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# CANADIAN MANUFACTURER

AND INDUSTRIAL WORLD

DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 23.

TORONTO, OCTOBER 7, 1892.

No. 7.

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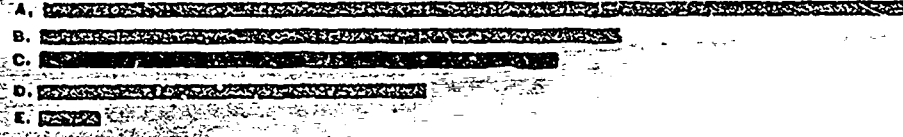
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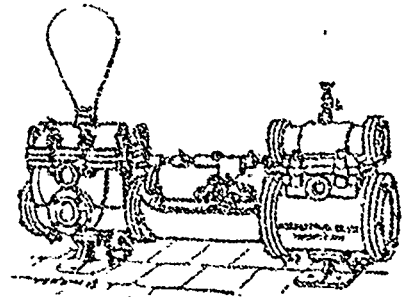
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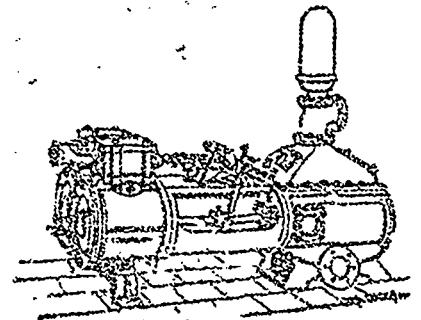
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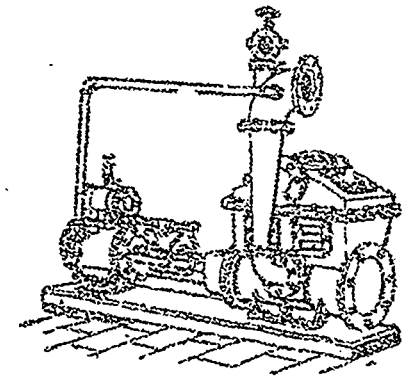


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**THE NATIONAL POLICY.**

In a recent editorial re "The National Policy," the *Shareholder* makes some grave mistakes in estimating the aims of the N P and of the manufacturers. It says —

The National Policy honestly carried out would benefit the country, but utilized as it is for personal ends it has become a scarecrow to those emigrating from other countries, and our census of 1891 shows the result, the increase of population in ten years is not what it ought to have been, and probably very different from what it would have been had living in Canada been cheaper than it is. With these facts staring us full in the face we have advocated that living should be made cheaper than it is, and that a protective tariff should only be applied to goods manufactured in the country, a tariff for revenue purposes only being imposed upon all goods not manufactured here.

It is a scarecrow to suggest that the National Policy has been used for personal ends, and that because it has been thus utilized it has prevented emigration—that more emigrants would have come to Canada if it had not been for the high cost of living, caused by the protective tariff. A wave of the hand should dispel this illusion. The American tariff is a hundred per cent higher than the Canadian tariff and yet an unceasing tide of emigration pours into that country, and the *Shareholder*

must look in another direction to discover the cause of our slow growth of population. We think we could locate the trouble but it is not our purpose to do so at this time. But we can confidently assure our contemporary that the general cost of living in Canada, under a lower tariff, is much cheaper than in the United States under a much higher tariff. Nor would we have it understood that the National Policy was introduced for the sole benefit of the manufacturers.

The National Policy, as the *Shareholder* suggests, was introduced for the purpose of encouraging the industries of the country. It was intended to extend and multiply the occupations of the people—of Canadians as well as of those from other countries who might emigrate hither. If these industries were engaged in manufacturing merchandise wherewith to supply the wants of the country, the operatives in them would be consumers of the products of the non-manufacturing industries. But the object was not so much to attract people to our shores as it was to furnish diversified employment for our own people. The *Shareholder* tells us that "it never was intended that the National Policy should be made the means of enriching the manufacturers by relieving them from contributing to the revenue of the country, and at the same time enabling them to put into their own pockets a sum equal to the duty on the imported article." We cannot say that we understand what is meant in the phrase "enriching the manufacturers by relieving them from contributing to the revenue of the country." It strikes us that as a class the manufacturers are quite as large contributors to the revenue as any other class, and much larger than some classes. It is certain that in many manufacturing industries, duties are paid upon the raw materials, but against this the manufacturers do not protest when it is seen that the duties are required for revenue.

It is intimated that the tariff enables the manufacturers to put into their own pockets a sum equal to the duty on the imported article. This we deny, and we call upon the *Shareholder* to mention one article where this is the fact. If it can do so, we will be quick to advocate a change in the tariff in that direction. If it cannot do so, it stultifies itself in making the charge. The object of the National Policy is to force the foreign manufacturers to pay as much for the privilege of the Canadian market as is the difference between the cost of the labor he employs in the production of his goods and the cost of the labor paid to Canadian workmen. We know that the remuneration paid to labor in foreign manufacturing countries is very much lower than that paid for similar service in Canada. This, then being the fact, it is evident that under free trade, or under a tariff for revenue only, the wants of the people would be supplied with the products of foreign labor, and that no occupation in that line would be afforded to Canadian labor, unless the remuneration were reduced and brought to a level with that of foreign labor. This difference in the labor cost, also making proper allowance for transportation charges on raw materials, should mark the amount of duty which should be imposed by the tariff. Therefore the manufacturer is not able to pocket the sum on the transaction which the *Shareholder* charges against him.

We are told that when the National Policy was under discussion the argument was advanced in answer to this last mentioned charge, that competition would keep down prices, but

that this did not satisfy the greed of the manufacturers, and competition was merged into combinations—that "the National Policy, instead of fulfilling its mission, became the means of taxing the consumers for the benefit of the manufacturers, the consumers paying in the enhanced price of the articles they needed a sum equal to that imposed on the imported article, which sum, instead of going into the coffers of the Government went into the pocket of the manufacturer." If combinations existed nowhere else than in protected countries, and in protected industries, it might fairly be charged that they were the direct result of protection; but when we know that this is not the case—when we know that combinations in trade are common to all countries, and to none more so than to Great Britain, the only free trade nation, the question is answered. In free trade Britain it does not seem possible for governmental interference against injurious combines, but in protected countries this is possible by judicious changes in the tariff. The Government should have the power, in the face of an injurious trade combination, to lower or even to entirely remove the duty when the breaking of it cannot be accomplished in any less heroic manner. If the duties are judiciously rated, the tariff can be and should be used to guard the people against the formation of injurious combinations and for breaking them when formed. If consumers confined themselves entirely to the use of home-made merchandise—if the tariff were prohibitive—the *Shareholder* would be correct in saying that the enhanced cost thereof went into the pocket of the manufacturer instead of into the coffers of the Government—that is, so much of it as represented the difference between the labor cost and the selling price. But our tariff is not prohibitory, as is shown in the fact that we import millions worth of finished products, made by cheap foreign labor, most of which could be made at home. There are those who consider that no Canadian-made merchandise can be equal to the foreign article, and it is this class who contribute most largely to the revenue. Perhaps it is quite as well that this class should exist, else the revenue would not be sufficient, or would have to be raised in other ways.

The most startling and iconoclastic proposition of the *Shareholder* is that a protective tariff should only be applied to goods manufactured in the country, a tariff for revenue purposes only being imposed upon such goods as are not manufactured here. If the National Policy had been formulated on these lines we would have had but very few manufacturing industries to protect. It is true that at the formation of it we had some industries in operation, but with these exceptions the industries which we now have are the direct outgrowth of the N.P. and we would not have had them if it had not been for its encouragement. It was this idea, we suppose, which placed steel rails on the free list. No steel rail has ever been manufactured in Canada, and never will be as long as the article can be imported free of duty, although we have sent millions upon millions of money abroad to pay for what we have required. And this in the face of the fact that our annual requirements are sufficiently large to give employment to several large rail mills; and that we have every requisite in Canada for making rails.

It is true we want our unoccupied lands peopled with farmers, but we also want home manufacturing industries which will give employment to multitudes who will consume what

these farmers produce. It is not to the interest of the country to produce wheat and cattle for export when these products of the farm could be consumed at home. Our best customers are ourselves, and only our surplus should be exported. The nearer the home consumption equals the home supply the more prosperous the farmer will be. But the *Shareholder* wants to reduce the power of consumption by reducing the price of labor, or by depriving the workman of his employment, thus injuring the farmer; and turning those consumers into producers of farm products, in direct competition with the farmers. It advocates a suicidal policy.

#### AN OPINION WANTED.

EVEN at this late date and stage of the game, our esteemed contemporary, THE CANADIAN MANUFACTURER, desires us to again express an opinion on the at present settled canal tolls controversy. All that can be said now, is, that after September 1, reciprocal courtesies will be exchanged with Canadian tonnage using the St. Mary's Falls canal, so that, while two apparent wrongs may not make a right, both parties now feeling aggrieved, yet, as the MANUFACTURER pertinently remarks, "saucy for the goose should be saucy for the gander." Even so with an equitable adjustment of canal toll charges, although we do not believe in the reprisal retaliation spirit, which a portion at least of the *Dominion press* has so wantonly indulged in of late. The national question of extended courtesies through artificial waterways, forming the gateway to neutral or international waters, is now a question for diplomatists to negotiate, though it would seem that the ill-advised discrimination practised in favor of Montreal as opposed to U.S. ports, will have the effect of more clearly determining the lines between strictly national waterways and those leading to, or commanding the traffic over international territory. It is a forgone conclusion, however, that foreign vessels will not be permitted to use the state canals, nor to enter and clear between U.S. ports, nor will their seamen be allowed to navigate American vessels. At the same time, the Dominion is perfectly justified in asserting all rights conceded by treaties, and to show cause wherein these rights may have been violated at any time.—*Cleveland, O., Marine Record.*

This is in reply to our request for the *Marine Record* to venture an opinion as to the fair dealing, or we might have said the unfair dealing of the United States with Canada, anent the treaty which is supposed to be existing by which the United States guarantees the same treatment to Canada in the matter of the use of American canals as Canada guarantees to the United States in the use of Canadian canals. By way of a pointer we had requested our Cleveland contemporary to express an opinion as to why an American vessel employed in transporting coal from Albany or New York city, through American and Canadian canals, to Ottawa, taking return cargo of lumber from Ottawa, through Canadian and American canals to Albany or New York city, should be accorded this privilege by Canada, while a Canadian vessel is denied this privilege by the United States. This is just the question we wish the *Marine Record* to discuss. There are many phases of this canal question which are exceedingly interesting, and which we are ready to consider, but at this time it is well to examine the matter with some minuteness of detail; and we desire to discuss this particular phase of it. We insist that what is saucy for the goose should be saucy for the gander. Suppose our Cleveland friend should be the possessor of two

vessels, precisely alike in all respects, including ownership, but not nationality—one vessel being registered as American, and the other as Canadian, and that this owner should desire to employ these two vessels in the trade indicated—in carrying coal from New York to Ottawa, and lumber from Ottawa to New York. The route would be along an American canal to the St. Lawrence river, and thence along a Canadian canal to Ottawa, and vice versa. The traffic would be impossible without the use of both canals. Under the terms of the so-called treaty, both these vessels would be entitled to engage in this trade. The Canadian vessel was guaranteed equal privileges with the American vessel, and this privilege being honestly and honorably observed, the Canadian vessel would be on precisely equal footing with the American vessel. But what are the facts? Without the consent of Canada, the United States abrogated that provision of the treaty which accorded this privilege to the Canadian vessel, but it insists upon the observance of it as applied to the American vessel. This is the point we invite the *Marine Record* to discuss. For the sake of eliminating extraneous matter from this discussion, it may be assumed that Canada has unjustly discriminated against the United States in the matter of rebate of canal tolls; but it must be remembered that the American objection to this adverse discrimination is based upon what is claimed to be a violation of the spirit, if not of the text of the treaty. The treaty, then, is the basis upon which this whole matter must be considered; and it will not do for our contemporary to exonerate its Government from a failure to observe the spirit of this treaty, on the ground that it had seen proper to abrogate a portion of it, and that without the consent of the other party to it, to wit—Canada. It is a good and sound legal and business axiom that a contract broken in one part is broken in all parts; and that the party who breaks it has no cause of complaint if the other party should disregard it. Now, Canada possessed certain rights under this treaty, one of which was that Canadian vessels should have equal privilege with American vessels in the use of American canals. But they are not accorded this right, for it has been denied them by the American Government. This, then, constitutes a breaking of the contract; and it comes with very bad grace for the American Government to complain that the Canadian Government have violated the spirit of the treaty when they themselves were the ones to decline to be bound by it. Why does the *Marine Record* speak of "apparent" wrongs? It certainly has intelligence enough to perceive that its own Government perpetrated a wrong on Canada when it denied Canadian vessels the same privileges in American canals that are accorded American vessels in Canadian canals. It speaks of "more clearly determining the lines between strictly national waterways and those leading to, or commanding the traffic over international territory," by which we suppose it means that the American canals to which Canadian shipping is denied access are "strictly national" waterways, from which it is eminently proper to exclude Canadian vessels; while the Welland and St. Lawrence river canals, and the St. Lawrence river itself from Ogdensburg to the Atlantic ocean are "international territory," over which Canada has no right to exercise supreme control. If this is the proposition it is ridiculous in the extreme. It may be that it is a part of the Yankee scheme to enforce this contention,

and to bring Canada to a concession to it, but we warn our neighbors that our right of eminent domain and all that that implies will never be surrendered. If the United States is ever to enjoy the use of these waterways it will be by consent of Canada, to be terminated at will.

The spirit that actuates the United States in this matter is exemplified in the assertion that "it is a foregone conclusion that foreign (Canadian) vessels, will not be permitted to use the state canals, nor to enter and clear between United States ports." If this is a foregone conclusion—if it is determined already that Canadian vessels are never to be accorded the privileges guaranteed to them under the treaty, nor under any other treaty, nor under any circumstances whatever, what inducement can there be for Canada to continue such privileges to American vessels? Canada has no idea of coercing the United States to fulfil the terms of a disregarded treaty—is it the intention or desire of the United States to force Canada to open her "international" waterways *volens volens*?

Will the *Marine Record* venture an opinion?

#### AN ENEMY TO CANADIAN MANUFACTURERS.

In another page will be found a communication from a Canadian manufacturer of baking powder, in which he alludes to the war being made upon his industry by a journal which claims to be the mouthpiece of the Canadian Press Association, in the interest of American manufacturers of the article. He also discusses the relative merits of certain kinds of baking powders, but this is a feature of the situation which we do not propose to consider at this time; our remarks being confined to the question as to whether the integrity of the National Policy shall be maintained as in favor of the Canadian manufacturers, or broken down in favor of American manufacturers and of certain newspapers in this country which would expect to be benefitted by the change.

A few months ago a new journalistic enterprise was floated out upon the sea of Canadian literature—the *Canadian Printer and Publisher*—and in endeavoring to give a reason for its appearance it stated that at the recent annual meeting of the Canadian Press Association it was decided that the publication of such a paper was necessary, that subsequently the executive committee of the Association, by resolution urged the J. B. McLean Co., of Toronto, to establish such an organ, and that these were sufficient reasons for the appearance of the *Printer and Publisher*. It then went on to tell how concerted action on the part of Canadian newspapers would increase their revenues to the extent of twenty-five to fifty per cent., illustrating its contention by showing that at the meeting of the Press Association a letter was read from a newspaper advertising solicitor in New York to the effect that the recent increase in the duty on baking powders had practically shut out American manufacturers; that the increased duty gave enormous profits to the Canadian manufacturers, who, becoming independent, did not find it necessary to advertise, and suggesting that the Press Association should use its influence with the Government to reduce the duty to a figure that would permit the importation of foreign baking powders. This New York meddler told them that it was a case of self-interest, the question being



whether the publishers or the Canadian manufacturers should make the money to be realized in the industry. We are told that the conclusion arrived at was emphatic that this disinterested (?) New Yorker was right in his ideas, and that, by united influence, publishers could bring about a reduction in the duty of this and other articles, and again be in receipt of the thousands of dollars which recent increases in the duty had cut off. Objection was also made to the duty on printing presses, but no suggestions as to how the affairs of Government were to be conducted without revenue.

In a subsequent issue the *Printer and Publisher* published a letter from a Halifax, N.S., newspaper publisher, pointing out what he called the injustice being done to Canadian newspapers, and the great loss they sustain because of the duty on patent medicines; the editorial opinion being that while Canadian printers cannot expect all this duty to be taken off, they have a right to demand that the rate shall not be so high as to be exclusive in its effect. In this instance, too, a Yankee intermeddler appears upon the scene, giving his disinterested (?) advice regarding the Canadian tariff. He tells how he devotes himself to the advertising business and has studied out the most effective methods of doing such work; that he had frequently encountered advantageous opportunities for striking American manufacturers for advertisements in Canadian papers, but that he had been confronted with the argument that it is impossible to sell any American manufactures in Canada beyond what Canadians cannot possibly do without.

Still later this self-constituted organ of the Press Association renewed the attack on Canadian manufacturing industries, naming proprietary medicines and remedies, soaps, perfumes, baking powders, etc., all of which, it says, require a great deal of advertising, saying that the loss which Canadian newspapers experience because the manufacturers do not, advertise them as extensively as the "organ" thinks they should, should be lessened by a reduction of the duty, thus enabling the importation of foreign goods which would be more liberally advertised. It says.—"The printing trade is not waging a war of extermination on any Canadian industry, but it does maintain unwaveringly that no Canadian industry has a right to live on wines and sweet-breads, while in order to supply this extravagant living, another industry (the printing trade) must live content with un buttered bread." The allusion to the "extravagant living of Canadian manufacturers is exceedingly refreshing. In an article in the same issue of the *Printer and Publisher*, discussing, 'Bribed Journalism,' the editorial opinion is recorded as follows: "The editor is looked to by the public to lay before them the truth, and the editor who deliberately misleads the public is nothing short of a double-dyed, black-hearted scoundrel, not fit for the society of honest men. Deceit should never be found in the columns of any of our newspapers, whether it be by the absence of something that should be there, or by the presence of something which is untrue." The presence of something which is untrue regarding wines, sweet-breads and the extravagant living of Canadian manufacturers, impliedly because of the injustice of the tariff, and the bitter denunciation of those who indulge in such deceitful and untruthful statements as stated in this "organ" of the Press Association, are interesting when read in parallel columns.

Judging from these repeated attacks on the tariff and upon

Canadian manufacturing industries, it is evident that the *Printer and Publisher* has enlisted itself in the cause of American manufacturers to break down the tariff and disorganize and destroy what the N.P. has built up, and all for the sake of the Yankee dollars that may be involved in publishing Yankee advertisements in its columns. We print the facts here given so that our manufacturers may know who and what they have to contend against.

#### EDITORIAL NOTES.

THIS special organ of the Red Parlor says that every receiver of a bonus from the Dominion Government renders a *quid pro quo*. Some men give return in abounding loyalty — *Kingston Whig*.

Some men do not know the meaning of the word "loyalty."

DURING the period from July 29 to August 24, inclusive, the Canadian Patent Office issued 483 patents to nationalities as follows:

United States	292
Great Britain	58
Germany	35
Canada	66
Austria	7
Australia	4
Bavaria	1
Belgium	1
Bohemia	2
Denmark	1
France	2
Italy	1
Netherlands	1
New South Wales	2
Portugal	1
Prussia	2
Queensland	1
Saxony	1
Sweden	1
Switzerland	1
Victoria	3
Total	483

Since the passage of the new Patent Act the cases which had been delayed because the necessary models of the inventions had not been filed, are, in consequence of this Act, being taken up and acted upon. It is probable that during the present fiscal year ending with June 30, 1893, there will be about a thousand more patents issued by the Patent Office than the usual annual average. The business of the Patent Office is increasing rapidly owing to the fact that the new Act is more favorable to inventors than was the old law. The above abstract, and the list of patents to be found in another place in this issue of this journal, is made up to and includes the last patent completed and issued to August 24th.

A SPECIAL despatch to the *Montreal Herald*, from Ottawa, a few days ago, stated:

Detective Grose, of Montreal, was in the city to-day and closed an important agreement with the Customs Department. The agreement is between himself and his partner, Detective Carpenter, who are to provide six other men, and the work they have to perform is to put down the whiskey smuggling business on the St. Lawrence. There are other illicit transactions in connection with the Customs that they will be called on to attend to, but this is the principal one. Mr. Grose was some fourteen years in the service of the Customs Department as a detective, and it would be difficult to secure any one more

competent for the duty which he has taken in hand. To the *Herald* Mr. Grose said to-day that the Department had given him carte blanche as far as expenditure was concerned. All his instructions consisted in the fact that he was told to put down the smuggling referred to, no matter what the cost.

It is all right to do everything possible to prevent whiskey smuggling, and for the Government to give carte blanche as to expenses for that purpose. The facts related indicate the character of the "pull" the whiskey men have with the Government. They are all wealthy men and wield much influence. But there are other manufacturing interests which are suffering much greater hardships because of the smuggling constantly going on; and although the facts are well known to the Government, absolutely nothing is being done to break up the illicit traffic. Is it because the sufferers are not as rich and influential as the whiskey men? In regard of the smuggling done by a whip manufacturing company, whose headquarters are at Westfield, Mass., but whose illicit operations in Canada are driving some of our manufacturers out of business, we have knowledge that the Government are well aware of the situation, but decline to give any carte blanche to detectives or to the Customs officers to break up the smuggling. Appeals to Mr. Chapleau have no more effect than they did to Mr. Bowell.

Our esteemed contemporary, the *Canadian Printer and Publisher*, wants the duty lowered on baking powders, patent medicines, fancy soaps, etc., so that American manufacturers of such articles can find sale for them in Canada, its idea being that if such should be the case these American manufacturers would spend much money in advertising in it and other Canadian papers. But it really does not seem to comprehend the facts of the matter. There are now three large American baking powder concerns who maintain branch factories in Toronto where identically the same goods are produced we understand, as in the United States, and who give employment to large numbers of Canadian workers, and this is the fact we presume to greater or less extent in all the principal cities of Canada. So too, as regards patent and proprietary medicines. Only about fifty miles away, in Rochester, N. Y., is an immense factory from which the 65,000,000 American market is supplied with Dr. Warner's remedies, but the tariff forced him to supply the 5,000,000 Canadian market from a Canadian factory, and now Toronto has such a factory from which all these remedies are supplied for the Canadian market. So too, with the Ayer's, of Lowell, Mass., one of the wealthiest concerns in the United States, who were forced by the tariff to establish a branch factory in Canada, in Montreal. So too, with Hood's sarsaparilla, Carter's little liver pills and many other specialties, all of which are manufactured in Canada. The prices to consumers of these articles are quite as low—in some instances probably lower—than in the United States. All these industries give employment to large numbers of Canadians, but if the tariff were materially lowered, so that such goods could be brought in from abroad, every one of these transplanted industries would immediately transfer their operations to another country, leaving the thousands of Canadians now employed in them without occupation. But this is just what the *Printer and Publisher* is working for, with the hope of being rewarded with a few dollars' worth of "Before and After" ads.

## SPECIAL ADVERTISEMENTS.

*Advertisements will be accepted for this location at the rate of two cents a word for the first insertion, and one cent for each subsequent insertion.*

### SPECIAL NOTICE.

Editor CANADIAN MANUFACTURER, Toronto, Ont.

DEAR SIR,—We hereby beg to tender our heartfelt thanks to our competitors, Messrs. Robin & Sadler, for their assistance in drawing the public's attention, through your issue of Sept. 16th, to the excellent quality of IMPORTED ENGLISH OAK-TANNED BELTING that we are manufacturing.

We little expected to receive such a boom from this quarter, and we cannot allow to pass unnoticed acts of kindness like these, even if it occasions us an expense of two cents per word. Most respectfully yours

THE J. O. McLAREN BELTING CO.,  
Montreal. Toronto.

### THE BAKING POWDER INDUSTRY.

Editor of THE CANADIAN MANUFACTURER :

DEAR SIR,—An effort has recently been made by the so-called representative of the newspapers in Canada to induce the Government to reduce the duty on baking powder, the object being to enable the United States manufacturers to sell more freely in Canada, and therefore spend more in advertising their goods in the newspapers. Three of these wealthy foreign companies already do a large business in Canada. They all sell a high priced powder, which they untruthfully claim to be the only wholesome article made. It has been proven that other powders, which are cheaper and much used by the masses, are, in point of wholesomeness, the equal of if not superior to those above alluded to.

This whole question was gone into several years ago in England in the case of Norfolk Baking Powder Company vs. The Queen, in which the Government undertook to show that alum baking powder was injurious to health, but the evidence was against them, and their case failed. There are thousands of tons of alum baking powder sold in England annually. The injury, if any, arising from the use of baking powder is caused by the residue remaining in the bread, after the carbonic acid gas has been liberated. In cream of tartar, the residue is largely Rochelle salts, which medical authorities say is injurious when taken in oft repeated doses. The residue from alum phosphate powder, while much less in quantity than that from cream of tartar powder, is composed of inert matter, which passes through the system with little or no specific action or injury to health. In the United States the manufacturers of cream of tartar powder have spent large sums of money to secure legislation in favor of their goods, but their evidence being defective and worthless, they have failed in their object. The masses are consuming annually thousand of tons of the cheaper alum phosphate powder without any apparent injury to health.

It has recently been stated in the press that the Government Commissioner, on the recommendation of the chief analyst, has been advised to pass a law against using any material containing alumina in the manufacture of baking powder, or using more than 20% of starch. Now please note this fact, cream of tartar powder containing 20% starch will make a baking powder of the same strength as an alum phosphate powder containing 50% starch. The purchaser gets just the same amount of leaven in a pound of each. I do not know on what foundation the recommendation of the analyst is based, but it seems to me that he cannot have weighed the evidence carefully, or he could not possibly come to the conclusion he has. One thing is certain; if his recommendation becomes law, the baking powder trade of Canada will fall largely into the hands of these rich American companies, that are able and willing to spend large sums of money to secure control of our market.

These facts in regard to baking powder can be established on the best of evidences. This being true, it would seem to me a most unwise policy to interfere with the free manufacture of the cheaper but none the less wholesome baking powders, which are used by the large masses of the people in Canada, as well as in the United States and England. Yours truly,  
MANUFACTURER.



THE hearty, healthful spirit of bluff old autumn seems to breathe gratefully from every page of *Ontario* for October. Cheery, wholesome yarns of flood and field, embellished with many beautiful illustrations, make the current number a most attractive one. The contents are as follows:—"Through Darkest America," by Trumbull White; "October Rides," by Jessie F. O'Donnell; "How We Came to Hunt the Fox," by E. J. Lorraine Dorsey; "A Two-Year Old Heroine," by Fannie Trevelyan; "Scientific Boxing," by R. C. Macdonald, M.D.; "Quail, and Quail Shooting," by Ed. W. Sandys; "Throwing the Fifty six Pound Weight," by Malcolm W. Ford; "Harry's Career at Yale" (continued), by John Seymour Wood; "Saddle and Scentimeat" (concluded), by Wenona Gilman; "A South American Lion Hunt," by Charles Bullman; "Review of the Football Season," by Walter Camp; "The National Guard of New Jersey," by Lieut. W. H. C. Bowen, U.S.A.; "Around the World with Wheel and Camera" (continued), by Frank G. Lenz; "Lacrosse," by Ross Mackenzie; and the usual editorials, poems, records, etc.

THE September issue of *The Illustrated World's Fair* exceeds all previous numbers in beauty and excellence. Its pictures, especially the water scene in front of the Horticultural Building and the great views of the Manufactures Building (in which the dedicatory ceremonies are to take place), are notable as triumphs of the process of engraving employed by this journal. Sculptor Clark's Cider Press is reproduced in a full page; Luther Lashin Mills writes the leading article; Dr. Meloy and Dr. Davis send an account of their visit to Ann Hathaway's cottage at Stratford-on-Avon; Machinery Hall appears as a wilderness of iron; the Art Palace grows into an Ionic temple; a learned article on the breeding of bird dogs is written by C. B. Whitford; the man who wrote "Twenty Years of Husling" (J. Perry Johnston), adds another chapter for his celebrated book; C. F. Gunther, the great collector, reproduces the portrait of Columbus, with an article; and a valuable official map (of the latest draft) is offered to the millions of close students of Jackson Park. The story of the Souvenir Coin law is given with care. Prof. Eastman, W. J. Ighlavat, Gertrude E. Wall, Nixon Waterman, Frank B. Welch, E. Hough, George P. McIntyre and Paul Hull contribute many choice bits of humor, gossip, rhyme and information. John McGovern, Editor. Jewell N. Halligan, General Manager. By the year, \$2.50; twenty-five cents a copy. McVicker's Theatre Building, Chicago.

THE September issue of the *Dominion Illustrated Monthly* opens with an amusing story by Mrs. K. A. Chipman, called "A Visitation at Verneuse," followed by the concluding article of Mr. LeMoine's series on "Our Historic Waterways," a subject replete with interest to all. Another valuable contribution to history is a paper by Dr. Douglas Brynner, the well-known Dominion Archivist, entitled, "How France saved the Thirteen Colonies," throwing light on a subject which has hitherto been almost entirely unknown, viz., the indebtedness of the revolted American Colonies to France during the early stages of their rebellion and the shameful treatment experienced by their benefactor. A most interesting article is that on "Scler Lefe in Halifax," by Mrs. M. Tremaine, of that city. Miss Madge Robertson, the well-known editor of the *Ladies' Pictorial Weekly* gives an amusing sketch of "Cameoing for Women," and Miss Ethel Longley gives an interesting resume of "A Sojourn in Stuttgart;" Mr. Lindsey, of Toronto, continues his series of papers on "Crickets in Canada," dealing fully with the progress of the game in our distant Provinces. A delightful story entitled "A Summer in Canada," by Miss A. M. McLeod, is begun, as is also the first paper of a new department entitled, "Talks with Girls," in which the subject of "Reading" occupies special attention. The Supplement is a portrait of the late Hon. John Robson, the well-known Premier of British Columbia. The publishers, the Sanston Litho. and Publishing Co., of Montreal and Toronto, deserve great credit for their enterprise in giving so interesting and handsome a publication for the very low price asked. \$1.50 per annum.

WITH a page of "Pretty Luncheons and Dainty Teas," a special paper on "Changes in Fashionable Stationery," by Ada Chester Bond, and an article by M. S. A. G. Lewis on "Children's Parties, Fevers and Frolics," the October *Ladies' Home Jour.* opens attractively and well. Marguerite Meirington gives a sketch, with portrait, of Margaret Deland, the author of "John Ward, Preacher," and Miss Mallon writes entertainingly of the personality and home life of "The Duchess," the author of "Phyllis" and "Molly Bawn." In the series of "Clever Daughters of Clever Men," Anne Raymond is pictured, and pleasantly written of, as is the wife of Oscar Wilde in the series of "Unknown Wives of Well-

known Men." The Rev. T. De Witt Talmage discourses of his travels "Through Victoria's Domain," Abram S. Isaacs of "The Jewess in Authorship," and Robert J. Burdette of "October and the Ills That It Is He'r To." The Editor talks of the necessity for thoroughness in the work of men and boys, and Maude Haywood gives much good advice to art students. The fiction of the number includes a short story, "Clad in Doublet and Hose," by May Kelsey Champion, illustrated by Algeo Barber Stephens, and the continuation of Julia Magruder's serial story, "A Live Ember." The poems are by Eva A. Madden and Lillian Caxton. Mrs. Mallon's "Dresses for Early Autumn" will be found helpful to all women, as will the illustrated article on "A Baby's Layette." Mrs. Lyman Abbott, Mrs. Margaret Bottomo, Miss Maria Parlos, Miss Seovil, Ruth Ashmore and Mr. Rexford fill their departments with all that is helpful and original. Published by the Curtis Publishing Company, for ten cents per number and one dollar per year.

A VALUABLE and pleasing number is *The Popular Science Monthly* for October. Dr. Henry Ling Taylor contributes the opening article, on "American Childhood from a Medical Standpoint," in which he points out the unwelcome mental and physical influences that surround American children, especially in cities. There is a timely article on "Specifics for the Cure of Inebriety," by Dr. T. D. Crothers, who tells what the signs are by which a great quackery may be distinguished. A notably interesting article is that on "The Evolution of Dancing," by Leo J. Vance, which is accompanied by ten spirited illustrations. In his "Lessons from the Census," Carroll D. Wright treats of "The Native and Foreign-born Population"—a subject on which every citizen should be informed. William Simpson takes "Mud as a Building Material" for his subject, and, with the aid of half a dozen pictures, establishes a pretty strong claim for his client. In "Language and Brain Disease," Dr. H. T. Pershing shows how loss of speech from brain disease throws light upon the process of obtaining the mastery of a language. John Coleman Adams describes the grand work of Redfield, Espy, Hare, Loomis, and other American meteorologists, under the title, "A Chapter in Meteorological Discovery." Dr. R. W. Shufeldit has an attractive illustrated article entitled "A Comparative Study of Some Indian Homes." An able review of "Recent Science," by Prince Kropotkin, an illustrated account of a successful French experiment in the "Warming and Ventilating of Dwellings," and a "Sketch of Alexander Winchell," with portrait, complete the body of the magazine. In the Editor's Table, "The Claims of Science," as recently stated by Prof. Pearson, are vigorously emphasized, and some account is given of "The Rochester Meeting of the American Association." New York. D. Appleton & Company. Fifty cents a number, \$5 a year.

THE October number of *Scribner's Magazine* begins a group of articles on "The World's Fair at Chicago," with a picturesque description by H. C. Bunner of "The Making of the White City." A series of illustrations by W. T. Smodley illustrates the striking transformation. Franklin McVagh, of Chicago, will write on "Chicago's Part in the Fair" (November number), and Frank D. Millet will write of "The Decoration of the World's Fair" (December). Mr. Millet's recent appointment as Chief in charge of the Decorations will enable him to write on this subject as no one else could. This group of preliminary articles on "The World's Fair" will, it is believed, give the general reader an adequate idea of the immense undertaking which is being so rapidly and artistically carried out. Among the most vivid articles in the Historic Moments Series, is a description in this issue by Daniel Denison Slade, M.D., of "The First Capital Operation under the Influence of Ether." Two articles in the number have a very practical educational value. Edmund R. Spearman describes "The School for Street Arabs," known as the D'Alembert School, which is situated near Paris, and has done so much for the solution of the great problem of making something out of the boys whose only home and school have been the city streets. Another interesting educational article is Walter B. Peet's account of the "Education of the Deaf and Dumb," which adequately explains the curious methods that modern science has devised for educating those whose senses are incomplete. Other interesting articles are W. C. Brownell's second paper on French art—this one dealing with "Romantic Painting;" Andrew Lang's contribution to the discussion as to the personality of "Homer;" Paul Leicester Ford's account of some curious entries which he has found in an unpublished diary of Thomas Jefferson; and a fully illustrated description of "The Launching of Cruisers and Battle-ships," by William J. Baxter, of the United States Navy.

# \* 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 those 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 August 4th to 24th, 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.

- 39,680 Lamp for burning gasoline, etc., R. Reid et al, August 4th.  
 39,681 Manufacture of metal spokes, R. Alpo, August 4th.  
 39,682 Bung, T. Hiller, August 4th.  
 39,683 Producing sparkling wines, A. Bruno, August 4th.  
 39,684 Rotating plough, O. Marth, August 4th.  
 39,685 Glove, A. B. Fischl, August 4th.  
 39,686 Ventilator, A. Riedinger, August 4th.  
 39,687 Lowering heavy loads as ships, etc., by employing several swimming bodies, A. Prussmann, August 4th.  
 39,688 Floating apparatus, A. Prussmann, August 4th.  
 39,689 Grain drill, P. P. Mast & Co, August 4th.  
 39,690 Production of fancy figured wooden plates, R. Hunnel, August 5th.  
 39,691 Burglar alarm, N. M. Powell, August 5th.  
 39,693 Killing poultry, A. Schenemann, August 5th.  
 39,694 Frames for railway cars, M. A. Zurcher, August 5th.  
 39,695 Hot air furnace, H. Cowles, August 5th.  
 39,696 Printing and stamping vignettes, H. Schwarz, August 5th.  
 39,697 Cutting grooves and channels in wood, E. Miller, August 5th.  
 39,698 Measuring, winding and cutting of lengths of cloth, A. Hahn, August 6th.  
 39,699 Rotary pump, J. Menge, August 6th.  
 39,700 Car coupling, G. S. Games et al, August 6th.  
 39,701 Automatic fire extinguisher, C. W. Kersteter and W. E. Smith, August 6th.  
 39,702 Anti-friction bearing, S. W. Ashmead et al, August 6th.  
 39,703 Cutting, trimming and pruning trees and hedges, N. Goodwin, August 6th.  
 39,704 Rotary engine, H. Sewrey, August 6th.  
 39,705 Odometer, E. J. Merry, August 6th.  
 39,706 Boarded floor, O. Hetzer, August 6th.  
 39,707 Heater, G. W. Harris, August 6th.  
 39,708 Opening cans, W. A. Hungerford, August 6th.  
 39,709 Brake gear for railroad cars, R. Falls and R. H. Staples, August 6th.  
 39,710 Valve, The Birkery Mfg. Co., August 6th.  
 39,711 Mechanical movement, A. B. Willcox et al, August 6th.  
 39,712 Furline water wheel, G. Munro, August 6th.  
 39,714 Grain binder, W. M. Holmes, August 6th.  
 39,715 Egg carrying package, R. G. Dale and W. S. Weightman, August 6th.

- 39,716 Paper provided with invisible designs, etc., T. Beecham, August 6th.  
 39,717 Sampling device, R. C. Hawley, August 6th.  
 39,718 Stamp and envelope moistener, W. J. Dyas and E. M. Marshall, August 6th.  
 39,719 Grain binder, E. G. Watrous, August 6th.  
 39,720 Switch, F. B. Rae, August 6th.  
 39,721 Manufacturing salt, etc., by evaporation, C. O. Peck, August 6th.  
 39,722 Car coupling, R. Chandler, August 6th.  
 39,723 Steam boiler, G. A. Ayer, August 6th.  
 39,724 Tasting liquid, T. Clement, August 6th.  
 39,725 Cutting green corn off the cob, W. Sprague, August 6th.  
 39,726 Clutch controller, D. R. Steele, August 6th.  
 39,727 Mechanical movement, A. B. Willcox et al, August 6th.  
 39,728 Coal elevating app., J. A. Russell, August 6th.  
 39,729 Manufacture of wire, The Val D'Aosta Syndicato (Ltd.), August 6th.  
 39,731 Manufacture of woolen-felted textile and similar fabrics, W. V. Williams, August 6th.  
 39,732 Pocket tobacco case, Curio Company, August 6th.  
 39,733 Self-lubricating trolley wheel, J. C. Mullin et al, Aug. 6th.  
 39,734 Crucible for casting dental plates, F. Fenner et al, August 6th.  
 39,735 Moulding or shaping butter, W. Foster, August 8th.  
 39,736 Railway car, M. A. Zurcher, August 8th.  
 39,737 Letter envelope, E. H. Moss, August 8th.  
 39,738 Automatically displaying advertisements, pictures, etc., J. S. Yule, August 8th.  
 39,739 Generating fluid pressure for motive power, W. and T. Hawkins, August 8th.  
 39,741 Flexible shafting, J. Howard, August 8th.  
 39,742 Offset mechanism for saw mill carriage, W. Gowen, August 8th.  
 39,743 Offsetting device for sawmill carriage, W. Gowen, Aug. 8th.  
 39,744 Offsetting device for saw mill carriage, W. Gowen, August 8th.  
 39,745 Hitching strap, H. Cole, August 8th.  
 39,746 Gear connection for vehicles, G. B. St. John, August 8th.  
 39,747 Varnish lacquer or glue, T. B. Osborne, August 9th.  
 39,749 Machine sheep shear, J. Howard and J. H. Geddes, August 9th.  
 39,751 Covering wire and other cores, J. Scott et al, August 9th.  
 39,752 Axle cutter, A. C. Parsons, August 9th.  
 39,754 Finger bar for harvester, The Massey-Harris Company (Ltd.), August 9th.  
 39,755 Gas condenser, E. N. Harris and J. L. Stamford, August 9th.  
 39,756 Firing and heating steam boiler, E. Marsh, August 9th.  
 39,757 Chain for cutter and lath, C. Mattison, August 9th.  
 39,758 Continuous running cement kilns combined with drying floors or chambers, H. Zaya, August 10th.  
 39,759 Gas Engine, W. Heckert, August 10th.  
 39,760 Illuminating gas, W. C. Andrews, August 10th.  
 39,761 Illuminating gas, W. C. Andrews, August 10th.  
 39,762 Sizing and painting cloth, D. J. Page and R. C. Reid, August 10th.

- 39,763 Draw bar, J. H. Elliott, August 10th.  
 39,764 Stave making machine, J. Pleukharp, August 10th.  
 39,765 Heating system, M. Wauner, August 10th.  
 39,766 Cable propeller, E. Hotzo, August 10th.  
 39,767 Com. actuated device, P. Kennedy, jr., August 10th.  
 39,768 Harrow, A. J. Nolles, August 10th.  
 39,769 Scale, J. Hanning, August 10th.  
 39,770 Step ladder, M. Croissant, August 10th.  
 39,771 Power hammer, W. H. Law, August 10th.  
 39,772 Recoil operated magazine guns, R. M. Catlin, August 10th.  
 39,774 Automatic friction car brake, P. Walsh, August 11th.  
 39,775 Car wheel, J. A. Webber, August 11th.  
 39,773 Heating apparatus, O. Schulze, August 11th.  
 39,777 Velocipede, T. Fano & C. F. Lavender, August 11th.  
 39,778 Plated ware, W. E. Pleadwell, August 11th.  
 39,779 Refrigerator, R. C. Simmons, August 11th.  
 39,781 Horse shoe calk, A. J. Blake, August 11th.  
 39,782 Percussive drilling machine, P. J. Ogle, August 11th.  
 39,783 Nut lock, T. C. Harris, August 11th.  
 39,784 Lock nut, T. Martin, August 11th.  
 39,786 Facilitating the stopping of tramways, etc., J. W. Lecx & S. Burlingham, August 11th.  
 39,788 Railway car, M. A. Zurcher, August 11th.  
 39,789 Handle for coffins, J. D. Ripson, et al, August 11th.  
 39,790 Grain door for cars, W. F. Lyon & W. R. Champney, August 11th.  
 39,791 Mechanical movement, F. P. Hummel & A. C. Bartholomew, August 11th.  
 39,792 Steam heating system, W. P. Skiffington & A. G. Paul, August 11th.  
 39,793 Sink, J. P. Putnam, August 11th.  
 39,794 Rotary reversible steam engine, J. J. & E. H. Payne, August 12th.  
 39,795 Cash recorder, C. E. Stone, August 12th.  
 39,797 Automatically regulating the water feed to steam boilers, J. Murrie, August 12th.  
 39,798 Coal sifter, R. Magee, August 12th.  
 39,799 Artificial fuel, G. Y. Smith, August 12th.  
 39,800 Artificial fuel, G. Y. Smith, do.  
 39,801 Pottery dipping tub, C. C. Thompson, August 12th.  
 39,802 Explosive compound, S. R. Divine, August 12th.  
 39,803 Sheet iron stove, water and other pipes, J. H. Hollowell & A. L. Franco, August 12th.  
 39,804 Weighing machine. The National Weighing Machine Co., August 12th.  
 39,805 Intermitent motion. The Korting Gas Engine Co., (Ltd.), August 12th.  
 39,806 Automatic governor for power engine. The Korting Gas Engine Co., (Ltd.), August 12th.  
 39,807 Automatic ignition in gas engines. The Korting Gas Engine Co., (Ltd.), August 12th.  
 39,808 Street and other railways. The Judson Pneumatic Street Railway Co., August 12th.  
 39,809 Circular rib knitting machine, L. Jones, August 12th.  
 39,810 Valve for train pipe. The Consolidated Car Heating Co., August 12th.  
 39,811 Car heating apparatus. The Consolidated Car Heating Co., August 12th.  
 39,812 Artificial fuel, M. Nerdlinger, August 12th.  
 39,813 Linotype machine, P. F. Dodge, August 12th.  
 39,816 Door hinge, H. Berthold, August 12th.  
 39,817 Exhibiting apparatus, C. S. Jenkins, August 12th.  
 39,818 Harness saddle tree, W. H. Bastin, August 13th.  
 39,819 Car starter, E. Vernon & B. Temple, August 13th.  
 39,820 Folding chair, A. London, August 13th.  
 39,821 Tong for lifting and handling ice, etc., J. E. Goodman, August 13th.  
 39,822 Game counter, A. Smith, August 13th.  
 39,823 Moth proof bag, F. O. Paige, August 13th.  
 39,824 Breast drill and brace, A. A. Tattersall, August 13th.  
 39,825 Ceiling block, A. Ekstrom, August 13th.  
 39,826 Fence, A. L. Bonnaffon, August 13th.  
 39,829 Cash register, J. A. Freat, August 13th.  
 39,830 Gum moistener, J. Vreeland, August 13th.  
 39,832 Nut lock, C. H. Miles, et al, August 13th.  
 39,833 Water regulator for boilers, W. M. & R. J. Copeland, August 13th.  
 39,834 Pattern board, J. W. Wright, August 13th.  
 39,836 Velocipede, J. C. Belyea, et al, August 13th.  
 39,837 Door mat, G. E. Eggert, August 13th.  
 39,838 Receptacle for feeding grain to live stock, C. A. Smith & G. Worts, August 13th.  
 39,839 Cartridge case, J. C. Butterfield & F. C. Batchelor, August 13th.  
 39,840 Metallic cartridge case, J. C. Butterfield & F. C. Batchelor, August 13th.  
 39,841 Disk harrow, A. J. Glass, August 13th.  
 39,842 Clothes pin, E. H. Turner, August 13th.  
 39,843 Valve, J. Draper, August 13th.  
 39,844 Washing machine, G. W. Smith, August 13th.  
 39,845 Cover for desk, F. Joseph & J. Hein, August 13th.  
 39,846 Disk harrow, S. J. Glass, August 13th.  
 39,847 Drying apparatus, C. H. Koyl, August 13th.  
 39,848 Wrench, A. K. Lovell, August 13th.  
 39,849 Bending machine, E. L. Booher, August 16th.  
 39,850 Sheet metal can, F. H. Palmer, August 16th.  
 39,851 Weaving wire and slat fabric, M. S. Caldwell, August 16th.  
 39,852 Automatic stove pipe draft regulator, E. Gorred, August 16th.  
 39,854 Automatic grain scale, J. H. Forsyth, August 16th.  
 39,855 Manufacture of horse shoe and other nails, P. A. Nillson, August 16th.  
 39,856 Railway and other axles or shafts, C. Lock, August 16th.  
 39,857 Strap and hoop for boxes and packages, S. C. Cary, August 16th.  
 39,858 Churn, M. L. Hoyt, August 16th.  
 39,859 Lasting machine, W. B. Dean, August 16th.  
 39,862 Dyeing or scouring, J. P. Delahanty, August 16th.  
 39,863 Polishing wheels, A. C. Barn, et al, August 16th.  
 39,864 Exhaust steam receiver, T. Foulds & W. Graeber, August 16th.  
 39,865 Dress shield, E. N. Gaillard & W. H. Stevens, August 16th.  
 39,867 Manufacture of steel and iron, J. H. Lancaster & M. R. Conley, August 17th.  
 39,868 Automatic knitting machine, A. Wrightson & B. Holt, August 17th.  
 39,869 Band saw-mill, A. Cunningham, August 17th.  
 39,870 Milling machine, C. H. Trask, August 17th.  
 39,871 Process for making solid link chains, J. Kurder, August 17th.  
 39,872 Automatic saw filing machine, J. M. House, August 17th.  
 39,873 Combined band and circular saw mill, H. J. Anderson, August 17th.  
 39,874 Stocking, L. M. Preston, August 17th.  
 39,877 Traction engine for making ice roads, G. T. Glover, August 17th.  
 39,878 Removable spring lever for cups, etc., F. J. Mackler, August 18th.  
 39,879 Device for transmitting power, W. E. Laird, August 18th.  
 39,880 Twine reel or holder, J. B. Holmes, August 18th.  
 39,884 Grain binder, J. S. Davis, August 18th.  
 39,885 Circular saw, G. Cassady, August 18th.  
 39,886 Railway crossing, U. M. Axtell, August 18th.  
 39,887 Latho for turning spirals, M. Brochu, August 18th.  
 39,890 Bending and embossing wood, B. Ludwig, August 18th.  
 39,891 Hydraulic motor, J. W. & G. P. Garret, August 18th.

- 39,892 Lamp hanger. The Pittsburgh Brass Co., August 18th.
- 39,893 Liquid measure indicator. The Pittsburgh Brass Co., August 18th.
- 39,894 Wick raising device for central draft lamps. The Pittsburgh Brass Co., August 18th.
- 39,895 Wick raising device for central draft lamps. The Pittsburgh Brass Co., August 18th.
- 39,896 Lamp. The Pittsburgh Brass Co., August 18th.
- 39,897 Radiator. The Holland Radiator Manufacturing Co., August 18th.
- 39,898 Car coupling, H. Schaeffer, et al, August 18th.
- 39,899 Sheaf carrier for binders, The Massey-Harris Co. (Ltd.), August 18th.
- 39,900 Grain binding harvester, The Massey-Harris Co. (Ltd.), August 18th.
- 39,901 Harvester binder, The Massey-Harris Co. (Ltd.), August 18th.
- 39,902 Buffer, S. W. Winslow, August 18th.
- 39,903 Band saw machine, T. S. Sprague & Son, August 18th.
- 39,904 Raising liquids, O. Schulze, August 18th.
- 39,906 Detergent, W. B. Brittingham, August 18th.
- 39,907 Fuse, E. W. Rice, jr., August 18th.
- 39,908 Appliance for handling invalids, J. G. Thrower, August 19th.
- 39,909 Grinding mill, J. & A. J. Jones, August 19th.
- 39,910 Hydro carbon burner, R. Ferguson, August 19th.
- 39,911 Device for operating car brakes, R. A. Kiscadden, August 19th.
- 39,913 Cinder sifter, J. H. Hunt, August 20th.
- 39,914 Fire escape, C. E. Sansoney, August 20th.
- 39,918 Regulator for steam furnace, J. Levey, August 20th.
- 39,919 Corset supporter, E. Pearl, August 20th.
- 39,920 Forming type bars, matrices, etc., O. Mergenthaler, August 20th.
- 39,921 Cooking vessel, R. C. Andersen, August 20th.
- 39,922 Combined cigar lighting and advertising apparatus, A. Neuhaws, August 20th.
- 39,923 Double hand winch, F. Uhlig, August 20th.
- 39,925 Rough rounding and channelling machine, H. Briggs, August 20th.
- 39,926 Utilizing the force of waterfalls, M. Hamilton, August 20th.
- 39,927 Dies for making belt fasteners, The Steel Belt Fastener Co., August 20th.
- 39,928 Turning button, D. B. Shantz, August 20th.
- 39,931 Door for freight cars, W. B. Wilson, August 20th.
- 39,933 Car coupler, N. Beausjour, August 20th.
- 39,934 Steam engine, E. W. Curtiss, August 20th.
- 39,937 Breast collar coupling, R. C. Tams, August 20th.
- 39,939 Bill file, E. B. Putney, August 22nd.
- 39,941 Bottle stopper, J. A. Stukey, August 22nd.
- 39,942 Drip board for sink, H. J. Cohen, August 22nd.
- 39,943 Pen holder, H. J. Kennedy, August 22nd.
- 39,944 Roasting sulphur bearing ores, C. W. Stickney, August 22nd.
- 39,945 Plumber's traps, F. N. Dubois, August 22nd.
- 39,946 Paper holder, Dr. F. Oliver, August 22nd.
- 39,947 Duplicating cheque book, J. Oldfield, August 22nd.
- 39,948 Gas burner for furnace, J. S. Rogers, August 22nd.
- 39,949 Mechanical device for separating, cleaning and sorting barley and other grains, applicable also to other purposes, C. Lampitt, August 23rd.
- 39,950 Alloys of nickel and copper and of alloys of nickel and iron and of alloys of nickel, copper and iron, F. W. Martino, August 22nd.
- 39,951 Cutting p'ier, S. A. Root, August 22nd.
- 39,952 Automatic fence machine, W. P. Shattuck, August 22nd.

- 39,953 Sheaf carrier for harvester, J. H. Feony, August 22nd.
- 39,954 Centrifugal machinery for separating cream from milk, W. Colo, August 22nd.
- 39,955 Oro roasting furnace, H. F. Brown, August 22nd.
- 39,957 Air valve for drain pipe, E. S. McClellan, August 22nd.
- 39,959 Oro roasting or calcining furnace, W. L. Candler, August 22nd.

## FOR REPAIRING MACHINERY



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

EVERY MANUFACTURER NEEDS ONE.

WRITE FOR PRICES.

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THE

## Whitman & Barnes Mfng. Co.

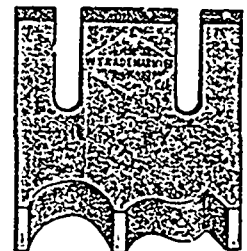
CANADIAN BRANCH:

St. Catharines, Ont.

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Machine Knives, Etc.



◀ ◀ SPECIALTIES ▶ ▶

Knives for Mowers, Reapers, Binders, Root Pulpers and Straw Cutters.

Knives for all kinds Wood-Working Machinery.

Knives for Paper Mills.

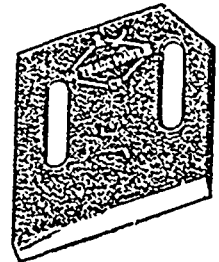
Knives for Leather Splitting Machinery.

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PARTIES WANTING SPECIAL KNIVES GET OUR FIGURES.

Goods the Best. Prices Moderate. Quality Warranted.



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## OXFORD & DOUBLE CROWN

DIRECT RETURN FREE

SEND FOR PAMPHLET HOW BEST TO HEAT OUR HOMES

THE E & G GURNEY CO. TORONTO, ONT.

- 39,960 Feeding paper to printing presses and for similar purposes, R. Creswell and W. Heslop, August 22nd.
- 39,961 Grinding and amalgamating pan, W. Roberts and H. R. Belden, August 22nd.
- 39,962 Baking preparation, The Rumford Chemical Works, August 22nd.
- 39,963 Cutting, grinding and polishing material, The Pittsburgh Crushed Steel Co. (Ltd.), August 22nd.
- 39,965 Concentrating ores, F. L. H. Brown, August 22nd.
- 39,966 Fence, F. P. Rosback and H. F. Band, August 22nd.
- 39,967 Photographic camera, J. J. Clairmont, August 22nd.
- 39,968 Automatic safety car coupling, T. Sweet and J. E. Ellison, August 22nd.
- 39,970 Fuse cap fastener, N. W. Moody, August 23rd.
- 39,971 Water closet bowl, J. C. Beekman, August 23rd.
- 39,973 Sash lock, W. Koenen, August 23rd.
- 39,974 Producing artificial graining on the surface of wood, F. A. Watters, August 23rd.
- 39,976 Taper attachment for lathe, D. Currie, August 23rd.
- 39,977 Roller mill, J. L. Wellford, August 23rd.
- 39,978 Rotary disintegrator and separator for fibrous material, B. Ziegler, August 23rd.
- 39,979 Drying malt, G. Partz, August 23rd.
- 39,980 Incandescent burner for hydro-carbon gas, J. S. P. Stutloy, August 23rd.
- 39,982 Weaving coiled wire fabric, C. O. White and W. B. Lloyd, August 23rd.
- 39,983 Hat and coat hook, T. Moody, August 23rd.
- 39,984 Machine for the manufacture of paper bags, The Remington Machine Co., August 23rd.
- 39,985 Paper box machine, P. H. and W. A. Knight, August 23rd.
- 39,986 Canning machine, G. L. Merrell, August 23rd.
- 39,987 Grate bar, C. Richardson, August 23rd.
- 39,988 Car seat, The E. L. Bushnell Spring Co., August 23rd.

- 39,989 Brick, A. S. Baker and T. M. Costello, August 23rd.
- 39,990 Ingot mould, C. Hodgson and J. Hill, August 23rd.
- 39,991 Tool for joining wire fence strands, The Jones National Fence Co., August 23rd.
- 39,992 Spark extinguisher and smoke consumer, D. Anderson and J. Naylor, August 24th.
- 39,993 Steel tube for the conveyance of liquids or gases, E. Walker and J. Shaw, August 24th.
- 39,994 Device for feeding fluid fuel, W. B. Wright, August 24th.
- 39,995 Automatic car coupling, D. Stark, August 24th.
- 39,996 Hosiery, T. West, August 24th.
- 39,997 Vacuum pump, A. Berrenberg, August 24th.
- 39,998 Steam and hot water coil or radiator, W. G. Cannon, August 24th.
- 39,999 Casing for furnace air injector, Western Smoke Preventor Co., August 24th.
- 40,000 Steam trap, J. Morehead, August 24th.
- 40,001 Construction of ships and other vessels, S. Stuart, August 24th.
- 40,002 Artificial teeth, D. B. McHenry, August 24th.

ELECTRICAL.

- 39,692 Electric lamp, J. W. Easton, August 5th.
- 39,713 Telegraphic transmitter, S. W. Smith, August 6th.
- 39,730 Electric heating, C. E. Carpenter et al, August 6th.
- 39,740 Electrical alarm, F. C. Skelton, August 8th.
- 39,750 Electric machine, J. Scott et al, August 9th.
- 39,753 Autographic telegraph, The Writing Telegraph Company, August 9th.
- 39,773 Dry cell, Dr. H. Koller, August 11th.
- 39,780 Controlling device for electric motor, F. O. Blackwell, August 11th.
- 39,785 Bleaching by electrolysis, T. J. Montgomery, August 11th.
- 39,787 Electric switch, F. Broaduax, August 11th.
- 39,796 Dynamo electric machine, J. C. Entz, August 12th.

# THE Canadian Manufacturers' Association

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

Office, ROOM 66 CANADA LIFE BUILDING, KING ST. WEST, - TORONTO.

TELEPHONE 1274.

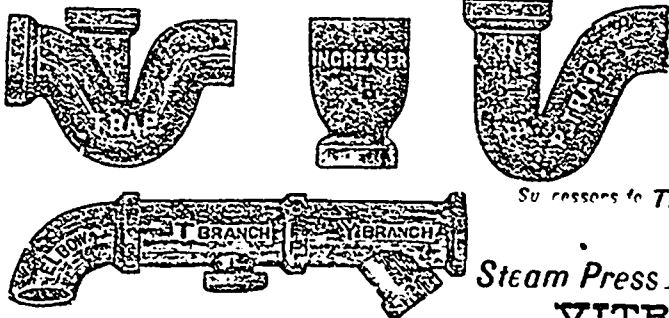
THE OBJECTS OF THIS ASSOCIATION ARE:

- 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 Canada.
- 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 that purpose, which is offered to them free of charge.

J. J. CASSIDY, Secretary.

HENRY NEW, Pres. J. H. NEW, Vice-Pres. A. E. CARPENTER, Sec.-Treas. TORONTO



## THE HAMILTON AND TORONTO SEWER PIPE CO'Y,

(LIMITED), HAMILTON, CANADA.

Successors to The Campbell Sewer Pipe Co. and The Hamilton Sewer Pipe Co.

— MANUFACTURERS OF —

## Steam Pressed, Salt Glazed VITRIFIED SEWER PIPE

FLUE PIPES, CHIMNEY TOPS and SMOKE PREVENTIVES.

Established 1860.

- 39,814 Incandescent electric lamp, E. Thomson, August 12th.
- 39,815 Lightning arrester, E. Thomson, August 12th.
- 39,827 Electrically reporting sporting and other events, W. B. Luce, August 13th.
- 39,828 Storage battery, C. Sorby, August 13th.
- 39,831 Telegraph and other poles The Sectional Standards, (Ltd.), August 13th.
- 39,835 Car heating apparatus. The Consolidated Car Heating Co., August 13th.
- 39,860 Arc lamp. The Atwood Electric Co., August 16th.
- 39,861 Arc lamp. The Atwood Electric Co., August 16th.
- 39,866 Automatic telephone and other electrical exchanges. The Stowyer Automatic Telephone Exchange, August 16th.
- 39,875 Secondary battery, N. H. Elgerton, August 17th.
- 39,881 Section insulator and lightning arrester for electric railways, E. Thomson, August 18th.
- 39,882 Regulator for dynamo electric machine, E. P. Clark, August 18th.
- 39,883 Electro-magnetic traction, M. W. Dewey, August 18th.
- 39,889 Electric traction increasing system for railways, M. W. Dewey, August 18th.
- 39,905 Electro motive force regulator, E. M. Bentley, August 18th.
- 39,915 Electric warming bottle T. Ahearn, August 20th.
- 39,916 Electric oven, T. Ahearn, August 20th.
- 39,917 Electric flat iron, T. Ahearn, August 20th.
- 39,929 Electrolytical electrometer, A. G. McKenna and S. & T. Weed, August 20th.
- 39,930 Trolley for electric railway cars, E. M. Tousley, August 20th.
- 39,935 Electric arc lamp, E. Thomson, August 20th.
- 39,936 Incandescent lamp, E. Thomson, August 20th.
- 39,938 Motor, J. T. Drew, August 22nd.

- 39,940 Electric arc lamp, W. Hochhausen, August 22nd.
- 39,956 Telephone receiver, E. C. Hess, August 22nd.
- 39,964 Combined indicating electric switch and current reversor, The Stowyer Automatic Telephone Exchange, August 22nd.
- 39,969 Electrical generator, W. Henry, August 23rd.
- 39,972 Appliance for the electric lighting of moving trains, H. W. Leonard August 23rd.
- 39,981 Electricity meter, F. Teague, August 23rd.

SCIENTIFIC PROCESSES.

- 39,748 Oxygen gas, G. Webb, jr., and G. H. Raynor, August 9th.
- 39,853 Manufacturing sugar from molasses, syrups and the juice of plants, C. Steffen, August 16th.
- 39,876 Art of producing ground wood pulp, E. F. Millard, August 17th.
- 39,883 Preparing and hardening limestone, G. J. Randall, August 18th.
- 39,912 Converting cast iron into steel, W. J. Mills, jr., August 19th.
- 39,924 Carbon product. L. S. Langville, August 20th.
- 39,932 Rock faced artificial stone, C. W. Stevens, August 20th.
- 39,958 Recovering and amalgamating metals, W. L. Caudler, August 22nd.
- 39,975 Manufacture of steel direct from the ore, W. F. C. McCarty, August 23rd.

The Illustrated American, which has achieved great popularity as the handsomest illustrated weekly published in our country, has been reduced in price from twenty-five to ten cents. This reduction has been brought about by improvements in its engraving and printing establishment, and it will in no way affect its literary and artistic excellence. This change places within the reach of all the best periodical of modern times.

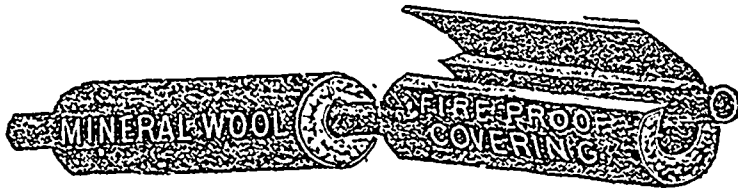
# BELTING

Patent Rolled Shafting, Hangers and Pulleys  
WROUGHT IRON PIPE and FITTINGS.

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

LAMBIN'S PATENT.

A Great Loss!



If you have any Pipes or Boilers uncovered you are losing on same at the rate of 8 cents every year on each square foot of surface exposed. By having them covered with our Mineral Wool Sectional Covering you will save 25 per cent of this loss. The saving thus obtained will pay for the cost of covering in less than one year. Our covering is the best fuel saver on the market.

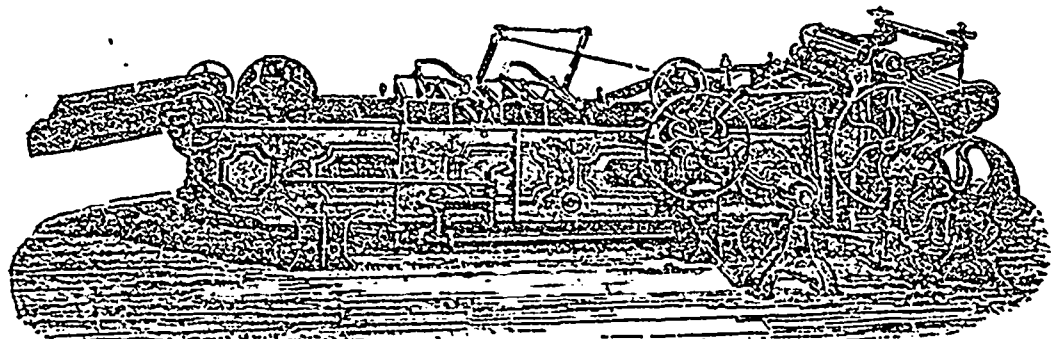
Canadian Mineral Wool Co., Ltd., 122 Bay Street, TORONTO.

# IMPROVED WOOL WASHER

BUILT BY  
C.G. Sargent's Sons

Graniteville, Mass.,  
U S A

Builders of Wool Washers,  
Burr Pickers, Wool  
Dryers, etc.



The above represents our New Hydraulic Wool Washer, superior to Rake Machine. Send for Illustrated Catalogue



## 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.*

IMPROVEMENTS now being made to the Ontario Cotton Mills at Hamilton, Ont., will cost about \$10,000.

THE Diamond Glass Works, at Hamilton, Ont., were destroyed by fire Sept. 7th, loss about \$40,000.

THE capital stock of the Peterborough Canoe Company, Peterborough, Ont., has been increased to \$40,000.

THE woolen mill of Mr. H. Hopworth, at Selkirk, Ont., was destroyed by fire September 26th. Loss, about \$3,000.

JOSEPH LA LONDE's steam saw mill, near Russell, Ont., was destroyed by an explosion of the steam boiler, Sept. 28th.

MESSRS. A. M. NEWLANDS & Co., Galt, Ont., are putting in three new machines for making Jersey cloth and glove linings.

THE Laprairie Pressed Brick and Terra Cotta Company has been incorporated at Laprairie, Que., to manufacture bricks, tiles, etc.

FIRE in the dye house of the St. Croix Cotton Mills, at Milltown, N.B., on Sept. 25th, did damage to the extent of about \$20,000.

THE name of the Waterloo Woolen Manufacturing Company, Waterloo, Ont., has been changed to the Waterloo Woolen Company.

THE saw mills of the Michigan Lumber Company, at False Creek, Vancouver, B.C., were destroyed by fire a few days ago, loss about \$10,000.

THE St. Francis Milk Company has been incorporated at Brompton Falls, Que., with a capital stock of \$100,000 to manufacture lumber, etc.

THE Peterborough Milling Company is being organized at Peterborough, Ont., with a capital stock of \$95,000 to build and operate a lumber mill.

THE Water and Weather Proof Paint Company of Canada is being incorporated at Toronto with a capital stock of \$5,000 to manufacture paints, etc.

THE Tourville Lumber Mills Company has been incorporated at Tourville, Que., with a capital stock of \$250,000 to operate lumber mills, cut timber, etc.

THE Windsor Patent Brush Company has been incorporated at Windsor, Ont., with a capital stock of \$25,000 to manufacture brushes, brooms, etc.

THE Ontario Peat Fuel Company of Toronto is being incorporated with a capital stock of \$300,000, to manufacture peat fuel by a newly patented process.

THE Ontario Wool Boot Company, Hanover, Ont., has been incorporated with a capital stock of \$25,000 to manufacture wool boots, shoes, slippers, etc.

THE Globe Hat and Cap Manufacturing Company of Toronto is being incorporated with a capital stock of \$30,000 to engage in manufacturing hats, caps, etc.

MESSRS. J. F. DAVIS & Co., Hamilton, Ont., manufacturers of granite ware, are enlarging their ovens and otherwise increasing the facilities of their factory.

THE Mason & Risch Vocalion Company, Toronto, has been incorporated with a capital stock of \$150,000 to manufacture vocalions and other musical instruments.

THE partnership between Messrs. McKelvie & Rife, Walkerton, Ont., manufacturers of woolen cloths, etc., has been dissolved, Mr. S. A. Rife continuing the business.

THE Pennington Baker Seating Company, Dundas, Ont., is being incorporated with a capital stock of \$50,000, to manufacture seating furniture, wood carving, etc.

THE Ontario Malleable Iron Company is being incorporated at Oshawa, Ont., with a capital stock of \$100,000 to manufacture malleable iron and other similar merchandise.

THE Central Electric Light Company, of Montreal, is being in-

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.

corporated with a capital stock of \$200,000 to furnish electric lights, motive power, electric heating apparatus, etc.

THE Mason & Risch Piano Company, Toronto, has been incorporated with a capital stock of \$250,000 to manufacture pianos and other musical instruments, to publish music, etc.

THE Smith's Falls Electric Power Company, Smith's Falls, Ont., is being incorporated with a capital stock of \$60,000, to supply electric energy for commercial purposes in that town.

THE Street Railway Construction Company, Toronto, has been incorporated with a capital stock of \$80,000 to manufacture equipments for and to build and equip street railways, etc.

MESSRS. MOREHOUSE & BRAY will start works in Oakville, Ont., for the manufacture of tarpaulins, etc. Mr. Morehouse was for some time manager of the Oakville Tent and Tarpaulin Company.

THE La Force Pneumatic Bicycle Tire Company is being incorporated with a capital stock of \$36,000 to take over and continue the business of H. J. La Force, in the manufacture of bicycles, etc.

THE Brantford Electric and Power Company has been incorporated at Brantford, Ont., with a capital stock of \$150,000, to supply electric lights, and electric power for commercial purposes in that city.

THE Canada Axe and Harvest Tool Manufacturing Company, Oshawa, Ont., has been incorporated with a capital stock of \$100,000 to manufacture axes, scythes, forks, and other harvesting tools.

THE Aylmer Furniture Company, Aylmer, Ont., is being incorporated with a capital stock of \$20,000, to manufacture furniture, etc. Mr. James Hay, jr., Woodstock, Ont., is one of the incorporators.

THE Fruit, Spice and Botanic Extract Company is being incorporated at Plantagenet, Ont., with a capital stock of \$10,000 to manufacture fruit syrups, vinegar, cordials and other non-alcoholic preparations.

THE Jouffret Manufacturing Co., Toronto, has been incorporated with a capital stock of \$3,000 to take over the business of Messrs. E. A. Jouffret & Co., and manufacture bonnets and hats, and bonnet and hat appliances.

MESSRS. GEORGE WINN & SON, Milton, Ont., are starting a new shoe factory which they expect to have in operation during the current month. The building which they are erecting is of brick, 70x30 feet, three stories high.

THE Brush Electric Company has been incorporated at Trenton, Ont., with a capital stock of \$25,000, to supply electric power for commercial purposes at that place. The most of the incorporators reside in Cleveland, Ohio.

MR. JOHN BOTT, Walkerville, Ont., informs us that he is meeting with a large demand for the "Pure Malt Stout" and "Wine of Malt" manufactured by him. It is recommended by physicians for debility and in assisting digestion.

THE Ontario Natural Gas Company have struck another gas well at Ruthven, Ont. Its flow is about 10,000,000 cubic feet per day. The company have begun laying pipes for conveying the gas to Windsor, Walkerville and Leamington.

THE new mill buildings of the Paton Manufacturing Company at Sherbrooke, Que., are completed and much of the machinery is in place, the expectation being to have the works in full operation in October, turning out woollen yarns, etc.

THE Canada Paper Company, whose mills are at Windsor Mills, Que., with head office in Montreal, and branch office in Toronto, are manufacturers and dealers in manilla paper, pulley board, mill board, press papers, wrapping paper, etc.

THE Goldie & McCulloch Company, Galt, Ont., are building two steam engines of 300 horse-power to drive the new screw and bolt making machinery about being introduced into their works by the Canada Screw Company, Hamilton, Ont.

MESSRS. GILMOUR and Hughson have decided to rebuild their saw mill at Hull Point, near Ottawa, destroyed by fire some years ago. Building will begin shortly, and it is expected the mill will be completed in time to begin operations next spring.

MESSRS. HAMELIN & AYERS, Lachute, Que., manufacturers of tweeds, blankets, etc., are making a novelty in the shape of a felt lubricator for railway car axles, which, it is claimed, will do away with the present system of lubricating with cotton waste.

THE Ontario Malleable Iron Company has been incorporated at Oshawa, Ont., with a capital stock of \$100,000, to manufacture cast-

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ings and other forms of iron, steel and other metals. Messrs. Wm. F. Cowan and John Cowan are numbered among the incorporators.

THE Paul Frind Woolen Machinery Company, Toronto, is being incorporated with a capital stock of \$50,000 to buy, sell, repair and deal in woolen mill machinery, etc. Messrs. James M. Young, of Hamilton, and Paul Frind, of Toronto, are among the incorporators.

MESSRS. PATTERSON & CORLIS, manufacturers of street and electric cars, St. Catharines, Ont., are enlarging their works and increasing their capacity output 50 per cent. They are now building electric cars for Niagara Falls, Toronto Junction and Brantford, Ont.

THE Low Phosphorus Ore Properties Company of Ontario is being incorporated in Toronto, with a capital stock of \$350,000, to work the iron mines in the counties of Haliburton and Peterborough, Ont. Mr. T. D. Ledyard, Toronto, is one of the incorporators.

MESSRS. LEITCH & TURNBULL, Hamilton, Ont., manufacturers of passenger and freight elevators, are now busy building some fine passenger elevators for parties in Toronto, Winnipeg, Man., and Ottawa, Kingston and Brockville, Ont., besides a number of freight elevators.

THE Hamilton Radical Electric Railway Company, Hamilton, Ont., are applying for incorporation with a capital stock of \$2,000,000, to convey electric power from Niagara Falls for commercial purposes, and to operate electric railways from the city of Hamilton to a number of neighboring towns.

MESSRS. STEVENS, HAMILTON & Co., Galt, Ont., display a cut of a 20 inch drilling machine in their business card on another page, which they are offering at a very low price. They manufacture a large line of iron working tools which are of excellent quality, and for the satisfactory working of which they give a guarantee.

MESSRS. NIE & LYNCH, Hamilton, Ont., are building a 25 horse power steam engine and boiler and all necessary shafting, pulleys, etc., for the new shoe factory of Messrs. George Winn & Son, at Milton, Ont. They are also building a 125 horse power steam engine for the electric light plant in the Temple Building, Montreal.

MESSRS. THOMAS MEALEY & Co., Dundas, Ont., manufacturers of carpet linings, stair pads, etc., are adding new machinery for the manufacture of cotton batting. They inform us that their business has increased 50 per cent. within the last two years, and that they now have the facility to supply all the Canadian demand for their products.

THE Worsted and Braid Company, of Toronto, has been incorporated with a capital stock of \$100,000 to take over the business of the Anston Manufacturing Company, of Toronto, and manufacture braids, lacing, warps, yarns, etc. The factory will be at Toronto Junction, near this city. Messrs. J. P. Murray and Thomas D. Wardlaw are actively interested.

MESSRS. COWAN & Co., Galt, Ont., have recently shipped a battery of boilers to Messrs. Garson & Purser, North Bay, Ont., and a battery to Mr. J. H. Armstrong, Parry Sound, Ont., and are now building a very large boiler for the paper mills of Messrs. Wm. Barber & Bros., Georgetown, Ont. A recent shipment was a boiler to Messrs. Ford & Co., Port Neuf, Que.

MESSRS. CARDON & GEARHART, Dundas, Ont., manufacturers of knitting machinery, have admitted Mr. Charles Collins into partnership with them, the new firm to be under the title of Cardon, Gearhart & Co. They have just completed and are putting upon the market an improved knitting machine which they sell at lower prices than what have heretofore obtained for such goods.

THE B. Greening Wire Company, Hamilton, Ont., are building an addition to their power wire weaving department and introducing a number of new looms, which will increase their capacity in this direction about one-third; and they are also increasing their wire-drawing plant. They have just fitted up a new and commodious office at the corner of Napier and Queen streets.

MESSRS. ALEX. MAIN & SON, Hamilton, Ont., manufacturers of rope and cordage, are increasing the facilities of their business by the erection of a two-story brick building, 45x30 feet, which is being equipped with new machinery for the manufacture of wrapping twine. The capacity of this new plant will be about one ton per day. The old rope walk is to be removed to give place to a larger one, built on an improved plan, and thoroughly equipped with machinery to be imported from Scotland.

## 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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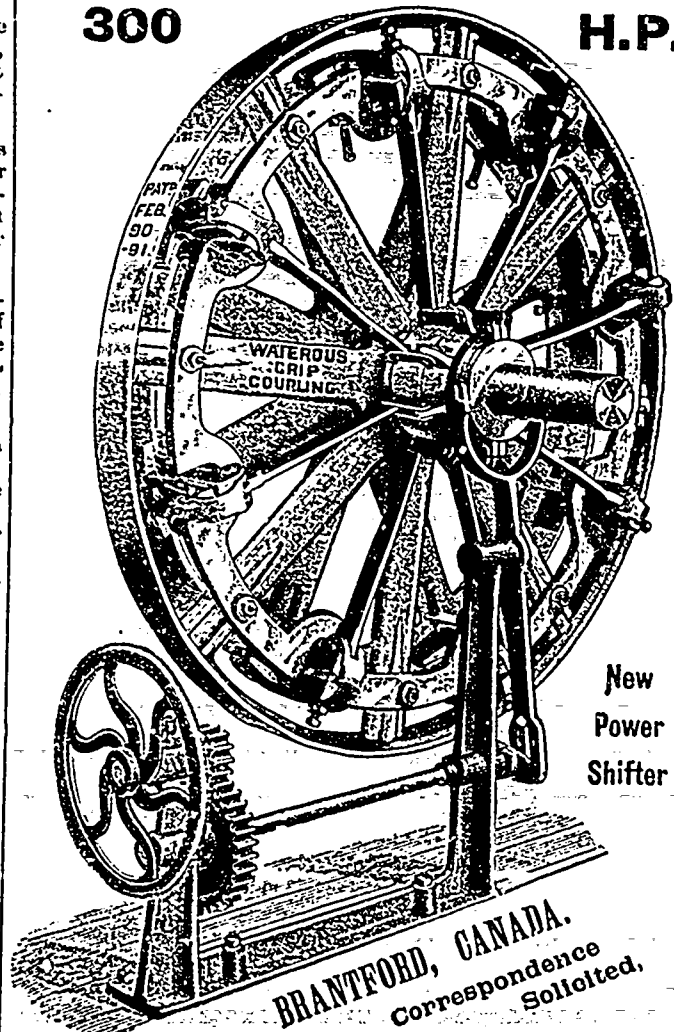
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MR. JAMES LESLIE has got settled in his new factory in St. Paul street, Montreal, and is running full swing. He is now prepared to fill all orders for card clothing, loom reeds and harness heddles, and general mill furnishings. He is putting in some new machinery, reference to which will be made in another issue. It is creditable to the character of Mr. Leslie's work that he received an order recently from Lima, Peru, to fit out a convent which is starting the manufacture of cloths there.—*Journal of Fabric.*

SINCE the destruction by fire several months ago of the woolen factory of the Paris Manufacturing Company, at Paris, Ont., several of our contemporaries have been very busy starting up the works again in different places. If these should all become materialized, Mr. Schofield, the president and manager of the company, would have to be ubiquitous to attend to them all. We are quite safe in saying, however, that no location has yet been decided upon, although it is almost certain that it will be at an early day.

THE Canada Screw Company, Hamilton, Ont., are increasing their plant by the addition of a brick building 100x75 feet, two stories high. This will be used for storage and shipping purposes, affording equal space in their main building for the new machinery which they are now introducing for the manufacture of wood screws, machine bolts, etc., by the roller process. The new building will be completed for occupancy during the current month, but the new machinery will not be in operation before the end of the year.

MESSRS F. E. DIXON & Co., Toronto, manufacturers of leather belting have received an order from the Toronto Electric Light Company for two enormous leather belts for the addition to their works on the Esplanade. These belts are to be thirty-three inches wide, double thickness, and 260 feet long. Messrs. F. E. Dixon & Co. have already supplied to this company four large double belts, thirty-six to thirty-eight inches wide, averaging each over 100 feet long, one of which has been in steady use for over seven years, and is still about as good as new.

MESSRS. BERTRAM & Co., Toronto, announce that they have purchased the entire property and good will of the John Doty Engine Co., Toronto, and will continue to carry on the business under the firm name of Doty Engine Works Co. They are prepared to construct marine engines, Armstrong & Sims high speed engines for electrical work, Reynold-Corliss engines, gas engines, hoisting and vertical engines, etc., and to give special attention to ship-building. The works are thoroughly equipped, and are under the supervision of Messrs. F. H. & F. W. Doty.

THE Haworth Belting Company, Toronto, in proclaiming the excellence of the leather belting manufactured by them, refer to a letter which they have received from Mr. W. E. Davis, electrical engineer of the Toronto Railway Company, in which he states that during his engagement as electrical engineer with the Toronto Incandescent Electric Light Company, and with the Toronto Railway Company, he had purchased sixteen extra quality double leather belts from the Haworth Belting Co., varying in width from twelve inches to thirty-two inches, and that they had invariably given the utmost satisfaction.

THE Hamilton Bridge Company, Hamilton, Ont., have contracted to build an iron steamer for the Toronto and Niagara Navigation Company. She will be a side-wheeler 311 feet long by sixty-eight feet beam, and will be driven by five boilers, twenty-one feet by eleven feet in diameter, at a speed of twenty and one-half miles an hour. Her capacity will be 2,400 people, and her fittings will be first-class in every respect, resembling the big Hudson river steamers. She will run from Toronto to Lewiston and Queenston, connecting with the new electric railway. The engines are to be built by a New York firm. The vessel will cost \$250,000.

THE B. Greening Wire Company, Hamilton, Ont., have purchased from the Toronto Steel Wire Mat Company, their plant, stock, and right to manufacture in Canada, the patent improved reversible steel wire door mat, and are now making that useful article in all desirable sizes. They say, regarding it, that it is wear and weather proof—snow, ice, mud, clay and water are wiped out of sight by the slightest scrape; it is self-cleaning, and requires no shaking; is adapted for any place where a mat may be needed, and is specially adapted for churches, schools, hotels, offices, stores, private dwellings, elevators, railways, street cars, steamboats, etc.

THE Page Wire Fence Co., Walkerville, Ont., is a young and lusty concern recently started in Canada, and is a direct result of the N.P. It is an off-shoot of an American concern, and the large demand the Walkerville Company are now supplying in Canada, without the N.P., would have been furnished from the other side

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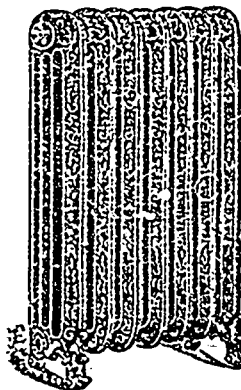
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of the international boundary. This company are manufacturers of the Page coiled spring woven wire fencing, and it is made in styles to suit all purposes—farm fences, lawn and cemetery fences, ornamental fences, etc. It is neat, tidy, efficient, and cheap. It needs but few posts. It does not burn up or blow down, and it seems to fill the bill in all directions.

Messrs. J. & J. TAYLOR, manufacturers of fire and burglar proof safes, Toronto, have issued a circular in which allusion is made to the tests some of these safes have recently undergone in different places. In the great fire at St. John's, Newfoundland, last July, the Taylor safes without exception came through the fire unscorched internally. In one case there was an English (Milner) and a Taylor safe in the same building. The contents of the former were destroyed, while those of the latter were intact. In the fire at Victoria, B.C., in August, which destroyed the power house and machinery of the electric tramway, a Taylor safe, in which was stored the books and papers of the company, preserved the contents intact.

In our last issue, in describing some of the exhibits displayed at the recent Toronto Fair, speaking of that of Messrs. Gowans, Kent & Co., Toronto, allusion was made to their famous and well known lamp as the "Rochester" lamp, when it should have been "Pittsburgh." Why it should not have been called Pittsburgh in the first place is one of those mysteries of a printing office which no fellow has ever yet been enabled to fathom. Of course the printer is to blame and the proof reader is to blame equally, for they should have known that Messrs. Gowans, Kent & Co. handle only the very best lamps in the world, and that could be no other than the "Pittsburgh" lamp. But these rash people have had their deserts meted out to them with a promptness which will deter all other careless people from falling into a similar error. They have been doped with choicera microbes. Speaking of lamps, all that we can now say is that those who are the happy possessors of the Gowans, Kent & Co. Pittsburgh lamp very correctly feel that they are in no way dependent upon either electricity or gas for a delightfully soft and pleasant light. The flame is large, the illumination all that could be desired, the combustion of oil perfect, and there is no disagreeable odor whatever. These lamps are made in styles to suit all. There is the modest and inexpensive lamp which works as satisfactorily as any, and the variety extends to those which include

Limoges vases and globes for containing the oil, with hand-painted shades and sparkling cut glass pendants.

The Canadian General Electric Co., Toronto, announce that the several business interests heretofore carried on in Canada by The Edison General Electric Co., The Edison Electric Light Co., The Thompson-Houston International Electric Co., and The Toronto Construction and Electrical Supply Co., have been consolidated, and will hereafter be conducted by the Canadian General Electric Co., Limited, which company has acquired the Canadian properties, patent rights, and good will of the several companies named. The manufacturing facilities of this concern at Peterboro', Ont., are unsurpassed, and their lamp works at Hamilton will be so improved as to allow of the manufacture of lamps for alternating currents in every way similar to those now manufactured at the shops of the Thompson-Houston Co., at Lynn, Mass., in addition to the lines previously manufactured. Such well-known types of apparatus for direct and alternating current distribution of incandescent lighting, railway power, and mining systems, as are fully covered by Canadian patents issued to the Edison Company, Thompson-Houston Company, Fort Wayne Company, and other allied interests, will receive special attention of this new company. They announce that they will keep a stock of machinery and supplies, which, for extent and variety has never yet been equalled in this country, and all enquiries will receive prompt attention whether addressed to head office, or either of the agencies located at the following points, viz: Halifax, N.S.; Montreal, Que.; Winnipeg, Man.; Vancouver, B.C.

The exhibit at the recent Toronto Fair made by the Dodge Wood Split Pulley Co., Toronto, was certainly one of the most attractive in Machinery Hall. They showed the "Dodge" patent wood split belt pulley, with patent bushing system, in all sizes, from three inches in diameter to several feet. Their space was readily distinguished by the towering pyramids of highly finished pulleys. A number of pulleys of various sizes were also shown in motion, power being transmitted to a neatly arranged counter shaft driven at right angles to the main shaft by the Dodge patent system of rope drive, which is patented in Canada, United States, and throughout Europe; the Canadian patents being owned and controlled by this company. A second counter shaft was also driven by a belt and "Brown" friction clutch pulley, which allowed the lower shaft to

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be stopped or started at will, and upon which pulleys suitable for electrical purposes were driven at a very high speed, showing the accuracy with which a properly made wood pulley will run. The company make a specialty of power transmitting machinery only, and showed with much taste their different lines. The manager said: "There is only one 'Dodge' pulley, and we are making it, and judging from our output I guess we are selling it." This company have just completed two or three 500 horse-power rope drives for the E. B. Eldy Co.'s pulp mills in Hull, Que., to replace fifty-inch belts, which it was found would not drive the grinders, while the rope drives run just twice the load to perfection. The Dodge Company have recently issued a new catalogue, and will be glad to mail it on application. They carry a full line at their city warehouses, 83 King Street West.

THE recent Montreal Exhibition, writes a correspondent, was a great success in every way, and was in many respects equal to that in Toronto. In one department it was stated to have been even superior, and that was in the machinery exhibit. Machinery Hall was crowded every day with people who were kept interested by looking at the various machines there. Among the principal exhibitors were Messrs. John Bertram & Sons, Dundas, who had a splendid collection of their famous iron tools, setting machines, bolt-cutters, etc. The Canada Machinery Agency, Montreal, had a specially good and varied exhibit, which attracted considerable attention. Among the machines shown by them was a four-sided fast feed-flourer, made by S. A. Woods, Boston; a Robb-Armstrong automatic engine, made by the Robb Engineering Company, Amherst, N.S., which was utilized for running the electric dynamo; several pumps manufactured by the Snow Steam Pump Works, Buffalo; and several of the wood-working machines and patent solid web wood-split pulleys, manufactured by the Cant Bros. Co., Galt. Mr. A. R. Williams, Montreal, had a fair show of iron tools and pulleys. Messrs. Robm & Sadler, Montreal, had an exhibit of leather belting, one belt fifty-three inches wide, being specially made for the Royal Electric Co., of Montreal. One of the engines for running the machinery in the hall was made by Messrs. Cowan & Co., Galt. Messrs. Esplan showed at work a Weymouth lathe, for making wooden egg-cups, several of which could be made per minute. All sorts of turned articles could be made on the machine by an alteration of the knives. Perhaps most interest was centred in one of their type-setting machines in motion, shown by the Linotype Co., Brooklyn. By its use the type-setting of single type is dispensed with, and the matter is set up from bars, each containing a line of print. By an operation of the finger keys, each single type is carried one by one to a composing point, where they are placed in line, where they are firmly enclosed in a mould, into which, by a subsequent operation of the same machine, molten metal was injected and a cast taken, which cast, as above stated, consists of a bar of type metal.

It is said the greatest attraction and the one which excites the curiosity of the most visitors to the Toronto exhibition is the carpet loom in the west wing of the Main Building. This is because Canadians seem to be of the opinion that all carpets come from England, though as a matter of fact some of the very best ingrain are made in that city. The owners of the loom just mentioned are the Toronto Carpet Company, which for about a year has been turning out the very best of carpets from their factory in the Esplanade, at the foot of Jarvis street. Canadian carpets have had the reputation of being greasy, but the Toronto Carpet Company has entirely obviated this fault by the use of the most improved machinery for scouring yarn. Mr. J. P. Murray, the president of the company, who has spent twenty six years in the establishment of W. A. Murray & Co., has happily "discovered what not to do and how to avoid doing it," as the *Dominion Illustrated News* has aptly put it. A year ago the company started three looms, but the demand for the goods soon compelled them to increase the plant to nine looms. Two travellers were sent out, one to Ontario, Quebec and the Maritime Provinces, and one to Manitoba and the Northwest. Orders came in so fast that thirteen more looms were started, making in all thirty-two. One of these is a three-ply, two are Cromptons and nineteen Murklands. These are the most improved machines and are highly recommended by *The Carpet and Upholstery Trade Review*, which in its current issue mentions a number of American firms who are putting other makes out and purchasing the Murkland and the Crompton. The company dyes its own yarn, using chiefly the alizarine dyes. A laboratory has been fitted up for the use of the chemist who compounds and tests the coloring material. The yarn is dried by steam, the drying rooms having a capacity of 1,000 pounds in three hours. The mention of these facts will show that the company's carpets, the Maple Leaf brand, are dyed hard and fast colors. All the apartments of the factory are provided with fire hose as a protection against fire. The factory is well lighted and the comfort and convenience of the sixty girls employed there has not gone unconsidered. The company has not depended upon the customs to aid them in building up a trade. They manufacture the best goods and believe Canadians will find that fact out. The rate at which they are doing so exceeds the company's brightest hopes. — *Montreal Trade Review*.

THE Royal Carpet Company of Guelph, Ont., made a fine exhibit of their products at the recent Guelph Fair, and the following is what was said of them by the *Herald* of that city:—Energy and

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Single and Double Yarns, Cop Yarn, Single  
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## ELECTRIC CARS

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SPECIALTY



ST. CATHARINES, ONT.

MANUFACTURERS OF

Horse and Trail Cars

OF

EVERY DESCRIPTION



enterprise are the requirements necessary for a successful manufacturing establishment. These are the principal traits of this company that have made them now the leading makers of all wool and union carpets in Canada. Much has been said about clean carpets made free from oil or grease. In this respect the company are proud to state that during the five years they have been manufacturing they have not had one single complaint about grease or oil being in their carpets. The company is composed of Mr. H. H. Burrows and Mr. Alvin R. Burrows, who will always be found busy procuring orders either on the road or at home; also Mr. John F. Burrows and Mr. Amos Burrows, who superintend the output of the company and attend to all the requirements of the manufacturing departments. Mr. H. Sykes, late of the Ontario Worsted Company, acts as secretary to the company. The class of goods manufactured by them comprise wool and union carpets (2 and 3-ply), Kensington art squares, rugs and stair carpets made in the latest shades and designs. The large carpet manufacturing centres in the States and elsewhere are visited every year by one member of the firm, who procures all the latest ideas beneficial to this country's trade. Their exhibit this year is worthy of special mention. The carpet manufactured for the Foresters in scarlet and cream is good, all the emblems of the Order complete the design. This should procure them many orders of a like class. The exhibit of window decorations is up to the times and no doubt will be admired by all. Smyrna and Moquette rugs cover the floor of their exhibit. All persons desirous of procuring the best house furnishings above mentioned cannot do better than call at their show rooms, corner of Norfolk and Paisley streets, Guelph, where they will receive a welcome and no pains will be spared to show all buyers anything they need. Carpets, of course, being the company's specialty, have more than a provincial reputation, and are to be found from Victoria in the west to cities in the province of Quebec. Their last season's trade excelled all others, and preparations are being made for a large output this winter. They feel certain that they can still hold their reputation as being the makers of the best wool and union carpets manufactured in Canada, either for purity of stock, beautiful and fast colors, artistic designs and full weight and measurement.

Messrs J. C. Wilson & Co. own large paper mills at Lachute, Que., and a factory in Montreal where envelopes, etc., are made.

Speaking of these industries the *Journal of Fabrics* says:—The most important feature of the progress of Lachute's industries is the large additions that are being made to the paper mills, which are the largest of all Lachute's industries, and which are, in fact, the largest mills in Canada, devoted to the production of manilla and similar paper. The mill is built of solid blue limestone and rests on a solid rock foundation. It is 560 feet long by 130 in its widest part, and has three stories, including the basement. It has a large new office of cut stone now in course of completion; and the central part of the main structure is surmounted by a stone tower, which is not merely an ornament but serves a useful purpose in holding an immense tank of water for fire extinguishing purposes. At the west end of the mill a large new wing about 100 feet long, of solid stone, is rapidly going up, and will ere long be ready to receive its equipment of machinery. A new paper machine of the most improved type will be erected here, with room for another, and the output of the mill will then be fourteen tons of manufactured paper per day. The manilla papers manufactured here are made from jute and other vegetable fibres combined with manilla paper stock. While these extensions are going on the motive power will be improved by the erection of a new wheel house with flume and wheel pits. The new flume will be 12x17 and 240 feet long, and the wheel house 55x30 feet, three stories high, the upper story to be devoted to machinery. The new wheel pit will contain four wheels. The mill will then have 400 horse power. A number of new machines for making paper bags, etc., will be added. The production of envelopes, boxes, bags, etc., of this firm is already far greater than any factory in Canada, for it has in Montreal a large establishment 61x130 feet, eight stories high, equipped with twenty-five printing presses, eight envelope machines, one machine for making and printing address tags, three machines for making, rolling and perforating toilet paper and many other machines for making boxes, etc. At the city factory and warehouse, which is on Craig street, 225 hands are employed, and when the new machinery is installed here there will be 100 more hands at work. A large part of the paper bag machinery is here, and there will be fifteen bag machines soon in operation, some of them turning out 200 finished bags per minute. The new flour sack machines, the only ones of their kind in Canada, will produce 60,000 perfectly made flour sacks per day, and the daily production of paper bags will be 1,000,000.

## BRUNNER, MOND & CO., Limited, Northwich, Eng.

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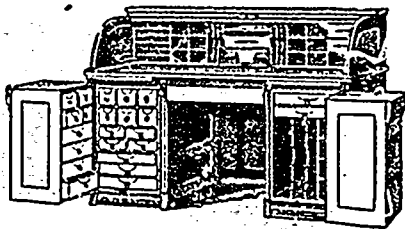
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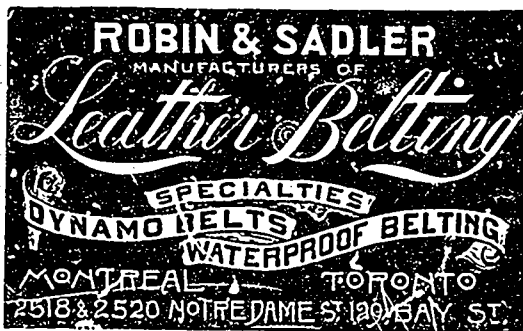
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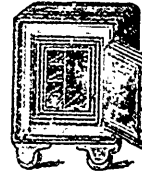
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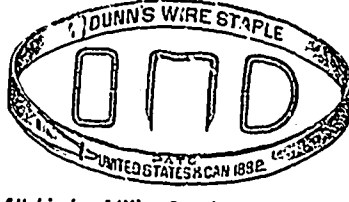
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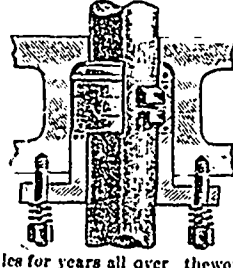
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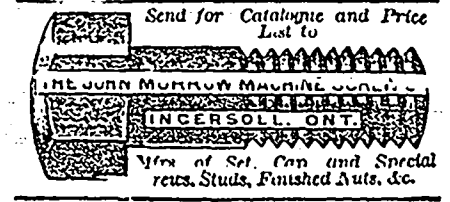
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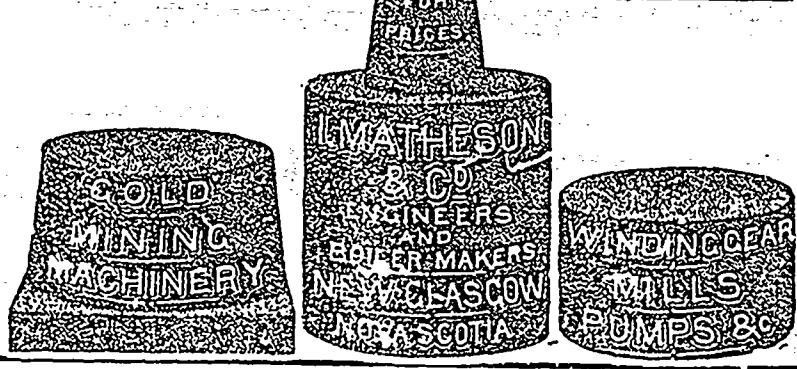
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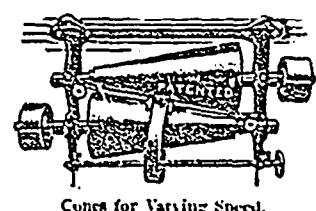
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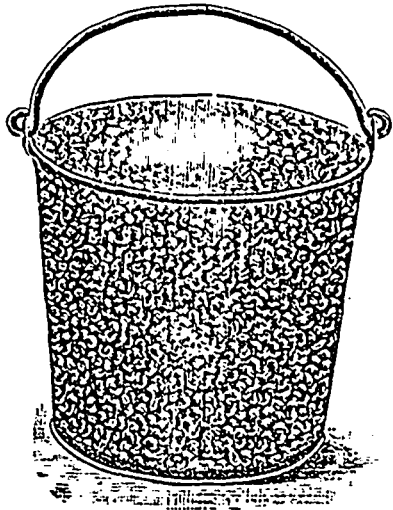
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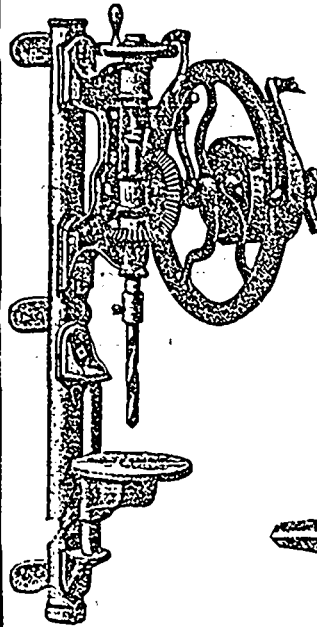


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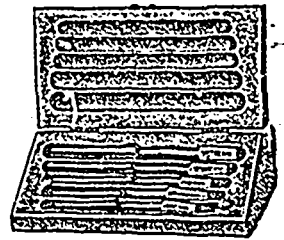
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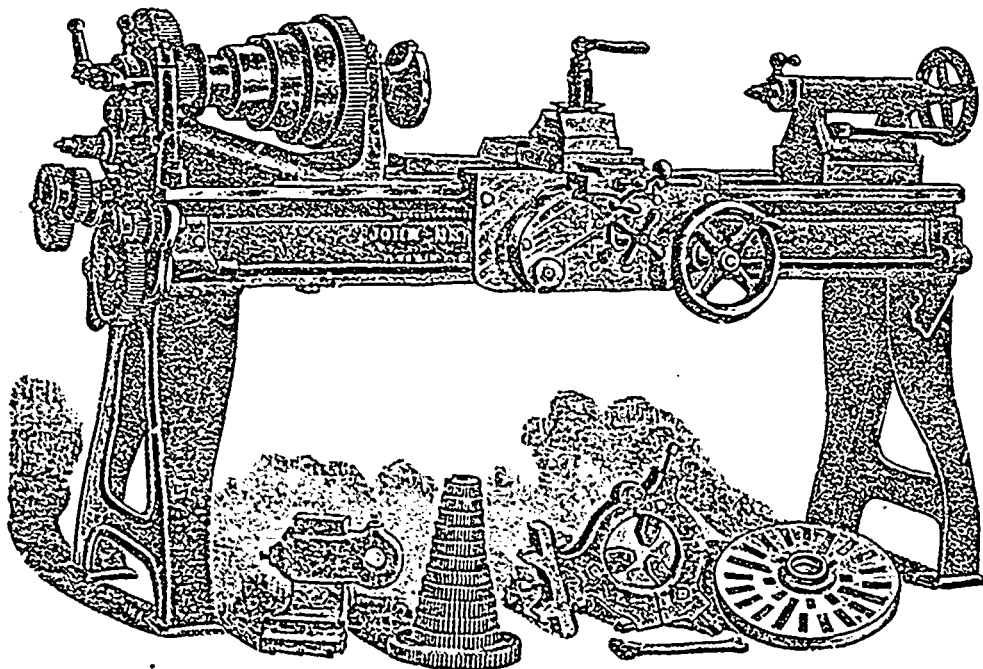
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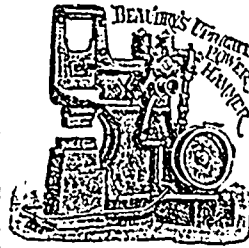
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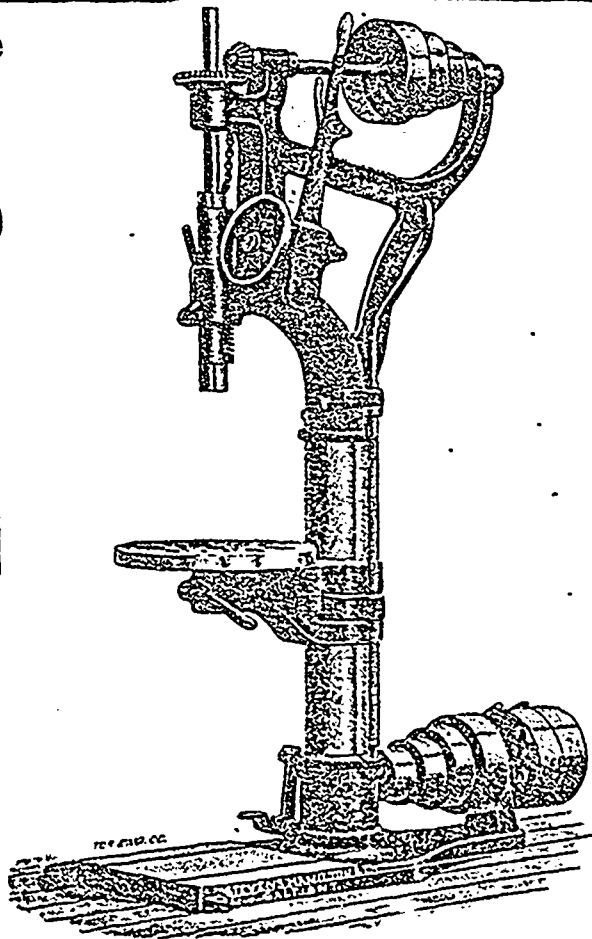
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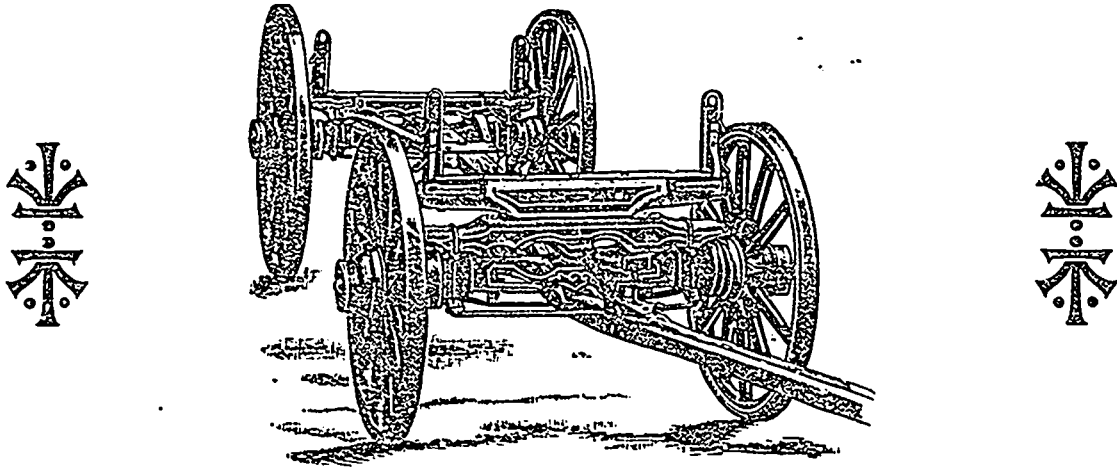
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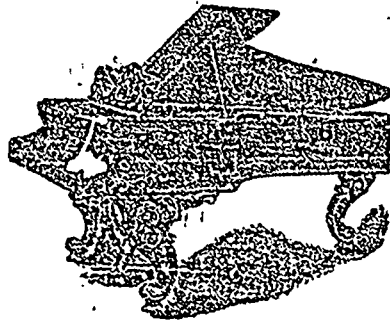
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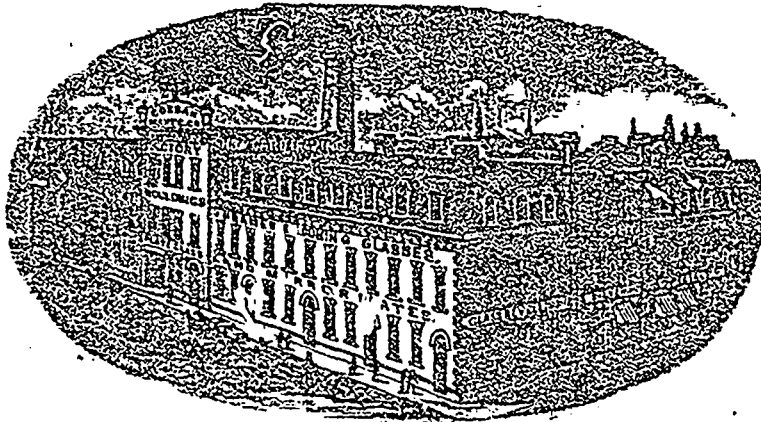
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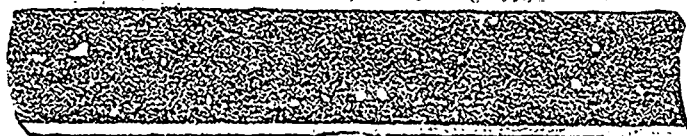
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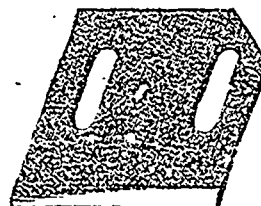
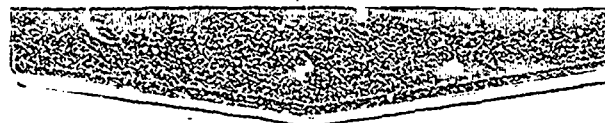
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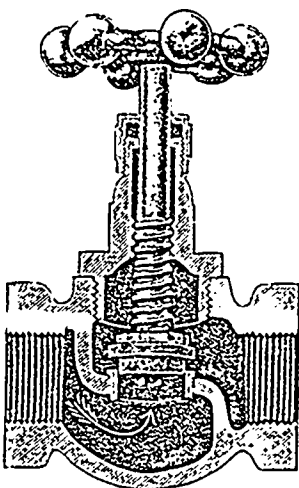
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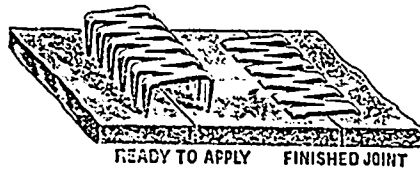
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