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Vol. 24.

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A



B



C



D



E

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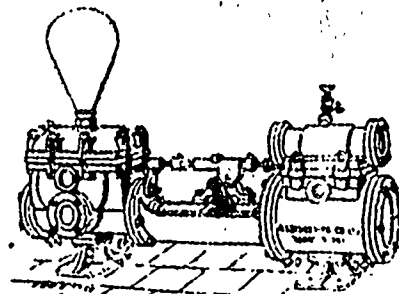
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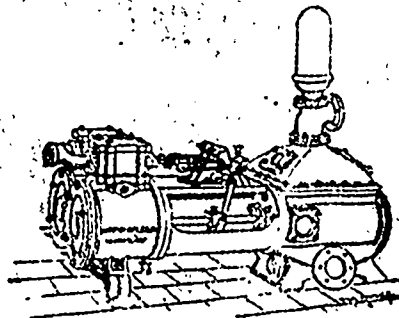
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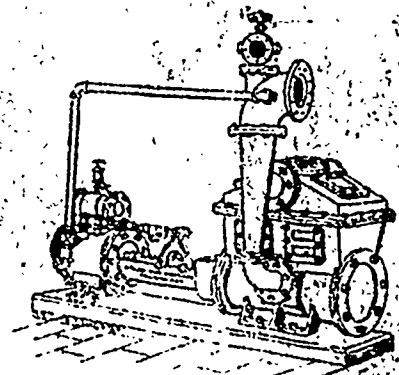


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MR. G. R. R. COCKBURN, M.P.

At a dinner at the National Club in Toronto a few days ago, Mr. G. R. R. Cockburn, representative for centre Toronto in the Dominion House of Commons, gave utterance to some quite remarkable sentiments. Among other things he said:—"You all know I am a supporter of the National Policy; but we must be on our guard against the pressure and influences that threaten the introduction of McKinleyism into Canada. * * It is difficult for the Government to withstand the pressure of interested parties, who simply desire government sanction to take money out of the pockets of the people. * * It is well, therefore, to examine what has been the result of thirteen years of protection; and if in the examination it is found that a protection of thirty or thirty-five per cent. has been futile in infusing life into any of the industries whose establishment has been attempted, it might be concluded that that industry was one not appropriate to the country, and should be allowed to die. * * The course of trade and manufacture has altered greatly since the N.P. was adopted, * * and an examination of the tariff in the light of these altered circumstances would show that a considerable readjustment of duties is necessary.

If it were found that some industries had given undoubted signs of having taken firm root and were growing strong, I would be inclined to encourage those even more than they are now. On the other hand, if it were found that other industries show no signs of healthy vitality, I would favor a diminution in the protection afforded. The National Policy was adopted with the idea that a few years of favored growth would put our manufacturers in such a position that they would in time be able to sell their wares at prices as reasonable as they could be procured for from abroad." A report of the incident stated that Lieut.-Col. Fred. C. Denison and Mr. Coatsworth, fellow members of Mr. Cockburn in the Dominion Parliament, in the representation of Toronto, listened to their colleague's remarkable speech in dead silence.

At what was the largest and most representative meeting of Canadian manufacturers ever held in the Dominion, gathered in Toronto about February 1st, 1887, to listen to Sir John Macdonald's exposition of the state of the country in general, and of the fiscal policies of the existing political parties, the following resolution was unanimously carried:—

Resolved, that this meeting of manufacturers, representing almost every branch of industry and every section of the country, hereby place on record their unanimous opinion, that on the maintenance of the National Policy depends the continued prosperity of Canada.

A few days later, on February 12th, a meeting was held in the Pavilion, in Toronto, under the auspices of the Industrial League, intended to show the interest felt by the manufacturers in the National Policy and in the party supporting it. The meeting was presided over by Mr. H. W. Elliot, and among the many gentlemen upon the platform were Mr. Cockburn, Mr. Denison and Mr. Small, who were then candidates quite anxious to be elected from Toronto to the Dominion Parliament. The meeting was intended to ratify the resolution above alluded to, and to create enthusiasm in behalf of the candidates who were then so anxious to encourage the manufacturing industries of Canada; and Mr. Cockburn was one of the speakers. It is not recorded, however, that his emphatic endorsement of the National Policy was qualified by such sentiments as he gave utterance to a few days ago. The Industrial League, whose guest he then was, and whose influence he was so anxious to acquire, and without which he well knew he could not hope to be elected, rendered Mr. Cockburn very substantial aid in his canvas. They were very generous towards him, and he was very profuse in his protestations of undying and unswerving attachment and devotion to their interests and to the National Policy.

In view of these facts—in view of the fact that Mr. Cockburn in his election owed much to the influence of the manufacturers exerted in his behalf; in view of the fact that he had sworn eternal allegiance to the National Policy; in view of the fact that his continuance as member for Centre Toronto was due to the influences that first elevated him, and in view of his recent utterances at the National Club, and their vagueness, it is due to those who were and would still like to be his political friends, for him to make some explanation of what he said. He should explain how and by whom pressure and influence that threaten the introduction of McKinleyism into Canada was brought to bear upon the Government. He should tell who the interested parties are who bring pressure to bear upon the Government

which it is so difficult to withstand, who desire Government sanction to take money unjustly out of the pockets of the people. He should mention some of the industries which he has discovered that thirteen years of protection of thirty or thirty-five per cent, had failed to infuse any life into. He should tell what industries he considers not appropriate to the country and which, therefore, should be allowed to die. He should tell why any industry which, under protection, had taken root and grown strong should be encouraged even more than it is now. He should explain his method of reasoning, in the light of his ante-election promises, why industries which do not show signs of healthy vitality should be incontinently choked and starved to death. An indignant and deceived constituency would be interested in an explanation if Mr. Cockburn could possibly find time to make it.

We challenge Mr. Cockburn's definition of the idea of the National Policy. We deny that the founders and advocates of it ever promised for it that after a few years of it our manufacturers would be able to sell their products at as low prices as similar articles could be obtained for abroad. That idea is excessively ridiculous and could only have originated in Mr. Cockburn's brain some time after the dishes had been removed from the banquet table. He well knows that, according to the ethics of protection, the height of the duty should represent in the protected country only the greater cost of labor and materials there over that in competing countries; and he knows that that is chiefly what the manufacturers ask for.

It is this sort of demagoguism that is fast sinking into contempt many of the so-called adherents to the National Policy in the House of Commons. The hope is entertained by many that, under the premiership of Sir John Thompson, less political shuffling will be done and more attention paid to the requirements of the country. It is to be sincerely hoped that Mr. Cockburn is not an exponent of the views of the Government. We do not believe he is. We also hope that the report is incorrect which states that both Mr. Denison and Mr. Coatsworth listened to Mr. Cockburn's speech "in dead silence." Brave and courageous men do not remain in dead silence when they hear slanders uttered against their friends.

AS TO AN IRON INDUSTRY.

THE *Toronto World*, in discussing the recent meeting of citizens interested in the manufacturing welfare of Toronto, said that that meeting established two points of the utmost importance, namely, that citizens of influence, adherents of both political parties, have great confidence in the future of Toronto as a manufacturing centre; and that men of scientific knowledge and of large practical experience in the use of iron believe in the feasibility of making Toronto alive with iron activities. The ground being thus clear of political obstacles, and the assurance of success being so confirmed, the next step was, it said, to acquire and to make public such practical information as is needed to justify capitalists in embarking in this enterprise. It urged the appointment of a Commission by the Ontario Government specially charged with the duty of making enquiries in regard to the mining, smelting and manipulation of iron, and that a deputation should wait upon the Ontario Ministers to urge this course. It specified the items

upon which positive, expert, reliable information was needed, such as the laying down of iron ore in this city, the cost of fuel and flux, the most desirable kind of furnace, its cost of construction, the cost of labor, of management, of distribution, and the extent of the probable market in which iron thus produced would be sold. It also declared that suppositions and general statements were of no value, that the information must be specific, and that when such information was obtained and published capitalists would be able to decide if any legislation was needed, and what necessary to remove difficulties in the way of embarking in the enterprise. The Commission to obtain this information, which should consist of well qualified experts, should, it says, visit the American centres of iron mining and making, also the iron districts of Great Britain, to learn the conditions under which the industry is there conducted; and if the local public are too supine to furnish funds for this work an appeal should be made to the Governments of Ontario and the Dominion for help, as the question at issue is of vital importance to the whole country.

The *World* maps out an extensive and expensive programme for the discovery of information which we either already have, or which is not at all necessary in solving this question. Without any further expert testimony we know that Ontario abounds in iron ore and fluxes well adapted for the manufacture of iron; we can tell to a dime what the cost of them per ton would be laid down at Toronto or any other point; that we have no supplies of coal in Ontario which could be used as fuel, and that if coke is used our dependence would necessarily be upon American ovens. We need no expert testimony on these most important points, for we are familiar with them already. We know that coke iron and steel can be manufactured as cheaply in Toronto as in Buffalo or Chicago, and we also know that charcoal iron of the best quality can be made here as cheaply as in Michigan. With all this important information already at hand; and being able to tell by reference to the Blue Books of the Dominion what our requirements of imported iron and steel and manufactures thereof actually are, it really does not require the services of experts to tell us approximately the extent of the home market we might enjoy if we possessed an iron and steel industry. The question, then, does not require the services of experts. The *World* must be aware of the fact that there were gentlemen at the recent public meeting who had already very thoroughly investigated this question, and who had expressed a willingness to invest sufficient money in the establishment of an iron industry in Toronto if certain concessions could be had from the Ontario and Dominion Governments. The assurances required were that the Dominion Government should guarantee the payment of a bonus upon the production of pig iron for a sufficiently extended term of years; that the tariff duty on pig iron would not be lowered in that time, and if it was that the bonus should be correspondingly increased, and that the Ontario Government would also guarantee a bonus of equal amount and for the same period as the Dominion Government. The location upon which to erect the works proposed by these gentlemen was a secondary consideration; and if the matter had progressed to a point where the location must be decided upon, if it could not have been secured in Toronto it would have been had elsewhere.

The only question, then, to be decided is as to whether the Dominion and Ontario Governments will give the necessary guarantees. If they will do so, we will soon find capitalists investing in the enterprise. If they will not do so, the matter will stand as it now is. If Toronto really wants to see the industry established, let her business men unite in demanding these guarantees from the two Governments.

AS TO BAR IRON.

THERE was a meeting of bar iron manufacturers in Montreal a few days ago, including two from New Brunswick and several doing business in that city, but there was no representative of Ontario mills. The object seemed to be to discuss and, if possible, to raise the price of bar iron; but the fact was recognized that it would be useless to consider that question without the presence of a representative of the Ontario Rolling Mills Company. An impression prevails among merchants that if prices for domestic iron should be advanced to any material extent it would be quickly followed by large importations of English and foreign iron.

We have heretofore alluded to the fact that no puddled iron is made in Canada, domestic mills confining themselves to the rolling of scrap. The duty upon imported wrought scrap iron is only \$2 per ton, while that upon finished iron is \$13 per ton. The mills in Montreal and St. John depend largely for their supplies upon foreign sources, and the imports of foreign scrap are very large. The cost of delivery is not great seeing that the article is much sought after as ballast by vessels coming to Canada from abroad. Scrap iron imported at Montreal is not available to Ontario mills, because of heavy freight charges from that city; and whatever the local supply to Ontario mills falls short of in the demand is made good from neighboring American cities. There is but one possible purchaser of wrought scrap for consumption in Ontario, and this being the case that concern makes the price for all they buy produced in this Province, and no holder of scrap has any other choice in selling than to accept just what this one concern may see proper to offer. And a similar fact obtains in selling bar iron. It fixes and controls the price.

There is no reason why Canadian mills should not have capacity to supply all the demands of the country for bar iron, but that they do not is seen by reference to the Trade and Navigation Returns which show that Canada is a heavy importer of bar iron. These imports are usually of a quality superior to that made in Canada; although most excellent iron is made here. That is to say, the bar iron made in Canada is as good as that made elsewhere of promiscuously gathered scrap, but it is not as good for many purposes as that made where puddling is observed. If our bar iron mills had puddling plants, using a proper description of pig iron, their output could be made to equal that of any other country. But there are reasons why they do not make puddled bars, included in which are, that under the existing incongruous tariff they can import their scrap, which is a higher form of iron than pig, paying only \$2 per ton duty, while the duty on pig iron, a lower form, is \$4 per ton. If pig iron were extensively manufactured in Canada there would be a large consumption

of it for conversion into puddled bar, particularly if the duty upon scrap was increased as it should be. Our bar mill men have a grand cinch in the situation, and they content themselves with supplying the general market with iron made entirely of scrap, forcing those who must have a better article to go abroad for it.

This situation is not fair to either the Government or to consumers. It is not fair to the Government in that our manufacturers of bar iron could well afford to pay a very much higher duty upon their imported scrap than what they now pay, thus increasing the revenues; and it is not fair to consumers in that they cannot now obtain puddled bars made in Canada, but are forced to send abroad for what they may require, upon which they have to pay \$13 per ton duty. And those who supply scrap iron in this country are also injuriously affected in that the price of their commodity is fixed by those who buy it, and in which the seller has no voice whatever. Whoever, in Ontario, may have wrought scrap iron to sell must of necessity sell it to but the one concern who buy, and who, with equal imperiousness, fix the price of finished iron to consumers.

It is an easy task to compute the cost of manufacturing bar iron in Canada when a few facts regarding it are known, and which the manufacturers could supply if they were inclined or could be induced to do so; and the result would show that it would involve no injustice to them to raise the duty on wrought scrap to \$4, or even \$6 per ton, leaving that upon finished iron as it is. If this were done our imports of puddled bars would be greatly decreased, being supplanted by such iron made in Canada. This, in turn, would increase the demand for pig iron which would, of course, encourage the increased production of that article. A great necessity of this country is that it should have a pig iron industry, particularly in Ontario. The enemies of protection pretend to say that Canada cannot become a large producer of pig iron, but even with the inefficient protection it now has, and in the face of incongruities of the tariff, some of which we have here alluded to, we have furnaces which are making most excellent iron, which production might be very largely increased.

We are not arguing for any general revision of the iron duties. We imagine that any important changes in the United States tariff might affect Canadian interests in many particulars, but until such changes are really made we should go slow in making any changes in our own tariff. But it is the part of wisdom to consider the incongruities of our tariff and how they might best be corrected.

MICHIGAN LUMBERMEN IN THE GEORGIAN BAY DISTRICT.

ONLY a short time ago vessel owners who followed the transportation of lumber were told that with a decline in the product of mills in the Saginaw valley, and the great inroads which the railways were making in the business of that district, there would be no business for the lake barges to engage in. The present season, more than any other for three or four years past, has proven that this claim resulted from a narrow view of the future of the great lumber districts in Georgian Bay (Canada) and at the head of Lake Superior. It is the universal verdict that the season just closing has been one of the

best seasons the lumber trade of the Saginaw valley and eastern Michigan has yet experienced. The movement of lumber has been satisfactory and fair prices have been realized. Everything available has been disposed of, and not in a score of years has the cleaning up process of odds and ends been so thorough.

James Moilea, of Saginaw, who is interested in this Georgian bay business, is quoted by the *Northwestern Lumberman* as estimating the product of fourteen Michigan firms operating in the Georgian bay district this winter at 368,000,000 feet. He divides this estimate among the different operators as follows: Saginaw Lumber & Lath Co., on Spanish river, 20,000,000 feet; Sibley & Beringer, 15,000,000; Spanish River Lumber Company, for Polson & Arnold, Bay City, 27,000,000; Nelson of Cheboygan, 8,000,000; Pack, Woods & Co., 15,000,000; E. Hall, Detroit, for Bay City, 16,000,000; F. W. Gilchrist, Alpena, on the Missisaga, 80,000,000; Howry & Sons, Saginaw, 25,000,000; Emery Lumber Company, French and Wahnapiatau rivers, 50,000,000; Hurst & Fisher, 50,000,000; Eddy Bros., Bay City, 20,000,000; Alger, Bliss & Company, Saginaw, 25,000,000; Moore Lumber Company, 10,000,000; William Peter, 17,000,000.—*Cleveland, O., Marine Review.*

It is asserted by free traders and not denied by protectionists that the young men of Canada are migrating in large numbers to the United States—that Canadians are being annexed in job lots to that country. It has been frequently shown in these pages that while the Dominion Government imposed an export duty on saw-logs, the saw-mill industry of Canada, particularly of the Georgian Bay district, was in a flourishing condition, and that such industries as were connected with it were also doing good business. We allude to manufacturers of steam engines, boilers, saw-mill machinery, saws, belting, etc. Since the export duty was removed at the threat of the McKinley tariff, all these industries have been the sufferers; and not only those engaged in the manufacture of saw-mill supplies, but also the men who worked in the saw-mills. During the fiscal year 1891 our exports of pine logs to the United States amounted to 36,700 logs, upon which an export duty of \$60,756 dollars was collected—this at the rate of one dollar per thousand feet of logs board measure; while in the same year our exports of sawn pine planks and boards to that country amounted to 686,000 feet valued at \$7,633,000: and of this \$6,500,000 went from Ontario. The logs were admitted free into the United States, and the lumber paid a duty there of \$1 per thousand feet. The removal of our export duty had a most marked effect upon the American saw-mill industry, as will be seen by the facts stated in the *Marine Review*. The United States census returns show that the supply of logs in what has heretofore been the great lumber producing States—Michigan, Wisconsin and Minnesota, has practicably been denuded and exhausted of pine timber, and that within two or three years they would afford no supply of logs whatever. In their endeavour to keep their mills supplied with logs, the mill-men in these States had possessed themselves of vast tracts of timber land in the Georgian Bay district, and to protect this interest the United States Government had imposed a duty of \$1 per thousand upon foreign (Canadian) lumber, and to protect the Canadian saw-mill industry the Canadian Government had imposed an export duty of \$1 per thousand upon logs going out of the country. Under these arrangements the consumer in the United States had to pay both duties. They had to pay their own import duty on Canadian sawn lumber,

and they had to pay the Canadian export duty on saw-logs. These facts were evident. But, in the framing of the McKinley tariff it was thought that Canada could be easily bulldozed into surrendering her export duty. If this were done it would place this industry entirely in the hands of American saw-mill men, virtually shutting Canadian lumber out of that market. The lever brought to bear was a threat to increase the import duty on Canadian lumber from one dollar to two dollars: and it is to be regretted that the Canadian Government in a moment of weakness yielded under the pressure and removed the duty. The result is seen in the enforced idleness of Canadian saw-mills and in the depression in the industries connected therewith; and in the wonderful impetus to the American industry. The *Northwestern Lumberman* says that next year the saw-mills at Alpena, Michigan, alone will receive from Canada about 100,000,000 feet of logs and those on the Saginaw river 200,000,000 feet, to say nothing about the supplies to mills in other localities.

The remedy for this unfortunate condition of affairs, is the imposition of an export duty on logs. It is true that if we should impose such a duty the American duty on our sawn lumber would be increased to \$2, but American consumers would have this to pay. If our export duty on logs were made, say, \$3 per thousand, the American mill-men would either have this to pay, or they would probably prefer to remove their mills to Canada.

By all means let the export duty be imposed. It is high time that a stop should be put to this constant catering to American interests at the demands of the American Government, and proper encouragement given to Canadian manufacturing enterprises. Impose the duty.

EDITORIAL NOTES

RATHER than pass another season without reciprocity in wrecking on the lakes, vessel owners should urge the present Administration to concede to Canada control of wrecking matters in the Welland and other canals of the Dominion, which it was thought would be covered by the term "waters contiguous to the United States." United States interests have little or no use for wrecking privileges in the Canadian canals, and the humane feature of this wrecking question, which is most important, does not apply to canals. It is a matter of no credit to the Executive officers of either Government that the legislators should agree upon a measure for the protection of life and property, and then find its enforcement delayed through a dog-in-the-manger policy that is at the same time extremely trivial.—*Cleveland, O., Marine Review.*

Beate your own Government all you please, but it is an exhibition of gall for it to insist on wrecking privileges in Canadian canals. Would it concede the privilege to Canada to do a wrecking business in the Erie canal? Not much.

THE Citizens' Industrial Association was recently formed in Toronto to advance the manufacturing interests of the city, a part of the scheme being to induce manufacturers to establish industries here. At a recent meeting of the Association—one at which Mr. G. R. R. Cockburn, M.P., was elected a vice-president—a question was considered of the Association endeavoring to induce the City Council to award a contract

for sewer pipe to a concern whose works are not in Toronto and not to a similar concern whose works are not in Toronto. If an effort had been made to induce a concern to locate works in this city, this would have been within the scope of the Association; but why it should become interested in a matter affecting outside industries is one of the things as yet unexplained.

CANADA has recently sustained a great loss in the death of Mr. Samuel Lennard, of Dundas, and Mr. J. B. Armstrong, of Guelph. They were representative men of Canadian manufacturers, and did much to build up industries which are a credit to the country. They were both numbered among the early advocates of the National Policy, and were of those who composed and maintained the Canadian Manufacturers' Association. Mr. Lennard and his two sons owned and operated one of the largest factories in Canada for the production of knit goods. Mr. Armstrong was an inventive genius in whose fertile brain originated the ideas of many of the articles the manufacture of which, protected by patents in several countries, made his name known throughout the world and brought him much wealth. Canada keenly feels the loss of such men.

ONE of the first acts of Sir John Thompson's Government affecting the tariff was to remove the five per cent. *ad valorem* duty upon raw sugar not higher than No. 14 D.S. not imported direct from country of production. This was done, so it was announced, to conciliate the Yankees through whose ports some sugar is imported into Canada. It did not seem to occur to the Government that when the conciliation feeling was rife some of it might have been extended to the people of Canada, either by reducing the duty on refined sugar to the McKinley standard, or by enlarging the free sugar to the same standard. The Yankees admit raw sugar free of No. 16 D.S., which is an edible article. No. 14 sugar, free in Canada, is not edible. The restriction just removed upon sugar imported via the United States deprives Canada of some revenue and gives it into the pockets of the sugar refiners. And this is what is called "Conciliation."

MR. MCKINLEY appears to be the only man in the United States who does not know what defeated the Republicans. Politicians of all shades of thought attribute the landslide to the tariff, but the author of the McKinley bill is in total darkness on the subject. He is no worse than the protectionists in Canada, who fail to see the significance of the downfall of the American Chinese wall.—*Toronto Mail*.

Let us see about this downfall of the American Chinese wall and the significance of it to Canadian protectionists. If the *Mail's* item means anything it means that inasmuch as Mr. Cleveland has been elected, the McKinley tariff is doomed, and that in some way or other the Canadian tariff will meet a similar fate. The tariff views of the Democratic party were formulated in the Mills bill, to which Mr. Cleveland gave hearty consent; and it is conceded that whatever changes may be made in the American tariff, it will be along the lines embodied in that bill. Canadian protectionists do not ask—have never asked—that the tariff duties be raised to the

McKinley standard, or that they be raised above what they now are. The *Mail* rejoices, however, at the success of a party that will probably give the United States what might be denominated the Mills tariff. Let us see how the Mills bill compares with the Canadian tariff. The *Empire* publishes the following table showing that the Canadian tariff is much lower than what Mr. Mills proposed to make the American tariff:—

Article.	Canadian Tariff	Mills Bill.
Carpets, Brussels, etc.	25 per cent.	30c. per yd. and 30 p.c.
China ware	30 per cent.	45 p.c.
Cotton socks, etc.	10c. per lb. and 30 p.c.	50c. per doz. and 40 p.c.
Cotton clothing	35 per cent.	40 per cent.
Cotton manufactures	20 per cent.	35 per cent.
Cotton fabrics	25 per cent.	1c. per yd. and 35 p.c.
Cotton handkerchiefs	25 per cent.	40 per cent.
Cotton velvets	20 per cent.	40 per cent.
Iron, stoves and other castings	\$12 per ton	\$24 per ton
Nails and spikes, cut iron or steel	1c. per lb.	1 1/2c. per lb.
Sass of all kinds	35 per cent.	40 per cent.
Woolen manufactures	10c. per lb. and 20 p.c.	25c. to 40c. per lb. and 35 per cent.
Woolen clothing	10c. per lb. and 20 p.c.	45c. per lb. and 40 p.c.

If the Mills bill is desirable legislation from the standpoint of the free trade *Mail*, it does not appear that the McKinley tariff is much of a Chinese wall after all.

WANTS.

Any subscriber to or advertiser in THE CANADIAN MANUFACTURER who may desire to purchase any sort of machine or machinery; or any sort of mill, factory, workshop, foundry or other supplies; or any materials for manufacturing purposes, and will notify us of his wants, the same will be published in a prominent department of this paper, and his name and address will be furnished to any subscriber or advertiser who may desire to supply the want, for which services no charge whatever will be made. Our friends are cordially invited to avail themselves of this invitation.

Outward (Toronto: William Briggs, publisher. Price 60 cts. In clubs of five, 50 cts.) This progressive young people's paper of the Methodist Church has in two years reached the very large circulation of 32,000 a week. It is a bright, beautifully illustrated, eight-page paper, devoted especially to religion, literature, travel, science, social progress and the modern young people's movements. It is especially characterized by its robust Canadianism of sentiment and loyalty to queen and country. It should be in the hands of every young Methodist.

The Montreal *Witness*, which is to move into its own building next spring, claims that it will be by far the best equipped newspaper, in a mechanical point of view, in Canada. Its immense Hoe quadruple machine will be capable of turning out 60,000 eight-page or 30,000 twelve or sixteen-page papers an hour, printed complete on both sides, cut, pasted, and counted in piles of fifty. In addition, its matter will be set on the Mergenthaler Linotype, which gives a new, clean face of type every issue, and its form will be compact and beautiful. The *Witness*, although old and reliable, is up to the front in respect of enterprise, and its readers expect and are not satisfied with anything but the best. The price of the *Daily Witness* is three dollars a year, of the *Weekly Witness* one dollar, and the *Northern Messenger*, published from the same house, is thirty cents.

Good Housekeeping for January begins the sixteenth volume of that popular and valuable magazine. There are a number of new departures, which will make the publication more widely sought than ever before, and of still greater value in the household. Of these mention may be made of initial papers in the following series: "The Household Market Basket," by Maria Parlow; "The Household Sausible," by Architect E. C. Gardner; and "The

Housekeeper's Shopping Bag, by Helena Rowe. There are also two pages of music, "My Little Lad and I," an original and popular poem published several years since in *Good Housekeeping*, being set to music for the piano by Edward H. Phelps. The standard features of the magazine are all preserved, and admirably promised is given for the new volume. Clark W. Bryan Company, Springfield, Mass. \$2 per year.

Outing for January is enlarged to a holiday number of ninety-five pages of mingled fiction, sport and travel. The contents are as follows: "A Comedy of Counterplots," by Edgar Fawcett; "Ice Hockey," by Beverly Fogart; "Some Famous Alpine Ascents," by Arthur Montenegro, F.R.G.S.; "That Dog is Zek Simmons," by J. A. Williams, jr.; "At St. Margaret's," by Clara Sprague Ross; "The Deserted Kingdom," by Frank F. Brumback; "Louie's World Tour A-Wheel," "A Morning Ride in California Highlands," by Elizabeth A. Vero; "Snow-shoeing in the White Mountains," by Gordon Hooker Taylor; "Ice Yachting in the Gulf of Finland," by Gerard Anderson; "A Glance at Big Game," by Ed. W. Sand's; "The Sword Fish of the Indian Ocean," by Nicolas Pike; "In Search of Paradise with Camera and Palette," by Burge L. Harrison; "On the Wrong Side of Snow Ridge," by J. Macdonald Oxley; "The Toughest Darkest America" (continued), by Trumbull White; "Harry's Career at Yale" (continued), by John Seymour Wood; "The Militia and National Guard of Ohio," by Lieut. W. H. C. Bowen, U. S. A., and the usual editorials, poems, records, etc.

The social laws which govern girls at the theatre, opera and concert form the third of Mrs. Burton Harrison's excellent papers on "The Well-Bred Girl in Society," in the January *Ladies' Home Journal*, and Mr. William Dean Howells supplements this article with his story of American girl life, "The Coast of Bohemia." "How Dumas wrote Camille" is told by Dumas himself through Lucy H. Hooper, and a companion article is that by Mamie Dickens, in which she tells the complete story of "How My Father Wrote His Books." The first instalment of "Mr. Beecher's Unprinted Words" is given, and will appeal strongly in its direct interest to all admirers of the great preacher. Edward B. writes on "The Literary Chances in New York," a sketch which Ruth Ashmore supplements by giving an admirable idea of "Girl Life in New York City." Palmer Cox has his famous Brownies on a raft crossing the ocean on their trip around the world. A most beautifully illustrated poem by Flavel Scott Mines, called "The New Year Minuet," opens this number of the *Journal*, which has again a new cover of the Italian Renaissance style. "One Dollar for one Year" is the motto of the *Journal*, or rather of its publishers, The Curtis Publishing Company, of Philadelphia.

Scribner's Magazine for January begins its thirteenth volume and seventh year, for which many important features are announced, some of them making their first appearance in this number. Serial fiction will be a feature of the year, with such writers as Frances Hodgson Burnett, H. C. Bunner, Robert Grant, Harold Frederic, and Miss Elliott, the author of "Jerry." In this number the first part of Mrs. Burnett's serial is given, under the title of "The One I Know the Best of All." Professor Angelo Heilprin, who was in command of the Peary Relief Expedition (which met the successful explorer of Greenland on his return to McCormick Bay,

last August, from his three months journey on the ice-cap), describes the voyage of the Kite, the quarters where Mr. and Mrs. Peary lived during the long Arctic winter, and the meeting of Lieutenant Peary with the relief party on the ice-cap. The important incidents are illustrated from sketches made on the spot by F. W. Stokes. The very popular "Historic Moment" series is represented this month by William Howard Russell's account of the "Fall of Sebastopol" (September 8, 1855), of which he was an eye-witness. The illustrated articles in this number, which is rich in pictures, include Madame Mario's account of "The Poor in Naples."

In the January *Popular Science Monthly* Dr. Andrew D. White completes his account of the stubbornly contested advance, "From Magic to Chemistry and Physics," in the Warfare of Science. Colonel A. B. Ellis contributes to the same number a paper on "Marriage and Kinship among the Ancient Israelites." "Some Vegetable Malformations," such as roses and pears with branches growing through them, etc., are described with illustrations, by Professor Byron D. Halstead. The story of an independent invention of the lightning-rod, by a Bohemian contemporary of Franklin, is told by Joseph J. Kral. Dr. Charles W. Pilgrim, writing on "Genius and Suicide," shows that a mind which is abnormally developed on any side is in much danger of becoming unbalanced. Dr. Alexander Macalister reviews the recent progress of anthropology under the title "The Study of Man." "The Early Extirpation of Tumors" is advocated by Dr. J. W. S. Gouley, whose experience has shown him that great numbers of innocent tumors take on a cancerous character in time. "The Evolution of Civilization and the Arts" is traced and explained by M. Gustave Le Bon. The movements of "A Captive Comet," one which collided with Jupiter, in 1886, are described by Charles Lane Poor. There is a statement of "The Problems of Anthropology," by Rudolph Virchow. In "The Rotation of the Farm," the so-called abandoning of farms is explained by Appleton Morgan as a tendency of the country population toward the city, which is likely to be counteracted by a growing tendency of city dwellers toward the country. Other articles are "The Logic of Organic Evolution," by Frank Cramer; "Profits of Legitimate Business not too large," by P. F. Hallock; "Totemism in the Evolution of Theology," by Mrs. Clara K. Barnum; and a "Sketch of Lewis Morris Rutherford," with a portrait. In the Editor's Table, the subjects of "Superstitions," "Scientific Politics," and "Good Roads" receive attention. New York: D. Appleton & Company. Fifty cents a number, \$5 a year.

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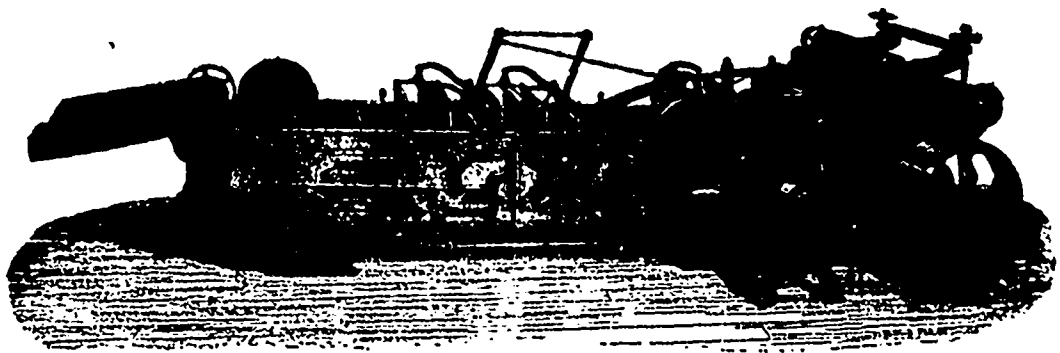
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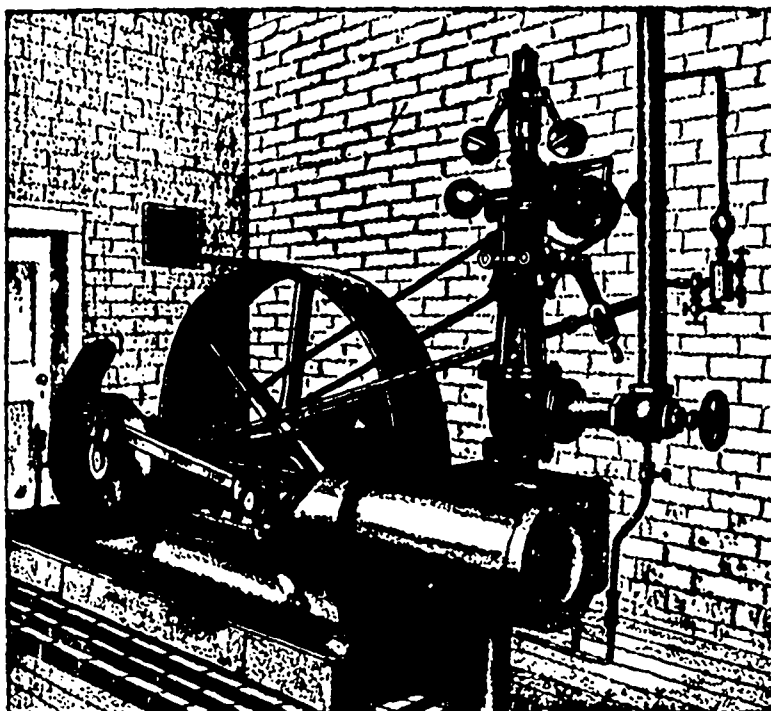


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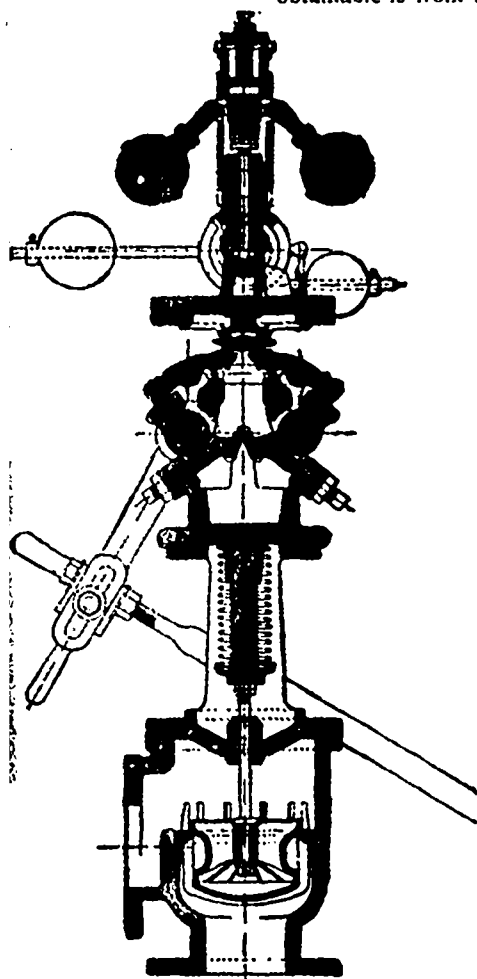
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Reliance Works, Montreal, and they inform us that they are enjoying a large and growing demand for it. They show letters from a number of manufacturers and others who are using it, the testimony of some of them being as follows:—
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 H. R. Ives & Co., Montreal, "We are not only saving 15 per cent. in fuel, but gaining 20 per cent. in power."
 Montreal Rolling Mills Co., Montreal, "In regard to fuel, using the same coal, the first week we saved nearly 25 per cent."
 Moses Parker, iron founder, Montreal, "The saving of fuel is about 15 per cent."
 Wm Buck, Brantford, Ont., "We consumed with the old governor 2,700 lbs. of coal for 10 hours run—with the Nordberg Governor 1,900 lbs., and our regulation is perfect."

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The B. Greening Wire Company, Hamilton, Ont., have sent us a copy of a brochure recently published by them entitled, "Wire: its Manufacture, Antiquity and Relation to Modern Uses." It traces back the manufacture and use of wire to the time when gold wire decorated the sacerdotal robes of Aaron 1,700 years before Christ; and it alludes to a specimen of wire made in Nineveh 800 years B.C. About the year 1600 it is recorded that at Tintern Abbey, on the Wye, pins and needles were manufactured by a Mr. Greening, who, it may be supposed was an ancestor of the people to whom we are now indebted for this little book. At any rate, about the year 1799 Nathaniel Greening, of Tintern Abbey, commenced the manufacture of wire at Warrington. It was with this concern that the late B. Greening served an apprenticeship to the business, and in 1858 removed to Canada and became the founder of the business now conducted by the B. Greening Wire Company. The book is exceedingly interesting, and contains a wealth of information which it would be difficult to obtain from any other source. We presume it will be sent to any who may apply for it.

The Legal and Commercial Exchange of Canada, whose headquarters are at Toronto, with branches in many other parts of the Dominion, have sent us a copy of their 1893 Reference Book which gives most important information regarding the commercial standing of we suppose about every person, company and co-partnership doing business in Canada. This edition does not differ from previous ones in so far as the superior style of rating is concerned, telegraph code and other advantages specially adapted for all business men, whether financiers, manufacturers or merchants, but the new revision of the whole Dominion evinces extreme carefulness. Some now and important features indicate the trend of trade in Canada. The first portion quotes Ontario, Manitoba, North-West Territories and British Columbia, while the second quotes Quebec and the Maritime Provinces. This arrangement has been made so as to allow of two volumes being issued to suit firms both in the east and west. There has been a desire for some time past to have a dividing line in some classes of goods, and this division of the Reference Book anticipates as usual the requirements of the time. The book is of a size convenient for office or pocket, the type is of clear agate, and the binding is of the most tasteful description. There are many most valuable features of the book which are not observed in other similar publications, the desirableness of which will be readily observed on examination.

* INVENTIONS. *

This department of THE CANADIAN MANUFACTURER is devoted to the interests of inventors, of patentees of inventions, and of manufacturers of patented articles. Patents are granted in Canada for fifteen years, the Government fee for which may be paid by instalments. Arrangements have been made by which the issue of all patents by the Canadian Patent Office and all renewals and extensions thereof will be promptly noticed in this department, and a brief description thereof given. Enquiries on these subjects are invited and will receive prompt attention. No charge will be made for answers by mail when return postage is sent. Information given free regarding patent laws and the obtaining of patents in Canada, United States, Great Britain and all foreign countries. Claims for inventions, as embodied in Letters Patent, also the illustrations of them, will be inserted in this journal at moderate charges. The attention of manufacturers is specially directed to the opportunities for lucrative business which may be acquired by close observation of whatever may appear in this department.

CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office from November 28th to December 15th, 1892, inclusive.

Information in regard to any of these patents may be had free on application to THE CANADIAN MANUFACTURER, or copies of American patents corresponding to these, where the American patent has been previously granted, can be procured through us for the sum of twenty-five cents.

Note.—The new Canadian Patent Law has come into effect, whereby the life of Canadian patents is for the term of eighteen years. Patent numbered 39,264 and all subsequently numbered are granted for the longer term.

MECHANICAL.

- 41,076 Steam engine, J. A. Mumford, November 28th.
- 41,077 Railroad signal, J. S. Parmenter, November 28th.
- 41,078 Top joints of vehicles, A. M. Hess, November 28th.
- 41,079 Railroad signal, W. E. Irvin, November 28th.
- 41,080 Forging and finishing circular articles, C. Fairbairn, November 28th.
- 41,081 Buoyant life saving appliance, F. P. Warren, November 28th.
- 41,082 Carving machine, J. Hay, Jr., November 28th.
- 41,084 Telephone receiver, A. T. Collier, November 28th.
- 41,085 Thermostat and indicator, H. Murdock, November 28th.
- 41,086 Ticket system, J. A. Milliken, November 28th.
- 41,087 Belt fastener, I. Jackson, November 28th.
- 41,088 Milk cooler, M. D. Mann, November 28th.
- 41,089 Mechanism for driving sewing and other machines by foot power, G. Hervien and N. A. Aubertin, November 28th.
- 41,090 Embalming, G. H. Hamrick, November 28th.
- 41,091 Shipping and display box for seeds, S. R. Miller, November 28th.
- 41,092 Machine for cutting cloth, J. Penman, November 28th.
- 41,093 Rock drill, Rand Drill Co., November 28th.
- 41,094 Air compressor, Rand Drill Co., November 28th.
- 41,095 Rock drilling, Rand Drill Co., November 28th.
- 41,096 Rock drill, Rand Drill Co., November 28th.
- 41,097 Sewing thimble, W. Braunley and J. L. Eaves, November 29th.
- 41,098 Winding of caps or balls, J. B. Loeson, November 29th.
- 41,099 Oil burner, G. G. Calkins, November 29th.
- 41,101 Asphaltum, J. A. Deibbs, November 29th.
- 41,102 Air compressor, A. O'Brien, November 29th.
- 41,103 Flushing apparatus for water closets, A. O'Brien, November 29th.
- 41,104 Waterproof material, E. Bernath, November 29th.
- 41,105 Railway switch, J. P. Kelly and J. Ledue, November 29th.
- 41,106 Third pedal movement for whisper pedals for pianos, J. B. Mitchel, November 29th.
- 41,107 Tobacco pouch, W. J. Cussen, et al, November 29th.
- 41,108 Corn planter, G. S. Sheffield and A. C. Hunchbaugh, November 29th.

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PATENTS,

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- 41,109 Advertising device, G. F. Burton, November 29th.
- 41,112 Stamp affixer, J. Coyle and A. McCallum, November 29th.
- 41,113 Knife sharpener, R. L. Sheridan, November 29th.
- 41,116 Stopping bottles, etc., B. C. & D. Cross, November 29th.
- 41,117 Skiving machine, J. R. Scott, November 30th.
- 41,118 Shingle gauge, J. W. Bacon, November 30th.
- 41,119 Branding of cigars, B. Goldstein, November 30th.
- 41,120 Perspectograph, J. H. S. Jechoux, November 30th.
- 41,121 Braer, A. A. Tattersall, November 30th.
- 41,122 Lock, H. Elliott, November 30th.

- 41,123 Die plate, L. C. Wetzol, November 30th.
- 41,124 Transfer ticket, W. Maclean, December 9th.
- 41,125 Adjustable number device, J. F. Evert, December 9th.
- 41,126 Screw stopper, J. J. Varley, December 9th.
- 41,127 Drawing pen, J. Phillips, December 9th.
- 41,128 Toy bank advertising device, J. W. Cameron and C. L. White, December 9th.
- 41,129 Spoon bait, E. F. Pflueger, December 9th.
- 41,131 Spiral hairpin, J. T. Larkin, December 9th.
- 41,132 Damper, C. A. Couch, December 9th.
- 41,133 Substitute for sponges and the like for bathing, etc., Wm. Taylor, December 9th.
- 41,134 Clothes drier, G. W. North, December 9th.
- 41,135 Hose nozzle, T. J. Carroll, December 9th.
- 41,136 Scrubbing brush, H. Blanchard, December 9th.
- 41,137 Measuring device, F. B. Edmund, December 9th.
- 41,138 Production of drops made of fine sugar and gum or similar material, T. Robertson, December 9th.
- 41,139 Bed clothes clamp, A. W. Hamble, December 9th.
- 41,140 Floor clamp, A. Zauner, December 9th.
- 41,141 Pump, H. J. Dykes, December 9th.
- 41,142 Car axle lubricating box, C. Fergie, December 9th.
- 41,144 Grain meter, J. Henry, December 9th.
- 41,145 Sawmill dog, M. Hanna, December 9th.
- 41,146 Oil can, S. Dunlap, December 9th.
- 41,147 Combination fence tool, J. W. Gallant, December 9th.
- 41,148 Electrotype and stereotype block, furniture and processes of manufacturing, J. C. Wolfe, December 9th.
- 41,149 Car coupling, F. A. Fox, December 9th.
- 41,151 Envelope machine, L. P. Bouvier and W. Harty, December 9th.
- 41,152 Weighing scale recorder and register, R. McFarlane and W. E. Holmes, December 9th.
- 41,153 Barbed wire, J. D. Curtis, December 10th.
- 41,154 Attaching carriage or vehicle springs, M. E. Robb, December 10th.
- 41,155 Removing surplus mucilage from a mucilage brush, F. T. Aikins, December 10th.
- 41,157 Arm and wrist rest, R. Kirk, December 10th.
- 41,158 Filtering tubes, with ball filtering material for purifying molten glass, M. Epstein, December 10th.
- 41,159 Compressing and accumulating air and water, G. Goulet, December 10th.
- 41,161 Telephone paper rack, J. F. Bullock, December 10th.
- 41,162 Car brake, J. G. Zimmorman, Jr., December 10th.
- 41,163 Toy, W. V. Snyder, December 10th.
- 41,166 Breast strap slide for harness, J. A. Macrae, December 10th.
- 41,167 Thill tug. The Adjustable Metallic Tug Co., December 10th.
- 41,168 Excavating shafts through rock or soil, J. D. Long, December 10th.
- 41,170 Railway carriage heating apparatus, T. S. Lapraik, December 10th.
- 41,171 Combination lock, H. H. Daniels, December 10th.
- 41,172 Wooden shovel, V. Lemieux, December 10th.
- 41,173 Chilled iron globules, B. C. & R. A. Tilghman, December 12th.
- 41,174 Numbering machine, W. E. Smith, December 12th.
- 41,175 Exhaust pipe of locomotive, J. R. Hartigan, December 12th.
- 41,176 Door lock switch for electric lights, C. Green, December 12th.
- 41,177 Inhaler and medicator combined, J. J. Souceubaugh, December 12th.
- 41,178 Trunk fastener, J. L. Jones, December 12th.
- 41,179 Watch case, F. Borgel, December 12th.
- 41,180 Vehicle pole, W. L. Pike, December 12th.
- 41,181 Fare and baggage checking system, J. P. Marlin, December 12th.
- 41,182 Transfer ticket, E. C. Boeckh, December 12th.
- 41,183 Gas regulator, J. Love, December 12th.
- 41,184 Gate, W. B. White, December 12th.
- 41,185 Land roller, D. A. Grant, December 12th.
- 41,186 Wood split pulley, W. H. Standish and W. T. Reid, December 12th.

D. MORRICE, SONS & CO.

MONTREAL and TORONTO.

Manufacturers' Agents
and General Merchants

The Dominion Cotton Mills Co., - Montreal

MILLS AT

Hochelaga, Coaticook, Chambly, Brantford, Kingston, Halifax, Moncton, Windsor, N.S., Magog (Print Works).

Grey Cottons, Bleached Shirtings, Bleached and Grey Shirtings, Cotton Bags, Drills, Ducks, Yarns, Twines, Waxes, Prints, Regattas, Printed Calicoes, Bismarks, Sheet Linings, Printed Flannels, etc., etc.

The Canadian Coloured Cotton Mills Co., Ltd.
Montreal, Mills at

Milltown, Cornwall, Hamilton, Merriton, Dundas also A. GIBSON & SONS, Marysville, N.B., and Hamilton Cotton Co. Hamilton.

Shirtings, Glazings, Oxfordes, Flannels, Tickings, Avonnes, Sheetings, Yarns, Cottonades, etc., etc.

Towels.—Fine, Medium and Coarse; Stuffs, Blankets Horse Blankets, Saddle-felt, Glove Linings.

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Serges, Yarns, Knitted Underwear—Socks and Hosiery in Men's, Ladies' and Children's.

Cardigan Jackets.—Mits and Gloves.

Braid.—Fine Mohair for Tailoring, Dress Braid, and Linen, Cord Laces.

Carpet Rugs.

The Wholesale Trade only supplied.



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To Rent, with power as required up to 600 Horse Power. Apply to

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C.P.R.



F. B. POLSON, TORONTO.

- 41,187 Globs valve, G. K. Tower, December 12th.
 41,188 Adjustable frame for tiles, R. Marsh, December 12th.
 41,189 Hammock, C. Johnston, December 12th.
 41,190 Beer and ale manufacturing, A. W. Billings, December 12th.
 41,191 Pumping apparatus, D. Noble and J. A. Brown, December 12th.
 41,192 Camera and graphoscope, W. V. Osmond and A. C. Kemper, December 12th.
 41,193 Tapping cock and valve, B. J. Bacon, December 12th.
 41,194 Wrench for oil well tools, W. Forgie, December 12th.
 41,195 Paper bag making machine, S. Cupples, December 12th.
 41,196 Freezing of meat or other articles, E. Heskett and A. Marcet, December 13th.
 41,197 Vest shield, J. F. Bullock, December 13th.
 41,198 Steam vehicle, A. C. Marshall, December 13th.
 41,199 Wool carding, J. Harley, December 13th.
 41,200 Pulp screening, C. J. Foster, December 13th.
 41,201 Fastening of thill loop, H. R. Schnair, December 13th.
 41,202 Time record book, H. W. Scattergood, December 13th.
 41,203 Lubricating the journals of railway cars, R. Edgar and R. J. Anomas, December 13th.
 41,204 Type-setting machine, J. Odell, et al, December 13th.
 41,205 Tidal motive power, W. Porter and J. Drummer, December 13th.
 41,206 Pump, M. M. Smith, December 13th.
 41,207 Overflow cut-off, A. W. Knox, December 13th.
 41,208 Water indicator for boilers, W. H. Rodgers, December 13th.
 41,209 Separable pulley, H. J. Gilbert, December 13th.
 41,210 Hot water attachment for boilers, G. T. Brewer, December 13th.
 41,211 Foot for dredge anchor, W. Pike and N. McDiarmid, December 13th.
 41,212 Forging screws by rolling, W. Thomson, et al, December 13th.
 41,213 Wood trimming machine, C. Neracher, December 13th.
 41,214 School desk, C. S. Barnes, December 13th.
 41,215 New canule for Tracheotomy, Dr. E. Hartstein, December 13th.
 41,216 Carriage, H. P. Wells, and O. Morrill, December 13th.
 41,217 Wheeled scraper, P. M. Broadfoot, December 13th.
 41,219 Extension ladder, J. D. Strumbert, December 13th.
 41,221 Producing lead carbonate, N. K. Morris and J. W. Bailey, December 13th.
 41,223 Bit stock, O. R. Alden, December 13th.
 41,224 Pipe wrench, J. W. Allen, et al, December 14th.
 41,225 Chopping knife, J. W. Allen, et al, December 14th.
 41,226 Making individual lasts and patterns therefor, G. W. Willey, et al, December 14th.
 41,227 Drum, J. W. Pepper, December 14th.
 41,228 Brick, J. B. West and Taylor Bros., December 14th.
 41,229 Steam trap, A. P. Clark and L. H. Buttrey, December 14th.
 41,230 Shearing machine, J. Altmann and W. Maxwell, December 14th.
 41,231 Feeding to magnetic separators, J. Wenstrom, et al, December 14th.
 41,232 Wagon and carriage jack, J. Bell, December 14th.
 41,233 Building and repairing wire fences, J. Heard, et al, December 14th.
 41,234 Honey extractor, E. L. Goold & Co., December 14th.
 41,235 Carriage, H. P. Wells and O. Morrill, December 14th.
 41,236 Furnace, E. S. Rodgers, December 14th.
 41,237 Index, F. L. Parker, December 14th.
 41,238 Fluid brake, H. & E. Shaw, December 14th.
 41,239 Doll support, A. B. Willcox, December 14th.
 41,240 Cattle car, F. E. Canda, December 15th.
 41,242 Tree and wood sawing machine, O. Olsen, December 15th.
 41,243 Locomotive boiler, L. W. Lester, December 15th.
 41,244 Cleansing filtering surface, M. McDonald, December 15th.
 41,245 Extension ladder, J. T. Cross, December 15th.
 41,246 Lead fibre, N. K. Morris, December 15th.
 41,247 Propeller, C. S. Merritt, December 15th.
 41,248 Agitator for mixed paints, C. J. McLennan, December 15th.
 41,249 Fruit canning device, J. J. Isler, December 15th.

BELTING

Patent Rolled Shafting, Hangers and Pulleys

WROUGHT IRON PIPE and FITTINGS.

RICE LEWIS & SON, Ltd., General Hardware Merchants, Toronto.

THE B. GREENING WIRE CO. LTD.
 HAMILTON, ONT.
 WIRE CLOTH
 ALL GRADES
 WIRE ROPE,
 PERFORATED SHEET METALS
 GALVANIZED POULTRY NETTING
 SOFA & CHAIR SPRINGS

ALSO
 MANUFACTURERS OF
 GENERAL
 WIRE WORK.
 Window Guards,
 Stable Fixtures,
 RAILINGS,
 Sand Screens
 Coal Screens
 Etc.

Stop The Leaks!

You can save your valves.

You can Save the loss of Steam, and thereby Save Fuel.

You can avoid the Annoyance and Expense of Disconnecting the Valves from the Pipe by using the Morse Valve Reseating Machine.

Can you afford to be without one?

DARLING BROTHERS

RELIANCE WORKS

MONTREAL.

- 41,250 Cattle car, F. E. Canda, December 15th.
- 41,251 Railway car, L. P. Farmer, December 15th.
- 41,252 Making stove-pipe elbows, A. N. Fairman, December 15th.
- 41,253 Money changer, J. Adams, December 15th.
- 41,254 Air supply device for gas machines, E. B. Badlam, December 15th.
- 41,255 Artificial stone, J. E. Keasling and C. Fuchs, Jr., December 15th.
- 41,256 Numbering machine, Carter & Co. (Ltd.), December 15th.
- 41,257 Apple picker, R. W. Anderson, December 15th.
- 41,259 Bicycle, A. J. Batterby, December 15th.
- 41,260 Overall, S. Latham, December 15th.
- 41,261 Spade and shovel, P. Caldwell, Jr., December 15th.
- 41,262 Corset, F. Rothschild, Jr. December 15th.
- 41,263 Typographic machine, F. T. Heath, December 15th.

ELECTRICAL.

- 41,083 Coin freed dynamometer, C. A. Barrett, November 28th.
- 41,110 Electric block signal system, J. L. Burt, et al, November 29th.
- 41,111 Secondary batteries, Mining & General Electric Lamp Co., November 29th.
- 41,115 Electric cut-out, W. P. Mashinter, et al, November 29th.
- 41,143 Depolarizing liquid for galvanic batteries, O. Schlesinger, December 9th.
- 41,156 Automatic disconnecter for overhead conductor, A. L. Johnston, December 10th.
- 41,160 Spring motor, The Universal Sewing Machine Motor Attachment Co., December 10th.
- 41,164 Electrically heating bars, etc., M. W. Dewey, December 10th.
- 41,165 Magnetic separator, J. Wentstrom, December 10th.
- 41,169 Storage battery, C. J. Hartmann, December 10th.
- 41,218 Armature for dynamo electric machine, S. N. Short, December 13th.
- 41,220 Motor, M. Crook, Sr., December 13th.
- 41,241 Arc lamp, L. H. Buchanan, December 15th.
- 42,258 Armature for electric motor, J. F. McLaughlin, December 15th.

SCIENTIFIC PROCESSES.

- 41,100 Producing metallic zinc, P. C. Choate, November 28th.
- 41,114 Desulphurizing oils, J. A. Dubbs and S. M. Boyd, November 29th.
- 41,130 Evaporating liquids, G. W. Cooper, December 9th.
- 41,150 Phonographic attachment, L. Glass, December 9th.
- 41,222 Process of educing and degumming fibre, yarns and textiles, G. E. Armstrong, December 13th.

A. LEOFRED,

Graduate of
Laval and McGill

: Mining Engineer

Main Office: QUEBEC.

BRANCH OFFICES: Sherbrooke
Montreal, 17 Place d'Armes Hill.

MINES, MINERAL PRODUCTS.

New Glasgow.

I. MATHESON & CO.

Nova Scotia.

Engineers and Boiler Makers

MANUFACTURERS OF

Corliss Steam Engines

Especially adapted for Mills and Factories.

Agents for

D. N. and C. Haggie's Patent Wire Rope for Mining Purposes

Captains of Industry.

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.

MR. J. E. LEWITT, Guelph, Ont., is building a knitting mill.

THE Quebec and Levis Electric Light Company are installing a 2000 light dynamo.

THE Victoria Electric Light Co., Lindsay, Ont., are installing a 700 light dynamo.

THE Brantford Electric Light and Power Co. are installing new 2,000 light dynamo.

THE Annapolis Electric Light Co., Annapolis, N.S., are putting another dynamo in their station.

MR. LENN will build a woolen mill at Brandon, Man., which will give employment to 100 hands.

MR. JAMES DOWNS, Adelaide, Ont. has given John Abell, Toronto, the contract to build him a roller mill.

MR. MONTROSE, of Mission City, B.C., is erecting a large woolen mill near Mission Junction, that Province.

MR. ALFRED J. FROST, Owen Sound, Ont., has just ordered a marine boiler from H. W. Petrie, Toronto.

A LARGE pump is being placed in the Joggins Mines, N.S., made by the Northey Manufacturing Co., Toronto.

THE Gem Soap Company is being incorporated at Toronto with a capital stock of \$3,000 to manufacture soap.

THE factory of the Ontario Box Company, Hamilton, Ont., was destroyed by fire December 20th. Loss \$6,000.

MESSRS. HATTON & JENKINS' new steam grist mill at Harrietsville, Ont., was destroyed by fire December 17th.

THE capital stock of the Kingston Hosiery Company, Kingston, Ont., has been increased from \$100,000 to \$200,000.

SULLIVAN'S CARRIAGE WORKS in Alice Street, Toronto, were destroyed by fire December 29th. Loss about \$8,000.

MESSRS. J. & G. BLACK'S woolen mills at Thurso, Que., were destroyed by fire December 21st. Loss about \$10,000.

THE planing mill of Mr. J. M. Green, at St. Thomas, Ont., was destroyed by fire December 22nd. Loss about \$10,000.

THE Crawford mine, Marmora, Ont., are putting in a new engine and boiler procured from H. W. Petrie, Toronto.

MR. H. W. PETRIE, Toronto, has just shipped a complete brick manufacturing outfit to Matadi, Congo Free State, Africa.

MESSRS. YOUNG & SON, paper makers, dye stuffs, etc., of Montreal have opened a branch office in Toronto, No 4 Lombard St.

THE Halifax Illuminating & Motor Co., Halifax, N.S., have just put into their works a 1,000 h.p. Babcock & Wilcox boiler.

ROBERT NEWBOLD is starting a new knitting factory at Inglewood, Ont. H. W. Petrie supplied the knitting machinery.

MESSRS. McRAE & MCKENZIE, Eganville, Ont, have had a new fifty-barrel roller mill built for them by John Abell, Toronto.

MESSRS. MICKLE DRYDEN & SON have enlarged their shingle at Gravesend, Ont., and have added an electric light plant.

THE Barrow Bay Lumber Co, Barrow Bay, Ont, have had a new fifty-barrel roller mill erected for them by John Abell, Toronto.

At Kingsville, Ont., a few days ago a vein of natural gas was struck which has an estimated flow of 6,000,000 cubic feet per day.

THE Truro Foundry and Machine Company, Truro, N.S., are building four large automatic whistling buoys for the Government.

THE Royal Electric Co., Montreal, are building two large 5,000 light and four 2,000 light dynamos for their lighting station in that city.

MESSRS. ABBOTT & Co., Montreal, Que., have sunk an Artesian well on their rolling mill premises and put in a Northey steam pump.

R. KYLIE, carriage manufacturer, Lindsay, Ont., has put in a new twenty horse power engine and boiler, bought from H. W. Petrie.

MESSRS. McNAB & ROOD are starting a new sawmill at Haliburton, Ont. The order for the mill complete was given to H. W. Petrie.

THE saw and shingle mill of Mr R. H. Menzies, at Berriedale, near Sundridge, Ont., was destroyed by fire November 25th, loss about \$3,000.

MESSRS. WM. KELLEY & SON, Blythe, Ont., have bought from the Reliance Electric Mfg Co. a 200 light incandescent plant for lighting the town.

THE Kingston Foundry and Engine Company, Kingston, Ont., will remodel the steamer "Algonquin" this winter at a cost of about \$10,000.

THE town of Yarmouth, N.S., is to be lighted by electricity. They have given an order to the Canadian General Electric Co. for a \$25,000 plant.

MESSRS. CRAWFORD & CRAWFORD, Brandon, Man., have just put in a complete steam laundry outfit, purchased from Mr. A. R. Williams, Toronto.

MESSRS. PATTERSON & CORBIN, St. Catharines, Ont., have just supplied another electric motor car for the Yarmouth, Nova Scotia, railway.

MESSRS. COWAN & Co., Galt, Ont., have added a No. 6 Brown & Sharpe milling machine to their plant, procured through H. W. Petrie, Toronto.

THE Gurney, Tilden & Co., Hamilton, Ont., has been incorporated with a capital stock of \$350,000 to manufacture stoves, ranges, hollow ware, etc.

THE Trenton Electric Company is being incorporated at Trenton, Ont., with a capital stock of \$50,000 to supply electricity for commercial purposes.

MR. A. B. COLEMAN, Burlington, Ont., is starting a planing mill. He has bought a 45-horse-power engine and boiler from H. W. Petrie, Toronto.

THE Yarmouth Electric Railway, Yarmouth, N.S., having met with so much success, are increasing their facilities and adding more Edison motors.

MR. H. W. GOCHER, Souris, Man., has just procured from Mr. A. R. Williams, Toronto, a lot of new machinery for his machine shop and planing mill.

CAPTAIN JOHN WRIGHT will build a saw mill at Hillsborough, N.B. The Robb Engineering Company, Amherst, N.S., will supply all the machinery.

A COMPANY is being formed at Brandon, Man., with a capital stock of \$100,000, to erect a woolen mill. The Mayor of Brandon will give information.

THE Gravenhurst Electric Light Co., Gravenhurst, Ont., have added to their plant a new steam pump and heater, which they procured from H. W. Petrie.

THE daily consumption of fuel at the works of the Nova Scotia Steel and Forge Company, New Glasgow, N.S., amounts to over 100 tons of coal per day.

It is said that the J Harris Company, of St. John, N.B., manufacturers of railway cars, etc., will remove that branch of their business to Amherst, N.B.

MESSRS. R. GEMMELL & SON, woolen manufacturers, Port Elmsley, Ont., are placing one of the Northey Manufacturing Co.'s duplex pumps in their mills.

MR. WM COOKE, St. Catharines, Ont., is putting in a 250 horse power electric generator, purchased from Reliance Mfg Co., to furnish power for his factory.

THE Moncton Gas & Electric Company, Moncton, N.B., have just purchased a 1,000 light dynamo and plant from The Canadian General Electric Co., Toronto.

MR. C. C. HARRIS, manufacturer tin-foil and solder, Toronto, has discarded his steam engine and boiler and put in a Kay Electric Motor with which to run his factory.

THE Collins Bay Forwarding Company are having a compound engine put into their steamer "Orion" at Collins Bay. The Doty Engine Works Co. are doing the work.

THE

"OPTIMATES" POWER HAMMER

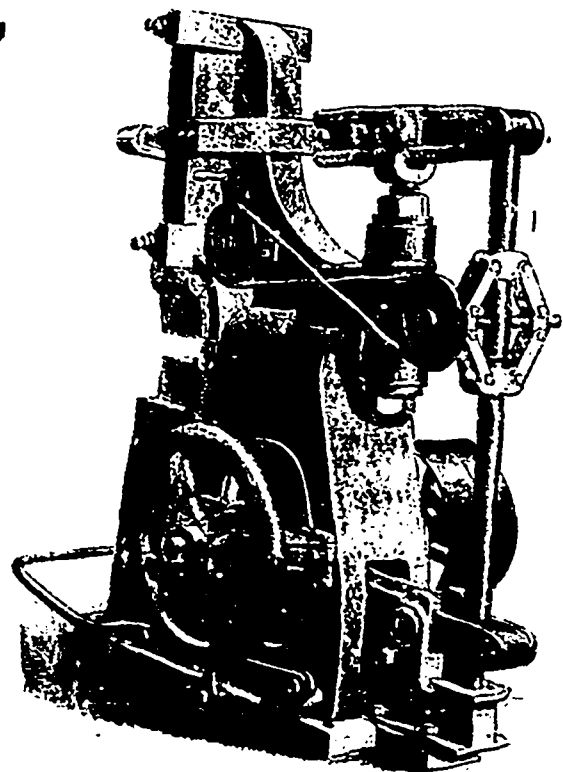
Patented in the United States, Canada, and England.

W. H. LAW,
Inventor.

MANUFACTURED BY

The Central Bridge and Engineering Co., Ltd.

PETERBOROUGH, ONTARIO, CAN.



The Kingsley Boiler Company, St. John, N.B., have recently placed one of their Kingsley patent boilers in the works of the Dominion Paper Company, at that place.

The Canadian General Electric Co. are placing in their works at Peterborough two Duplex power pumps and condenser made by the Northey Manufacturing Co., Toronto.

MESSRS. CORLEY & COLLINS, Mount Forest, Ont., have purchased from H. W. Petrie, Toronto, a 60-horse-power Brown automatic engine to run their electric light plant.

The E. B. Eddy Co., Hull, Que., are placing an extra large duplex power pump in their mills for general water supply. It was made by the Northey Manufacturing Co., Toronto.

The Mimico Gold Reducing Co. at Marmora, Ont., are adding to their plant by putting in an ore crusher, pulverizer and new boiler, procured from H. W. Petrie, Toronto.

The grain elevator of the Ogilvie Milling Company at Virden, Man., was destroyed by fire December 12th, together with about 20,000 bushels of wheat. Loss about \$30,000.

MESSRS. PARKER & CO., coppersmiths, Toronto, are placing a ten horse power electric motor for running their factory, supplied by the Reliance Electric Mfg Co., of Waterford, Ont.

The Doty Engine Works Co. have shipped to the Parkin Lumber Co., of Lindsay, Ont., a Corliss engine, of eighty horse power, and two boilers, to be used in driving electric lights.

MESSRS. STEVENS & BURNS, London, Ont., are adding a brake lathe with 84-inch swing to turn twelve feet, and weighing nine tons. It was bought from A. R. Williams, Toronto.

MESSRS. GALNA & DANTEL, of Parry Sound, are building a new tug for towing logs, Doty Engine Works Co., of Toronto, are supplying the machinery, which will be of the compound type.

MR. W. A. CLARK, of Collingwood, Ont., is building a new steamer for the Georgian Bay trade. She will be fitted with a 9 and 11 x 12 compound engine from the Doty Engine Works Co., Toronto.

MESSRS. GEO. F. ROY & SON, Whitehall, Ont., have purchased from H. W. Petrie, Toronto, a thirty horse power return tube fire box boiler, which they will place in their saw and shingle mill.

The Yarmouth Duck & Yarn Company, Yarmouth, N.S., have just put in an electric plant for lighting their mills. It is a 300 light plant, supplied by the Canadian General Electric Co., Toronto.

The feathering paddle wheels for the steamship *Niagara*, are being built by Messrs. John Inglis & Son, Toronto. This steamer is being built at Hamilton, Ont., for the Niagara Navigation Co.

The elevator in Toronto Chambers, Toronto, is being converted to be run by electricity by John Fensom. He will use a duplex electric elevator pump, made by The Northey Manufacturing Co.

MR. JAMES LOCKRIE, proprietor of the Ontario Steam Rope Works, has recently added about \$10,000 worth of new machinery for manufacturing parcelling twines, a new feature in his business.

The Montreal Cotton Mills Co. are having a large duplex power pump made for them by the Northey Manufacturing Co., Toronto, to be placed in their mills at Valloisfield, Que., for protection against fire.

MR. M. BRISTOL, planing mill and electric light, Madoc, Ont., has purchased from H. W. Petrie, Toronto, a 40-horse-power Wheelock engine and new steel boiler to run his electric light plant.

MR. J. HOWARD, Whitby, Ont., has just put in a new wood-yard outfit purchased from A. R. Williams, Toronto, consisting of portable engine, cross-cut machine and Hildreth's patent wood splitter.

The Dominion Bridge Company, Montreal, whose works are at Lachine, near that city, have been awarded the contract for building a new steel bridge over the Lachine canal in Montreal at \$35,000.

The triple expansion marine engine and the three large boilers for the new steamer being built by The North Shore Navigation Co. at Owen Sound, are being constructed by Messrs. John Inglis & Son, Toronto.

MR. THOMAS McDONALD, proprietor of the Great Western Flour Mill at Woodstock, Ont., which was recently destroyed by fire, will rebuild as an oatmeal and split pea mill of 300 barrel per day capacity.

MESSRS. J. Y. SHANTZ & SON, manufacturers of buttons, Berlin, Ont., have purchased the large building in that town erected for a trunk factory, and will occupy it for the purposes of their business.

The Yarmouth Nova Scotia Electric Street Railway was started August 26th, and during the first three months, with only two cars running, they carried 58,326 passengers. These cars are heated by electricity.

The McKinnon Dash and Hardware Company, St. Catharines, Ont., have been incorporated with a capital stock of \$500,000 to take over the business heretofore carried on at that place under the same name.

The Woolley Electrical Appliance Company is being incorporated at Barrie, Ont., with a capital stock of \$25,000 to manufacture the Woolley electric-magnetic apparatus and other electrical appliances.

MESSRS. VOORHEES & CO., of New York, have purchased a suitable lot at the intersection of Wellington and Simcoe Streets, Toronto, upon which they will erect a large biscuit factory at a cost of about \$100,000.

The Standard Electric Co., Ottawa, are about to install what is claimed to be the largest dynamo yet manufactured in Canada. It is being made by the Royal Electric Co., Montreal, and will be for 5,000 lights.

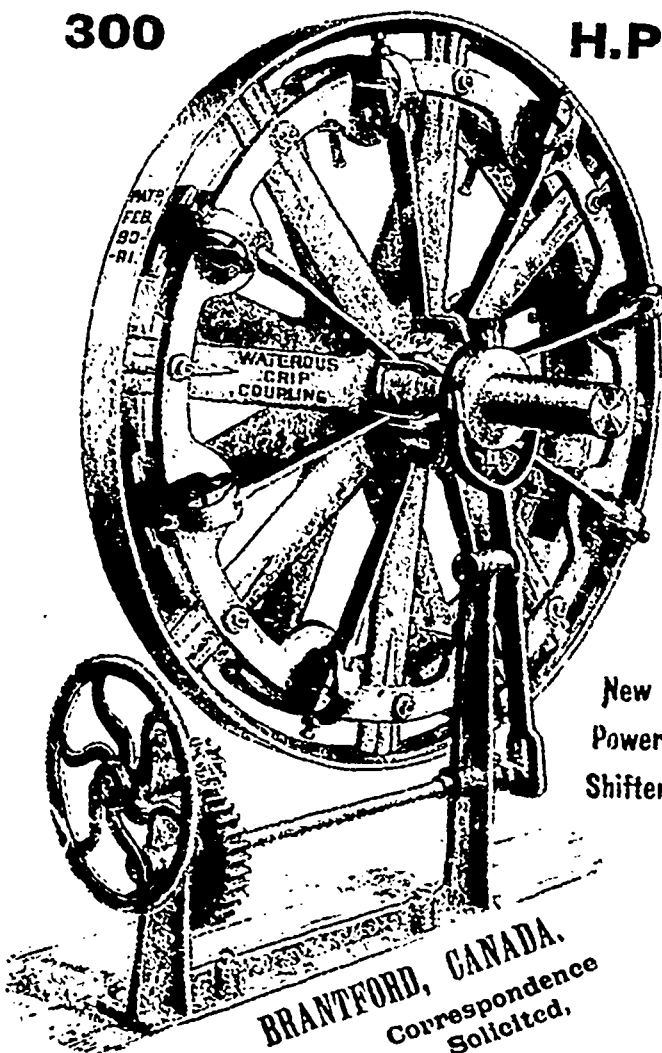
MESSRS. HENDERSON & PORTS, paint manufacturers, Halifax, N.S., have lately completed a two-story addition to their works, 60 x 40 feet, which will be used for manufacturing iron and tin cans and packing cases.

MESSRS. CARRIER, LAINE & CO., Lewis, Que., are building a steam disinfecter for the Dominion Government to be used at Halifax, N.S., a fac-simile of that recently made by them for use at Grosse Isle quarantine station.

The Works Department of the city of Toronto will hereafter build all their own scavenger carts, watering carts, etc. They have just ordered an outfit of wood-working machinery for this purpose from Mr. H. W. Petrie.

300

H.P.



The
Haworth
Belting
Co.
Toronto
1893

A FIRE which occurred in Toronto, December 19th, destroyed a large amount of property, including the works of the Toronto Canoe and Boat Company, loss about \$18,000; and R. B. Elgie's box factory, loss about \$8,000.

MR. ALEX. BRYCE, Eglinton, Ont., manufacturer of hygienic milk, has increased the motive power in his works, on account of his rapidly increasing business. Mr. A. R. Williams, Toronto, supplied the engine and boiler.

MR. ALEX. FLECK, JR., Ottawa, is adding more machinery to his machine works. One machine is a very large iron turning lathe weighing fifteen tons, procured from London Machine Tool Co through A. R. Williams, Toronto.

MESSRS. S. BEAUMONT & SON, woolen manufacturers, Glen William, Ont., are putting in four machines for making knit shirts and drawers. Their machinery includes two sets of cards and twenty-five hosiery knitting machines.

THE Pillow and Hersey Manufacturing Company, Montreal, announce that they are now extensively manufacturing merchant bar iron, and are prepared to execute orders for all the leading sizes and kinds as may be required.

MESSRS. A. C. LESLIE & Co., of Montreal and Toronto, inform us they are now carrying a complete stock of Jessop's tool steel at their Toronto warerooms, 18 Front Street West. They report the demand steadily increasing for this article.

MESSRS. GEORGE WHITE & SONS, machinists, London, Ont., are enlarging their capacity and adding more machinery, among which is a powerful set of geared boiler rolls procured from the London Machine Tool Co. through Mr. A. R. Williams, Toronto.

THE Ontario Excelsior Manufacturing Company has been organized at Chatham, Ont., to manufacture headings, hoops and other cooper's stock, and excelsior for upholstering purposes. Mr. John Pratt and Mr. George Marris are managing the business.

THE Clarke Spring Ticket and Novelty Manufacturing Company, London, Ont., are applying for incorporation with a capital stock of \$20,000 to manufacture a new price tag or ticket for blocked goods. Mr. F. O. Clarke, of Listowel, is at the head of the concern.

MESSRS. RITCHIE & RAMSAY, manufacturers paper and cardboard, New Toronto, are installing a 75 light dynamo bought from the Royal Electric Co., Montreal. They expect to have their new factory in thorough running order by the second week in January.

MESSRS. A. DEKORDE & Co., 12 Cedar St., New York, have sent us an exceedingly useful 1893 calendar, each page of which contains reference to certain lines of goods handled by them. They are importers and manufacturers of fine extracts, chemicals, dye stuffs, etc.

THE Dominion Bridge Company are building for the power house of the Toronto Railway Company what they claim to be the largest span and heaviest travelling crane in Canada. The span is sixty-three feet. It has two eight ton Harrington hoists and will lift fifteen tons.

THE Knowles, Ham & Nott Company has been incorporated at Brantford, Ont., with a capital stock of \$20,000 to manufacture refrigerators, spring beds, and general housefurnishings, and to acquire the business heretofore carried on by Messrs. Ham Bros. & Co., of that city.

POROUS TERRA COTTA FIREPROOFING

See it in use in new Bank of Commerce Building, Toronto; new Royal Insurance Company Building, Montreal; Imperial Fire Insurance Company Building, Montreal; St. Lawrence Sugar Refinery, Montreal.

The finest thing for suburban cottages. Excludes heat and cold; is cheap and durable.

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Manufacturers of Salt Glazed Vitrified Sewer Pipes, Double Strength Railway Culvert Pipes, Inverts, Vents, and all kinds of Fire Clay Goods. The Standard Drain Pipe Co., of St. Johns, P.Q., Ltd. W. C. TROTTER, Pres.

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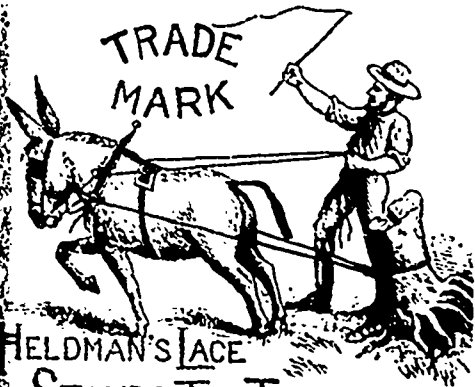
A LACE

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Heldman Bros.,

BADEN, ONT.



HELDMAN'S LACE STANDS THE TEST.

Messrs. Crofters, Henderson & Wilson, carriage manufacturers, St. John, N.B., are erecting an addition to their works to fill the place previously occupied by their show room, which was destroyed by fire on Oct. 6. This will considerably increase their facility for manufacturing.

The Massey Harris Co., Toronto, are making some improvements and adding more machinery to their plant. They have ordered from the London Machine Tool Co., through Mr. A. R. Williams, several automatic screw-cutting machines, a turret lathe, style presses, and other tools.

The Bras D'Or Marble Company, whose extensive quarries are situated on Mar'le Mountain, near West Bay, Inverness County, C.B., have started work and are now laying tramways and opening up the quarry, having purchased a Wardell channeler and the latest and most improved quarry machinery.

The Peterborough Canoe Company, Peterborough, Ont., successors to the Ontario Canoe Company, that place, have their new factory about ready for occupancy, the equipment of which will be of the very best. The machinery is being supplied by Messrs. Cowan & Co., Galt, Ont. Col. J. Z. Rogers is manager.

It was recently announced in these columns the incorporation of the Vernon Company, of Ontario, with a capital stock of \$300,000 to manufacture machinery, etc. Messrs. Herbert H. Vernon and George Dunstan, of Toronto, and James H. McKeggie and Harman Bunker, of Barrie, Ont., are included in the list of incorporators.

The Peoples' Electric Company, of Windsor, Ont., are applying for incorporation with a capital stock of \$50,000 to operate electric tram roads, supply electricity for commercial purposes, etc., in the towns of Windsor, East and West Sandwich, Walkerville, and other municipalities. Messrs. Fredric Nicholls and H. P. Dwight, of Toronto, are interested.

Mr. A. F. Barron, representing the Odell Typewriter Company, of Chicago, was in Toronto a few days ago, looking for a suitable location in which to establish a Canadian branch factory of his company's business. He proposes to organize a company with a capital stock of \$50,000, a large part of which would be contributed by the Chicago company. The N. P. does it.

The Toronto Chemical Smelting Co., of Port Colborne, Ont., has given a contract to the Dixon-Woods Co., of Pittsburgh, Penn., to build a six-pot furnace in which to smelt nickel ore by a patent process, and from which black glass will be a by-product. Regular glass pots will be used. The glass will be extremely hard and will be used for pavements and building blocks.

The Doty Engine Works Co., Toronto, have closed a contract with Messrs. Hugh Ryan & Co. for supplying them with machinery for carrying on their work on the Soo Canal. There will be twenty engines, all of large capacity driving twenty-eight hoisting drums, which will be used in connection with the derricks for handling the stone used in the construction of the locks.

Mr. John McCreery, proprietor of the Huttonville, Ont., woolen mill, has removed from there to Campbellford, where he has taken a lease of the Senior mill. He has taken his knitting machinery which will form a new feature for that mill. He will have about twelve power machines on hosiery, and will run four sets of cards on blankets, yarns and hosiery.

Mr. J. H. Eberington, proprietor of the Empire Carpet Works, who removed from Paris to St. Catharines, made the change owing to lack of space in his old place. He has added two art square looms and looms for stair carpets, making present capacity of his factory thirty-two looms. A new shearing machine is being added, and preparations are being made to run the factory by electric power.

Mr. J. F. Porter, who set up and attended the Robb Armstrong steam engine at the Toronto Fair last September in the interest of the Robb Engineering Company, Amherst, N.S., has accepted a position with the Southwick Oil Company, of Rochester, N.Y., and will look after the interests of that concern in the Maritime Provinces. Mr. Porter was in the employ of the Robb Company for eight years.

Messrs. Darling Bros., proprietors of the Reliance Works, Montreal, and manufacturers of hand and power elevators, etc., inform us that they have orders from the following named concerns for putting in their power elevators. Messrs. M. Moody & Sons, Terrebonne, Que.; Messrs. Frost & Wood, Smith's Falls, Ont.; Messrs. Ritchie & Ramsay, Toronto, and Messrs. A. Ramsay & Son, and Lefebvre Bros., Montreal.

The Doty Engine Works Co. have contracted to build for the Muskoka & Georgian Bay Navigation Co. a new steamer for the passenger business on the Muskoka Lakes. She will be 125 feet long by twenty-five feet beam, composite construction, built in very best manner and elegantly fitted up for the tourist trade. The motive power will be a compound engine, of 300 horse power. The boat will be completed by 1st June.

Messrs. Tooke Bros., shirt manufacturers, Montreal, have equipped their factory with an electric plant supplied by the Royal Electric Co., that city. It is a 400 light incandescent plant. This firm are also using electricity for heating their polishing and sad irons, in the place of gas, as formerly. They are the first in Canada, we are informed, to use electricity in this manner for laundry purposes. They have started fifty irons with electricity.

Messrs. Abbott & Co., Montreal, have nearly completed their

THE

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CANADIAN BRANCH:

St. Catharines, Ont.

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Knives for all kinds Wood-Working Machinery.

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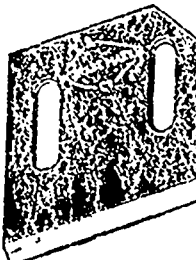
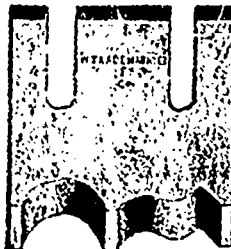
Knives for Leather Splitting Machinery.

W. & B. Diamond Twist Drills.

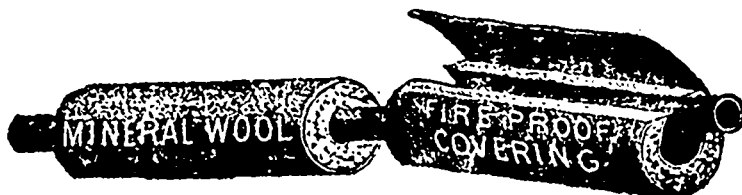
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Goods the Best. Prices Moderate. Quality Warranted.



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A Great Loss!

If you have any Pipes or Boilers uncovered you are losing on same at the rate of 50 cents every year on each square foot of surface exposed. By having them covered with our Mineral Wool Sectional Covering you will save 85 per cent of the loss. The saving thus effected in fuel will in one year more than pay the cost of covering, which we guarantee to last as long as the pipes. Our covering is the best fuel saver on the market.

Canadian Mineral Wool Co., Ltd., 122 Bay Street, TORONTO.

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new rolling mill works, and expect to be busily at work early in January. The old factory was destroyed by fire on August 24th, last, and the rebuilding was commenced as soon as possible. The new buildings are very extensive and complete, and are fitted up with the latest and most improved machinery for the manufacture of bar iron, horse shoes, spikes and all kinds of nails, washers and the similar line of goods.

A JOINT stock company has been incorporated in London, Eng., under the name of William Johnson & Sons, (Ltd.), with a capital stock of £50,000, to acquire the real estate buildings, machinery, water rights, trade marks, good will and the business of manufacturing paints, colours and varnishes, carried on by Mr. William Johnson at Mill Street, Montreal, for the purpose of introducing further capital with a view of the consolidation, extension and development of the business.

Messrs A. R. CLARKE & Co., Toronto, have sent us an 1893 office calendar, got up very beautifully in silver lettering and ornamentation, on black background. The announcement upon it is to the effect that the firm are manufacturers of calf, kid, goat, kangaroo, sheep and skivers leather, black and colored. They are also manufacturers of gloves and mitts of every description. This is an old concern—established in 1852—and one of the most reliable in Canada. They give employment to about 150 hands.

The Dodge Wood Split Pulley Co., Toronto, have just contracted with the E. B. Eddy Co., Hull, Que., for two more large rope drives, one 300 horse power, and one 200 horse power. This makes 2,100 horse power in Rope Drives supplied to the Eddy Co. The Dodge Pulley Co. are also at work on 600 horse power drive for the Ottawa Electric Light Co., Ottawa, 300 horse power drive for Montreal Cotton Co., and 100 horse power drive for the Rathbun Co., Deseronto, Ont. This looks as though rope driving was receiving considerable attention in Canada.

THE Badische Anilin Soda Fabrik, for whom Middleton & Meredith, Montreal, are Canadian agents, have patented some new rhodamines which are yellower in tint than those hitherto known, and possess the feature of having some affinity for the vegetable fibre, so that they are specially suitable for dyeing half-silk fabrics from a plain bath. These new rhodamines are intermediate in composition between the original rhodamine and the tetra alkylated rhodamines obtainable by the aid of succinic acid and ethyl compounds, which by heating alone or with certain bodies part with some of their ethyl constituents. These new rhodamines are likely to be useful.

THE Haworth Belting Company, Toronto, are in receipt of a letter from Mr. W. E. Davis, electrical engineer of the Toronto Railway Company, in which he says:—"In reply to your request for a letter from me in reference to the quality of the wide double leather main driving belts built by you for the Toronto Railway Company, I would say that each and every belt is doing excellent work, all running perfectly true and even, and giving the very best satisfaction. This letter is given with the consent of the Managing Director and I trust that it will be of some service to you as you certainly deserve credit for the prompt and satisfactory manner in which you have done our work."

THE Northey Manufacturing Co., Toronto, have bought two acres of land on the south side of King Street West, at the subway, on which they are erecting large works. The main building will be 350 feet long, 80 feet of which will be 110 feet deep, and the balance 75 feet. It will be of solid brick, with slate roof, and will have convenient and finely fitted offices. A railway switch

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Our portable drilling machine can be applied to the frame of a machine, or anywhere a hole is required. It bores at any angle. Nothing like it for repairs.

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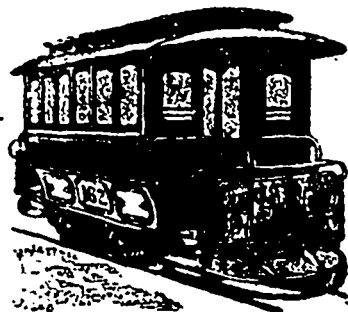
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OF

EVERY DESCRIPTION

will be laid into the works. They will put in a twenty-ton electric crane to extend the whole length of the shops; and they will put in about \$28,000 worth of new machinery of the latest and most approved styles. A department of the works will be fitted with special facilities for the scientific testing of pumps. One of the gas producers manufactured by the company will be placed on the premises and will be used for firing the boiler, the forges, melting pots and foundry, as well as for lighting and heating the factory.

The Reliance Electric Manufacturing Company, Waterford, Ont., inform us that during the month of December, just past, they made electric installations as follows:—W. Cook & Sons, St. Catharines, Ont., one 165 h.p. generator, and one 25 and one 10 h.p. motors. R. H. Smith & Co., St. Catharines, Ont., one 50 h.p. motor. A. Meyers, St. Catharines, Ont., one 10 h.p. motor. The Empire Carpet Works, St. Catharines, Ont., one 10 h.p. motor. Hilliard & McKinley, London, Ont., one 15 and one 10 h.p. motors. J. O. Parker & Co., Toronto, one 10 h.p. motor. A. Groves, Fergus, Ont., one 5 h.p. motor. Grand Central Hotel, St. Thomas, Ont., 250 light incandescent plant. James Robertson, St. Thomas, sixty light incandescent plant. James B. Kelly, Blythe, Ont., 225 light incandescent plant. Brantford Electric Light and Power Company, Brantford, Ont., fifty arc light plant. Verity Plow Works, Brantford, Ont., thirty arc light plant. Waterloo Manufacturing Company, Waterloo, Ont., fifteen arc light plant.

The famous falls of Montmorenci and all the surrounding property, belonging of late to the Hall estate, has been sold for \$230,000 to the Quebec and Levis Electric Light Company. The old sawmills, worked for so many decades back by the Hall firm with the water power from the falls, are to be torn down. The electric light company has acquired Montmorenci for the sake of the water power of the falls, which is to be chiefly employed in the manufacture of electricity. A new iron flume, 1,200 feet long and six feet in diameter, is being constructed to conduct the water from above the cataract to the factories below, one of which is to be built half way up the side of the cliff, so that the water which supplies its power may be used over again for supplying power to another establishment. It is probable that the company will supply electric power for factories, etc., in Quebec, as well as electric light for private residences and city streets, and will manufacture portable electric light for the cars of the principal Canadian railways and motive power for a street railway and for trains upon the Montmorenci railway.

Messrs. Cowan & Co., Galt, Ont., have sent us a copy of their new illustrated catalogue, in which is described the wood-working and other machinery, automatic cut-off and slide valve steam engines, boilers, etc., manufactured by them. The various machines are shown in large and clearly defined cuts, and the descriptive matter referring to them is full and accurate, so that a correct idea of the construction and capacity of any article may be had immediately. In wood-working machinery this concern have kept fully abreast with the times, having adopted every valuable improvement suggested by practical experience, some of which have been secured by patents. To ensure satisfaction every machine is run and tested before it leaves the works. Messrs. Cowan & Co. supply the popular and well-known Harris-Corliss steam engine, which, they say, holds its own against all rivals as a simple and effective automatic engine. They also furnish a good,

substantial and simple slide valve engine for planing and saw mills, so that they can supply a complete outfit for such purpose on exceeding short notice, including engine, boiler, shafting, hangers, pulleys and all necessary machinery. Having recently extended their works, plant and appliances, they are well prepared to fill orders promptly, and to guarantee entire satisfaction to customers.

The Kemp Manufacturing Company, Toronto, have sent us a copy of their new 1893 illustrated catalogue and price list, descriptive of the many lines of hollow metal ware made by them. The book is quite large—7 x 12 inches—and when it is considered that each of the 150 pages contains references to quite a large number of articles, it will be seen that it would be impossible to attempt to enumerate them all in this brief description of the catalogue. The general lines mentioned however, include plain and stamped ware, tinner's trimmings, japanned ware, pieced tin ware, tin toys, heavy polished and crown-pieced ware, embossed ware, all manner of sheet-steel ware, galvanized ware, coal hods, ornamented coal vases, stove boards, wire goods, kitchen and dining room furnishings, copper kettles, oilers, stove pipe trimmings, grocers' and druggists' cans, bird cages, enamelled ware, lamps and lanterns, etc. The book is made in the best and most attractive style, and shows that great pains were taken in the preparation and arrangement of the matter. The Kemp Manufacturing Company is one of the very largest manufacturing concerns in Canada, engaged in this line of business; but we understand that preparations are now being completed for a considerable extension of their works, giving occupation to a largely increased number of hands, and the inclusion of certain new lines of products not heretofore made in this country.

The Goldie & McCulloch Company, Galt, Ont., are enjoying a very large demand for the Wheelock steam engine built by them. Among recent sales of this engine we enumerate as follows:—Farmers Mutual Cordage Company, Brantford; Messrs. Gilmour & Hughson, Ottawa, a 1,000 horse power engine and eight steel boilers each 16 feet long by 66 inches diameter; Mr. W. H. Ives, Wheelock engine in planing mill at Colborne, Ont.; Mr. George Fensom, Wheelock engine in flour mill at Elmwood, Ont.; Messrs. Brooks & Co., Cuba, West Indies, Wheelock engine for sugar works; Snider's flax and flour mill at Conestoga, Ont., a Wheelock engine; Guelph Gas Light Company, Guelph, Ont., a 300 horse power Wheelock engine; Messrs. Abbott, Grant & Bull, biscuit works, Brockville, Ont., a Wheelock engine; Mr. James Ledingham, saw mill, Alma, Ont., a Wheelock engine; Calgary Brewing and Malt-ing Company, Calgary, N.W.T., a Wheelock engine; The Ogilvie Milling Company, also placing a 150 horse power Wheelock engine in their mill at Winnipeg, Man.; Mr. T. T. Coleman, Seaford, Ont., Wheelock engine in saw mill; Verity Plow Company, Brantford, Ont., a Wheelock engine; Messrs. McKay & Guest, Renfrew, Ont., a Wheelock engine in flour mill; Messrs. G. L. Grant & Co., Ingersoll, Ont., a Wheelock engine in pork factory; Mr. George Keating, Kemptville, Ont., a Wheelock engine in woolen mill; Messrs. A. Bauer & Co., Waterloo, Ont., a Wheelock engine in factory; Messrs. R. & J. Watson, Portage la Prairie, Man., Wheelock engine in planing mill; Messrs. Lake & Bailey, Hamilton, Ont., Wheelock engine in flour mill; Standard Woolen Mills, Toronto, a 150 horse power compound Wheelock engine; W. H. Storey & Son, Acton, Ont., a Wheelock engine for glove factory; Canadian Pacific Railway Company a 150 horse power Wheelock engine and two boilers, 90 horse power each, for cement works at Vancouver, B.C.

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THE Canadian Manufacturers' Association

W. K. McNAUGHT, President J. J. CASSIDY, Secretary
GEORGE BOOTH, Treasurer

Office, Room 66 Canada Life Building

FINE STREET WEST, TORONTO. TELEPHONE 1271

THE OBJECTS OF THIS ASSOCIATION ARE:

To secure by all legitimate means the aid of both Public Opinion and Governmental Policy in favor of the development of home industry and the promotion of Canadian manufacturing enterprises.
To enable those in all branches of manufacturing enterprises to act in concert as a united body whenever action in behalf of any particular industry, or of the whole body, is necessary.
To maintain Canada for Canadians.
Any person directly interested in any Canadian manufacturing industry is eligible for membership.

Manufacturers desiring to hold meetings for the promotion of their business are invited to avail themselves of the Board Room of the Association for the purpose, which is offered to them free of charge.

J. J. CASSIDY, Secretary.



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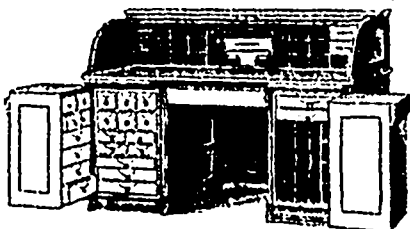
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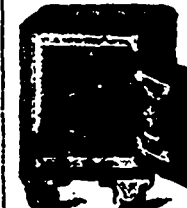
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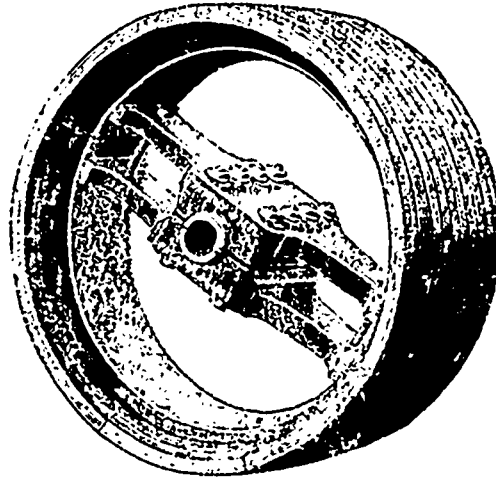
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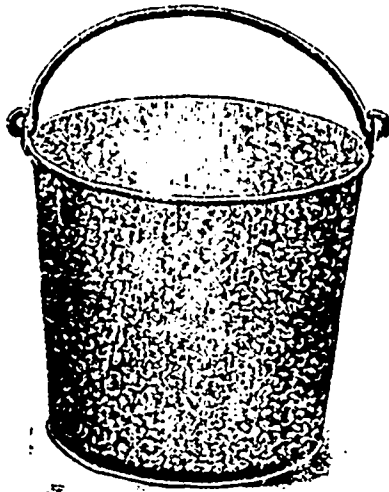
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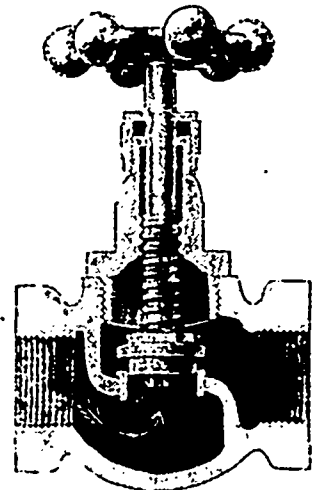
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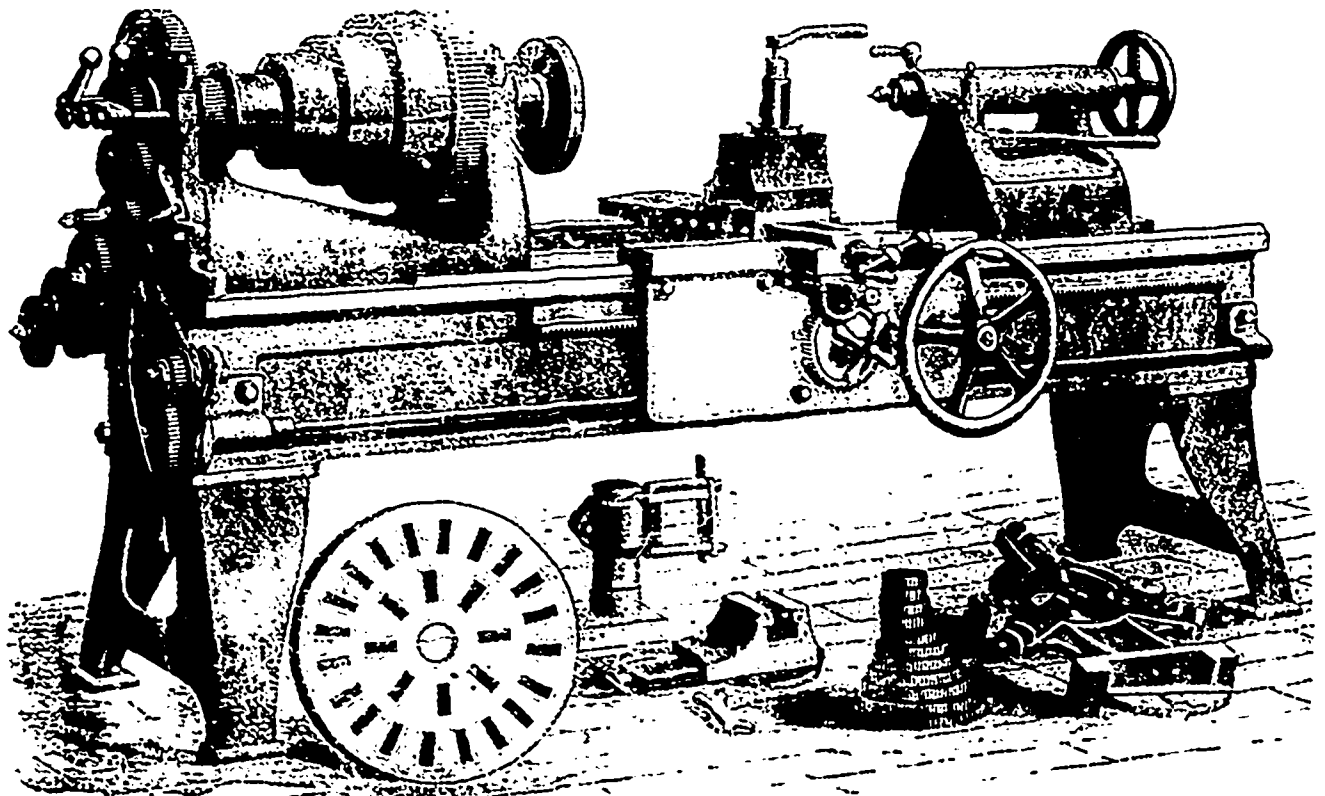
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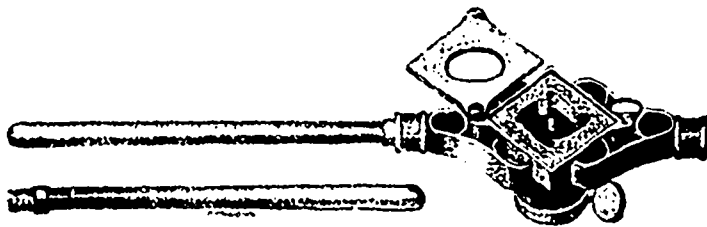
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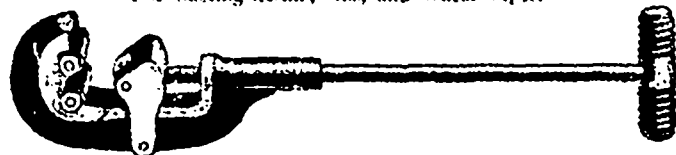
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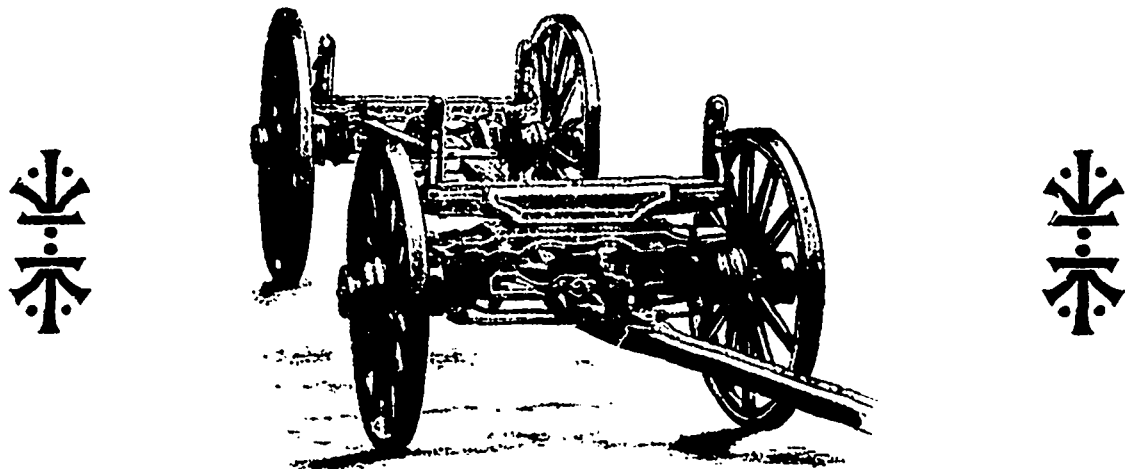
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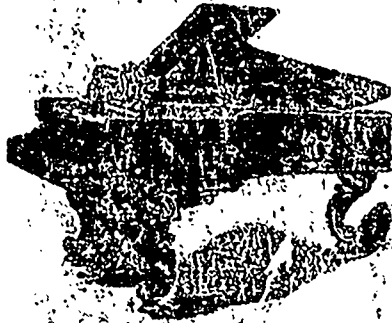
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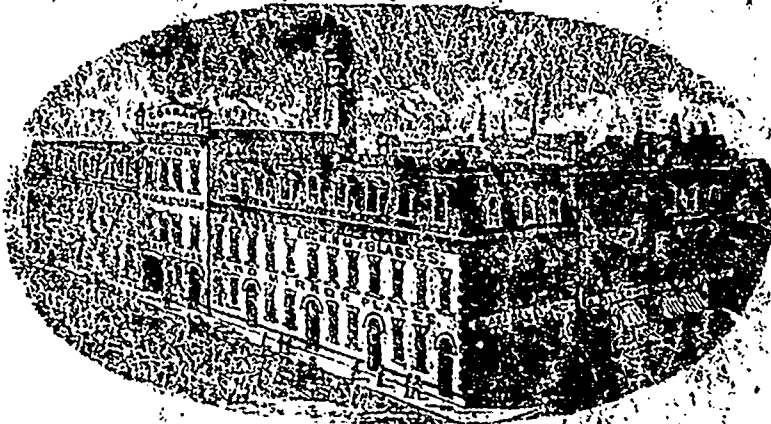
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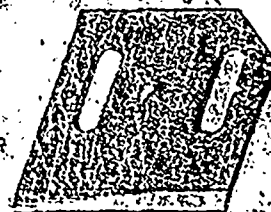


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