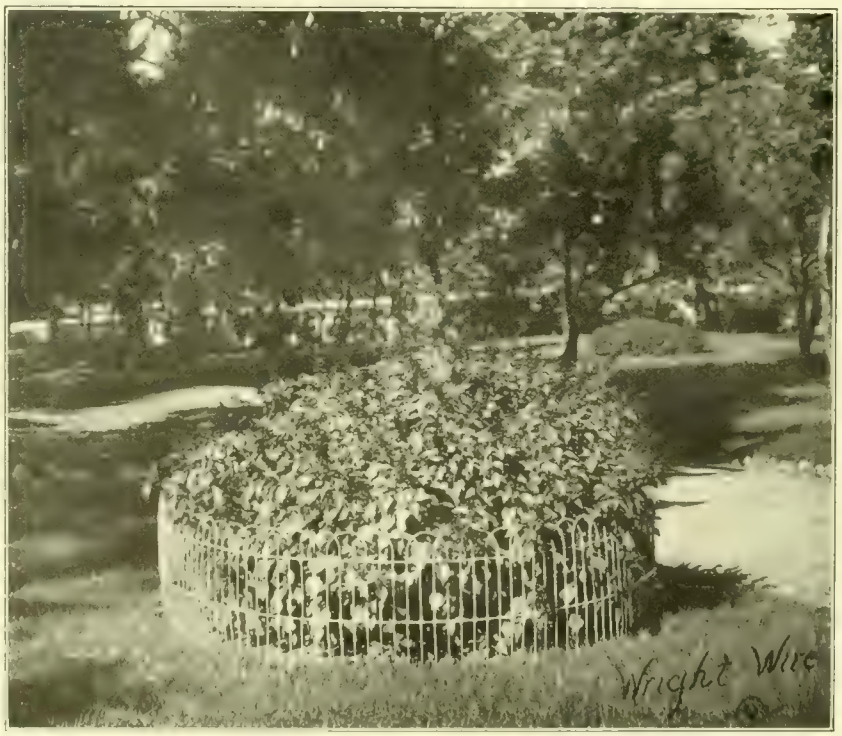
Worcester National Bank

11 Foster Street

Modern Equipment
Careful Administration

Safe Deposit Vaults
Storage Vaults

RUST PROOF GALVA-NIZED



FLOWER BED GUARD

Ornamental Wire Fences, Gates, Tree Guards

WAREHOUSES:
New York, Philadelphia
Chicago, San Francisco

WRIGHT WIRE COMPANY
Worcester, Massachusetts

"DE VARS" Quality

"DE VARS" American Maid Hose-Supporters

"DE VARS" E. Z. B. Suspenders

"DE VARS" Pinon Dress Shields

Made in all sizes and styles

Remember that "DE VARS" is on the BEST Hose-supporters, Suspenders and Shields

American Narrow Fabric Co.

MANUFACTURERS

Worcester, Mass.

SEATTLE CHICAGO NEW YORK BALTIMORE

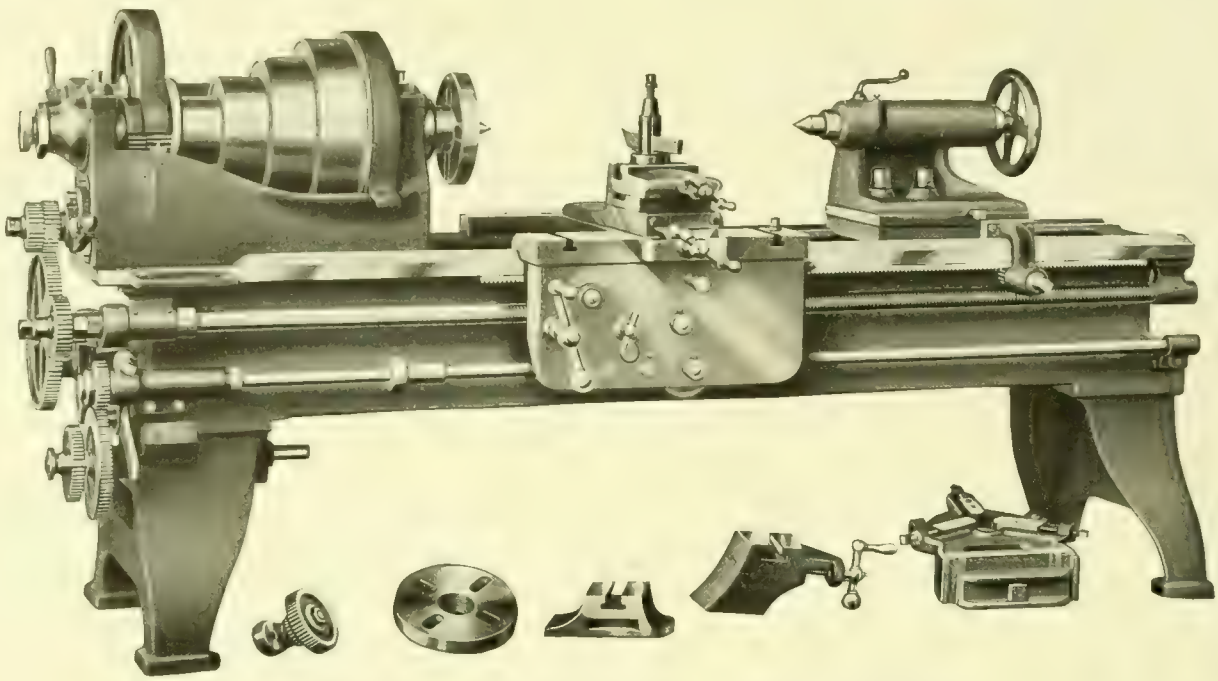
State Mutual Life Assurance Company

(Incorporated 1844)

Assets, Jan. 1, 1909,	$32,540,041.03
Liabilities, Jan. 1, 1909,	$29,843,942.37
Surplus, Jan. 1, 1909,	$2,696,098.66

A. G. BULLOCK, President
BURTON H. WRIGHT, Secretary

Worcester, Massachusetts



The NEW REED LATHES are

HEAVY, POWERFUL, CONVENIENT, ACCURATE

Engine Lathes 10″ to 30″ swing. Motor Driven Lathes 12″ to 24″
Speed Lathes. Manual Training Lathes

F. E. REED COMPANY, WORCESTER, MASS., U. S. A.

Made in Worcester.

HEYWOOD TRADE MARK SHOE 1864

Our Arch Support Shoe

is scientifically designed for the relief and cure of broken down and weak arches.

Foreign Sales Agents:

E. Coleman & Co.
Manchester, England

Donnell & Palmer
Buenos Aires,
Argentine Republic

Patterson & Ruhl
Melbourne, Australia

Sold by the leading retail stores in all parts of the United States.

Heywood Boot & Shoe Co.

Manufacturers

Worcester, Massachusetts, U. S. A. Retail Store, 415 Main St.

Made in Worcester.

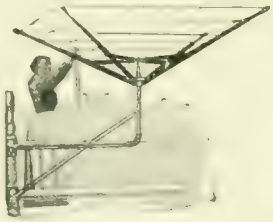
Over 500,000 Users Testify to the Merits of

HILL'S CLOTHES DRYERS

SEND FOR ILLUSTRATED BOOKLETS

HILL'S CHAMPION LAWN CLOTHES DRYER

Made in Worcester.



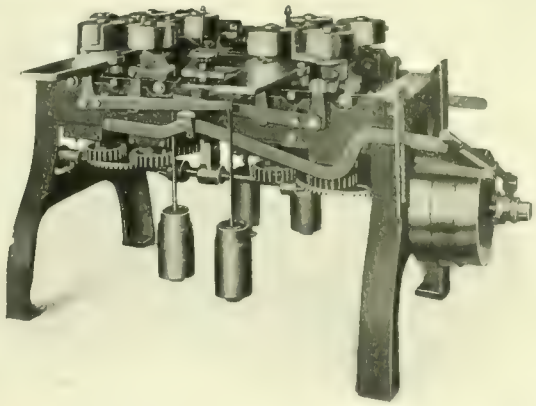
HILL'S BALCONY CLOTHES DRYER

THE HILL CANION SANITARY LAUNDRY DRYER

HILL DRYER CO.
Worcester, Mass.

The Largest Manufacturers of Clothes Dryers in the World

SHIPPING CASES AND BOXES



Power Feed Box Board Matcher

Everything needful for making
Wooden Boxes and Cases
Planing Machines
Sawing Machines
Fitting Machines
Trimming Machines
Matching Machines

HOBBS MANUFACTURING CO.

Made in Worcester.

26 SALISBURY STREET, WORCESTER, MASS.

SHERMAN ENVELOPE CO.

Worcester, Mass., U. S. A.
Manufacturers of

All Kinds and Sizes of Envelopes

Lithographed, Printed or Plain
Our Envelopes are made from Standard Grades and Weights of Paper

The Sherman SINEGRAPHIC Envelope, a great time and money saver
The Sherman STAMP SAVER for mailing second class matter
The Sherman DOUBLE TONGUE CLASP merchandise mailing envelope
Made in Worcester.

TO LAY THE DUST

AMERICAN CAR SPRINKLER CO.

WORCESTER, MASS., U. S. A.

Made in Worcester.

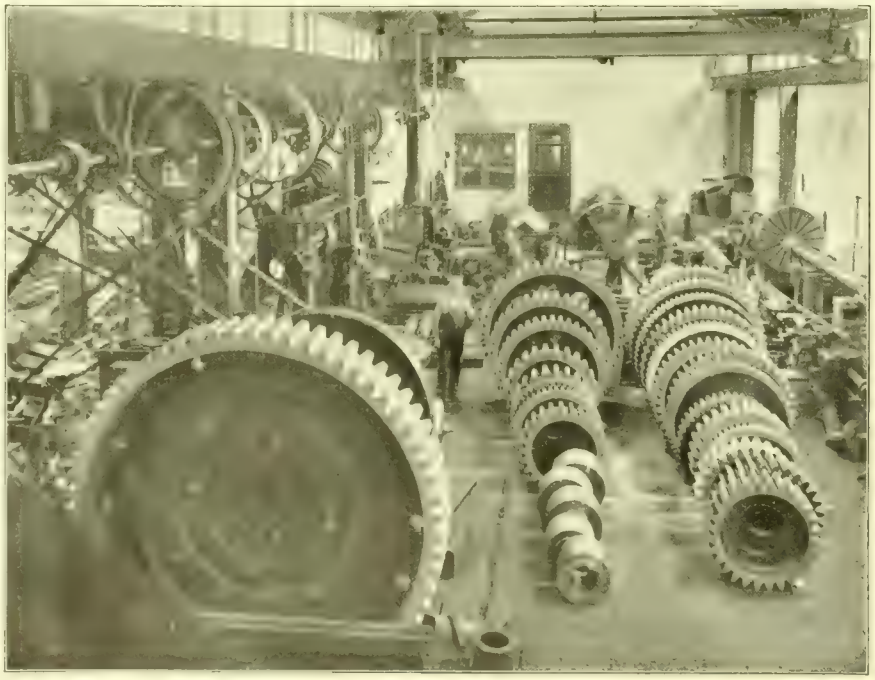
Craig Street Facade, Bank of Montreal, Montreal, Quebec
McKim, Mead & White, Architects.

The Norcross Brothers Company, Builders.

The Norcross Brothers Company

General Contractors and Builders

New York
Boston
Providence
Washington
Worcester



GEAR PLANING—BEVEL, SPUR AND SPIRAL GEARS

CONTINUOUS ROLLING MILLS for Billets, Merchant Bar, Small Structural Shapes, Skelp, Hoop, Cotton Tie and Wire Rods

CONTINUOUS GAS PRODUCERS

CONTINUOUS HEATING FURNACES

DYBLIE REVERSING VALVES

WIRE DRAWING PLANTS complete

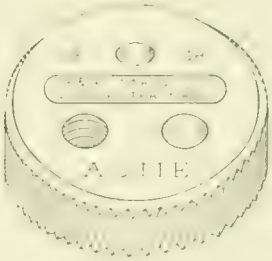
52 Rue du Congres
Brussels, Belgium

MORGAN CONSTRUCTION COMPANY

WORCESTER
MASSACHUSETTS

Made in Worcester.

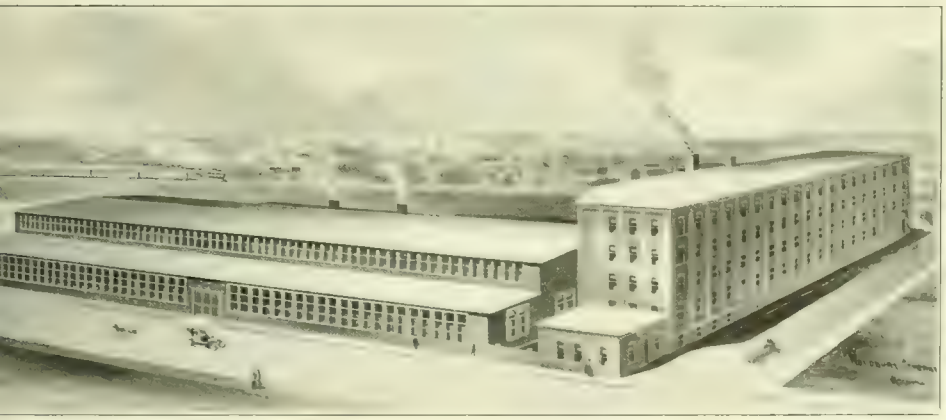
Wood Screws.
Machine Screws.
Taps and Dies.
Stove Bolts.
Tire Bolts.
Cap Screws.
Set Screws.
Small Nuts.
Rivets and Burrs.
Hanger Bolts.
Chair and Stove Rods.



Machine Screw Gages.
Special Gages.

REED & PRINCE MFG. CO.
Worcester, Mass., U. S. A.

HIGH GRADE GREY IRON CASTINGS



OUR CASTINGS

are soft and strong, made from high grade pig iron, and all our mixtures are from chemical analysis.

With our modern sand-blast method of cleaning we insure to our customers a perfectly clean casting, free from sand and scale. Give us a trial order and let us demonstrate to you that we can furnish what we claim in this respect.

We mould castings
up to 15 tons

Capacity 20 tons a day

L. W. Pond Machine & Foundry Co., Gold and Assonet Sts., Worcester, Mass.

Made in Worcester.

NEW ENGLAND ANCHOR FENCE COMPANY

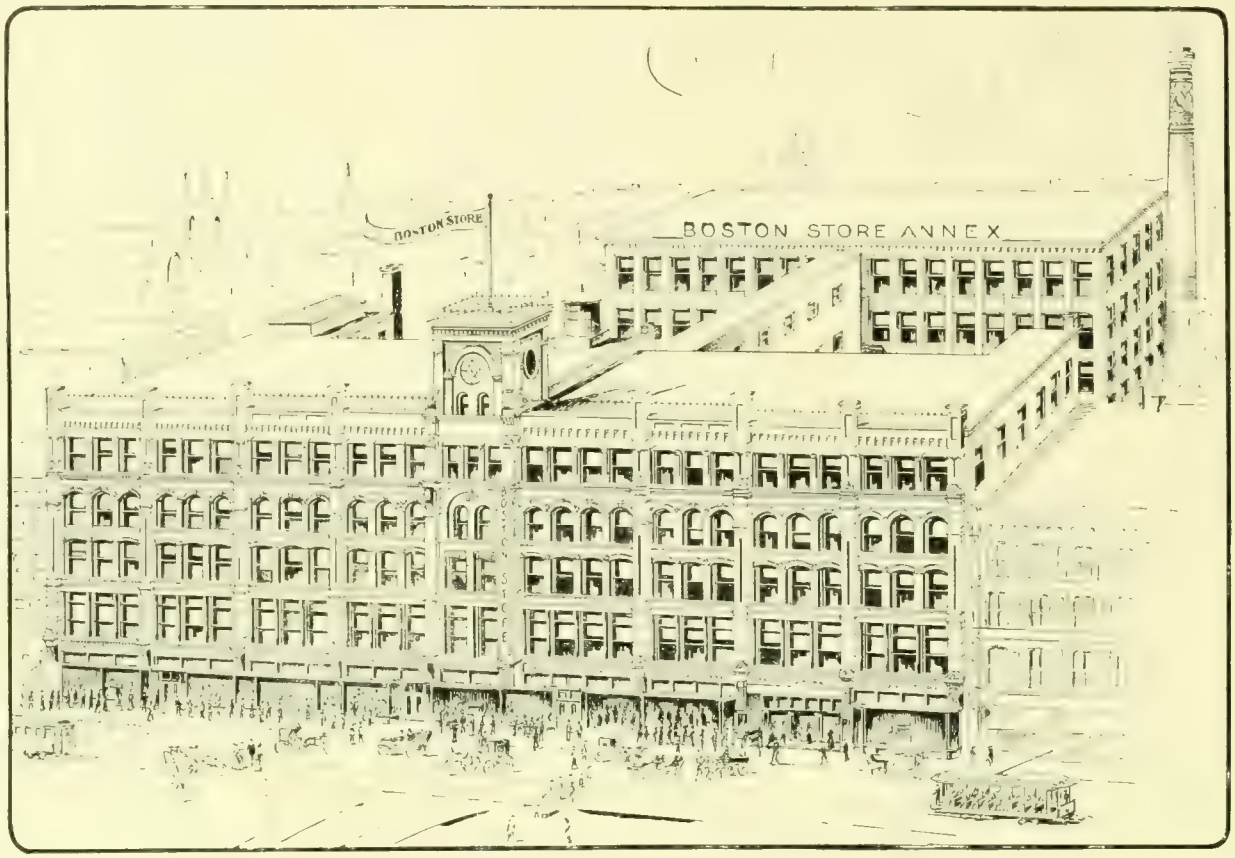
DEPARTMENT OF SPENCER WIRE COMPANY

We furnish and erect
complete
Ornamental Fences
of Wire
or Wrought Iron

Flower Bed Guard,
Trellis,
Tree Guards
Rubbish Baskets for Parks
and Cemeteries.

80 WEBSTER ST., WORCESTER, MASS.

Made in Worcester.



Worcester's Progressive Department Store

Fifty-three Stores Under One Roof

We guarantee the price of every article we sell to be as low or lower than the same goods can be bought for elsewhere. Should you find that the same article or goods can be bought for less elsewhere, make a claim on us and it will be promptly allowed.

We do not consider that our obligations cease when a customer buys goods and pays for them or has them charged. If any customers of ours are not satisfied with their purchases, they may return them and get their money back without objection or dispute.

Such a guarantee — from such a store — surely makes this a safe place to shop. The Denholm-McKay store is more than just a store — it is a great institution owing much to the public and paying that debt bountifully each day.

You can shop by mail or telephone as satisfactorily as though personally at the store.

Our larger debt to the public — the thing that makes this different from "just a store" — is to furnish exactly what every customer needs with no obsessing thought of what we should like to sell. This is real service — the position of a business that makes it honestly able to say: "Your money back if you ask it" — for your money is not our money until you are exactly suited.

Does this not suggest to you that this store is pre-eminently Worcester's best and safest shopping place?

DENHOLM-McKAY CO.

WORCESTER, MASS.

Barnard, Sumner & Putnam Co.

Our Never Surrender Hosiery

THE reputation of our Hosiery has extended during many years throughout the length and breadth of the land. It is not a spasmodic reputation, nor one acquired by sensational advertising; it is the result of a careful, conscientious study of Hosiery fabrics and manufacture, coupled with a desire to provide a reliable series of values which cannot be outclassed.

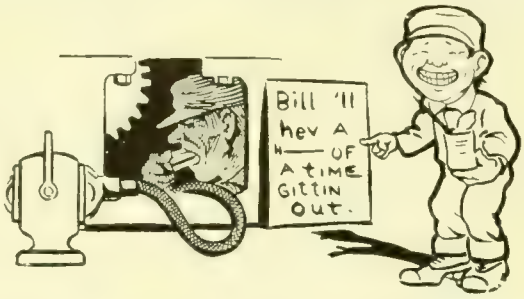
Our Never Surrender Hosiery

has stood the test of more than forty years and still occupies a strong hold in the esteem of an immense circle of customers the length and breadth of the country.

Men's, Women's and Children's Hose, in all sizes and weights to suit all seasons

Three Pairs for One Dollar

Guaranteed for good, reasonable wear, and in cases of complaint replaced with others free.



A MAN may have to squeeze through a space he could negotiate only with his stomach empty and go through all kinds of contortions to get at a job of

Drilling, Grinding or Polishing

with a

Coates Flexible Shaft Outfit

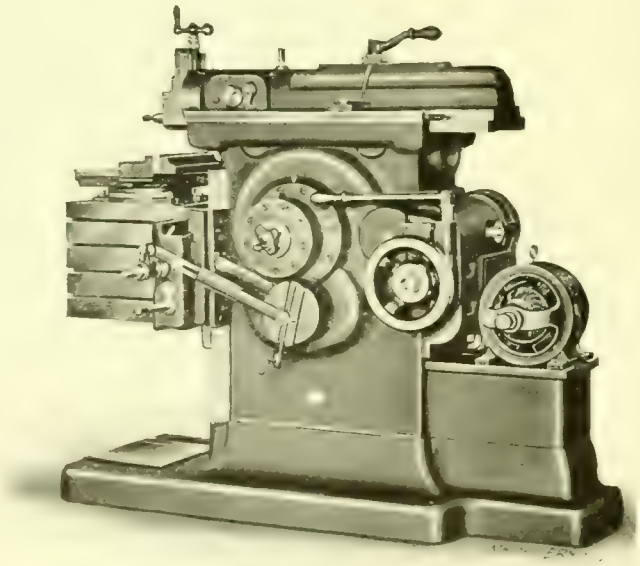
but when the job's done he has saved the expense and time required to tear the machine apart and disturb joints that are difficult to seat again.
Better get our bulletin F. Y.

Coates Clipper Mfg. Co.
Worcester, Mass.

WOODBURY & COMPANY
INCORPORATED
ARTISTS ENGRAVERS
ART PRINTERS
No. *Four Walnut St.* WORCESTER MASS.

ORIGINAL DESIGNS
BIRDS-EYE VIEWS
HALFTONE ENGRAVINGS
COMMERCIAL PHOTOGRAPHY
We Photograph
Machinery, Views, and Manufactured Products
PHOTOGRAPHIC ENLARGEMENTS
ANY SIZE
ART PRINTING
BY OUR NEW
LUXOGRAVURE PROCESS
BUSINESS ANNOUNCEMENTS, CATALOGUES
CARDS, WEDDING INVITATIONS, MENUS
A MOST COMPLETE ENGRAVING AND ILLUSTRATING PLANT

18″ All-Geared Drive Shaper



A Shaper because of the quantity and quality of work that it will turn out puts shaper-production on a new and higher level.

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WORCESTER, MASS.

A Deposit in the

People's Savings Bank

452 Main St., Worcester, Mass.

Is Absolutely Safe and Always Available

Quarter Days:
February, May, August and November 1st

Deposits and withdrawals may be made by mail

Bank open for deposits Saturday evening, 6 to 8

Samuel R. Heywood, *President*
Charles M. Bent, *Treasurer*

Provident Life and Trust Co.

of Philadelphia

Jan. 1, 1909

Assets,	$66,394,010.07
Liabilities,	58,563,002.21
Surplus to Policy-holders, including Capital Stock,	8,831,007.86
Insurance in Force,	203,898,905.00
Paid for business during 1908,	22,345,544.00

Central Massachusetts General Agency

One of the largest Life Insurance Agencies in this section.

1908 business the largest in the history of this agency.

Lester V. Bailey, *General Agent*

W. Gray Harris, *Cashier* Guy Francis Wheeler, *Agency Special*

Offices, 420, 421, 422 Slater Building, Worcester.

G. L. Brownell,

Builder of

IMPROVED TWISTING AND SPINNING MACHINERY

For making Hard or Soft Twines, Lines, and Cordage. Wet or Dry Twist, from Cotton, Linen, Hemp, Manila, Sisal, Paper, Silk, Jute, Hair, Wool, etc.

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Worcester Massachusetts

Please address Station A.

Made in Worcester.

Factory Systems

There are possibilities for improved methods and increased profits in YOUR business. Likewise, there are losses to be stopped and expenses to be eliminated, or reduced.

The Superintendent of our Engineering and System Department has had twenty-five years of experience in factory organization and systematization, and devotes his attention to this branch of our practice exclusively.

Simplicity is our slogan.

New England Audit Company

Springfield Court Square Building — Worcester State Mutual Building

Prospectus containing one hundred references mailed upon request.

New England Fibre Blanket Company

Established 1[illegible]

Bowker Building, 24 Washington Square, Worcester, Mass.

Incorporated June, 1909, under the laws of the Commonwealth of Massachusetts

Capitalization $25,000.00

$15,000.00 Preferred Stock, Shares $10.00 each, Guaranteed 8%

$10,000.00 Common Stock, Shares $100.00 each (all subscribed)

WE OFFER THE BALANCE OF OUR PREFERRED STOCK AT PAR, 8% GUARANTEED

This is an investment opportunity seldom offered to obtain an 8% guaranteed stock in a home industry.

The earnings last year were equal to 25% on the total capitalization, and they will exceed that figure this year.

The business consists of supplying newspapers with material from which their printing is done, and on several lines we have a complete monopoly.

Every courtesy will be extended to investors at our factory, where the books are open to investigation.

The additional capital will be used in the development of trade and the establishment of a branch in England.

The following list comprises only a few of the prominent newspapers we are supplying, and to whom we can refer, also Bradstreet's and Dun's Mercantile Agencies.

The Telegram, Worcester, Mass.
The World, New York City, N. Y.
Herald, New York City, N. Y.
The Times, Hartford, Conn.
The Post, Hartford, Conn.
Republican, Springfield, Mass.
Union, Springfield, Mass.
Times, Brockton, Mass.
The Globe, Fall River, Mass.
News, Salem, Mass.
The Sun, Lowell, Mass.
The Chronicle, North Attleboro, Mass.
The Herald-News, Taunton, Mass.
Herald, North Adams, Mass.
Times, Pawtucket, R. I.
Tribune, Providence, R. I.
The Post-Standard, Syracuse, N. Y.
Herald, Syracuse, N. Y.
News, Baltimore, Md.
Sun, Baltimore, Md.
Journal, Baltimore, Md.
American, Baltimore, Md.
Post-Intelligencer, Seattle, Wash.
Tribune, Tacoma, Wash.
Dept. Public Printing, Ottawa
Mail, London, Eng.
Advertiser, Dundee, Scotland

The Post, Worcester, Mass.
L'Opinion Publique, Worcester, Mass.
The Globe, Boston, Mass.
The Herald, Boston, Mass.
The Post, Boston, Mass.
The Journal, Boston, Mass.
Transcript, Boston, Mass.
Public Ledger, Philadelphia, Pa.
Evening Telegraph, Philadelphia, Pa.
Bulletin, Philadelphia, Pa.
The Record, Philadelphia, Pa.
Tribune, Chicago, Ill.
John Anderson Pub. Co., Chicago
The Inter-Ocean, Chicago, Ill.
The Live Stock World, Chicago, Ill.
Illinois Pub. Co., Chicago, Ill.
The Chronicle, San Francisco, Cal.
The Bee, Sacramento, Cal.
The Republican, Fresno, Cal.
The Record, Los Angeles, Cal.
Tribune, San Luis Obispo, Cal.
La Presse, Montreal, Canada
Witness, Montreal, Canada
Herald, Montreal, Canada
Gazette, Montreal, Canada
The Star, Montreal, Canada
Le Canada, Montreal, Canada

Gazette, Worcester, Mass.
Star, Washington, D. C.
Times, Washington, D. C.
Herald, Washington, D. C.
Post, Washington, D. C.
The Chronicle, Houston, Texas
The Post, Houston, Texas
The Gazette, San Antonio, Texas
The News, Dallas, Texas
The News, Galveston, Texas
The Blade, Toledo, Ohio
Times, Toledo, Ohio
The Leader, Cleveland, Ohio
The Press, Cleveland, Ohio
The Enquirer, Buffalo, N. Y.
News, Buffalo, N. Y.
Times, Buffalo, N. Y.
Journal, Portland, Ore.
Oregonian, Portland, Ore.
Star, Toronto, Canada
News, Toronto, Canada
Mail and Empire, Toronto, Canada
The Herald, City of Mexico
El Diario, City of Mexico
Record, City of Mexico
El Heraldo, City of Mexico

The right is reserved to reject any applicant, or to allot a less number of shares than applied for

New England Fibre Blanket Company

THEODORE T. ELLIS, Treasurer. Telephone 2780

LEON RICE PARTRIDGE, Representative. Telephone 3322

Room 10, Burnside Building. Telephone 5153

See descriptive article on page 396

SHOES
FOR
BOYS AND GIRLS

If you want shoes that will stand the hardest kind of wear, ask your shoeman for

TRADE MARK
Nox 'Em All

SHOES

They are made in all leathers, for dress and school wear

This Box Calf Shoe for Boys, Sizes 1 to 5, $2.00
8 to 13, $1.50.

We supply these shoes to your retailer.

H. E. SMITH & SON, Inc.
Worcester
Mass.

WORTH
Cushion Sole
SHOE

MEN WOMEN

For Tired Feet

WATER PROOF SOLE

A Mattress for the Foot

RETAIL STORE,
573 Main Street.

THE CUMMINGS CO. INC. Mf'rs. Worcester, Mass.

BON TON CORSETS

are universally recognized as the ultra-fashionable high-grade corsets of the present day. All the better grades are boned with WALOHN, the wonderful indestructible boning that will not break, warp or rust. *Price, $3 to $12*

ROYAL WORCESTER CORSETS

are absolutely the *best medium-priced* corsets the world has ever known. They are the accepted standard of authentic style, perfect fit and workmanship, and are boned with best quality non-rustable wire. *Price, $1 to $5*

ADJUSTO REDUCING CORSETS

are *patented*. They are equipped with the famous "Reducing Bands," which can be instantly adjusted. Double-boned throughout with wide, flat, double bones. Suitable for both medium and full figures. *Price, $3 and $5*

WE ARE SOLE WORCESTER AGENTS FOR THESE FAMOUS CORSETS

BOSTON STORE
Denham & McKay Co.

Available Sites for Manufacturing Plants in Worcester

THE IDEAL INDUSTRIAL CITY

For plants already established, who for any cause desire a change, or for BRAND-NEW PLANTS

Plans and Specifications

Showing location on B. & A. R. R. or B. & M. R. R. Water in abundance, trolley connection, city water, gas, electric lights and power, and all modern conveniences may be seen by calling or addressing

The Worcester Board of Trade

11 Foster Street Worcester, Massachusetts

Make Your Feet a Christmas Present

It Means Health and Comfort for Them and You

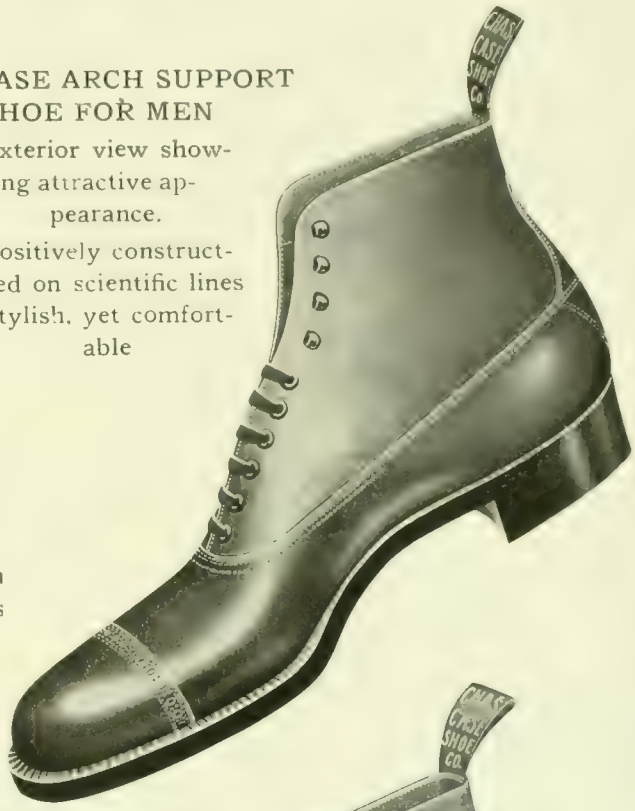
You Know that sound feet are most desirable. The Case Arch Support Shoes are built to support the arch, thus preventing or curing flat feet and broken arches. Make walking easy for those whose feet trouble them

CASE ARCH SUPPORT SHOE FOR MEN

Exterior view showing attractive appearance.

Positively constructed on scientific lines

Stylish, yet comfortable



ROYAL WORCESTER ARCH SUPPORT SHOE FOR WOMEN showing the Arch and how it supports the foot

CASE ARCH SUPPORT SHOE FOR MEN showing the Arch and how it supports the foot

No other Arch Supporter is needed in the Case Shoe

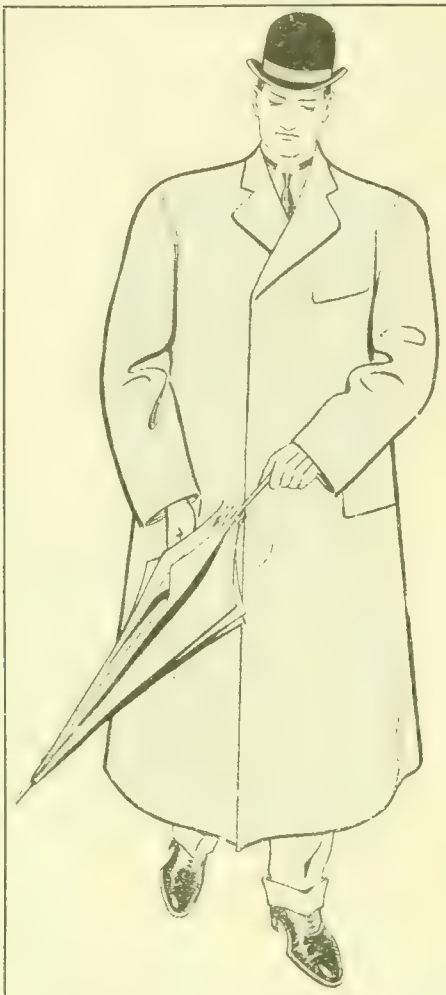
ROYAL WORCESTER ARCH SUPPORT SHOE FOR WOMEN showing the exterior and stylish shape

ORDER BY MAIL IF YOUR DEALER CANNOT SUPPLY YOUR NEED

CHAS. CASE SHOE CO.

Makers of Fine Shoes for Men and Women

40-44 Thomas Street, Worcester, Mass., U. S. A.



Ware Pratt Clothes

The Best New Winter Styles
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Also everything worth while in Hats, Furnishings and Shoes is ready for your inspection.

Specialties for Christmas Gifts in

Bath Robes House Coats
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that afford an opportunity for selection rarely met with

Complete Outfitters for Men and Boys

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OPPOSITE CITY HALL, WORCESTER

The Popular Store

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Dry Goods

Ladies' Suits and Furs

Men's Clothing

Millinery

Two New Departments

Shoes and Rugs

Home Office
518 Main Street
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The Ridgely Protective Association

Pays Weekly Sick and Accident Benefits to Odd Fellows Only

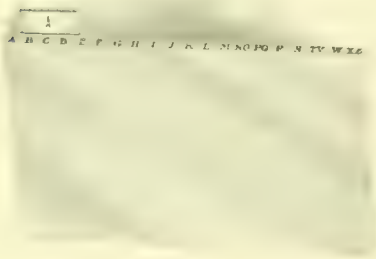
Surplus (including capital), Sept. 30, 1909
$248,176.85

Paid in Benefits since Organization
$1,135,804.75

DESIRABLE TERRITORY OPEN TO GOOD, LIVE AGENTS

Worcester's Ideal Clothing Store, Hammond Clothing Co., Main and Chatham Streets

Our Methods of Indexing R Different



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Not With Us

We have little respect for old methods just because they are old. Our idea is to *change with the times*—to meet new conditions—to keep with the spirit of the times—to get ahead if possible.

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Improved Systems—Go Ahead Methods

Everything the best that money and brains can produce

The School of Experience

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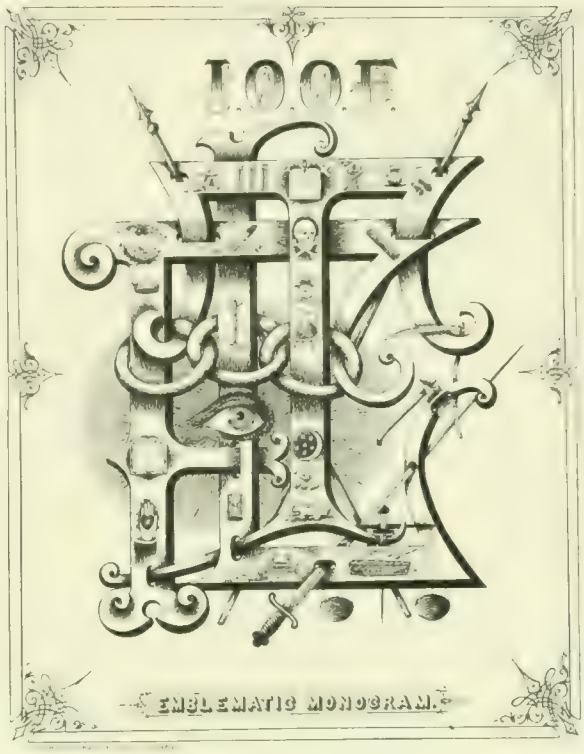
Telephone 5218 **Opposite City Hall**



For Odd Fellows Only

This Emblematic Monogram

Is a reproduction of a pen drawing by Walter W. Cowan. The letters F. L. T. are interwoven and chained together with the three links, each letter passing through its own link, making it impossible to separate them, and the beautiful emblems of the order appear thereon.

Size 22 x 28 inches.

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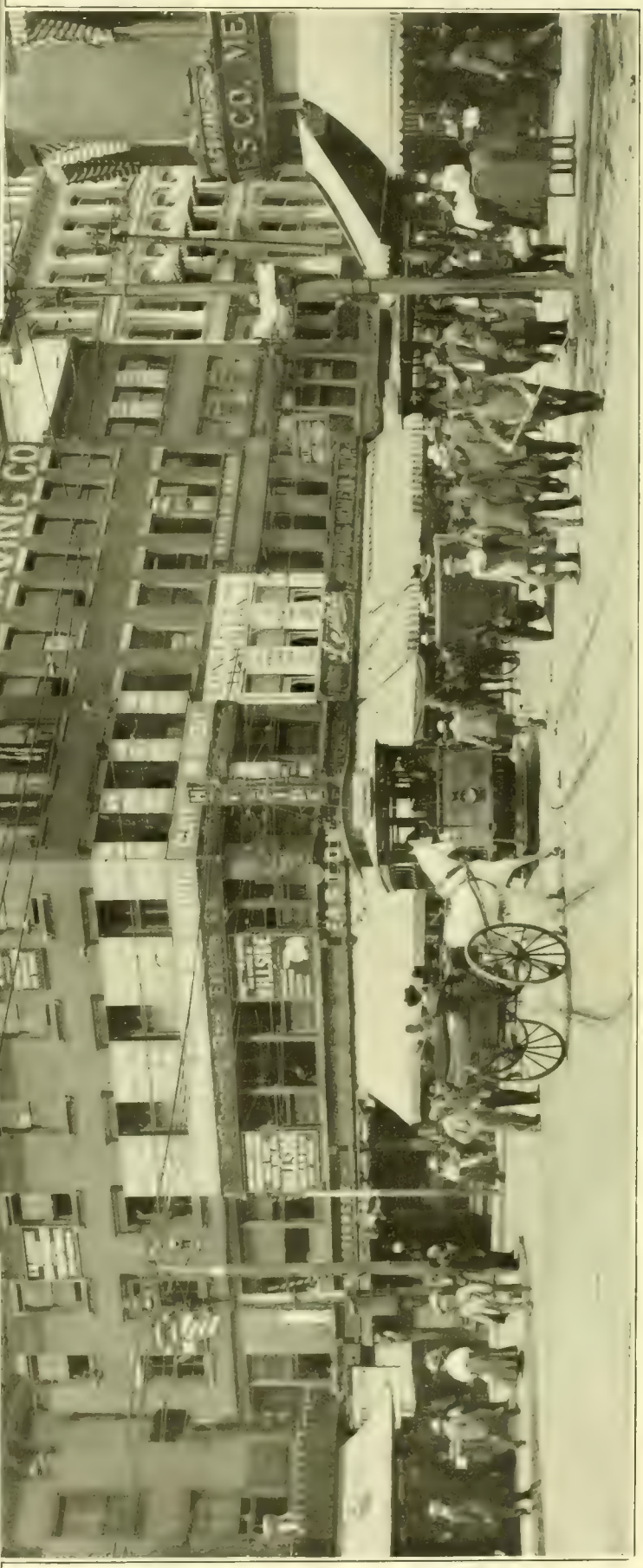
ORIGINATORS, ARTISTS AND MAKERS OF THE BEST PRINTING PLATES

The Compliments of the Season to all our Friends and to those we hope to make Friends, the coming year—1910



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Main, Front and Pleasant Streets

Opposite City Hall Park

New Park Hotel

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Excellent Cuisine

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Drink the Best

COLD BLAST GINGER ALE

Is the pinnacle of perfection as far as tonics go. The call for the imported brands has decreased materially since we placed our famous Cold Blast Ginger Ale on the market—because it is only BEST sold. Superior quality always gains recognition.

PUREOXIA, the purest of all distilled waters, is used in the making of Cold Blast Ginger Ale. That's why it has that "something" taste pleasing to the palate.

Delivered in any part of the city at 75 cts. per case of 24 bottles.

We have granted to the

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The Charles E. Hires Company, Philadelphia

Delivered in any part of the city at $1.10 per case of 24 bottles. 30 cents refunded on return of case and bottles.

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Worcester, Massachusetts

Telephone 2455

Not a drink that merely ***tastes*** good, but one that adds to the joy of it all by refreshing, by cooling, by cheering, by satisfying.

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Carbonated in bottles.

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Works of Norton Co. and Norton Grinding Co.
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Norton Grinding Wheels are known and used in all parts of the world.

Grinding Machinery
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Made in Worcester.

H. HODGSON,
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QUEENSBURY MILLS

FRED HODGSON,
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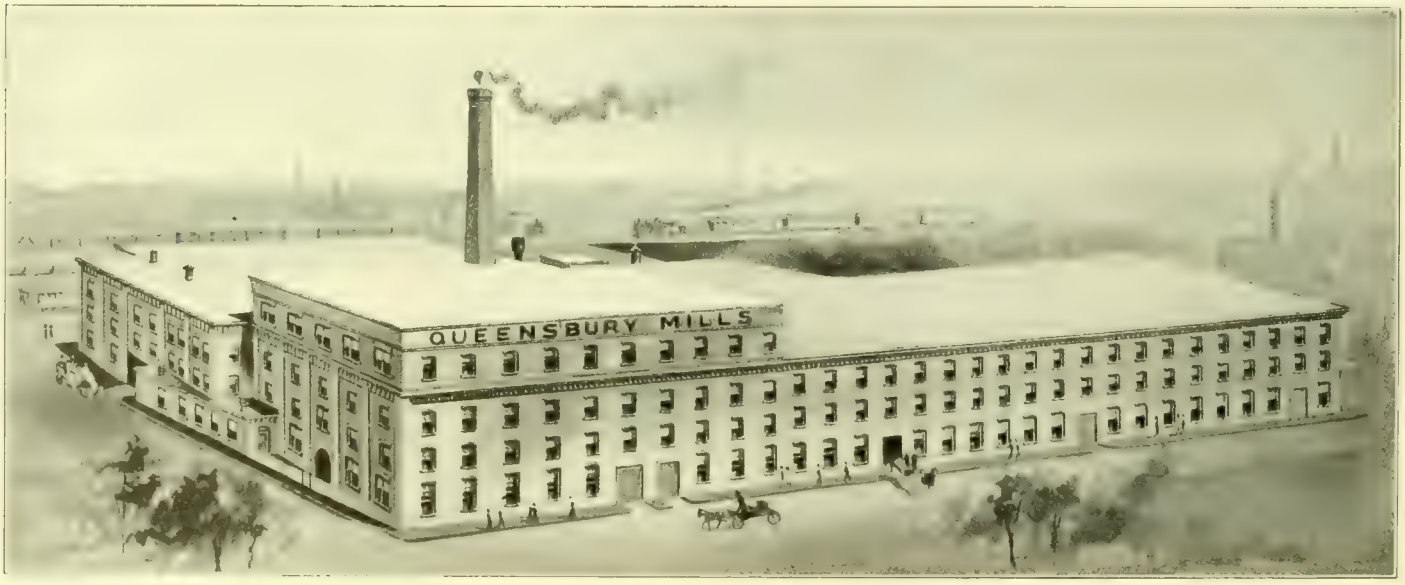

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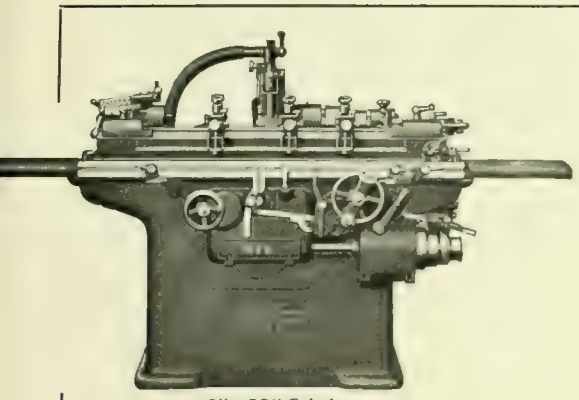

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Manufacturers of Plain Machines for cylindrical grinding. Universal Tool and Cutter Grinders, Bench and Floor Grinders.

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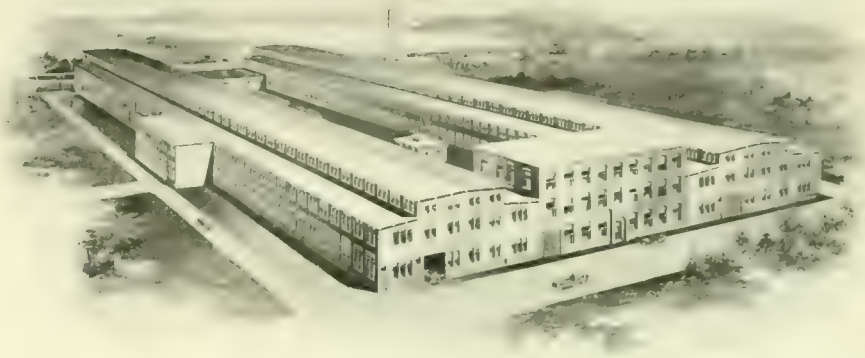

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Beats the best Oak Belting for Wood-Working Machinery,
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We also make WARREN'S WATER-PERFECT PROOF Leather Belting

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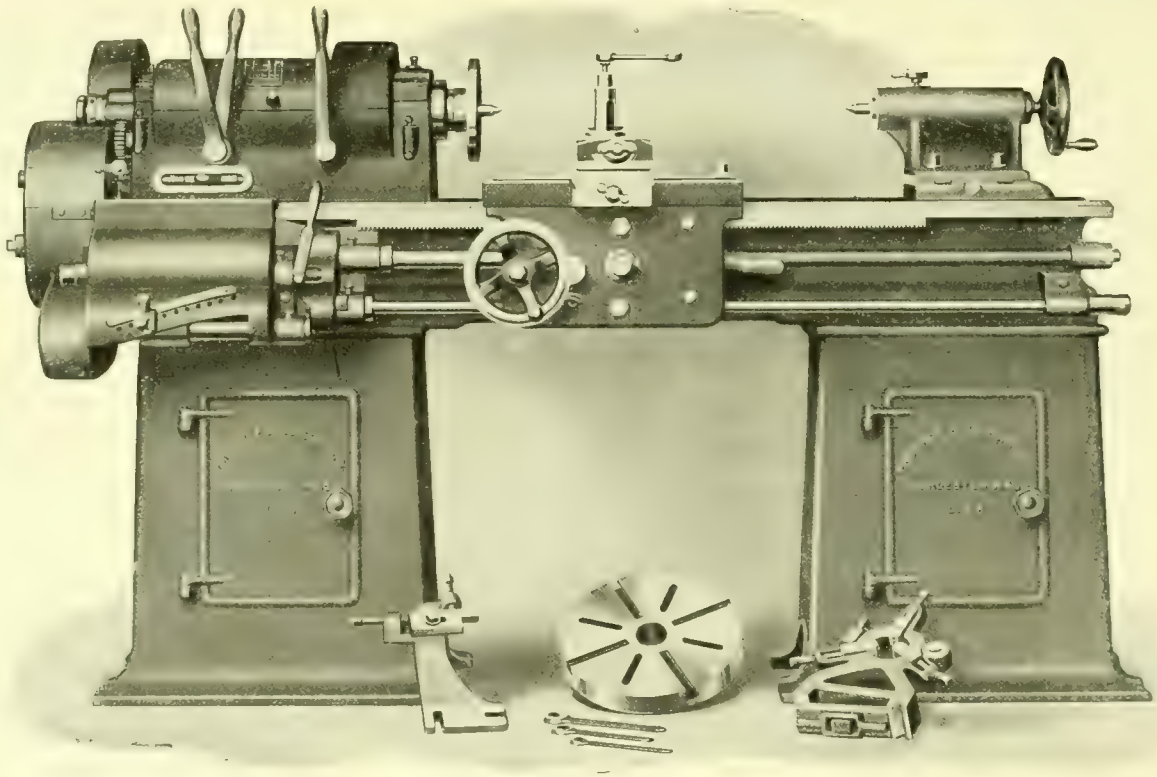

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Manufacturers of

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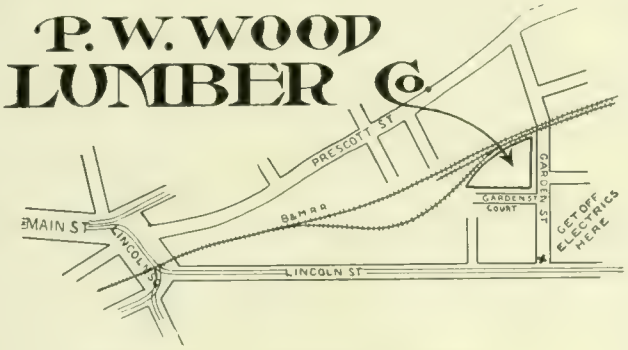

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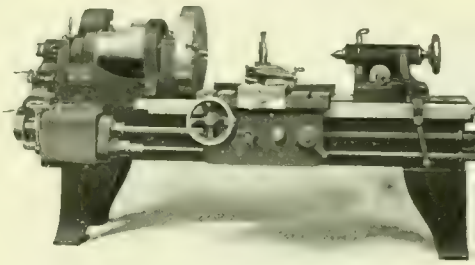

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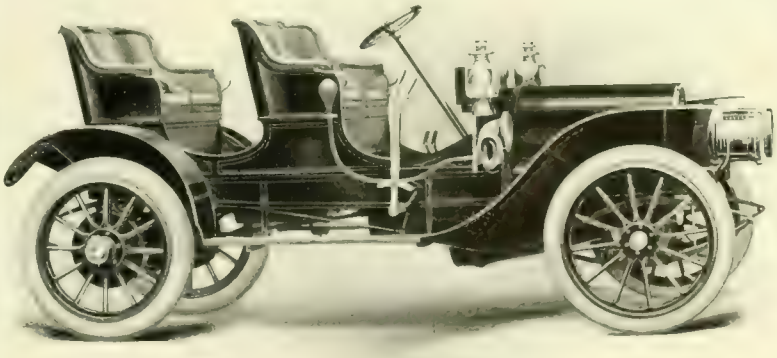

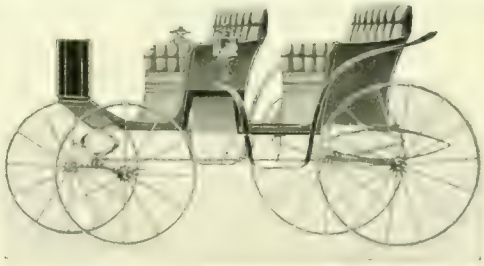

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The VICTOR Improved

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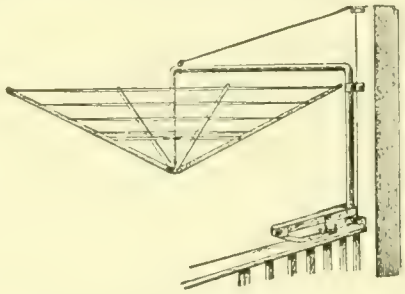
Ash
Chutes,
Sifters,
Etc.



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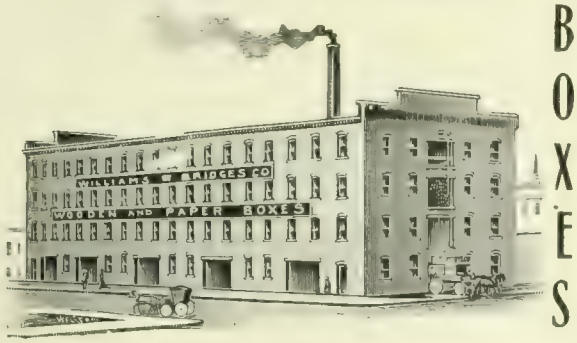

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Stove Trimmings, Ball Bearings

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Special attention given to the Manufacture of High Grade

Machinery Castings

Tainter and Gardner Streets
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A DOLLAR Bill and a Two Dollar Bill can be produced by the Government at about the same price—a few cents each. The face value of one is 100 cents; the other is just double that amount

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If it is "face value" you are interested in, then we are interested in you.

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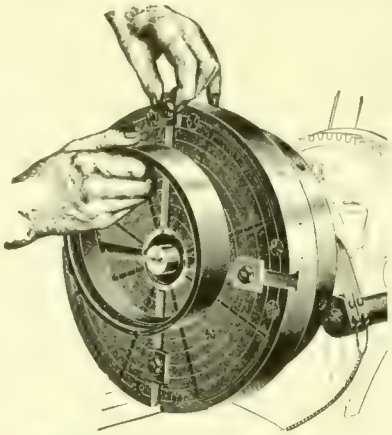
The Commonwealth Press
OLIVER B WOOD
WORCESTER
MASS



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Rotary chuck, sizes 6″ to 36″. Flat chucks, 10″ to 8′ long

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Made in Worcester.

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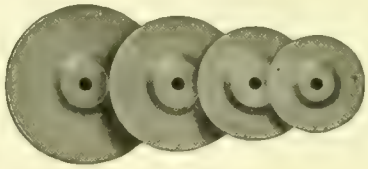

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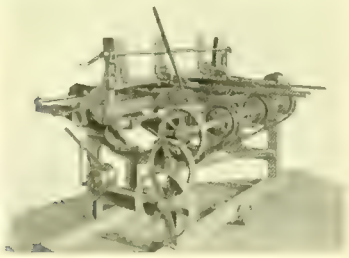

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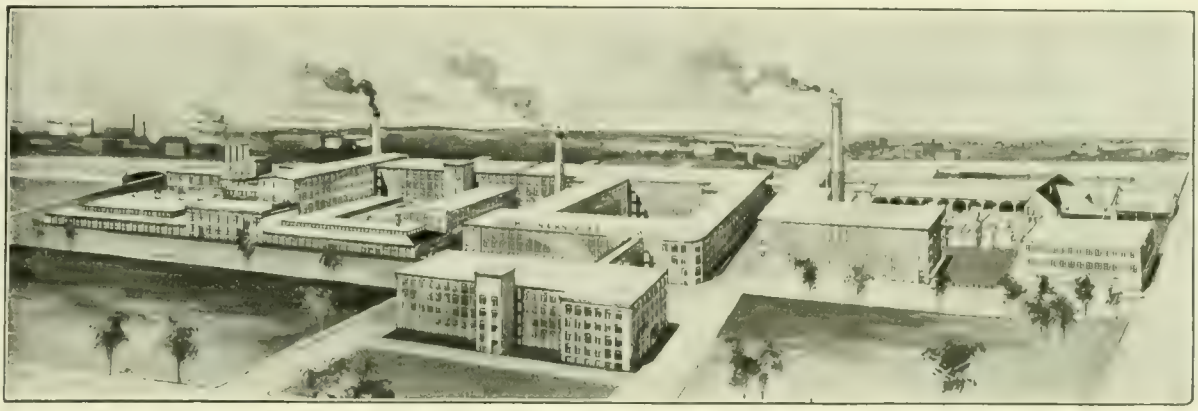

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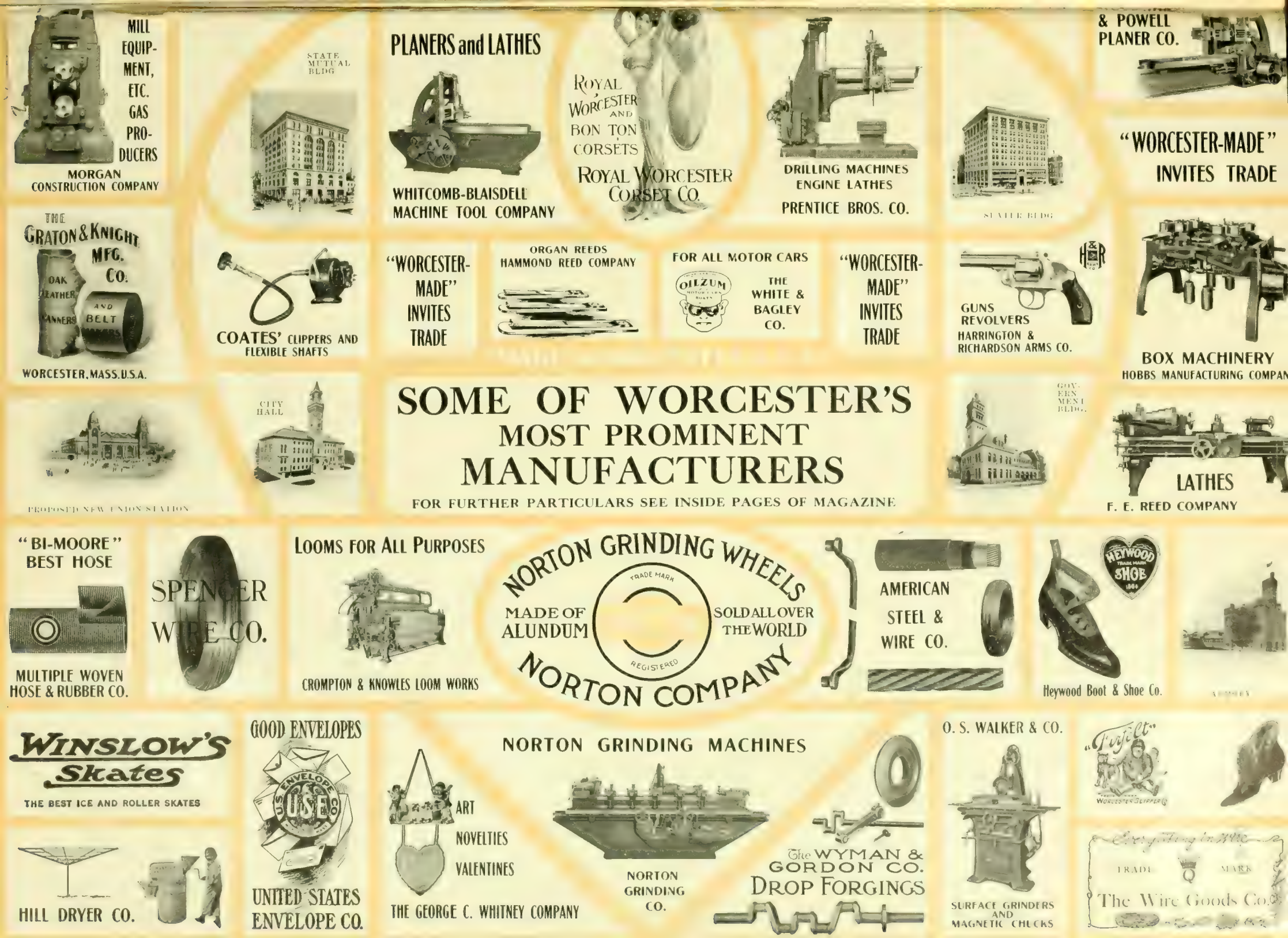
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