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ANATION THAT MANUFACTURES FOR ITSELF PROSPERS

J. JONES TORONTO

Vol. 15.

TORONTO, NOVEMBER 2, 1888.

No. 9.

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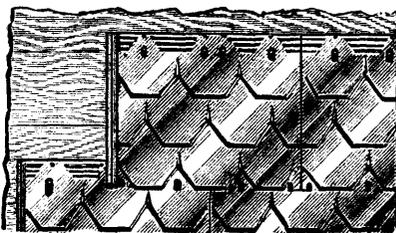
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SEE ADVERTISEMENT, PAGE 345.

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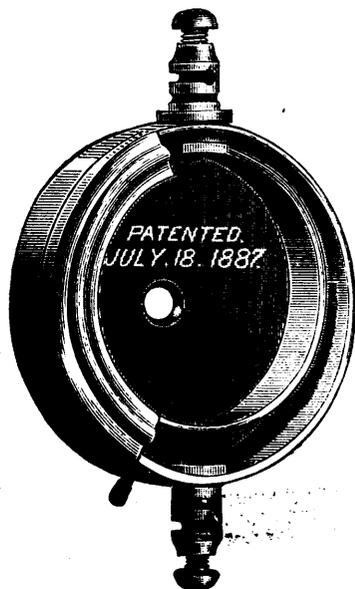
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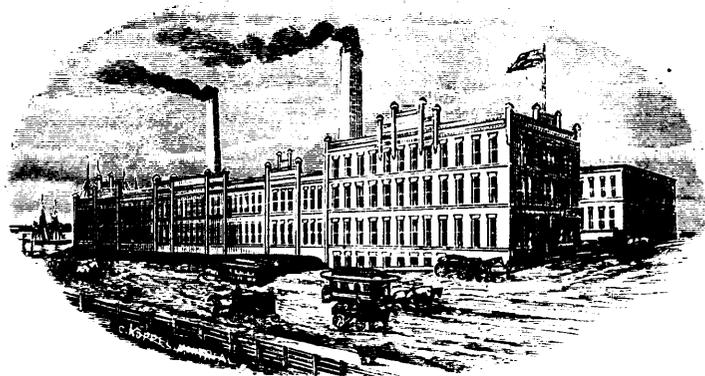
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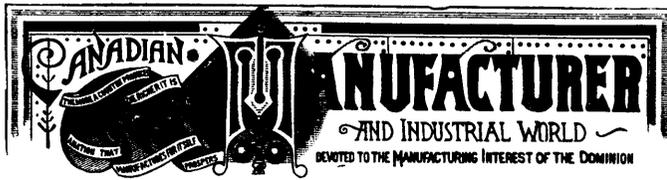
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6 WELLINGTON STREET WEST, TORONTO.

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J. J. CASSIDEY, *Editor.*

ED. D. McCORMACK, *Secretary.*

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MR. FREDERIC NICHOLLS is Secretary of
The Canadian Manufacturers' Association,
The Woolen Manufacturers' Association, and
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His Office is at the Publication Office of the
CANADIAN MANUFACTURER,
6 Wellington Street West, Toronto.

[OUR usual supplement containing artotypes of "Captains of Canadian Industry" will appear in our next issue.]

WHAT THEY SAY.

SINCE THE CANADIAN MANUFACTURER began the publication of artotype portraits of "Captains of Canadian Industry," giving brief sketches of their lives and of the enterprises in which they are engaged, many of our contemporaries in Canada and elsewhere have said many kind things about us and this feature of our journal. The fact is, while all the world knows that Canada is a progressive country, and that she abounds in manufacturing industries which have lifted her to the high plane she now occupies among the nations of the earth, but scant knowledge was had of the men who conducted these industries, or of the magnitude and value of them. Therefore, in bringing this knowledge to public attention, we have engaged in a work that is thoroughly appreciated by contemporary journals; and we herewith give our readers the opportunity to read what some of them say concerning our enterprise.

A REPRESENTATIVE INDUSTRIAL JOURNAL GIVEN TO DASHES OF ENTERPRISE.

(*The Empire, Toronto.*)

THE CANADIAN MANUFACTURER presents its readers with photographs, reproduced by the artotype process, of four "Captains of Canadian Industry," namely: Mr. W. H. Storey, glove manufacturer of Acton, Ont., president of the Canadian Manufacturers' Association; Mr. Samuel May, of Toronto, first vice-president, and manufacturer of billiard tables; Mr. Bennett Rosamond, second vice-president, and president of the Rosamond Woollen Company, of Almonte, Ont.; and

Mr. George Booth, of Toronto, treasurer of the Association. The likenesses are all admirable. Accompanying them is a sketch of the life of each of these gentlemen, written in an appreciative spirit, and replete with facts of interest to Canadians generally. THE CANADIAN MANUFACTURER is what its name implies—a representative industrial journal, fair to all sections of the Dominion, and, we may add, given to dashes of enterprise that are most creditable in its management.

AN EDUCATING INFLUENCE.

(*The Trader, Toronto.*)

THE CANADIAN MANUFACTURER is embellished with photographs of our leading manufacturers, reproduced by the artotype process. The likenesses of these "Captains of Canadian Industry" are splendid specimens of artistic work, reflecting the highest credit upon the Canadian company who execute them. Accompanying these photographic reproductions is a biographical letter-press account of the gentlemen illustrated, which will be found most interesting reading, inasmuch as they conclusively show that Canada is indeed a country where merit has a fair chance to reach the top of the ladder. We heartily commend the enterprise of our talented contemporary, not only on account of the expensive and beautiful illustrations it is furnishing of prominent citizens, but also for the educating influence that the publication of their career must have upon an ambitious and thinking class of readers, such as THE MANUFACTURER undoubtedly possesses. The lesson from the commercial success of the prominent gentlemen illustrated is that in this country every sober, industrious man has a chance, and that the workman and employe of to-day, may be, and often is, the capitalist and employer of to-morrow.

THE MANUFACTURER A GREAT SUCCESS.

(*Review, Peterborough, Ont.*)

A PERIODICAL that is pushing its way into public favor is THE CANADIAN MANUFACTURER, published at Toronto. It is devoted to the manufacturing interests of the Dominion. It is doing good service both as showing what is being done in that direction, and also in upholding and advocating the N. P., which makes manufacturing enterprises successful. A specially valuable feature of the paper is its manufacturing notes, in which brief mention is made of every industrial enterprise being started, and of everything of interest concerning those in operation of which the publishers can obtain any information. The "Captains of Canadian Industry" series of articles is a feature never before attempted anywhere in any trade paper, and the success the publishers are meeting with in the matter is very gratifying. The series of articles not only perpetuates the portraits of our leading manufacturers, presented in really expensive and artistic style, but the biographical sketches are such as to instil good lessons regarding the rewards that follow intelligent and persistent endeavor. It is true that in the sense of giving the general news of the day THE MANUFACTURER does not devote space to such matters, but very little that occurs that should interest manufacturing people is missed. As an enterprise aiming to advance the

interests to which it is devoted THE MANUFACTURER is a great success, and is liberally patronized, both as an advertising medium of great value, and as a record of industrial data carefully compiled.

NOT ONLY INTERESTING BUT USEFUL.

(*The Shareholder, Montreal.*)

THE CANADIAN MANUFACTURER, which is published at Toronto and is devoted to the manufacturing interests of the Dominion, is engaged in publishing a series of portraits of the "Captains of Canadian Industry" with brief biographical notices. The portraits are well executed. Seven plates have now been issued, each one containing four portraits. These sketches, and the other information contained in the publication, which, we may remark, is now in its fifteenth volume, are not only interesting but useful, not only to manufacturers, but to others interested in the manufacturing industries of Canada, and are well worthy their consideration.

COMMENDABLE ENTERPRISE.

(*Free Press, Acton, Ont.*)

WITH commendable enterprise, and consistent with the province it embraces, THE CANADIAN MANUFACTURER has commenced the publication in its columns of the portraits of prominent manufacturers of the Dominion, under the caption "Captains of Canadian Industry." The portraits are accompanied with short biographical sketches and notes concerning the businesses of the gentlemen who are referred to. The first business man whose portrait graces THE MANUFACTURER'S columns in this connection is Mr. W. H. Storey, of the "Canada Glove Works," Acton, who is at the present time President of the Canadian Manufacturers' Association. The accompanying sketch of his life and progress in business is full of interest and will tend not only to give the general public a better acquaintance with Mr. Storey and his splendid business, but will at the same time bring Acton, with which he is so intimately associated, into more than ordinary prominence. The same issue of THE MANUFACTURER presents likenesses and sketches of Messrs. Samuel May and George Booth, Toronto, and B. Rosamond, Almonte. THE MANUFACTURER is one of the finest productions representative of any particular class of the business community on the continent. It is fully alive to the interests of its constituents, gives a careful *résumé* of events concerning manufacturers and their products, and its excellent portrait gallery is a very desirable and interesting feature. No manufacturer should fail to have his name on THE CANADIAN MANUFACTURER'S list.

ONE OF THE LEADERS.

(*Herald, Guelph, Ont.*)

AMONG our wide-awake trade exchanges THE CANADIAN MANUFACTURER may be classed as one of the leaders. A short time since this publication began the production of a series of illustrated biographical sketches of "Captains of Canadian Industry." It was an entirely new departure in journalism, either in this or in any other country; and the very excellent artotype portraits of leading Canadian manufacturers which

have been displayed in each successive issue of the journal have made it valuable as a pictorial album which must of necessity become a part of the history of the Dominion. The publication of these portraits, and the biographical sketches of their originals, will be continued indefinitely; the object being that when their publication is finally discontinued, to assemble and reproduce them in book form, which arrangement will be all the more valuable in that the matter which is now being extended through many months in THE CANADIAN MANUFACTURER will all be brought into the compass of one attractive and convenient volume.

DOING THE WORK THOROUGHLY WELL.

(*Beaver, Napanee, Ont.*)

THE CANADIAN MANUFACTURER is devoted exclusively to the manufacturing interests of the Dominion of Canada, and is one of the few journals which, having an important work to do, is doing it thoroughly well. We have been a close and constant reader of the publication for many months, and have found that the many topics which are constantly arising affecting the interests of the manufacturers of the Dominion are discussed in an able and liberal spirit, and in a manner that must have an effective influence in establishing these interests on a permanent basis, to the advantage of our people and the Dominion as a self-dependent, though integral part of the British empire.

ADVERTISING PATRONAGE THE BEST EVIDENCE OF APPRECIATION.

(*Review, Paris, Ont.*)

AMONG the exchanges which the *Review* receives, no Canadian journal is perused with more interest and relish than THE CANADIAN MANUFACTURER. As a type of the successful trade journal it fills its mission most ably and creditably, its news columns being a good summary of doings in the industrial centres of the country, while its editorials are marked by a desire to promote the manufacturing interests of Canada, and always have the right Canadian ring about them. THE MANUFACTURER is well patronized by advertisers, which is the best evidence of the appreciation of it. This is right. A newspaper lives by its advertisements. It may also be said that the good advertiser lives by his advertisements, too. We wish our able contemporary long life and prosperity.

DIRECTS AND GUIDES PUBLIC SENTIMENT.

(*Gazette, Sherbrooke, Que.*)

"THE nation that manufactures for itself prospers." Taking this motto as its guide, THE CANADIAN MANUFACTURER, a journal published twice a month in Toronto, closely watches and carefully records everything that occurs bearing upon industrial enterprise. Its columns are full of matter that every merchant should know. It does not confine itself to this. It seeks to direct and guide public sentiment in the direction which shall best promote the interests it advocates. Although we do not accept all its views, we can safely say they are always put forward with clearness and intelligence; and even when its arguments fail to convince they serve to give rise to thought, and show how much that is worth considering can be

said in advocacy of a particular line of policy. Moreover, it combines the agreeable with the useful, and some well-written articles in it now in course of publication, on "Captains of Canadian Industry," illustrated by some fine likenesses of well-known manufacturers, furnish interesting reading.

IT DESERVES WELL.

(*Standard, Pembroke, Ont.*)

THE last issue of this excellent manufacturing journal, THE CANADIAN MANUFACTURER, contains photographs of four of the leading "Captains of Canadian Industry" — Messrs. William Bell, organ and piano manufacturer, of Guelph; John Bertram, machine manufacturer, of Dundas; John R. Barber, paper manufacturer, of Cornwall; and William Chaplin, axe manufacturer, of St. Catharines. Strange to say, three out of the four are Scotchmen, and Protectionists, too, going to prove that auld Scotia's sons are making their mark in Canada. Accompanying are brief sketches of these gentlemen, which form interesting matter. THE MANUFACTURER is to be complimented on its enterprise, and it deserves well at the hands of the important interests it serves.

OF SPECIAL IMPORTANCE TO THE COUNTRY.

(*Conservator, Brampton, Ont.*)

ONE of the many excellent and interesting Canadian publications is THE CANADIAN MANUFACTURER, issued semi-monthly at Toronto. On June 1st the publishers began a new and original feature, that of giving an artotype plate of portraits of leading manufacturers of the Dominion, four portraits with each edition. The pictures are among the finest we have ever seen of the kind. THE MANUFACTURER discusses subjects of special importance to the country, and is brim-full of information in regard to the progress and development of all industrial operations. Business men find it a valuable publication well deserving of their support.

GO ON AND PROSPER.

(*Era, Newmarket, Ont.*)

THE CANADIAN MANUFACTURER, published in Toronto, is devoted to the manufacturing interests of the Dominion. By the introduction of artotype plates, in which splendid illustrations of our leading manufacturers are produced, together with short biographical sketches, the managers are bringing the fifteenth volume to more prominence than any of its predecessors. Go on and prosper.

THE CAPTAINS OF INDUSTRY.

(*Planet, Chatham, Ont.*)

THE CANADIAN MANUFACTURER is publishing a series of interesting descriptive articles of leading manufacturers, and in each issue of the paper artotypes of gentlemen prominently connected with Canadian industries are given. The last issue contains an excellent picture of our worthy citizen, Mr. D. R. Van Allen, whose name has stood so high amongst the manufacturers of Canada during the past quarter of a century.

THE MOST INTERESTING TRADE JOURNAL.

(*Enterprise, Dutton, Ont.*)

THE CANADIAN MANUFACTURER, published in the manufacturing interests of the Dominion, is the most interesting trade journal that comes to our office. Its neat typographical appearance, and the interesting matter it furnishes its readers, ought to insure it a large patronage among the manufacturers of the Dominion. The recent publication of a series of biographical sketches, accompanied by very excellent artotype portraits of the leading "Captains of Canadian Industry," enhances its value.

IN EVERY SENSE THOROUGHLY CANADIAN.

(*News, Berlin, Ont.*)

WE are pleased to note the great progress made by THE CANADIAN MANUFACTURER, which shows every evidence of improvement and prosperity. It is a good representative of the great industries it promotes, and is in every sense thoroughly Canadian. It is publishing very fine and elegant plates of what it calls "Captains of Canadian Industry." All these men are great because of the N.P.

A STERLING PERIODICAL.

(*Progress, St. John, N.B.*)

THE CANADIAN MANUFACTURER ought to be proud of the illustrations that regularly adorn that sterling periodical. They are highly creditable to Canadian taste and enterprise.

NOT TO BE EQUALLED.

(*Guide, Port Hope, Ont.*)

THE CANADIAN MANUFACTURER is a well conducted journal — a better one in the interests of manufacturers could not well be found. It has for several months past been publishing portraits of the "Captains of Canadian Industry." This issue has one of our respected neighbor, James Crossen, Esq., Cobourg.

SIGNS OF PROSPERITY.

(*Industrial World, Chicago, Ill.*)

THE CANADIAN MANUFACTURER, published at Toronto, Canada, has been improved in typographical make-up and other respects. We are pleased to note these signs of prosperity in the affairs of our industrial neighbour.

BRIGHTEST AND BEST.

(*Farm Machinery, St. Louis, Mo.*)

THE CANADIAN MANUFACTURER is the brightest and best Dominion exchange that comes to our round table. The evidence of its prosperity and power for the promotion of Canadian industries are many and pleasing.

AN ABLE CHAMPION OF THE N. P.

(American Manufacturer, Pittsburg, Pa.)

THE CANADIAN MANUFACTURER, published bi-monthly, at Toronto, is a most excellent paper of its class, and an able champion of the "National Policy," (Protection) of the Dominion. It has been established quite a number of years, and presents every evidence of prosperity.

A COMMENDABLE STROKE OF ENTERPRISE.

(Iron Trade Review, Cleveland, Ohio.)

THERE is no journal in Canada that is doing more or better work in building up the industries of the Dominion than THE CANADIAN MANUFACTURER, published at Toronto. It is a staunch advocate of protection to Canadian manufacturers, and its cartoons in support of that policy are very telling. It is showing a commendable stroke of enterprise by publishing a series of portraits and sketches of "Captains of Canadian Industry."

IN KEEPING WITH ITS WELL-KNOWN REPUTATION.

(Herald of Trade, San Francisco, Cal.)

THE CANADIAN MANUFACTURER, one of the most interesting of our exchanges from across the line, is publishing a series of illustrated biographical sketches of "Captains of Canadian Industry." With each issue of THE MANUFACTURER a supplement is issued giving the portraits of the subjects of the sketches, made by the artotype process. The enterprise is a very creditable one to the journal and entirely in keeping with its well-known reputation all through the United States as a live and thorough-going industrial and trade journal.

CANADA'S GREAT TRADE JOURNAL.

(Millstone, Indianapolis, Ind.)

THERE is one great trade journal in Canada, and that is THE CANADIAN MANUFACTURER, published at Toronto. While thoroughly loyal and patriotic, it more worthily compares with the high type of American trade journals than any Canadian journal we know anything about. At the present time it is furnishing a supplementary sheet with each number containing artotypes, of most excellent character, of the "Captains of Canadian Industry," and a fine-appearing lot of gentlemen they are, too. Our miller friends in Canada will find a subscription to this journal a paying investment.

AN INTERESTING FEATURE IN THE HISTORY OF CANADA.

(Baldwin's Textile Designer, Brasher Falls, New York.)

THE CANADIAN MANUFACTURER has of late been making itself very attractive. On June 1st, its publishers began publishing a series of illustrated biographical sketches of "Captains of Canadian Industry," giving in a supplementary form, four artotype portraits of leading Canadian manufacturers in each successive issue, which makes the journal valuable as a pictorial album, as well as becoming an interesting feature in the history of the Dominion.

A FIRST-CLASS TRADE PAPER.

(Machinery Market, London, England.)

WE have evidence before us that Canada is not behindhand in the matter of first-class trade papers. THE CANADIAN MANUFACTURER, published in Toronto, and now in its fifteenth volume, is one of the best trade publications we know. The proprietors have lately commenced the issue of a series of portraits of "Captains of Canadian Industry." These are issued in a supplementary sheet, and are beautifully got up by a special process called "artotype." Our contemporary is evidently well supported, as it deserves to be, and we wish it continued success and increased prosperity.

CANADIAN COPYRIGHT.

Canadian manufacturers who are connected with the book publishing business, have discovered that "eternal vigilance" is necessary to the perpetuation of their several trades. Under existing law the English copyright holds good in this country, and no Canadian publisher can print an English copyright book without the consent of the author. If the Canadian rights of English authors are purchased and the literature actually published in Canada, that fact is a bar to the introduction into Canada of any foreign editions; but in the absence of any such acquired rights, American editions may be brought into Canada on the payment of a tariff duty of fifteen per cent. to the Government, and twelve and a half per cent. to the English owner of the copyright. But the English author to enjoy the full benefits of [this law, and to shut out the competition of American book pirates, must have his book manufactured in Canada. This gives him some return for his labor, and at the same time it gives employment to Canadian paper makers, Canadian printers, Canadian book-binders and a host of other Canadian bread-winners.

But English authors do not desire to be compelled to have their books made in Canada to secure the benefit of the English copyright law; and they are now making strong endeavors to bring about a situation by which Canadian book readers must either buy English editions or go without; and to this end a bill was introduced at the last session of the Dominion Parliament, intended to bring Canada under the provisions of what is known as the Berne international copyright law. This law is the outcome of a convention held a couple of years ago in Berne, Switzerland, in which Great Britain, France, Germany, Spain and Italy guaranteed that the literary works of the authors of these several countries shall be as sacred to them in any and all of the countries embraced in the convention as in their own. Neither Canada nor the United States ever subscribed to the Berne treaty. There are comparatively few books published in Canada in other than the English language; and while Canadian publishers are restricted in the publication of English copyright works, the United States is not so restricted, and Canadian book buyers are free to buy American reprints of English works, as we have shown, while Canadian book-makers are forbidden by law from manufacturing them. The situation is an anomaly in which Canadian publishers are discriminated against, and in which American publishers are specially favored. If the bill now pending in

the Dominion Parliament becomes law, and Canada is brought within the operation of the Berne treaty, any author in any of the treaty countries, having copyrighted his work in his own country, and registered the fact in all the other countries, effectually effects the prohibition of the production of his work in all the treaty countries except at his own good will and pleasure; and not only this, but none but the authorized editions of such work can be allowed in any such countries.

The existing law is sufficiently hard on Canadian book-makers and book sellers, but the proposed law would be disastrous to their interests; and the Copyright Association of Canada are endeavoring to have the pending bill superseded by one that will not work them such injustice. They propose to ask the Government to make a law which will refuse copyright in Canada to all United States authors until such time as the United States enters into a copyright treaty with Great Britain and Canada; that the condition for obtaining Canadian copyright shall require that the work be printed and published in Canada within two months after first publication anywhere else; that any work intended to be copyrighted in Canada shall, before or simultaneously with its publication elsewhere, be registered in Canada; that should the person entitled to Canadian copyright fail to take advantage of the provisions of the law, any Canadian publisher may issue the work, under license of the proper authority, said license not to convey any exclusive right; the proposing publisher to pay the author through the Canadian Government a royalty of ten per cent. on the retail price of each copy sold, and that the importation of foreign reprints of works of which the copyright is subsisting in Great Britain, and which have been registered for publication in Canada, be prohibited.

It is to be hoped that all existing laws which discriminate against Canadian publishers may be repealed, and that the law proposed by the copyright association, or some other to the same effect, be enacted. Existing laws do not prohibit the importation of cheap American reprints of English books, while the cost of the English made books is so high that Canadian readers cannot afford to buy them.

THE CANADIAN SEWER PIPE INDUSTRY.

IN the October issue of the *Canadian Architect and Builder* it was stated that the editor was in receipt of a letter from a gentleman in the United States, in which he stated that he was thinking of establishing a sewer pipe factory in Canada, and requesting information regarding the market for the article. He also wished to learn if there was any sewer pipe manufactured in Canada and to what extent; his understanding being that the largest size at present manufactured in the country was six-inch pipe. Enquiries were instituted by the editor of the paper named, with a view to obtaining the information sought for, which information was to the following effect:—"A wide field lies open to the manufacturer of a first class article in that line in Canada. There are at present two manufactories in Canada—one in Ontario, the other in Quebec. These supply but a very small percentage of the sewer pipe used in this country. The largest proportion is imported either from Scotland or the United States. That such a large proportion of sewer pipe has to be imported is due to the inferiority of the

pipe at present manufactured in Canada as compared with the imported article." "We give these statements to the public," says the *Architect and Builder*, "with no desire to injure in any way any industry at present in operation in Canada, but rather to point out to the proprietors of such the apparent necessity of improving the quality of their output, if they desire to supplant the manufacture of other countries at present used so largely in our public works." That paper also "considers it a duty to encourage the establishment in Canada of manufactures wherever there appears to be a profitable opening for the same."

The facts stated in the foregoing, and the conclusions drawn from them, were of such a misleading character as to induce us to write to the managers of the only two sewer pipe factories in Canada, requesting their views regarding the article published in the *Architect and Builder*. Mr. A. E. Carpenter, president of the Hamilton and Toronto Sewer Pipe Company, says:—"The article referred to is very misleading and unfair to the sewer pipe industry in Canada. Having at one time held half the stock in each of the existing factories in Canada—the Standard Drain Pipe Company, of St. Johns, Que., and the Campbell Sewer Pipe Company, of Hamilton, Ont., and having made sales for both companies—I think I know the sewer pipe trade of the country quite as well as those giving the information referred to in the *Architect and Builder*. The Hamilton factory, which was established in 1860, was quite small at the beginning, but has now become a large establishment in which are made all sizes of sewer pipe from four inches up to eighteen inches diameter, and all sizes of junctions appertaining to any of these sizes; the present output being double what it was three years ago. We supply nearly all the sewer pipe used in Ontario, except in Toronto, where a prejudice has arisen against the domestic make through the use of a "slip" glazed pipe which was made in Yorkville (a suburb of Toronto), several years ago. That pipe did not give satisfaction; and the "slip" pipe, like the factory that produced it, is a thing of the past. Twenty-eight years ago the "slip" pipe was also manufactured at the Hamilton factory, but its manufacture was discontinued years ago, though American manufacturers, and dealers in American pipe, lose no opportunity of using this fact to the disadvantage of the present industry. This company have heretofore supplied in part and do now supply in full all the pipe used in Hamilton, St. Catharines, St. Thomas, Brantford, Chatham and Belleville, which, until recently, have drawn a part of their pipe from factories in the United States. Until this year we have also supplied Kingston, their supplies now being drawn from the factory at St. Johns, Que. The smaller towns in Ontario also draw their supplies from our factory, among which we name Sarnia, Strathroy, Dunnville, Guelph, Galt, Owen Sound, and Niagara Falls. We send to you for your information a tabulated statement concerning all the sewers constructed in the city of Hamilton up to January 1, 1888, as officially reported by Mr. William Haskins, City Engineer, in which it is shown that the pipe was all from our factory except the twenty-four inch pipe, which was imported from the United States, and which gave very poor satisfaction, as a large proportion of it has been taken up because of its defectiveness. Several miles of our pipe have been placed since this report was

made. We feel very much indebted to you for calling our attention to the article in question, and for your interest in the matter. The *Architect and Builder* could very easily have ascertained the facts before publishing an article calculated to inflict a great deal of injury upon us."

The tabulated statement of Mr. Haskins, City Engineer, alluded to, contains a certificate from that gentleman that the sewer pipe referred to in his statement was all manufactured by the Campbell Sewer Pipe Company, except that for two sewers, which was twenty-four inch imported pipe. The aggregate length of the sewers in the city amounts to about 159,000 feet, while that constructed of imported pipe amounts to but only about one mile.

These facts seem to be conclusive as to the superior excellence of the pipe manufactured by the Hamilton and Toronto Sewer Pipe Company, at their works in Hamilton. Regarding the products of the Standard Drain Pipe Company, of St. Johns, Que., Mr. W. C. Trotter, the president of the Company says :

"I have to thank you for drawing my attention to the article in the *Architect and Builder*. Such statements are too frequently made by those who either have no desire to obtain correct information, or who will not use it justly when they have obtained it. When our factory was started here in 1884, the question was at once raised by importers of Scotch pipe as to the strength and durability of our product, and the argument was advanced, 'Scotch pipe has been used here for fifty years, and is known to be of good and durable quality. If you buy Canadian pipe you do not know what you are getting.' Notwithstanding which opposition, some of the large dealers took up the sale of our pipe, the article affording the utmost satisfaction. Pipe of our manufacture has been subjected to the most severe tests, and has been proven to be first quality in every respect, not only fulfilling the requirements of engineers as regards resistance to crushing pressure, but far exceeding any possible requirement. For instance, our contract with the city of Montreal calls for twelve inch pipes which will sustain a crushing weight of 2,000 pounds to the square inch—but the official test, made by P. W. St. George, Esq., C. E., City Surveyor, shows that our twelve-inch pipe withstood an average pressure of 5,696 pounds to the square inch, which was 3,696 pounds in excess of the requirement. In a competitive test as to the absorption of moisture made by Mr. St. George as between Scotch pipe and that manufactured by this company, the results showed that our pipe absorbed but one unit in forty-six units of pipe, while the Scotch pipe absorbed one unit in eighteen of its weight. This shows greater density of body and non-absorbing qualities two and a half times greater in our pipe than in Scotch pipe. Again, our pipe has been subjected to the 'smoke test' in competition with those brands of Scotch pipe most largely imported into Canada. This test was made in the Montreal corporation yard and conducted by R. P. Fleming, Esq., C. E., Engineer to the Sanitary Association of Montreal. In Mr. Fleming's report he says : 'A drain consisting of eight lengths of straight pipe and three junction pieces, was submitted to the crucial smoke test, which the pipe withstood in a most satisfactory manner ; while a second drain of inferior pipe from another factory, when submitted to the same test, showed numerous defects through

which the smoke escaped in large quantities.' The drain of inferior pipe referred to was laid with Scotch pipe."

The facts which are here stated regarding this important Canadian industry are incontrovertible ; and they prove that the statements made by the *Architect and Builder* are not only wrong and misleading, but absolutely vicious. It is difficult to imagine why a respectable Canadian journal should proclaim that Canadian sewer pipe is inferior to the imported article, when enquiry in proper quarters would have elicited contrary facts. That no such enquiry was made is evident from the testimony of the managers of the only two sewer pipe factories in Canada, and the fair inference is that the *Architect and Builder* has been unwisely influenced by dealers in foreign made pipe, who are naturally prejudiced against the domestic product. An explanation is now in order.

CANADA NEEDS MORE PROTECTED INDUSTRIES.

DEMAGOGUEISM seems to be run mad in the United States. That fact is particularly and painfully noticeable in the acts of both the President and both branches of Congress. Canadians have cause for rejoicing, in that recent events have demonstrated that much of the proposed love for Canada expressed by our Yankee friends was grounded in conceit and sordid avarice, the ulterior object being to denationalize Canada, sever it from its connection with the Mother Country and make it a part and parcel of the American Union. If Canada does not study the course in which events in the United States are shaping themselves she will not be true to her own best interests. The specious arguments some time since put forth by Mr. Wiman, Mr. Butterworth, Professor Goldwin Smith and lesser lights of the Annexation Party in behalf of Commercial Union, and their efforts to show that the autonomy of Canada would not be hazarded by such union, are demolished by the stand taken by Senator Sherman, who shows very clearly that if Canada desires any closer relations of any sort with the United States it can only be by becoming an integral part of that republic. "Forewarned, forearmed," and Canada can now observe without the aid of spectacles that Commercial Union and Annexation are synonymous terms.

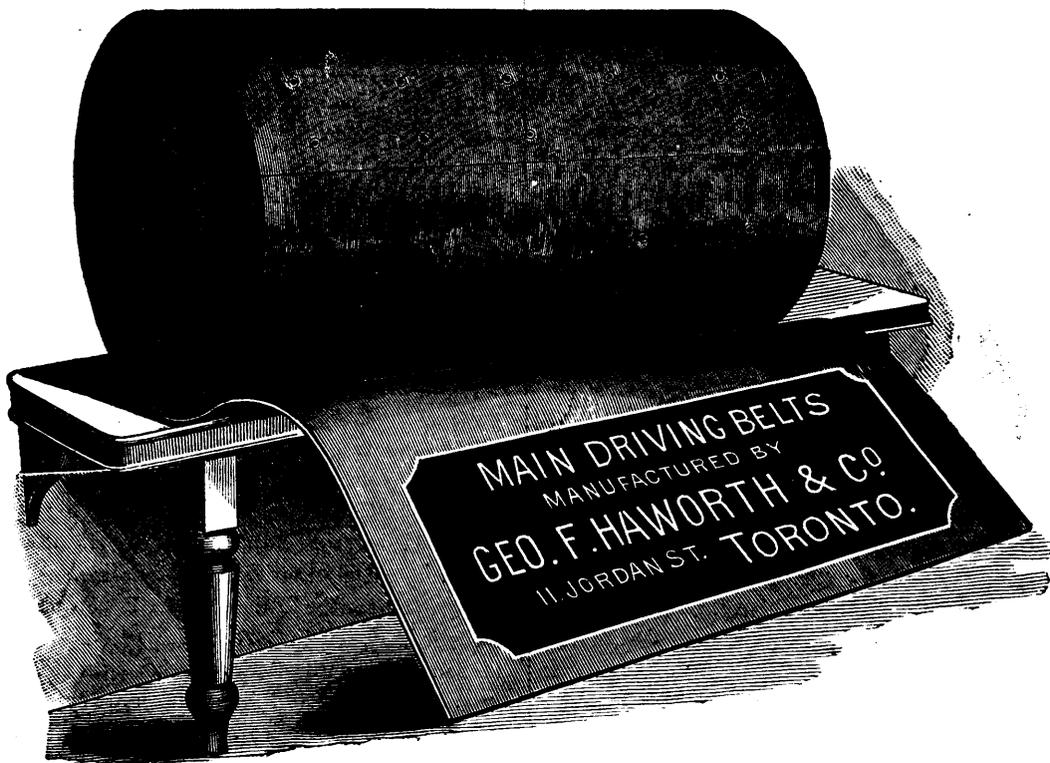
Canada does not desire to cast her lot with the Great Republic, and there are innumerable good and sufficient reasons why she should not. But while unanimous sentiment may be in this direction, it should be remembered that our Yankee friends are a covetous people who are possessed of the idea that their manifest destiny is to absorb all of the North American Continent, and the isles of the sea adjacent thereto, and to give the north pole to their screaming eagle as a roosting place. They will do this if they are permitted to do it, and it remains with Canada to thwart the ambitious project. The way to do this is to be able to do it. Recent events in the United States show plainly that the temper of the people there is to force Canada to the abandonment of some of her most valuable rights, failing in which to force a quarrel which would lead to war, and the war to subjugation and annexation. There may be more or less delay in carrying out the programme, but it is the programme nevertheless which many would like to see carried out.

- NOTICE -

ON AND AFTER THE 10TH OF OCTOBER, WE WILL SELL
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PRICE LIST FOR HOYT'S AMERICAN
PURE OAK-TANNED LEATHER BELTING
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TORONTO.

Canada can thwart and frustrate all this arrangement by preparing for it, and that preparation should consist largely in fostering and building up in Canada such industries as would be of priceless advantage to us under any circumstances. Will Canada cast a retrospective glance at the situation that prevailed in the South during the war of the Rebellion? Without arsenal facilities for making even a pistol or musket; without a gun foundry; without shops capable of manufacturing locomotives; without rail mills; with but very few and small woollen and cotton factories; without sufficient tanneries to produce enough leather to make shoes for the soldiers in the field, to say nothing of those not in the army, and dependent upon blockade running for medicines, arms, ammunition, clothing, food and other necessaries, the condition was a deplorable one indeed. The indomitable pluck and bravery of the Southern people was the admiration of the world; but the admiration of the world did not preserve them from ultimate defeat. Barren as they were of these essentials, the wonder is that they protracted their resistance for four years; and there can be no doubt that such a brave people would have achieved their independence if their leaders had not always been imbued with the idea that good policy required they should always buy in the cheapest market. Previously American workshops in the Northern States and Great Britain had always supplied their wants in this direction, and when the lines of warfare were drawn they found themselves in a terribly awkward and helpless condition. Personal bravery was a commendable quality, but it did not supply arms or ammunition, food, clothing or medicines.

Canada at this time would not be in such helpless condition. We have factories for making cotton and woollen goods; shops for building locomotives, engines and machinery; some facilities for making arms and ammunition, but no gun foundries, no rail mills and no large arsenals. It is true that as long as Canada maintains her British connection our deficiencies can be supplied from the Mother Country, even though war should exist; but Canada can never hope to be able to successfully face all the adverse circumstances that might possibly surround her without the facilities for manufacturing within her own boundaries all things necessary for offence as well as defence.

"THIS IS POSITIVE."

RECENTLY in the House of Representatives of the United States Congress, Mr. Hatch, of Missouri, chairman of the Committee on Agriculture, quoted a paragraph from a report of Mr. Washington, Consular Agent of the United States at London, Ontario, transmitted to the Department of State, to the effect that he was "creditably informed by a Canadian farmer that he had just bought a Walter A. Woods American self-binding reaper for \$110 laid down in an American city near the lines," and that "the price of the same machine in the same place to an American farmer would be from \$150 to \$170." Mr. Hatch stated that he had also, in a speech previously delivered by him at Kirksville, Missouri, said that the Oliver Chilled Plow Works, at South Bend, Indiana, exported plows to Canada, and sold them at an average cost of \$4 less than they were sold at to American farmers; that since that time a

gentleman residing at Kirksville had received a letter from the Oliver Chilled Plow Works denying the correctness of his statement, declaring that the concern had little or no trade with Canada, and that he had written to the Oliver Chilled Plow Works, reiterating his statement, giving as his authority Mr. Washington, Consular Agent of the United States at London, Ontario. In support of what he said, he read a report transmitted to the Department of State by Mr. Washington, stating that the Oliver chilled plow, which in the United States cost \$16, could be purchased in Canada for \$12.

We know nothing whatever concerning the Mr. Washington alluded to, but judging from the fact that he is a Consular Agent of the United States, presume that he is a free trader by profession and a staunch supporter of Mr. Cleveland's government. At the same time, however, we would naturally suppose that he is a gentleman who would never find it difficult to confine himself strictly to actualities, nor indulge in borrowing largely from the pages of unmitigated fiction even to help his political party on the eve of a presidential election. But the world is full of people with queer ideas.

In reply to the statement regarding the reaping machine, the Walter A. Wood Mowing and Reaping Machine Company promptly telegraphed their denial in these words: "We authorize the publication of an explicit denial of Congressman Hatch's statement. We have not sold any machines to Canada so far as we know, or are able to ascertain by the most careful investigation. Our machines are sold as low in the United States as in any country in the world. This is positive."

In reply to a note to the Oliver Chilled Plow Works, requesting the facts regarding the matter in which their name was used by Mr. Washington, we received the following reply:

OLIVER CHILLED PLOW WORKS,
SOUTH BEND, IND., Oct. 12, 1888.

Editor CANADIAN MANUFACTURER:

We acknowledge receipt of your favor of the 10th inst., and thank you for your kindness in writing to us. The statement of Mr. Hatch, of Missouri, relative to our export of plows to Canada to which you refer, seems to have been based upon a report made by Mr. Washington, Commercial Agent of the United States at London, Ontario.

We beg to say that Mr. Washington's statement is false, and was undoubtedly made for campaign purposes in the contest which is now in progress in this country. There is not a word of truth in it, and we may say for your information that we export no plows to Canada, and no Canadian dealer buys them from us. The Canadian tariff of 35 per cent. prohibits such export, and all the goods we now ship to Canada are extras and repairs for plows sold there before the present Canadian tariff came into effect. While we should be pleased to sell to Canadian on the same terms that we do to American dealers, we could do no better, and the tariff, as aforesaid, prevents us from doing even that much.

Yours truly,

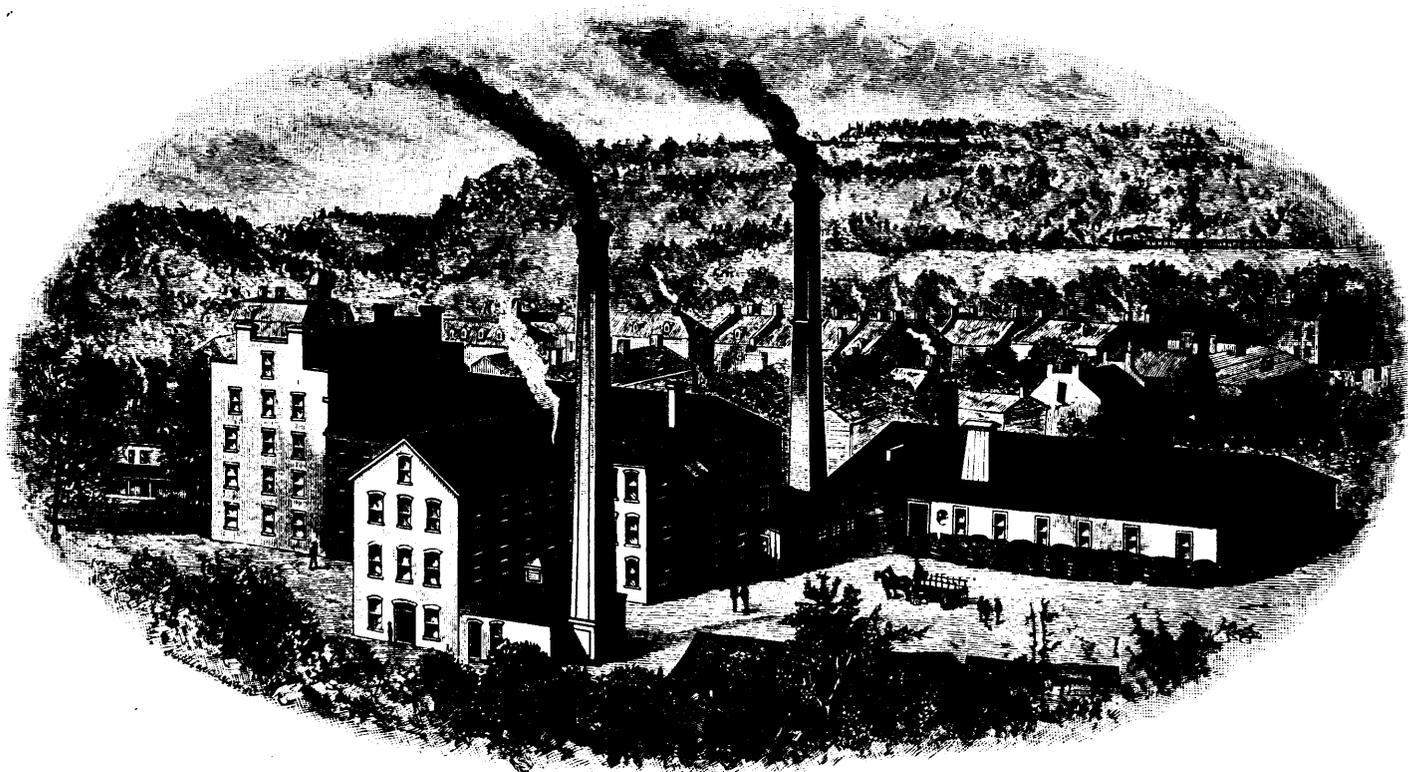
OLIVER CHILLED PLOW WORKS.

Mr. Washington seems to have made a few mistakes in his report to his superiors at Washington City, and if all of his reports are equally wide of the mark no reliance whatever can be placed in them. The Walter A. Woods Mowing and Reaping Machine Company say that they have never sold any of their machines in Canada, and that their machines are sold as low in the United States as in any country in the world; therefore, the Canadian farmer who told Mr. Washington that

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he had bought one of these reapers for \$110, the price of the same machine to American farmers being from \$150 to \$170 simply could not distinguish the false from the true, with a decided bias towards the false. Mr. Washington's statement regarding the Oliver chilled plows is not sustained by even a mythical Canadian farmer, and the Oliver Chilled Plow Works denounce his report as "false," and "not a word of truth in it," for they "export no plows to Canada, and no Canadian dealer buys them" from the company. Mr. Washington has evidently been associating with some Canadian free traders who have imposed upon his credibility, and who are no friends to Canadian manufacturers of agricultural implements.

SPECIAL ADVERTISEMENTS.

TISDALE'S BRANTFORD IRON STABLE FILTINGS.—We lose no job we can figure upon. Catalogue sent free. The B. G. Tisdale Co., Brantford, Canada.

LATHE WANTED.—A good second-hand turning lathe, fourteen feet between centres. Must be in good order. Give name of maker, swing, etc., with lowest price. Address P.O. Drawer 1946, Montreal.

KNITTING **CREELMAN BROS.,** **MACHINES.**
Georgetown, Ont.

EDITORIAL NOTES.

REV. BURCHARD was Mr. Blaine's friend four years ago when, just previous to the election, he made his unfortunate "Rum, Romanism and Rebellion" alliteration in favor of the Republican candidate. It defeated Mr. Blaine and gave Mr. Cleveland the presidency. It would be a singular coincidence if at this election Mr. Cleveland should be defeated through the unwise letter written in his behalf by his friend Lord Sackville.

THE authorities of the Canadian Bank of Commerce give an emphatic contradiction to the report in circulation that \$10 bills on that bank have been counterfeited. There have been none of the alleged counterfeit notes in circulation in this city, and at none of the bank's branches have any been detected. The \$10 note counterfeit some time since has been retired from circulation and there is no counterfeit on notes being issued by the bank.

SIR LEONARD TILLEY, Lieutenant-Governor of New Brunswick, while in Toronto a few days ago, paid a friendly visit to **THE CANADIAN MANUFACTURER**. Sir Leonard is a warm friend of this journal, and had the kindness to say that it was doing good service in the field in which it works—that as the advocate of Canadian manufacturing industries it is invaluable; and that its zeal in behalf of Canada's National Policy was appreciated by all who have the true interests of the Dominion at heart.

THE Montreal *Witness* gives currency to the exploded story about the Oliver Chilled Plow Company, an American concern selling their plows in Canada for twelve dollars, when they refuse to sell the same article in the United States for less than sixteen dollars. Its object in doing this is to have a fling

at the theory of tariff protection and to show how the American farmer is being robbed by it. The point might contain some pungency if there was any truth in the statement. But there is not a word of truth in it, and therefore no argument can be based upon it.

"THE action of the customs underlings towards a prominent gas man, writes our representative at the Toronto meeting, and as noted elsewhere, was an outrage."—*Light, Heat and Power*.

The indignation of our contemporary arises from the fact that some of the "prominent gas men" from the United States who recently attended the convention of the American Gas Light Association, in Toronto, attempted to bring dutiable goods into Canada without paying duties thereon. The display of a few American silver dollars before the eyes of the Canadian customs officers did not swerve them from their duty, although the attempt to smuggle in books, cigars, watches, cutlery, etc., and their failure to do so through the vigilance of the officers is spoken of as "ludicrous."

THE *Empire* says that the fuss that is being raised in the United States because Lord Sackville, British Minister at Washington, gave a private answer to a private friend's enquiries about the Presidential election, is not intended to have any serious diplomatic result; that it is only an electioneering dodge to make the electors think that President Cleveland has British sympathies, and so work upon the prejudices of the anti-British voter. The *Empire* seems forgetful of the fact that Lord Sackville is really a high functionary, and that, as such, any utterances he may make regarding the purely local affairs of the country to which he is the accredited minister, must of necessity be flavored with the prestige of his official position, although his views may have been expressed privately to a private friend. The *Empire* may consider the writing of that letter "an electioneering dodge," but the letter was, nevertheless, written by the British minister who expressed "British sympathy" for President Cleveland. It is interesting to watch the course of events in the United States pending this Presidential campaign, and to see how the irony of fate produces an unfortunate letter from Lord Sackville which will probably do for Mr. Cleveland in 1888, just what Rev. Burchard's "Rum, Romanism and Rebellion" alliteration did for Mr. Blaine in 1884. In 1884, Mr. Cleveland was elected through the blunder of Mr. Blaine's friend, while in 1888 he will most probably be defeated through the blunder of his own friend.

ADMIRERS of Canada and of Canadian persons, places and things, who desire to keep within handy reach a valuable souvenir regarding them, could not gratify their wishes more successfully than by keeping the successive numbers of *The Dominion Illustrated*, published in Montreal by G. E. Desbarats & Son. There are but few if any Canadians who could not acquire valuable information regarding this country by careful and constant study of this work.

MR. G. B. STEBBINS, Detroit, Mich., has sent us *The American Protectionists' Manual*, of which he is the author. The eighteenth thousand of this valuable book has gone through the press; the present being a revised edition with changes and late facts. It is a complete and compact magazine of facts and arguments bearing on the great issue, and which are as applicable to Canada as to the United States. Supporters of the N.P. may gain some valuable information from the book.

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If you want a really good Driving Belt, or any other Belt, send to us and we will give you one which will give you thorough satisfaction. You will find both our prices and the quality of our goods all right.

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Manufacturing.

This department of the "Canadian Manufacturer" is considered of special value to our readers because of the information contained therein. With a view to sustaining its interesting features, friends are invited to contribute any items of information coming to their knowledge regarding any Canadian manufacturing enterprises. Be concise and explicit. State facts clearly, giving correct name and address of person or firm alluded to, and nature of business.

THE Montreal Car-wheel Company have increased their capital stock from \$25,000, to \$75,000.

THE carriage works of Messrs. Fisher & Co., Kincardine, Ont., were destroyed by fire Oct. 18.

THE Howard Pulpware Company, Montreal, have been incorporated with \$20,000 capital stock.

THE Edwards Oil Burning Company of Toronto, have been incorporated with a capital stock of \$100,000.

THE Alberta Lumber Co., have commenced the erection of their mill at Red Deer, north of Calgary, Alberta.

BUZWELL'S saw mills on Spanish River, near Algoma Mills, Ont., were destroyed by fire Oct. 15, loss \$40,000.

THE Almonte Electric Light Company, Almonte, Ont., have been incorporated with a capital stock of \$20,000.

A LARGE grain elevator will probably be built soon at Teeswater, Ont. Mr. W. R. Thompson or Dr. Gillies can give information.

MESSRS. ROBSON & LANCHARD, Oshawa, Ont., have recently built a large addition to their tannery works in that town.

THE McClary Manufacturing Company, London, Ont., have provided a gymnasium and reading-room for their employes.

THE planing mills of Messrs. Graves & Co., at Mount Brydges, near London, Ont., were destroyed by fire a few days ago.

THE slack barrel coopers throughout Ontario are pushed with orders for barrels in which to market the present apple crop.

THE Chaudiere Electric Light and Power Company, Ottawa, have increased their capital stock from \$40,000 to \$100,000.

MESSRS. D. H. McMILLAN & Co., of Winnipeg, are building an elevator at Indian Head, Assa. The capacity will be 25,000 bushels.

THE saw-mill and furniture factory of Mr. C. Heiser, at Neustadt, Ont., were destroyed by fire October 19. Loss about \$5,000.

THE gas well at Thorold is now down 1,600 feet, but no gas has yet been struck. The drill is now going through a stratum of slate.

THE Auburn woollen mills, Peterboro, Ont., are putting in eight more broad looms. They have now nearly a complete outfit of broad looms.

THE extensive saw mill of Mr. Isaac Cockburn, at Muskoka Bay, near Gravenhurst, Ont., was destroyed by fire Oct. 26, loss about \$20,000.

A VALUABLE deposit of coal has been found at Oslow, near Truro, N.S., and a company with \$50,000 capital is being stocked to open it up.

THE contract for preparing the site for the mammoth Ross-McLaren saw mills at Westminster, B.C., has been let, and the work is now in progress.

MESSRS. ROBSON & LAUCLAND, Oshawa, Ont., have recently completed an addition to their tannery at that place, 30x20 feet, three stories high.

THE distillery of Messrs. J. P. Wiser & Son, at Prescott, Ont., was destroyed by fire October 28. The works will be in operation again in about two months.

MR. JAMES LESLIE, Montreal, manufacturer of card clothing, loom reeds, and leather belting, is having a new automatic engine put into his factory in that city.

THE Albion Iron Works, Victoria, B.C., built the four large boilers recently introduced into the mills of the Hastings Saw-Mill Company at Vancouver, B.C.

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NEW BRUNSWICK FOUNDRY.

RAILWAY CAR WORKS, | PORTLAND ROLLING MILLS,
PARADISE ROW. | STRAIT SHORE.
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Railway Cars of all description. Chilled Car Wheels, "Washburn Peerless" Steel Car Wheels. Car. Machine, Mill, Ship, and all kinds of Castings. Steam Engines, Mill and other Machinery. Nail-Plate, Bar Iron, Street and Mine Rails, Ships' Iron Knees, Hammered Car Axles, Shafting and Shapes.

BRUSHES

Paint, Whitewash, Kalsomine, Household Brushes.
 Horse, Factory, Machine Brushes, etc., etc.
 Corn Brooms and Whisks.

MANUFACTURED BY

T. S. SIMMS & CO., - ST. JOHN, N.B.



SEALED TENDERS, addressed to the undersigned and endorsed "Tender for Hot Water Heating Apparatus, Guelph, Ont.," will be received until Monday, 12th November next, for the construction of a Hot Water Heating Apparatus at the Guelph Post Office Building.

Plans and specification can be seen and form of tender and all necessary information obtained at this Department and at the Post office, Guelph, on and after Friday 26th instant.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,
 A. GOEBEL,
 Secretary.

Department of Public Works,
 Ottawa, October 24th, 1888.

It is said that Messrs. Wm. & J. G. Greey, Toronto, manufacturers of milling machinery, etc., contemplate the erection of a large flouring mill at Port Arthur, Ont.

MESSRS. J. HARRIS & Co., St. John, N.B., will build three snow plows for the Temiscouata Railway. They will also construct a quantity of rolling stock for the same road.

MESSRS. BUTTON, WRIGHT & Co., who operate a furniture factory at Teeswater, Ont., will be granted a loan of \$5,000 by that municipality to extend and enlarge their works.

MR. JAMES GUSTIN, of Ingersoll, Ont., has commenced the erection of a flouring mill on the premises where his old building stood and which was burned down some time since.

THE St. Lawrence Paper Company have been voted a bonus of \$25,000 by the town of Morrisburg, Ont., as inducement for the location of their new paper mills at that place.

THE knitting factory of Messrs. Noyes & Platchette, Galt, Ont., was destroyed by fire Oct. 13, loss about \$2,500. This is a new firm, having been in business but a few months.

MR. HIRAM WALKER, Walkerville, Ont., having secured a large interest in the casket works of Messrs. A. C. Rice & Co., at present located in Sarnia, will move them to Walkerville.

THE G. & J. Brown Mfg Company, Belleville, Ont., have recently been making considerable shipments of small work to Sault Ste. Marie, Ont., for railroad construction.

THE R. S. Williams Piano Company, Oshawa, Ont., are building a large three-story wing to their works. The premises they occupy were once known as the Joseph Hall Machine Works.

MESSRS. CHAS. BOECKH & SONS, Toronto, have recently received a consignment of 21 carloads of choice broom corn, aggregating about 350,000 pounds, for their broom factory in this city.

MESSRS. THOMPSON, TASSANT & Co., who operate a large sawmill at Teeswater, Ont., require better facilities for the purposes of their business, and will abandon the place unless they obtain them.

MESSRS. THOMAS CONNOR & SONS, proprietors of the New Brunswick Cordage Works, Portland, N. B., will make extensive additions to their factory, and considerable new machinery will be introduced.

A PROPOSAL has been made to the town of Napanee to put up glass works there employing 500 hands, on condition of a free site, exemption from taxation for ten years, and a loan of \$10,000.

THE Albion Iron Works Company, Victoria, B. C., are building the 700 horse-power engines and boilers which are to be placed in the new steam tug now being built in that city for Messrs. Dunsmuir & Sons.

MR. ROBERT DAVIES, proprietor of the Dominion Brewery, Toronto, is making extensive additions to his brewery plant. At present he is unable to fill all the orders being received for certain brands of his goods.

MR. W. A. ERB, Apohagin, N. B., is building a machine shop which is to be operated in connection with his steam saw and grist mills. The new building will be 48 x 30 feet, three stories high and thoroughly equipped.

THE capital stock of the Hamilton Forge Company, Hamilton, Ont., has been increased to \$100,000. At the recent meeting of the company a dividend of seven per cent. was declared upon the earnings of the past year.

MR. THOMAS ROBSON, Lindsay, Ont., is placing a new steam engine, battery of boilers, and other machinery, in his tannery at that place. Mr. Robson is one of the largest manufacturers of pebbled leather in Ontario.

MESSRS. WOOD & BODOIN, Cowansville, Que., are making additions to their shops with a view to entering largely upon the manufacture of the Hall & Wright sap evaporator, sap spouts, sap buckets, and all kinds of sugar makers' supplies.

THE Galt Knitting Co., Galt, Ont., are taking out the old engine which has done duty in their works for many years, and replacing it with a fine new eighty horse-power Wheelock engine from the works of Messrs. Goldie & McCulloch, that town.

MR. W. J. HARE, Oshawa, Ont., has let the contract for the construction of a new foundry, to be erected on the site of that recently destroyed. The main building will be 50x40 feet, two stories high, and the moulding shop 50x50 feet, both of brick.

MESSRS. CRAIG & SON, Montreal, have acquired the Canadian right to use the process recently discovered by Mr. T. Belanger, of Messrs. Belanger Bros., by which the brilliancy of the electric light is greatly increased, and allowing each light to be governed at will.

THE extensive saw mill and lumber yards of Mr. Robert McFarlane, at Montreal, were destroyed by fire October 24; loss about \$30,000. Mr. McFarlane has recently put down an expensive plant of machinery, and had over 50,000 feet of lumber stocked in his yards.

MR. H. R. ROBERTSON, the builder of the great timber raft that was built at Joggins a few months ago, and which was successfully towed to New York, will build another raft at the same place next season. It will be 600 feet long and contain 20,000 pieces of timber.

MR. W. F. HUTCHINSON, Sherbrooke, Que., has recently invented and patented some simple but effective machinery by which he can manufacture 60,000 wooden tooth-picks per hour. He has established a factory in Sherbrooke and will engage extensively in the business.

FIRE broke out in Ewin's spice mills, Montreal, October 26, and after doing a good deal of damage spread into Robert Mitchell & Sons' brass foundry, where the firemen succeeded in checking the flames. The damage by fire and water is estimated at from \$5,000 to \$10,000.

MESSRS. TIMOTHY GREENING & SON, Dundas, Ont., call attention to the fact that they are wire manufacturers and metal perforators. They manufacture wire cloth of all grades; perforate sheet metals of every description, and perforate and indent all kinds of work of special designs to order.

MESSRS. J. P. CURRY & SON, Niagara Falls, Ont., are brewers of lager beer which is highly appreciated. A few days ago when Governor-General Lord Stanley was in that town, he drank some of this lager, and was so much pleased with it that he ordered supplies of it sent to him at Ottawa.

"BRIGHT LIGHT"

(WATER WHITE)



THE BEST ILLUMINATING



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SAW MILL MACHINERY

ALLINGTON'S PATENT DOUBLE COLUMN BAND MILL,
WITH ROLLER GUIDES.

SINGLE COLUMN BAND MILLS. WILKINS' PATENT COMPENSATING
BALANCE GANG, NO FOUNDATIONS REQUIRED.

Circular Saw Mill, and everything required in first-class
Saw Mills. Send for Circular.

THE Grellner patent everlasting lock wedge for axes, hatchets and similar handed tools, manufactured for the Simmons Hardware Company, St. Louis, Mo., is attracting much attention from lumbermen and the trade. An illustration of this wedge is shown in another part of this journal.

THE Delhi Fruit and Vegetable Canning Company, St. Thomas, Ont., during the week ending September 15, put up 106,000 cans of fruit and vegetables. The largest output for any one day was 22,500 cans, and during the three weeks ending September 29 the pack aggregated 288,000 cans.

THE Kemp Manufacturing Company, proprietors of the Dominion Tin and Stamping Works, Toronto, are calling attention to some of the specialties manufactured by them, and which are in great demand at this season. Among these are stove pipe thimbles, stove boards, coal hods, fire shovels, etc.

A COMPANY has recently been incorporated in Montreal with \$100,000 capital for the purpose of manufacturing sewer pipe and similar fire clay goods. It is probable that within a very few years the Canadian producers of these lines of goods will be fully able to supply all the Canadian demands for them.

THE Boiler Inspection and Insurance Company of Canada, the head office of which is in Toronto, under the management of chief engineer George C. Robb, have applied for power to include under their policies insurance covering loss of life or injury to persons, resulting from explosions of the insured boilers.

THE Port Hope *Times* suggests that the name of Cobourg be changed to "Crossenville." We were thinking that the name of Port Hope ought to be changed to "Morrisburg," but seeing there is a town of that name already in Canada, we suggest it be called "Twineville" instead.—*Cobourg Sentinel-Star*.

THE Grand Trunk Railway Company have declined to accept the bonus of \$100,000 offered them by the authorities of London, Ont., for the establishment of car works in that city. The works will be built at Stratford and operated in connection with the immense machine shops recently erected there by the Company.

THE Browpley Electrical Manufacturing Company has been formed in St. John, N.B., with a capital stock of \$10,000, for the manufacture, purchase, sale and repair of all kinds of electrical and magnetic machinery, plant and apparatus, steam engines, air compressors and general machinery, brass and other metal castings and fittings, etc.

THE immense new piano factory buildings of Messrs. Heintzman & Co., at West Toronto Junction, have been completed, and it is expected that they will be occupied in a few days. A description of these works was given in these pages a few months ago, when work upon them was begun. This is probably the most extensive piano factory in Canada.

THE Montreal Transportation Company will build a tow barge at Kingston, Ont., 142 feet keel, thirty-four feet beam, and seventeen feet depth of hold, with capacity to carry 70,000 bushels of grain. The Chatham Mfg. Company, Chatham, Ont., are supplying a large portion of the oak timber and plank that will be required in the construction of this vessel.

MESSRS. DAY BROTHERS, recently of Montreal, have been voted a bonus of \$800 a year for ten years by the town of St. Johns, Que., as an inducement for them to remove their steel stove factory from the former to the latter place. They are practical men, backed by some capital; and the article they propose to manufacture is said to be a good thing.

MESSRS. KERR BROS., of Walkerville, Ont., on Tuesday of last week cast the first pump, weighing three and a half tons, for the Windsor waterworks. The cast was a very successful one. The weight of metal used was four tons, the melting and casting only taking one hour. This indicates the facilities for heavy works of this kind possessed by the Messrs. Kerr.—*Chatham Planet.*

THE London Bolt and Nut Works, London, Ont., through Mr. John White, are asking the corporation of that city that they be exempted from taxation for ten years, and free water for the purposes of the business. This is a new concern who will employ from \$12,000 to \$15,000 capital, and an average of not less than fifteen hands. There are said to be but two factories of this kind in Canada.

THE business of the Atlas Woolen Company, Whitby, is being wound up. This is one of the factories bonused by that town a few months ago. The Mayor strongly protested against handing over the bonus of \$5,000 at that time, but he was forced into doing so by the ratepayers and the company. Subsequent events have shown the Mayor of Whitby to be a man of shrewd judgment.—*Oshawa Vindicator.*

MESSRS W. J. GAGE, & Co., publishers, manufacturers of blank books, etc., have been voted a bonus of \$25,000 by the town of Morrisburg, Ont., and exemption from taxation for a term of years as an inducement to erect a paper mill there for the manufacture of fine writing papers. In addition to this handsome bonus the natural facilities for water supply are of such a character that a mill can be built at very much below the usual cost.

MR. JAMES HOLT, late manager of the Thorold Woolen and Cotton Manufacturing Company's mills at Thorold, Ont., has been engaged by the Bombay Woolen Co., of Bombay, India, to go there to superintend and direct the setting up and starting of the machinery of their new twelve-set mill. The whole of the machinery is being made by Messrs. John Latham & Sons, Rochdale, England, the well-known makers of woolen, cotton and worsted machinery. Mr. Holt's engagement is for three years.

THE teasel business heretofore carried on by Messrs. James McLaughlin's Sons, Skaneateles Falls, N.Y., is now conducted by Messrs. McLaughlin Brothers, who have had a life-long experience in the business, and who will give even greater satisfaction than the old firm on account of their entire personal time and attention being devoted to the teasel business. Their advertisement will be found in every issue of THE CANADIAN MANUFACTURER.

MR. ALEXANDER MANNING, of Toronto, Mr. A. M. Dodge, of New York, and others have decided to erect a stamping mill in Toronto, which will be supplied with all the machinery necessary to extract gold and other elements from the ore. These gentlemen own a fine gold limit in the northern part of Ontario, and they will bring the ore to Toronto, where it will be crushed and the valuable mineral extracted. The mill will be of six stamp capacity.

THE Otonabee flouring mills at Peterborough, Ont., have recently been entirely remodelled and equipped throughout with the latest

Fenwick & Sclater,

43 and 44 Foundling St., Montreal.

MANUFACTURERS OF

Cast Steel Files and Rasps, Anchor Brand.

Cotton Waste, white and colored.

Asbestos Cement for covering Steam Pipes and Boilers

Asbestos Piston and Joint Packing. Asbestos and Rubber Piston and Joint Packing. Plumbago Packing.

HOSE—Rubber, Canvas and Linen.

HOSE—Cotton, Rubber-Lined for Fire Brigades.

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Asbestos Packing Co., Boston; Boston and Lockport Block Co., Boston; American Cotton Waste Co.; Montreal Tent and Awning Co.; "Household" Fire Extinguisher Co.

A. C. LESLIE & CO.

MONTREAL and TORONTO,

MANUFACTURERS' AGENTS FOR

Iron, Steel, Wire, Tinplate,

GALVANIZED IRON.

Special value in STEEL BARS, ANGLES, SHEETS, PLATES.

BUYERS ARE INVITED TO OBTAIN PRICES.

"JESSOP'S" STANDARD TOOL STEEL IN STORE.

C. J. GRELLNER'S

PATENT EVERLASTING

LOCK WEDGES

FOR HANDLED TOOLS,

AXES, HATCHETS, ALL KINDS.



NOTICE.

FOR SALE BY HARDWARE DEALERS.

Patented November 11th, 1886.

MANUFACTURED EXCLUSIVELY FOR SIMMONS HARDWARE CO., St. Louis.

and most approved machinery; in connection with which, and immediately adjoining, has been erected a fine new grain elevator of 30,000 bushels capacity. The capacity of these mills is now 250 barrels a day. The Peterborough Review has a column-long article in which all the various machines and machinery are described.

MESSRS. CHARLES D. BROWN in this city, and B. Frank Brown, of New Hampshire, have purchased an interest in the patent right for the United States of a new corrugated hay cap, manufactured of wood pulp. The caps are invented in Sherbrooke, P.Q., by Symmes Bros., and have been tested there and in Europe, where it has been found to work perfectly. The new company will probably start three or four mills for the manufacture of these goods.—*Portland Daily Press.*

THE new Canadian Pacific Railway elevator building at Port Arthur is being pushed rapidly. Already twenty-seven hundred piles have been driven into the ground for its foundation. The average length of the piles is thirty feet, and they are driven in blocks of twelve each, surrounding which are boxes that are being filled with concrete. On this concrete, also supported by the piles, will be set blocks of granite measuring three feet square on the surface by eighteen inches in thickness.

It will be remembered that about a year ago Mr. Angus Courtney, of Moore township, near Cartwright, in boring for water struck gas. This was repeated twice. Since that time Mr. Courtney has used the gas from one of the wells for heating and cooking purposes. Mr. J. Lamont, of Chatham, has joined Mr. Courtney in the experiment of introducing the gas for lighting purposes in Cartwright, and the gas will be used in the salt block and flour mills, besides private residences. —*Chatham, Ont., Planet.*

THE Vancouver *World* describes a novelty in the shape of a portable grist mill on a scow which has begun work on False Creek says, "It is propelled by side wheels. The machinery was supplied by Polson & Co., Toronto. The firm who own it have 300 tons of grist orders ahead for points on the Fraser. This ingenious idea will be of great benefit to the farmers in the district." The idea is not new. In a recent issue of this journal a description was given of a similar but more elaborate steamboat grist mill now operating in Florida.

MESSRS. ISAAC USHER & SON have had on exhibition for some days at the Dispensary samples of slabs manufactured from their cement, and submitted to a marblizing process, which converted them into very perfect imitations of the finest black, Spanish, Italian and Tennessee marbles. The samples were much admired by many who called to see them, and if the process be a cheap one this will open up still another important industry, and greatly increase the possibilities of revenue from Canada's natural products. —*Thorold, Ont., Post.*

THE Massey Mfg. Company, Toronto, are pushing their new malleable iron works to completion, the expectation being that they will be in operation before the end of the current month. The structure is of brick, about 30 feet high and covering an area of 312 x 63 feet. The equipment is first-class in all respects, the motive power being furnished by a 75-horse power steam engine. This department of the company's works will require the employment of about 100 hands. The product of these works will be consumed in the manufacture of the agricultural implements in which the company are engaged.

THE Canada Pacific Railway has commenced staking out its twenty-four acres of ground at Brownville, where it is to have extensive repair shops, storehouses and all the other erections necessary for a great centre. By vote of the people the C.P.R. is to be free of taxation for ten years. Brownville is destined to become quite a centre of local trade, and the location of the works of the company at this point, necessary to the operation of the road from Montreal to St. John, will benefit all the surrounding portion of Maine. —*St. John, N.B., Globe.*

MESSRS. RYAN have completed an extension to their building and store at Moncton, N.B., for the accommodation of the knitting factory, purchased from the estate of J. A. Stephens by Mr. H. A. Gross, of Hillsboro, N.B. The extension is two stories high, and twenty-two feet long. As enlarged, the upstairs apartments comprise one large factory room, 22x45 feet, and a front room 25x25, which is occupied as a storeroom and office. The machinery, which comprises not only that belonging to the old Universal Knitting Company of Moncton, but that of the Archibald Knitting Company, of Halifax, is sufficient to give employment to 125 hands.

MESSRS. W. H. OLIVE, of Montreal, and James M. Wishart, of Manin, Kansas, will establish works in Sherbrooke, Que., for the manufacture of the Wishart patent self-heating laundry iron, and other patented household and hardware specialties. The laundry iron is a very desirable piece of household furniture and one that will be intensely popular with the ladies, as the iron is heated and kept hot by an ingenious contrivance which generates gas from a small cylinder filled with gasoline, one filling lasting from two to three hours. About twenty-five workmen will be employed in this factory at the start, the number to be increased later to seventy-five or 100 hands.

A PUBLIC meeting was held in Napanee, Ont., Oct. 26, to consider a proposition to erect glass works in that town. Mr. Richard Davis, a practical glass maker from St. Helen's, England, appeared and stated that he represented thirty other glass workers of his town who wished to establish a co-operative glass factory in Canada, his proposition being for the workmen alluded to to invest £200 each, and the municipality of Napanee to provide a suitable site for the works and to lend the company \$10,000 for five years without interest, the works to be given as security. The feeling is in favor of the scheme, but it will be several weeks before it will be known whether it can be materialized.

A GRANITE cutting machine, invented in New Brunswick, and just purchased by Camden parties, is attracting much attention

G. & J. BROWN M'FG CO.

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BELLEVILLE, ONT.

Engineers, Machinists, Boiler Makers,

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RAILWAY and CONTRACTORS' SUPPLIES A SPECIALTY.

Frogs, Diamond Crossings, Switches, Hand Cars, Lorries, Velocipede Cars, Jim Crows, Track Drills, Semaphores, Rail Cars, Double and Single Drum Hoists, etc., etc.

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MANUFACTURERS OF

**Strap and T. Hinges, Screw Hooks and Hinges,
Wrought Steel Butts for Builders and Cabinet
Makers, Washers, Staples, Hooks, Hasps, Hay
Carrier Hooks, Patent Hasp Locks, Bed
Fasteners, Steel and Iron Cut Nails,
Clout, Truck and Finishing Nails,
Brads, Tacks and Shoe Nails.**

We are also prepared to make special Nails or Hinges, or other articles made from iron from samples. The quality of our goods is always A. 1 and our facilities for making them are unequalled.

among the stone workers of eastern Maine. The new owners are experimenting with it to see if it can be made to work satisfactorily. The machine has cutters one above the other, which are fixed to loose pulleys on a movable shaft. They are one inch thick, going to an edge. The cutters move up and down, and the stone is brought to them on a carriage, similar to that of an iron planer. If the machine cuts stone as rapidly and well as claimed, it will revolutionize the granite business; but this is far from being an assured thing. —*Bangor, Me., Commercial.*

THE steamer *Otter*, which is now being dismantled at Victoria, B.C., has an eventful history. She was built in Great Britain of British oak, her first appearance in British Columbia waters being in 1854. Her engines were on exhibition at the great "World's Exhibition" in London, held in the Sydenham Crystal Palace in 1851. When the steamer was first put in commission she was considered a very fine vessel. She carried passengers and freight between Victoria and the Fraser River during the gold excitement there, from 1858 to 1862. In the work of dismantling it was discovered that her timbers were as sound and solid as they were the day she was built. She is being converted into a coal scow.

To supply the millions of toothpicks used every year, ingenious machines of great productive power have been invented. Like all other occupations the toothpick business has its combination, but a Maine inventor has set out to break it with a machine that makes 6,000,000 picks a day, and he is making a machine that will produce 72,000,000 a day. Green, clear, straight-grained birch and maple wood is used, and after steaming for several hours it is easily cut into veneers, or thin strips of wood with the grain running across. These veneers are pliable and are wound upon large spools, a hundred feet on each, and from the spools they are fed into the pick machine, which cuts them into picks with wonderful rapidity.

MR. MAYOR MACDONALD and Councillor Arpin, acting as delegates of our Corporation, interviewed Mr. Heney in Montreal on Tuesday, and made the proposition to pay him a bonus of \$25,000 distributed over eight years, provided he would establish his manufactory here on the scale originally proposed, that is, the payment of not less than \$40,000 annually in wages for a period of at least

eight years. Mr. Heney did not absolutely consent, but we hope he will see his way clear to accept the offer. We are convinced that once he gets started here he will never regret coming hither, as the advantages of conducting a large manufactory in St. Johns are almost unequalled by any other town in the Province.—*St. Johns, Que., News.*

THE Dominion of Canada furnishes a small though none the less representative collection of exhibits at the Melbourne International Exhibition. The area covered by the court is not quite 3,250 feet, and there are scarcely thirty exhibitors. The preparations are in a backward state. The agricultural bent of the population is indicated by a display of harvesting machinery, and their ingenuity demonstrated by several exhibits of domestic labor saving apparatus. That the Canadians are becoming a manufacturing community is also patent. Chilled cast iron wheels for railroad and tram cars, buggies and carriages, fire and burglar proof safes, a knitting machine, tools of various kinds and other appliances, are shown. A display is made, as well, of cabinet organs and pianos, chemical and other products, and canned lobsters.

THE Moncton, N. B., *Times*, speaking of the Chignecto ship railway, the construction of which has recently been begun, says:—"The general contractors, Messrs. Dawson, Symes and Ussher, have some twenty teams and thirty men already at work constructing a dyke around the dock at Fort Lawrence. They have given a contract to Rhodes, Curry & Co., for sixty dump cars, six tons each, which will be loaded by a steam shovel and moved by a locomotive of the standard gauge. Several sub-contracts have also been let. Dawson, Noble & Co. have three miles of the heaviest work on the Baie Verte end, and will use cars and have a locomotive of their own. C. H. Morse has men at work on his contract of two miles from Fort Lawrence to Long Lake. Rhodes, Curry & Co. have had nearly their whole force employed for some weeks erecting buildings etc., for the contractors.

THE Heisler Electric Light Company, St. Louis, Mo., through Mr. Edgar G. Jones, their general manager for Canada, have just contracted with a company at Sault Ste. Marie, Ont., for an entire electric plant with which to light the streets and public and private buildings of that town. Some of the superior advantages claimed by the Heisler system are that it successfully combines the illumination of streets with the universal supply of incandescent light to residences, offices, stores and halls, with every facility for changing and shifting the circuits, or extending the same to any desired distance at very small cost, from a central station. The electric current can be carried to any distance with the loss of energy of the equivalent of only one thirty-candle-power light per mile embraced in the circuit, the length of the circuit being practically unlimited. Water or other power located miles away can be used to advantage, the power in some of the plants of this system being over five miles from the lamp distribution.

THE new bridge at the lock is completed by the contractors, and teams were allowed over it on Wednesday evening. The bridge was designed and built by Mr. W. H. Law, of the Central Bridge Works, Peterborough, and is a double cancellated high truss of twelve pannels, each fifteen feet eight inches long. The length of the span is 190 feet, and the width of the roadway eighteen feet clear. The height of the trusses is thirty feet from centre to centre of chords. The flooring is of four inch red pine. The superstructure is designed to carry a moving load of about 1,500 pounds per lineal foot, or a total load of about 142 tons, exclusive of the weight of the structure, and when fully loaded no portion of the superstructure will be strained to more than one-fifth of its ultimate strength. Mr. Law has done his work well, and it is very creditable to the Central Works.—*Peterborough, Ont., Review.* [Mr. Law has recently contracted to build a steel bridge 100 foot span and 14 foot roadway for Fullerton, Ont.]

SIR JOHN HENRY JOHNSON, of Colchester, England, principal owner of the High Rock phosphate mines at Buckingham, Quebec, operated by the Canadian Phosphate Mining Company, of which he is president, was at Buckingham a few days ago examining into the working of the mine, with a view to ascertaining to what extent phosphate mining could be increased on a paying basis. For years Buckingham phosphate has attracted much attention on the English market by the very high amount of apatite it contains, and last summer a syndicate of English capitalists were incorporated as the Canadian Phosphate Mining Co., and purchased the High Rock mines, the most extensive in the district. Since that time the new company have expended thousands of dollars in increasing their facilities for mining, and as a result their output from these mines last summer was over twice as large as was ever taken out before. The results were very encouraging and the president of the company, Sir John Johnson, decided upon visiting the company's mines. Sir

Leeds Foundry and Machine Works.

E. E. ABBOTT,

MANUFACTURER OF

Vertical Drills, Shears,

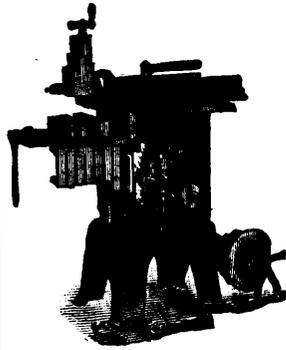
IRON PLANERS,

Punching Presses, Rolls,

BOLT CUTTERS

AND

SPECIAL TOOLS FOR WORKING
IRON AND WOOD.



GANANOQUE, - ONTARIO.

HENRY PORTER,

MANUFACTURER OF

LEATHER

BELTING

432 to 442 Visitation Street, Montreal, Que.

AND

36 FRONT STREET EAST, TORONTO.

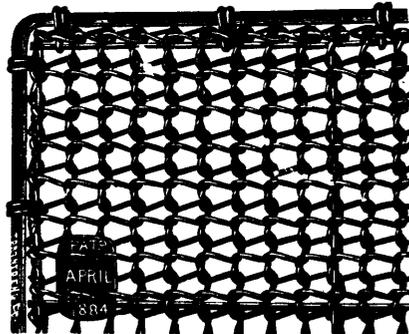
Mill owners will do well to write for estimates before placing their orders.

VICTORIA WIRE MILLS

ESTABLISHED 1859.

PATENT

Reversible Steel Mat



Having purchased from the Toronto Steel Wire Mat Co. their plant, stock and sole right to manufacture their celebrated mat in Canada, we offer the same for sale at the new reduced price list.

B. GREENING & CO.
HAMILTON, ONT.

FOR

Cylinder, Machinery

& Wool Oils

WRITE TO

ROYAL OIL COMPANY,

1, 3 & 5 Sherbourne Street,

TORONTO.

OUR MOTTO: "High Class Oils at Low Prices."

John will look into the phosphate deposits in the entire district, and it is likely the company will greatly enlarge the field of their operations.

THE Standard Drain Pipe Company, of St. John's, Que., are one of the only two concerns in Canada which manufacture vitrified salt glazed drain pipe and connections; their products also embracing vent or chimney lining, stove brick, chimney tops, fire clay slabs and blocks, flue covers and all kinds of fire clay goods. Their factory covers an area of 220 x 110 feet and contains six kilns—one of eighteen feet diameter (with which the business was started four years ago), four of twenty-one feet diameter each, and one of twenty-four feet diameter, all of inside measure. Last week the product of these kilns aggregated nearly 12,000 feet of pipe, which is a fair average of the output of the works. The consumption of fire clay amounts to about 8,000 tons per year, the largest proportion of which is brought in barges from the clay beds of New Jersey. About 3,000 tons of Nova Scotia coal per year is consumed in the works, about 50 skilled hands being employed besides a large number of diggers, handlers, etc. We are informed that this company were awarded the contract for all the sewer pipe and sewer invert blocks required by the corporation of the city of Montreal for the current year.

THE McClary Manufacturing Company, London, Ont., inform us that they have let the contract for the erection of a brick factory for the manufacture of the stamped and pieced tinware, japanned ware and specialties which they make so extensively. The size of the building will be 160 x 60 feet, four stories high, and upwards of 400,000 brick and a quarter of a million feet of lumber will be required for its construction. It will be well lighted, there being not less than 150 windows in it, and it will contain the most recent improvements as to ventilation, etc. The machinery from the other tinware departments of their works will be removed to this building, as well as the machinery from the Burn & Robinson factory at Hamilton, and the entire business will be so concentrated as to increase the present capacity very largely, as well as to lessen the cost of production. The McClary Company inform us that when completed this will be the largest factory in the Dominion, and as complete as any in America. The present factory and storage warehousings will be converted into one immense warehouse 160 x 100 feet, four stories high, which will be used for storing as well as for manufacturing purposes.

THE St. Clair Tunnel Company have purchased thirty-six lots in Sarnia at a cost of \$9,500, and work will be resumed at once. The first proceeding will be to open a cut or "hopper" directly over the site of the portal, 200 feet wide on the surface, and sloping to thirty feet square at the bottom. The bottom will be on the grade of the tunnel, which will make the depth of the "hopper" on the Canadian side sixty feet, and on the Michigan side forty-five feet. The boring machinery will be placed in position at the bottom of the pit, and the work of construction begun from each end and carried to a junction under the middle of the St. Clair. The excavation of the hoppers will be done by contract, and the work, we believe, has been already awarded, the contract calling for the completion of the excavation in three months. About 50,000 cubic yards of earth will have to be moved, and to handle the material a temporary track will be built. The clay will be used to fill up the trestle work of the Grand Trunk track along the bay shore on the Canadian side, and for filling up the low lands on the American side. A side track is now being built on the Conger property, recently purchased by the company.

THE band saw is fast asserting its supremacy as a lumber producer as well as a timber saver, and the opposition to it which presented itself on its attempted practical introduction is dying out as its superiority becomes recognized. When the introduction of the band saw was seriously considered, and a few enterprising pine lumber manufacturers adopted the innovation, serious doubts existed as to whether the saving in timber would compensate for the loss of time or lack of speed, as compared with the old reliable circular. But practical results have removed all doubts in that connection, and demonstrated that not only can the saving of nearly twenty per cent. in timber be accomplished, but that the band saw is rapidly crowding toward the speed of the much vaunted and useful circular. A band saw in the mill of N. B. Bradley & Sons, of Bay City, Mich., is credited with recently cutting 70,000 feet in less than ten hours. This is a most remarkable accomplishment, and if it can be demonstrated that a band saw is capable of even a near approach to 70,000 feet per day, it will not be long before it must inevitably supersede the circular, because of the enormous saving of timber accomplished by the heavy comparative reduction in the thickness of the kerf, assisted by the growing scarcity of timber in the North-West, which will act as an incentive to discard the circular and adopt the band mill.—*The Timberman.*

TO LET.

TO MANUFACTURERS.

FACTORY, with water privilege, near Black's Bridge, Montreal. Building 60 x 60, five flats, extra well lighted and very strong; rare opportunity for party wanting cheap power. Apply

WM. JOHNSON & CO.

14 St. John St., Montreal.

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THE ONTARIO INDUSTRIAL LOAN AND INVESTMENT CO.

Having now in course of erection a Large Building on the north side of Lombard Street, between Church and Victoria, are prepared to receive offers for the renting of the same, with or without steam power, in flats or portions to suit lessees.

The proximity of the location to the wholesale houses and all the railroads entering the city, makes it particularly suitable for light manufacturing purposes.

By applying at once alterations in the plans can be made to suit convenience of lessees.

For full particulars apply at office of the Company, 32 TORONTO ARCADE, TORONTO.

E. T. LIGHTBOURN,

Manager.

MUNDERLOH & CO.

MONTREAL,

SOLE AGENTS FOR THE DOMINION

OF

Meyer's Watchman Control Clock.

REDUCED PREMIUMS ON FIRE INSURANCE
SECURED BY USING THIS CLOCK.

Description and particulars on application.

FOR SALE!

CHARCOAL BLAST FURNACE.

IN

HURON COUNTY, MICHIGAN.

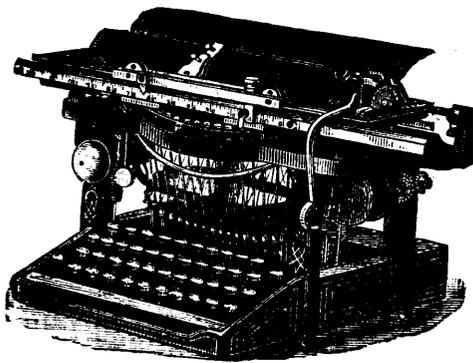
IRON STACK. FIRST-CLASS CONDITION. EASILY REMOVED

Address.

E. C. POPE,

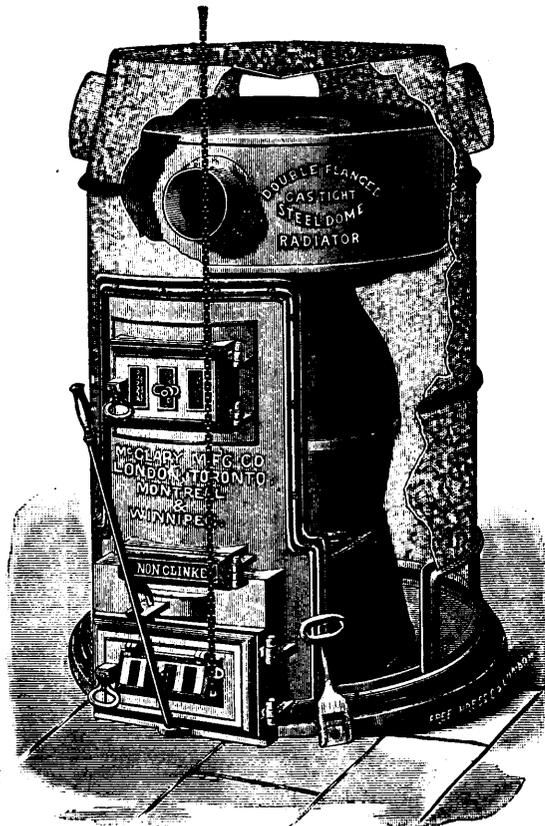
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Gold & Silver Medal
BY
CANADIAN
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FAMOUS TOP RETURN FLUE FURNACE.



IN THREE SIZES. FOR BRICK OR PORTABLE SETTING.

WITH EITHER CAST IRON OR STEEL RADIATOR.

Unequaled for economy of fuel, simplicity of construction, ease of management and heating capacity.

PATENT ADDING MACHINE

A MATHEMATICAL MARVEL

Is not a toy but a practical article. Thousands in use. HUNDREDS OF TESTIMONIALS. By mail (charges prepaid) on receipt of price—ONE DOLLAR. Money returned if not satisfactory. Circular, testimonials, etc., for stamp. Agents wanted.

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SOLE AGENTS FOR CANADA.
BRANCH OFFICE—BUFFALO, N.Y.

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PATRONIZE HOME INDUSTRY

Every user of Teazels should purchase those of Canadian Growth in preference to Foreign Importations.

ORDERS FILLED BY
F. W. SCHWENDIMAN, DRAYTON, ONT.

OR
THE DOMINION DYEWOOD & CHEMICAL CO
TORONTO, ONT.

IMPORTANT TO TEXTILE MANUFACTURERS AND ALL WHO DESIRE TO SELL TO THE MILLS.

THE BLUE BOOK

A Pocket Directory of the Cotton, Woolen and Worsted Mills, Dyers, Bleachers and Print Works of the United States and Canada.

Compiled to meet the demand for a small, compact Directory (as the large and cumbersome Directories contain a mass of matter of no interest to mill men). It gives name of place, county, railroad (or nearest railroad station), hotel, telegraph and express; name of mill, proprietor or company agents, and superintendents; class of goods made; number of cards, looms, spindles, knitting and sewing machines, boilers, water wheels, and if THERE IS A DYE-HOUSE.

It contains full particulars of ALL NEW MILLS under construction, with probable date of completion.

As much care has been taken, and as full particulars are given of a 1-set mill as of the largest.

Manufacturers and travelling salesmen who subscribed for it, and have received their copies, pronounce it the most accurate and complete Directory of the Trade ever published. Size, 7 by 4 inches.

Price, postpaid, \$2.00, bound in cloth; \$2.50, bound in leather.
(Canadian Bills accepted).

JAMES E. PALMER, 176 Broadway, New York.

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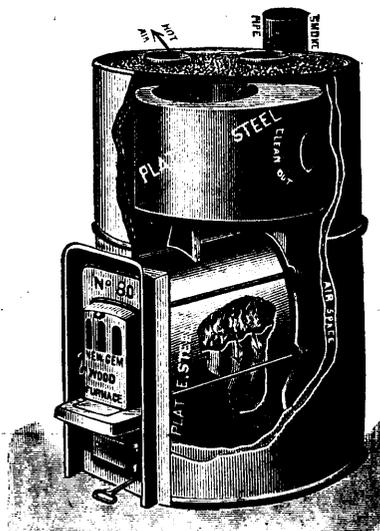
Wood Furnace

Entirely new and of novel design.

A Powerful and Economical Heater.

Thoroughly tested. Specially adapted for medium sized dwellings.

SURE TO SELL



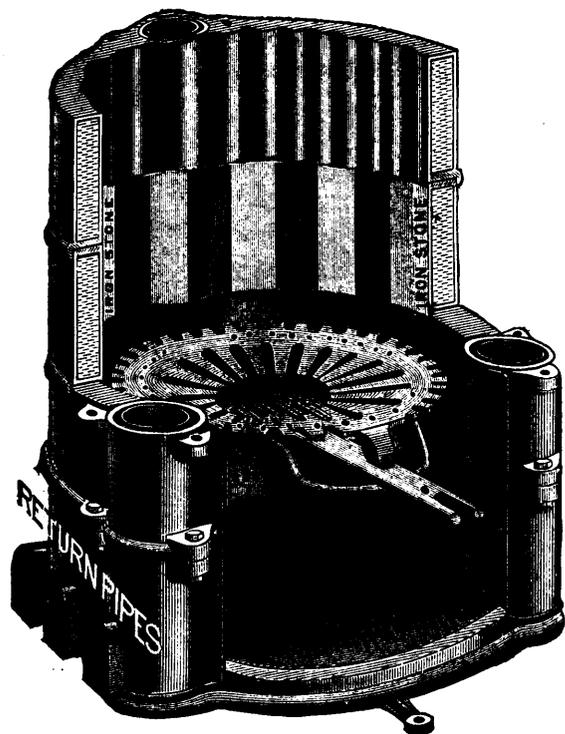
Any dealer who has not received our price list for 1888 will please advise us.

McClary Mf'g Co.

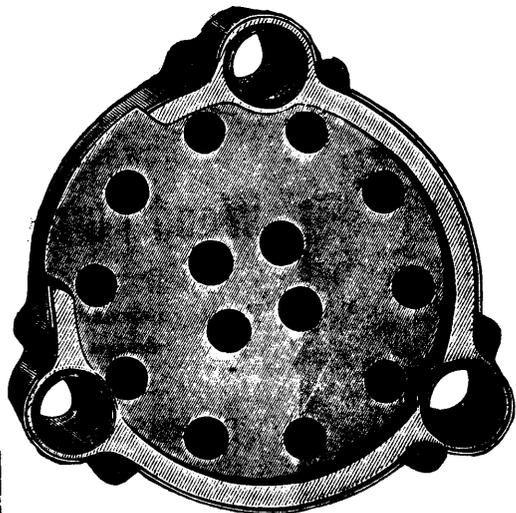
London, Toronto, Montreal and Winnipeg.

New Improved Gurney Hot Water Heater.

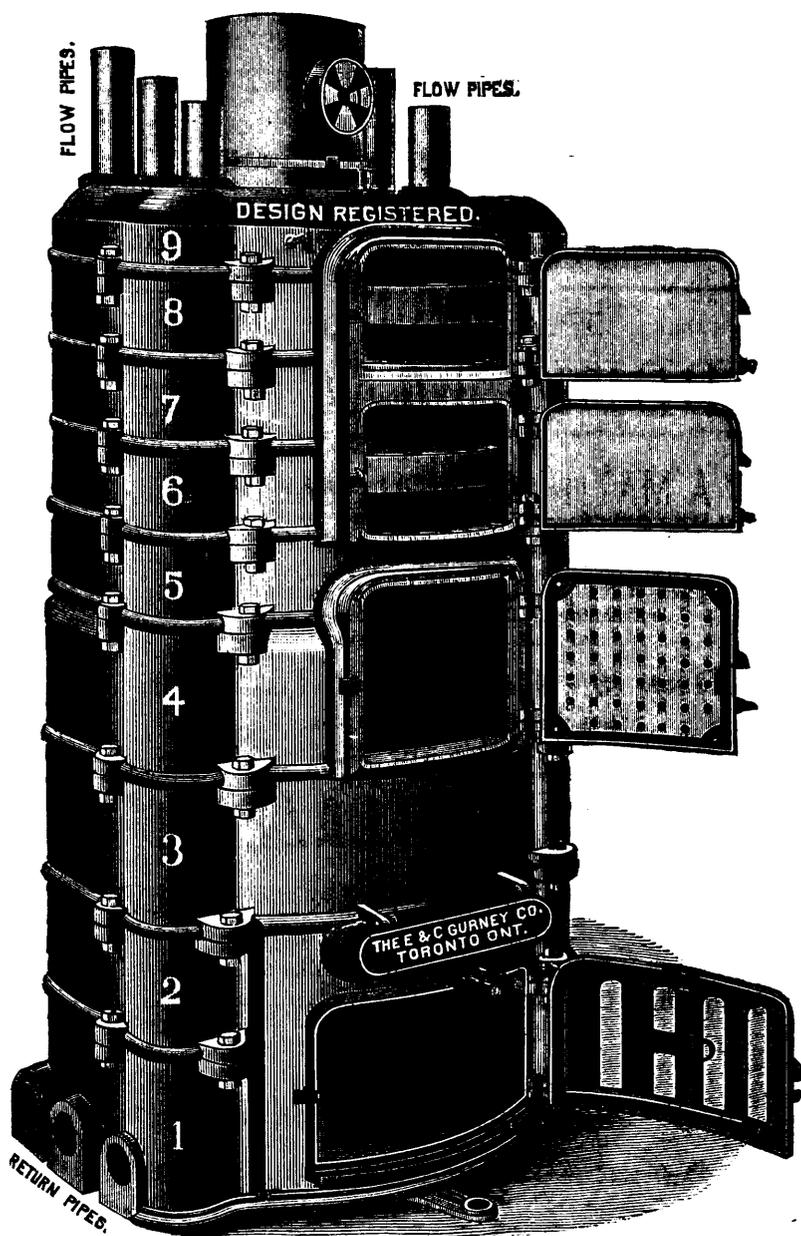
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Ash Pit, Grate, Fire Pot and Corrugated Section.



Top Radiator with Deflector.



Front and Side View.

SECURING INCREASED ECONOMY, DURABILITY, UTILITY.
SEE IT OR SEND FOR OUR CIRCULAR.

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BARREL TRUCK

FOR MOVING BARRELS WITH HEADS IN OR OUT.

WILL CARRY FROM 700 LB. BARRELS DOWN TO A NAIL KEG. (WILSON'S PATENT. 1887.)



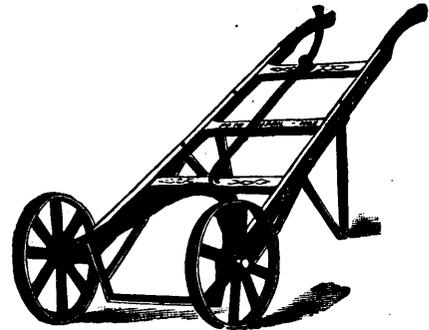
These Trucks are now ready for the market. Nothing to equal them for the purpose designed. Send order early.

Read the following Testimonial for the first Truck purchased from the Inventor.

Office of THE MORSE SOAP CO'Y.
JOHN TAYLOR & Co., Proprietors.
TORONTO, April 25th, 1887.

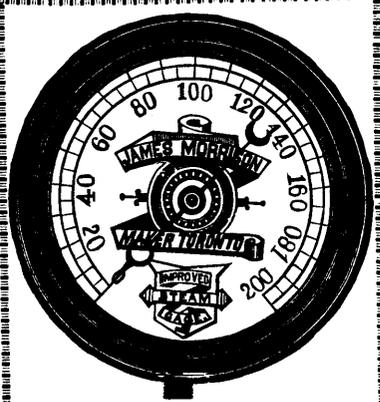
We have pleasure in saying, that the Barrel Truck we bought from George Wilson, for moving liquids unheaded is quite a success, and has already saved us much labor and material, on account of its convenience.

Respectfully,
[Signed], MORSE SOAP CO.



Manufactured only by GURNEYS & WARE SCALE COMPANY, HAMILTON, ONT.

Crown Water Closet.
Inodoro Water Closet.
Perfect Water Closet.
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Demarest Valve Closet.
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A full stock of Wash-basins, Urinals, etc.
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Plumbers' and Steamfitters Brass Work.
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Sole Canadian representative of the Celebrated Hancock Inspirator.

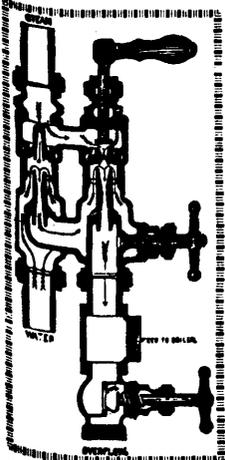


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The Company have also lands where the main lines of the Grand Trunk (Northern) and Canadian Pacific Railways cross at Davenport. Switches are obtainable from either or both roads, and abundant space can be afforded for very extensive works; and for the erection of all dwellings that may be required by workmen.

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COMPANY'S OFFICES IN TORONTO,
No. 7 VICTORIA STREET.

Manager.

Corliss Engines

STATIONARY and MARINE ENGINES and BOILERS

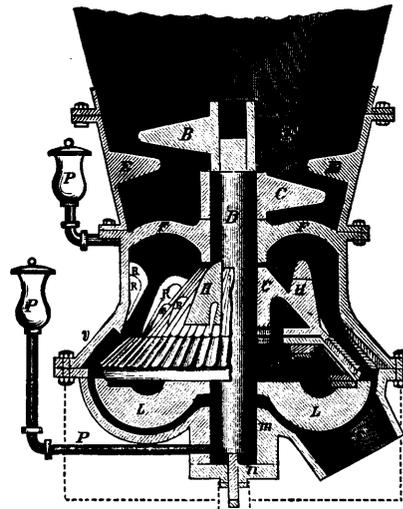
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CASE'S IMPROVED SYSTEM.

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SEGMENT BARK MILL.

For grinding any hard substance
SUCH AS

Cement, Plaster, Bones, Bats,
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Also as a Corn
Breaker.

The Segments will retain
their cutting edges longer than
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It has the following good
qualities, viz.:—Fast grinding;
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It works with ease in damp
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coupling.

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Is prepared to accept Agencies for the Argentine Republic and Uruguay
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at the office of **NICHOL KINGSMILL, ESQ.,**
Toronto, Consul for the Argentine Republic.

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Smith (of Frank Smith & Co.); W. R. Brock & Co.; Wyld, Grasett & Darling; Smith &
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Bank and Office Railing, in Brass, Iron, Steel, Bronze or Plated.
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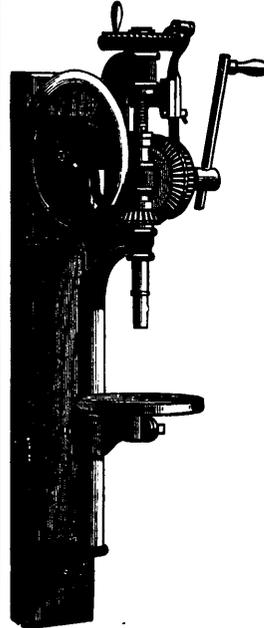
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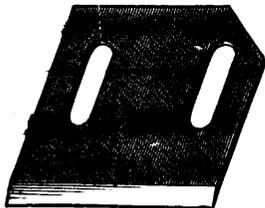
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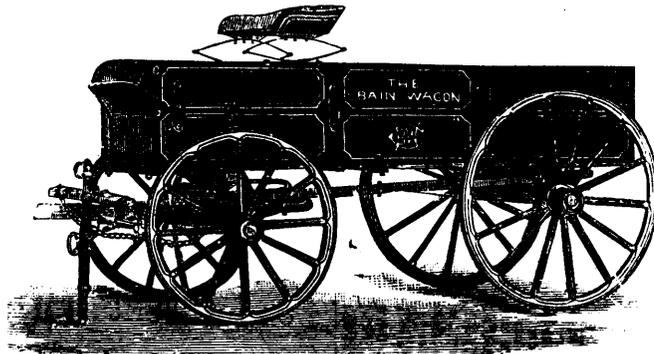
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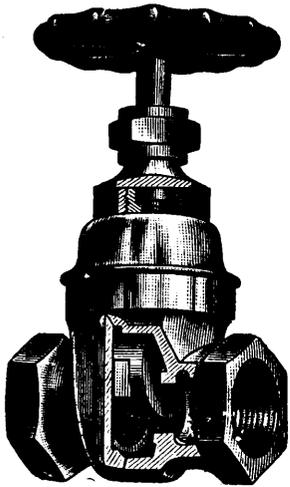
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Also Heavy Sleighs and Steel Skein Log Trucks.

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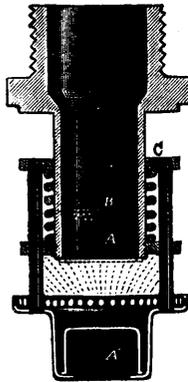
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STEAM, WATER AND GAS,
Best Value in the Market.

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Sole right to manufacture in the Dominion.
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Capacity, 400 Barrels per day. Warranted equal to any Hydraulic
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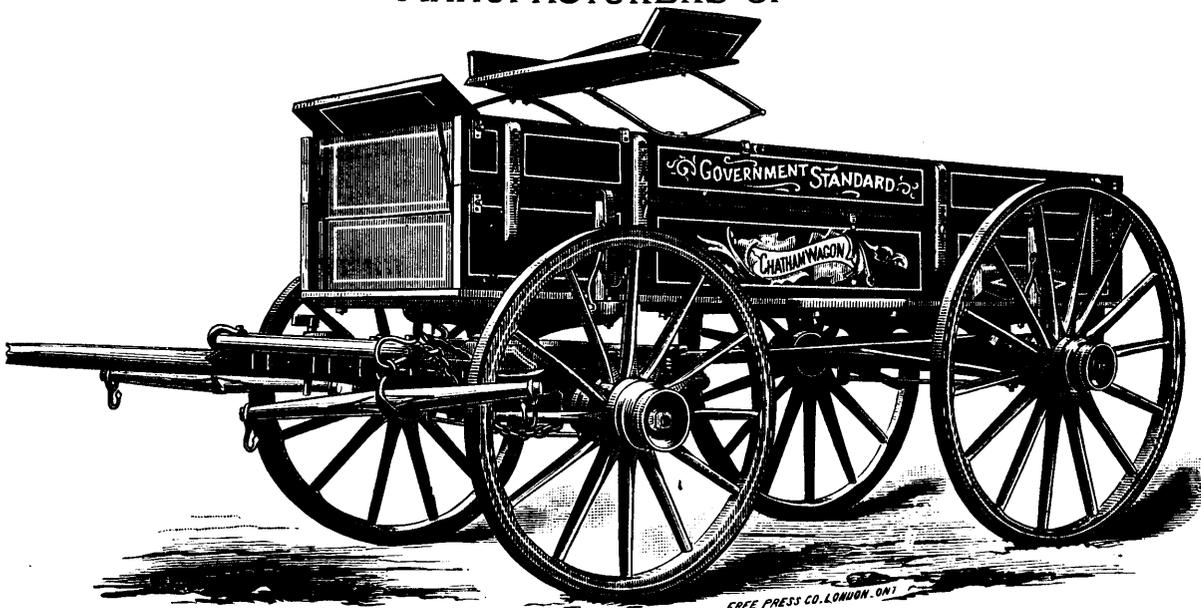
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We simply ask intending purchasers, in their own interests, to send to us for particulars of the Chatham Wagon, or if there is one convenient
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THE MOST COMPLETE AND USEFUL CARRIAGE
CHAIR EVER INVENTED.

Useful in Winter and Summer.



Every Baby Should Have One.

The "Empire" in Carriage Position.

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Every Instrument
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Have a universal reputation as being strictly first-class, and are recommended by Highest Musical Authorities. In tone, design and workmanship unsurpassed.

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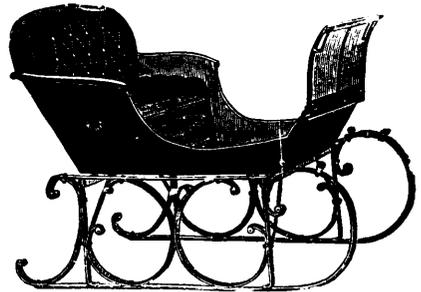
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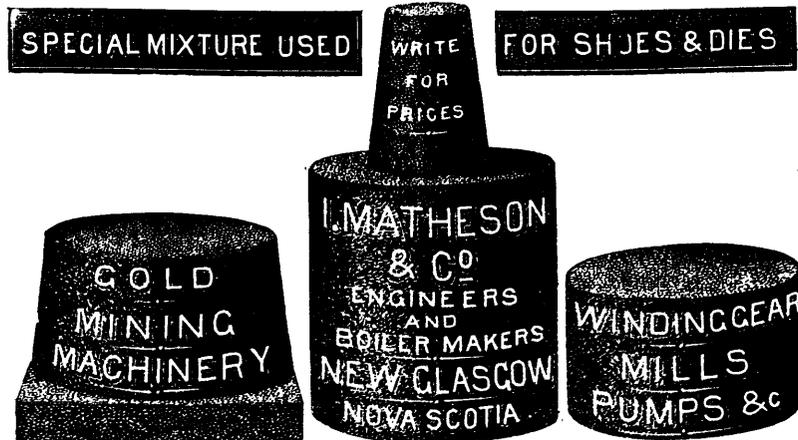
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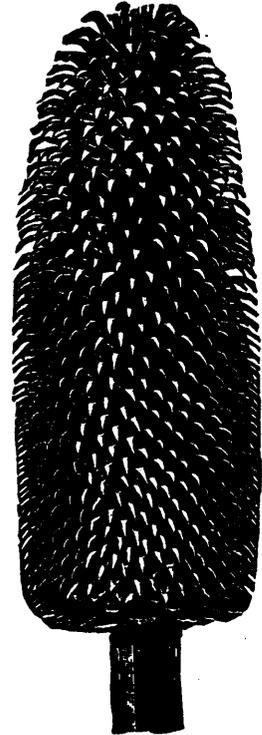
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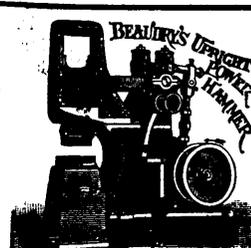
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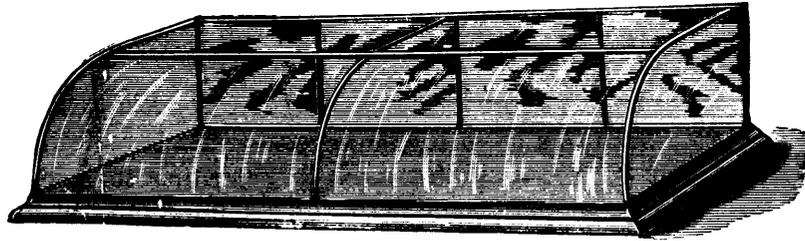
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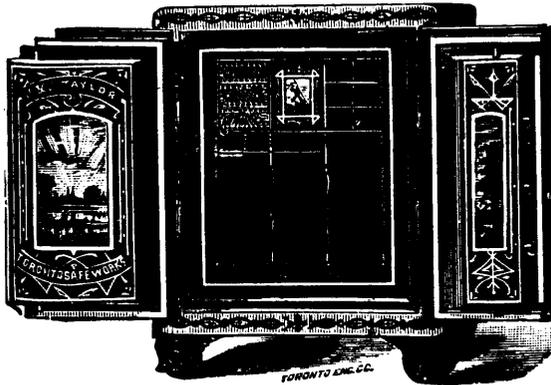
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All our new style Fire-proof Safes are fitted with TWO COMPLETE TONGUES AND TWO GROOVES on both the door and door frames, which effectually prevent the heat from passing between the door and frame into the interior of the safe.

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NOW { **WE HAVE CUSTOMERS** { To whom we have sold 3,000 to 40,000 Dollars worth of Belting.
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CAN YOU { **HARMONIZE THESE FACTS WITH** { 1st. That our PRICES are RIGHT?
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IF NOT { Send us a Sample Order and see if we cannot please you.

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Canadian Leather,
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Thoroughly Stretched,
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LACE LEATHER, DANVILLE, - QUE.

OUR BELTING IS MADE FROM

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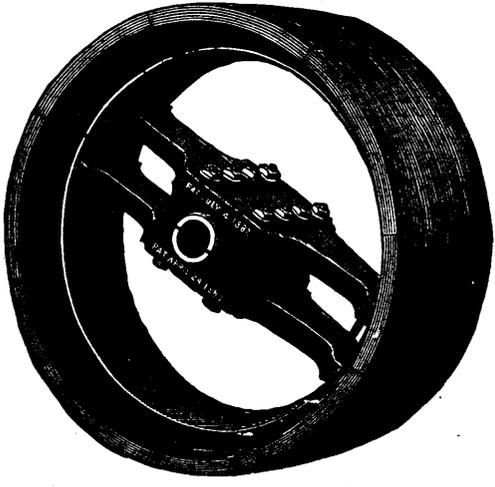
Tanned in the most careful manner expressly for Belting in our own Tannery. We warrant it equal to any imported, either American or English, or any made from imported American or English Oak Leather. All widths, single or double, for any duty Saw Mills, Cotton Mills, Woollen Mills, Electric Light, etc., etc.

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WITH PATENT BUSHING SYSTEM

Best Belt Surface, Lightest, Strongest, Best Balanced, and Most Convenient Pulley in the World.

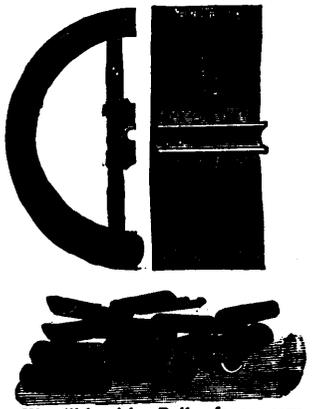
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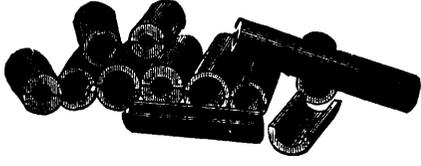
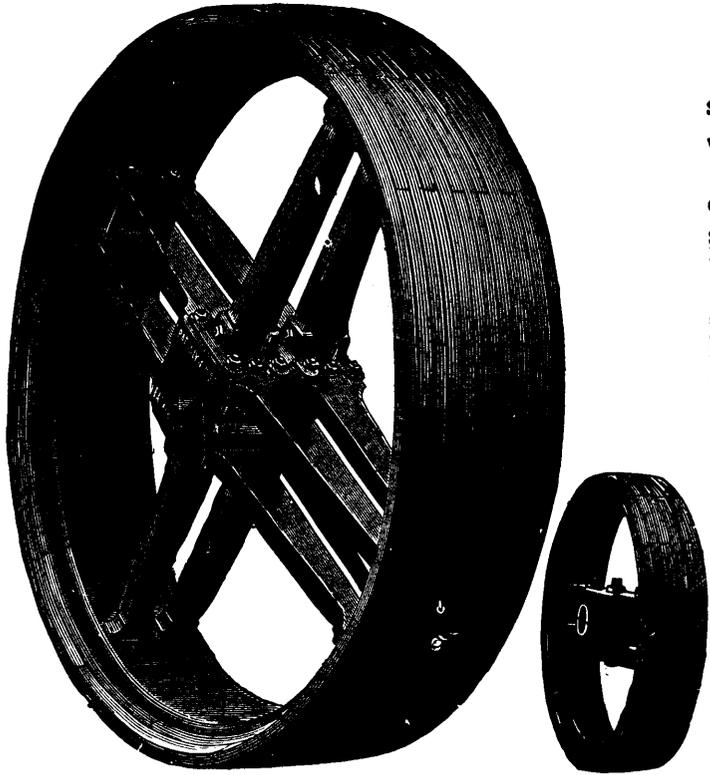
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And 50 per cent. Lighter than Wrought Iron or Steel Pulleys.



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Gentlemen: You ask why we use the Dodge Patent Pulley. I answer because we consider them the cheapest, most convenient and satisfactory in all particulars.
 Yours truly, S. R. STIMSON, General Manager.

OFFICE OF NEWTON WAGON CO., BATAVIA, ILL., Feb. 17, 1885.
Dear Sir: Replying to your favor, will say that after using the Dodge Wood Split Pulley for a year or more we are satisfied they are a good thing, if not the best Pulley made, and shall use them hereafter in preference to any other we know of.
 Yours truly, NEWTON WAGON CO.

We have sold these pulleys for one year, and they have been put to every kind of service, and their popularity is wonderful. We refer to the following users for proof of the above statements: Pillsbury & Hulbert Elevator Co., Minneapolis; R. M. Pratt & Co., Elevators; Northern Pacific Elevator Co.; The Pacific Elevator Co.; Minneapolis Harvester Works; Minneapolis School Furniture Co.; M. & St. L. R. R. Co.; Willford & Northway; Washburn, Crosby & Co.; St. Paul Electric Light Co.; St. Paul Roller Mill Co.; Minneapolis Brick Co.; N. W. Mfg. & Car Co., Stillwater, Minn., and very many others.
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According to the best scientific authority it costs one horse power to keep in motion one ton of metal or weight; thus for every unnecessary 2,000 pounds weight on your line shaft, cost you one horse power. To maintain a horse power costs from \$25 to \$125 per year. Any manufacturer who will take the pains to investigate the unnecessary weight by Heavy Iron Pulleys, too tight belts, etc., will be surprised to find the enormous waste of power consumed in this manner. 60,000 Dodge Patent Wood Split Pulleys now in use. Our capacity being now equal to 100 Pulleys per day, we shall hereafter keep in stock for immediate shipment all sizes.

Send for Illustrated Circular and Reference List.

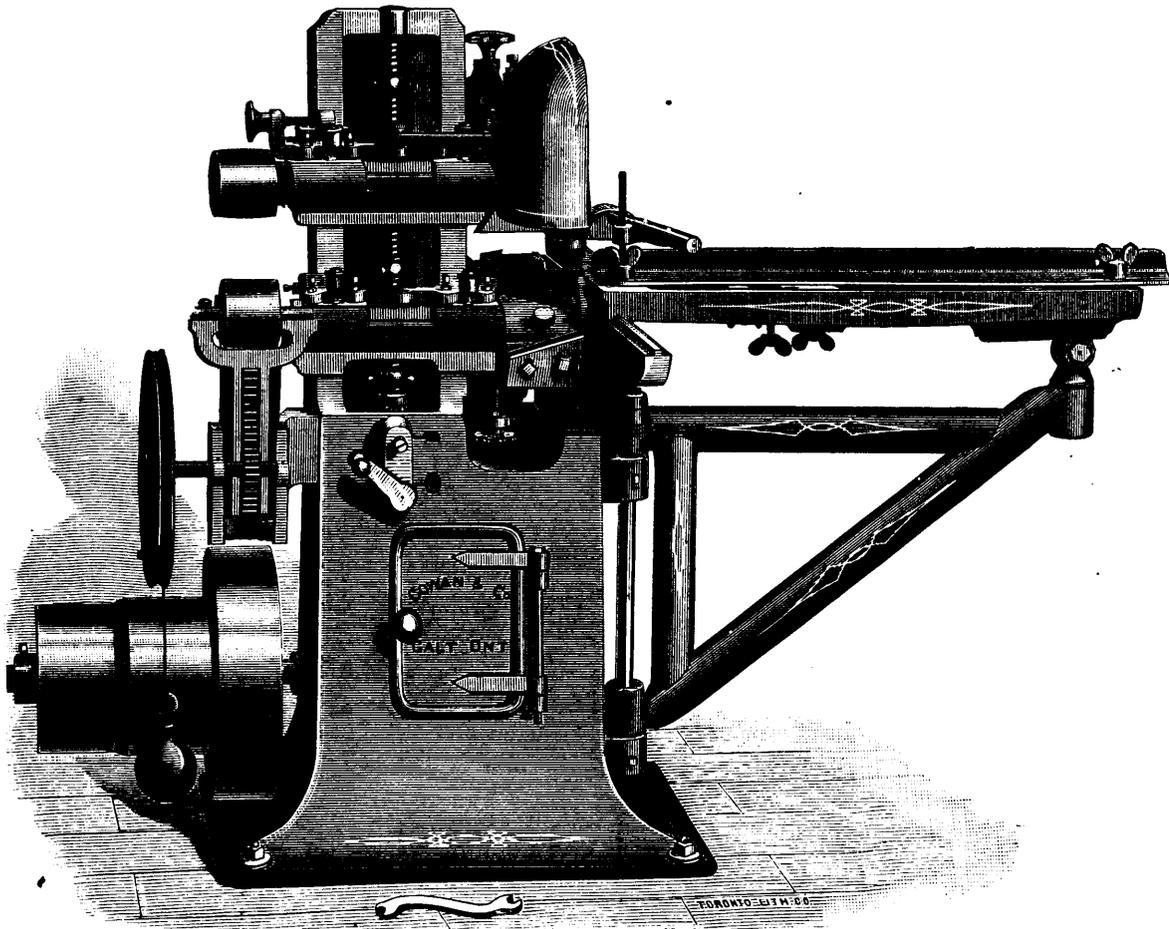
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We beg you will note this fact when comparing our List with others which are for SOLID RIM, and NOT for Pulleys in HALVES.

NEW AND IMPROVED *Pedestal Tenon Machine.*



This is an entirely new style of Tenon Machine. The frame is cast in one piece, and the working parts stand solidly on a pedestal, avoiding all vibration.

The Cutter and Cope Heads are connected and are moved all together, or separately, as required. The Upper Head and Boxes also adjust horizontally to suit shoulder of tenon, the Cope Knives moving with the Heads to prevent re-adjustment.

A special feature in this machine is the Bed, or Carriage, which is at once light and strong. The outer end works on rollers and is moved very easily.

In cutting the tenon the Bed and Carriage move entirely past the Heads and Cutters, the operator having full control of the work. It has also the advantage of leaving the Heads and Cope Knives clear, and of ready access by the operator.

The Carriage is so arranged that it cannot tip over the Slides nor be thrown into the Cutters, and is also supplied with extension bar for long tuff, as in all Tenoning Machines.

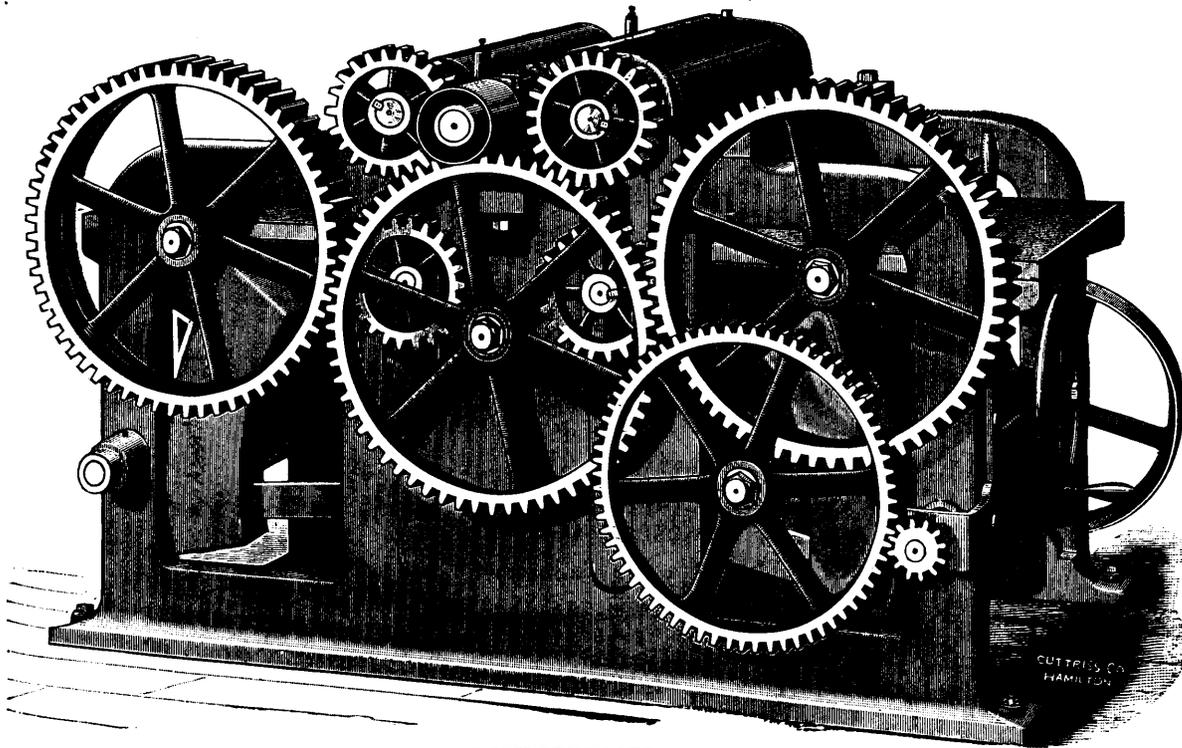
This Machine is supplied with single or double Copes, as ordered, and for furniture work it is without Copes, and with an adjustable cut-off Saw.

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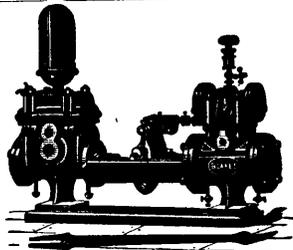
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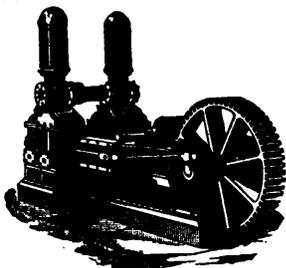
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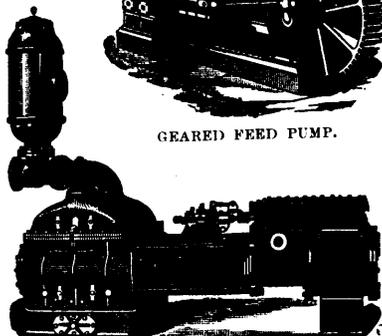
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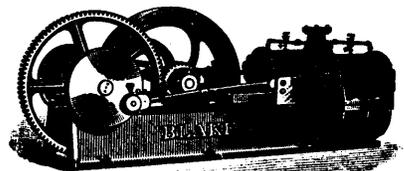
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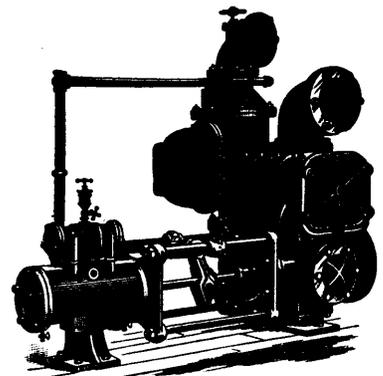
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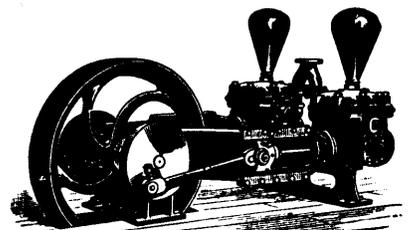
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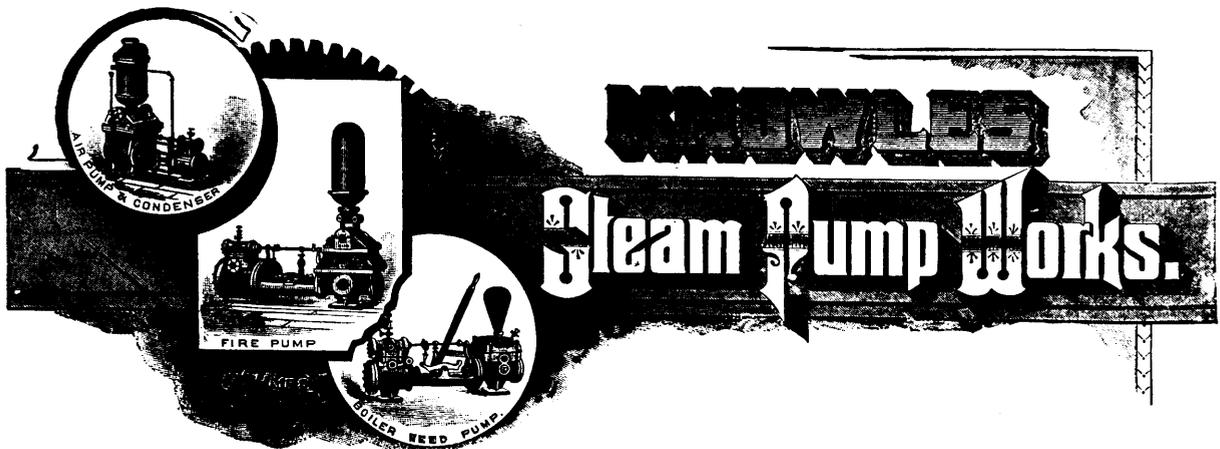
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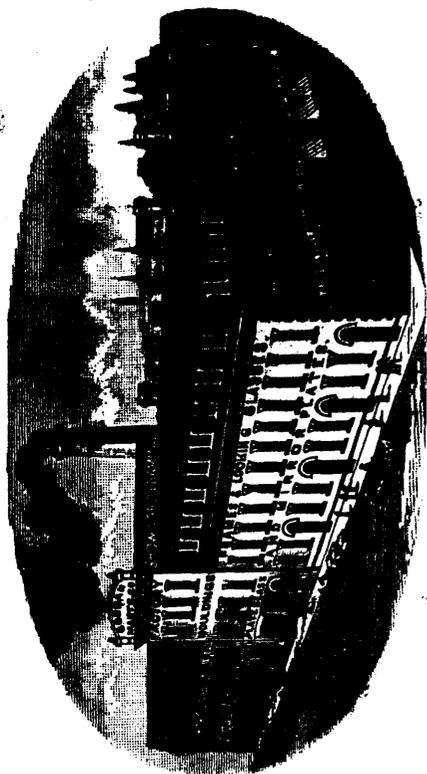
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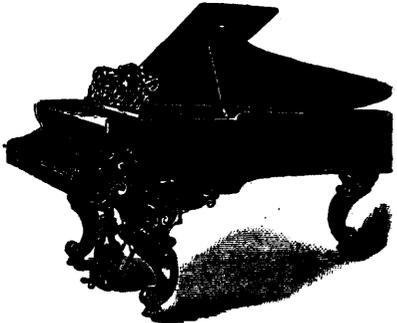
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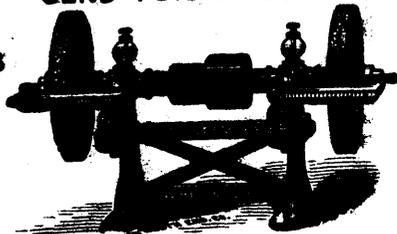
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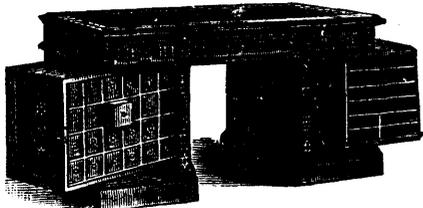
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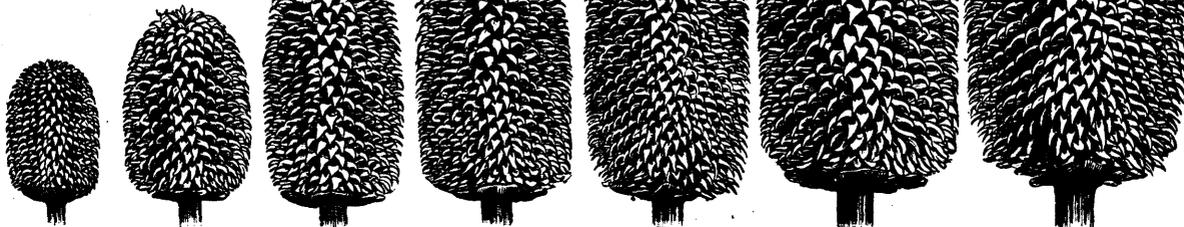
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