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# THE CANADIAN MANUFACTURER

AND INDUSTRIAL WORLD

DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION.

Vol. 24. TORONTO, FEBRUARY 17, 1893. No. 4.

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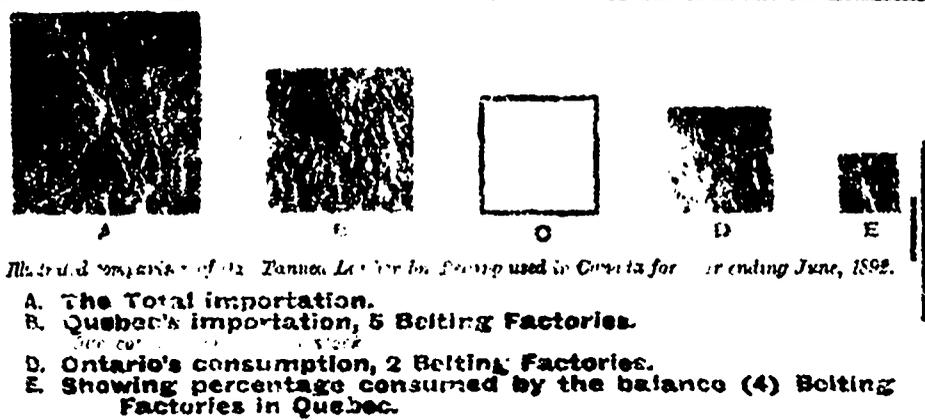
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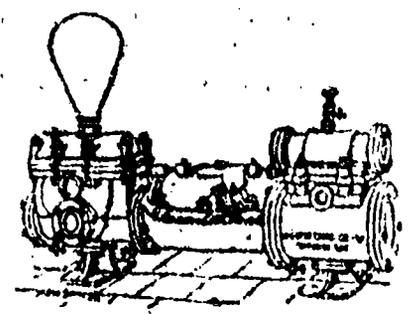
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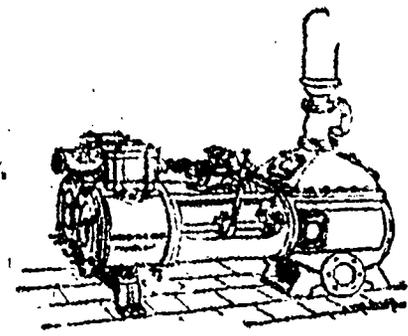
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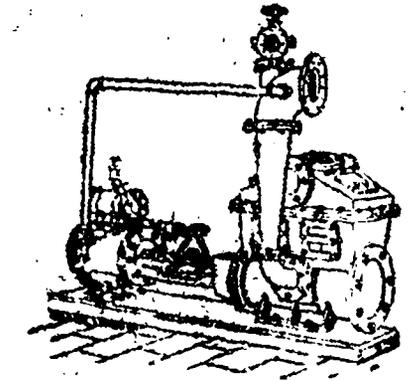


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- Second Vice-President - - - W. H. LAW.
- Treasurer - - - GEORGE BOOTH.
- Secretary - - - J. J. CASSIDEY.
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- Chairman Tariff Committee - R. W. ELLIOT.

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

**EIGHTEENTH ANNUAL MEETING**

OF THE

**Canadian Manufacturers' Association.**

**REPORT OF PROCEEDINGS.**

The eighteenth regular annual meeting of the Canadian Manufacturers' Association was held in their offices in Toronto, Tuesday, February 7, 1893.

Among those who were present were: W. K. McNaught, President; John Bertram, Dundas, First Vice-President; George Booth, Treasurer; J. J. Cassidey, Secretary; R. W. Elliot, Chairman Tariff Committee; P. H. Burton, A. E. Kemp, M. T. Smith, J. P. Murray, W. C. Phillips, John Taylor, J. W. Taylor, Robert Watson, William Pender, A. R. Clarke, John Dick, F. B. Fetherstonhaugh, A. R. Wickett, J. A. Parker, P. Freysing, Thomas Robertson, Joseph Simpson, J. O. Thorne, Toronto; H. J. Bird, Bracebridge, Ont.; Thomas Cowan, Galt, Ont.; A. E. Carpenter, Henry New, Hamilton; James Watson, St. Catharines, Ont.; O. C. Ander-

son, Walkerton, Ont.; H. W. Marlatt, Oakville; George Lang, Berlin, Ont.

W. K. McNaught, President, occupied the chair, and J. J. Cassidey was Secretary.

The minutes of all meetings held since the last annual meeting were read and approved.

The Secretary read a large number of interesting communications which he had received, bearing upon the business which had been entrusted to him, and which it was of importance to the Association to be acquainted with.

President McNaught read a most interesting address, which is given in full in another place.

**SECRETARY'S REPORT.**

Secretary Cassidey read the following report, which was received and adopted:—

*Mr. President and Gentlemen of the Canadian Manufacturers' Association.*

Since the last general annual meeting of this Association many events have transpired of much importance to Canada. I mention the retirement from the Premiership of Sir John Abbott, because of ill-health; and the accession to that honorable position of Sir John Thompson. I also allude to the reorganization of the Government in which the cabinet offices, created several years ago by Act of Parliament, have been filled for the first time. In this reorganization the incumbents of offices, with whom this Association are most frequently brought into intercourse, are: Sir John Thompson, First Minister; Hon. Mackenzie Bowell, Minister of Trade and Commerce; Hon. George E. Foster, Minister of Finance, and Hon. N. Clarke Wallace, Controller of Customs. This Association will have frequent occasion to communicate with Sir John Thompson, as Premier; and it is a pleasure to know that in him the National Policy has an earnest, strong and consistent defender. Mr. Bowell and Mr. Foster have occupied the positions they now hold for many years, and their qualifications as experts in the departments of the Government over which they preside, and their uniformly sympathetic manner in their intercourse with the officers and members of this Association who may have business with them, are assurances that whenever this Association may have occasion to approach them in the interest of our manufacturers, the same suavity will always be observable, and the same cordiality be extended. Mr. Wallace is a new man in the Government, and fills a new office. The country has long felt the necessity of the existence of the office of Controller of Customs; and it should be well pleased and well satisfied that so excellent and so competent a gentleman fills it.

At your last annual meeting a series of resolutions were passed affirming the continued attachment of the Association to the principles of the National Policy, and confidence in the Government as upholders of it; and your Secretary was instructed to convey a copy of these resolutions to the First Minister, Sir John Abbott. This pleasant duty was duly performed in a personal interview with Mr. Abbott, at which your president, Mr. McNaught, was present; and your Secretary was requested to say to you that the interests of the

manufacturers would ever receive the friendly attention of the Government.

A resolution was also passed having reference to a recent decision of the Exchequer Court, at Montreal, in a case wherein it was charged that certain goods imported from the United States were undervalued. Your Secretary was instructed to communicate with the Government with a view to having the Customs Act so amended as to prevent the occurrence of such incidents. He performed this duty, and herewith submits the correspondence had with the Government on the subject.

According to the spirit of another resolution passed at that meeting, having reference to the administration of the Patent laws, your Secretary prepared a paper embodying the views of the Association, which was duly transmitted to Hon. John Carling, Minister of Agriculture, and Mr. Pope, Commissioner of Patents, and I am pleased to report to you that these suggestions were embodied in the legislation, which was soon after had by the Dominion Parliament.

There was a meeting of your Tariff Committee held on the same day with your last annual meeting. The business before it was not then completed, and an adjournment was had to February 26th, when all the business that had been brought before it was disposed of. Some of the recommendations that had been made to the Government the previous year had, in the meantime, been disposed of to the satisfaction of the Association. Those which had not been thus disposed of were revised and again submitted to the Government, and it affords me much pleasure to inform you that some of the recommendations of your Tariff Committee, and of this Association, were very promptly acceded to. Those which were not thus disposed of will come before your Tariff Committee again at their meeting next week.

A special general meeting of this Association was called to assemble on April 1st last. This was to consider an invitation, that had been received from the London Chamber of Commerce, to send one or more delegates to the then forthcoming Second Congress of Chambers of Commerce of the British Empire which was to assemble in London in June. The invitation was accepted, and your Executive Committee instructed to take suitable action. The action of that Committee was to appoint its chairman, Mr. Frederic Nicholls, as your delegate to that Congress; but when it was too late to arrange to have another delegate go, Mr. Nicholls found that he would be unable to attend, and so your body was not there represented.

At that general meeting of this Association a resolution was passed relating to the re-distribution of seats in the Dominion House of Commons; and your Secretary was instructed to communicate with the Government on the subject. This duty was duly performed.

At a meeting of your Tariff Committee, held April 21st, a communication was read from the carpet manufacturers asking the co-operation of this Association in urging upon the Government to make certain changes in the administration of the Customs, affecting their industry. Your Tariff Committee adopted the request of these manufacturers; and I have much pleasure in stating that the request has been favorably acted upon.

At that meeting of your Committee a communication was read from Mr. G. R. R. Cockburn, M. P., asking the views of the Association regarding the then pending resolution of Mr. McNeill, M. P., in the House of Commons, proposing preferential tariff duties for Great Britain. The proposition did not find favor with the Committee, the following resolution being thereupon passed by it:—

*Resolved:* That any substantial reduction in the duties now imposed by the tariff would result in disaster to Canadian manufacturing enterprises."

According to the custom of this Association, and in pursuance of one of its chief objects, since your last annual meeting your Secretary prepared a brief of the recommendations of your Tariff Committee, in which the Government were requested to make some changes and modifications in the tariff. Of course these recommendations were not all in the direction of increased duties. On the contrary many of them asked for reductions, and others that certain articles be placed in the free list. Owing to circumstances which need not be here alluded to, the Government have been very cautious in entertaining propositions for changing the tariff, and therefore but few changes have been made. These, however, which were made as requested by this Association, have given much relief to the industries which they were intended to benefit. The recommendations which were not acted upon by the Government will be again submitted to your Tariff Committee; and those of them which may be again endorsed by it will be again submitted to the Government, together with such new matter as may receive its approval.

Close observation of the working of the tariff convinces your Secretary that much of the complaint made against it by both manufacturers and importers have their cause in that feature of the tariff where *ad valorem* duties are imposed. Thus we see the country flooded with cheap and inferior foreign merchandise upon much of which it is impossible to fix a fair value; and where the duties upon them are *ad valorem*, the revenue and the home producers suffer. In many cases this evil would be obviated if specific duties were imposed, or perhaps both specific and *ad valorem*. I find in the records of this Association that in 1885, when Hon. A. W. McLelan was Finance Minister, it was urged upon the Government that specific duties should always prevail where practicable; and this recommendation has been urged upon the Government by this Association many times since.

Your Secretary is happy in welcoming you into this Board Room where you are now assembled. The frequency and importance of the meetings of the Association and of your various Committees, and the constant requirement of your Secretary in attending to your business for such accommodation, made these surroundings most desirable. A cordial invitation is extended to all manufacturers desiring to hold meetings for the promotion of their business to avail themselves of the use of this Board Room for the purpose, for which no charge is made, and it is frequently made use of for such purposes.

Your Secretary has pleasure in laying before you a beautiful Souvenir of your Association, which he has recently caused to be published. He is and has been in frequent receipt of requests from manufacturers in many parts of the country for copies of the By-laws of your Association and other important information regarding it. The last previous edition of

your By-laws was published several years ago; and as but very few of them remain in his hands, and as he deemed it very desirable that such information should be available for distribution on demand, he caused them to be published in the style now submitted to you. In the book is also included some other information regarding the Association; the names of the officers and of the members of the Executive and Tariff Committees; the general objects of the Association, which are the reasons for its existence, and extracts from letters written by some of our members which indicate the high value the writers place upon the Association as an organization, the writers being numbered among the most influential business men in Canada.

It is with much pleasure your Secretary bears testimony to the uniform kindness and assistance he has received while in the discharge of his duties at the hands of his co-laborers, the officers and committees, and from many of the other members of the Association. Words of encouragement and approbation go far in compensating him for whatever labor he has bestowed, and care he has experienced in transacting your business.

TREASURER'S REPORT.

TREASURER BOOTH presented and read his annual financial statement, which showed the finances of the Association to be in a most satisfactory condition. It showed that the membership was larger, and the revenue larger than ever before. The report was accepted and adopted.

RESOLUTIONS.

A number of important resolutions were offered, discussed and adopted as follows:—

A DECLARATION OF FAITH.

Moved by Mr. R. W. Elliot, seconded by Mr. Thomas Cowan:—

Whereas, in the opinion of this Association, the National Policy is steadily effecting the disenthralment of the manufacturing and other industrial interests of Canada. It has knit and woven into one homogeneous whole the different Provinces, solidifying them into a great and prosperous nation. It has produced among the people a feeling of security, of national pride, and of commercial and industrial independence without which no people can attain to the acme of happiness and prosperity. Therefore

Resolved,—That the continued development of Canada, and the happiness and prosperity of the Canadian people, demand the perpetuity of the National Policy.

Resolved,—That this Association hereby express its continued confidence in the Dominion Government; and that with the National Policy and its system of tariff protection to Canadian enterprise as its key-stone, it will fairly, honestly and impartially follow that line in all matters affecting the tariff, and administer the Customs laws in the spirit in which they were created.

AS TO CONVICT LABOR.

Moved by Mr. A. E. Kemp, seconded by Mr. Robert Watson:—

Whereas, according to the ethics of protection and of the National Policy, while it is the duty of the Government of Canada and of the different provinces, to always legislate in favor of domestic interests and of home industries, it is also and always the duty of those Governments to refrain from

enacting any legislation which will in any manner injuriously affect any of those interests.

And Whereas free Canadian labor, especially when employed in manufacturing industries, is injuriously affected when brought into competition with convict labor. Therefore

Resolved,—That this Association deprecates and protests against the employment of convict labor in any manufacturing industry where the product of that labor is brought into competition in the open market with the product of free labor.

DOMINION INSOLVENCY ACT.

Moved by Mr. P. H. Burton, seconded by Mr. A. E. Kemp:—

That in the opinion of this Association it would be to the interest of Canadian merchants and manufacturers generally to have a Dominion Insolvent Act, which, while affording the same measure of protection to creditors and relief to debtors, would also do away with the unfair system of preferential assignments which at present obtain in some of the Provinces.

FAST ATLANTIC STEAMER SERVICE.

Moved by Mr. John Bertram, seconded by Mr. Thomas Cowan:—

In view of the completion of our great trans-continental railroad, and the fact that our system of canals and natural waterways from the upper lakes to tide water is fast nearing completion, it is of importance to every farmer, merchant, and manufacturer in Canada, that our facilities for carrying passengers and freight between this country and Great Britain should be put upon such a footing as will materially reduce the charges, as well as the time in transit between these important points, and thus enable our people to reap the full advantage of the vast sums already spent upon our internal carrying system. This Association is therefore of the opinion that the Government of Canada should grant a subsidy sufficiently large to guarantee the establishment of a fast Atlantic steamship service between this country and Great Britain.

VOTE OF THANKS TO OFFICERS.

Moved by Mr. James Watson, seconded by Mr. A. R. Clarke:—

Resolved,—That the thanks of this Association be tendered to the President, Mr. W. K. McNaught, for the able and excellent paper he has just read, in which Canada is portrayed in truthful colors, and the fact that the National Policy has been and is a blessing to the country most clearly proven; and that the Secretary be instructed to have the address given the widest publicity possible.

Resolved,—That the thanks of this Association be tendered to the President, the Treasurer, the Secretary and the Chairmen of Committees, for the zeal and fidelity they have exercised in performing the duties assigned to them.

The discussion arising out of the foregoing resolutions, was participated in by a great many of the members present, characterized by great unanimity of sentiment and good feeling.

ELECTION OF OFFICERS.

The following officers were unanimously elected for 1893:—

- President..... John Bertram.
- First-Vice President..... P. W. Ellis.
- Second Vice-President..... W. H. Law.
- Treasurer..... George Booth.
- Secretary..... J. J. Cassidey.

EXECUTIVE COMMITTEE.

- Chairman..... Frederic Nicholls.
- Secretary..... J. J. Cassidey.

<i>Ex-Officio</i> , John Bertram.....	Dundas.
P. W. Ellis.....	Toronto.
W. H. Law.....	Peterborough.
R. W. Elliot.....	Toronto.
William Christie....	"
Joseph Simpson.....	"
Samuel May.....	"
John Taylor.....	"
James Goldie.....	Guelph.
John Cowan.....	Oshawa.
Wm. Chaplin.....	St. Catharines.
Robert Mitchell.....	Montreal.
George W. Sadler....	"
W. K. McNaught..	Toronto.

## TARIFF COMMITTEE.

Chairman.....	R. W. Elliot.
Secretary.....	J. J. Cassidey.
<i>Ex-Officio</i> , John Bertram.....	Dundas.
P. W. Ellis.....	Toronto.
W. H. Law.....	Peterborough.
George Booth.....	Toronto.
Frederic Nicholls....	"
Robert Watson....	"
C. E. Pease.....	"
A. E. Kemp.....	"
J. P. Murray.....	"
William Stone.....	"
J. F. Ellis.....	"
Herman Heintzman	"
Frederic Crompton.	"
W. K. McNaught..	"
Thomas Cowan.....	Galt.
James Warnock.....	"
W. H. Storey.....	Acton.
William Byers.....	Gananoque.
James Watson.....	Hamilton.
C. A. Birge.....	"
F. J. Leigh.....	Kingston.
James Hay, jun....	Woodstock.
William Angus.....	Montreal.
Louis Coté.....	Hyacinthe, Que.
C. C. Cleveland...	Danville, Que.

## REPRESENTATIVES TO TORONTO INDUSTRIAL EXHIBITION ASSOCIATION.

W. K. McNaught,	George Booth,
R. W. Elliot,	Samuel May,
	J. J. Cassidey.

Upon the election of Mr. Bertram as President he was escorted to the chair by Mr. McNaught and Mr. Elliot; and upon assuming his duties he made a most effective speech, in which he alluded to the work which had been done by the Association in the interest of Canadian manufacturers, and the duty of members, and of manufacturers generally, to give the organization their most hearty and substantial support. Similar speeches were made by Messrs. Cowan, Elliot, Booth, Kemp, Pender, Watson and others. The meeting was most harmonious and enthusiastic.

## PRESIDENT'S ADDRESS.

GENTLEMEN,—I am glad to welcome so many well-known manufacturers, from various parts of the Dominion, to the Eighteenth Annual Meeting of the Canadian Manufacturers' Association.

Since we last met together, many changes have taken place in the political and commercial relations of this country.

The people of the United States at their recent Presidential election declared overwhelmingly for free trade and tariff reform, and have entrusted to Mr. Cleveland and the Democratic party, the task of carrying their wishes into effect.

In Great Britain a change of Government has also taken place, mainly on the issue of Home Rule. Owing to the serious and long continued depression of trade, a feeling of unrest and discontent with their free trade policy has manifested itself, and the idea of tariff protection to British industries and preferential trade throughout the Empire, seem to be fast gaining ground.

In our country, to the regret of his many friends, Sir John

Abbott was compelled to resign the office of Premier on account of ill health. His mantle has, however, fallen upon the shoulders of a tried and worthy successor, and in Sir John Thompson this country has not only secured a leader of unimpeachable integrity, but an able and sagacious statesman, who will carefully safeguard the interests of our beloved Canada.

Our Canadian Parliament during its last session declared in favor of preferential trade relations with Great Britain and throughout the British Empire, and their decision has since been indorsed by the most influential Boards of Trade throughout the Dominion.

These changes, in connection with the activity of the opponents of protection in Canada, have aroused considerable discussion as to the future fiscal policy of this country, and in certain quarters an impression seems to prevail that Canada's protective policy will shortly be compelled to "walk the plank." So far as the bulk of Canadian manufacturers are concerned, they do not fear discussion, and they are satisfied that the more thoroughly the trade question is ventilated, the more determined will the vast majority of our people be to adhere to a policy which has conducted so largely to the national prosperity.

There never was, and probably never will be, a fiscal policy which suited everybody exactly. That our present fiscal policy is obnoxious to the politicians who are out of office, goes without saying, and it seems naturally to be a part of their business to try and prove to our people, that they are being crushed under the iron heel of monopoly. This being the case, it is hardly any wonder that theories almost innumerable are continuously put forward for the cure of Canada's supposed commercial ailments, and if you will bear with me, I propose to analyze a few of them in the light of this country's practical experience.

## IS THE NATIONAL POLICY PERFECT.

The enemies of the National Policy seek to engender animosity between the manufacturing and agricultural population of this country by insisting that we are utterly opposed to any change except in the direction of higher duties. No charge could be further from the truth. One of the principal differences between protectionists and free traders is, that the latter believe that their fiscal dogma of free trade is immutable, and that it is fully and equally suitable for every people, age, or clime, irrespective of condition or surroundings. Protectionists on the contrary, while believing that even free trade may be best for some conditions, consider that the fiscal policy of every country should be regulated in accordance with the conditions in which it finds itself, and depends materially upon its capabilities, position and environment. Further than this, they believe that the tariff, while protecting its home industries, should be altered and adjusted from time to time, as occasion demands, so as to subserve the best interests of the country. Absolute free trade and direct taxation, may be all right theoretically, but in practice it fails to meet the requirements of this practical age, and as a consequence every civilized nation in the world to-day (Great Britain not excepted), raises a certain proportion of its revenue by levying duties upon goods imported from foreign countries. The manufacturers of Canada do not consider the present tariff as perfect. On the contrary they recognize the fact that it must be changed and

modified from time to time to suit the ever-varying conditions of trade. While this is so, as regards details, the principle of adequate protection to home industries upon which the whole superstructure rests, must remain intact. It is to the interest of the country to see that the duty of levelling the incongruities of the tariff from time to time, is entrusted to the friends of the National Policy, and not to its avowed enemies.

It is a favorite assertion of the enemies of our present fiscal system that Canada's protective policy has outlived its usefulness, and that having strutted its brief hour upon the national stage, it should now be relegated to the museum of political monstrosities. There never was a greater mistake. Canada's national policy is not moribund by any means. On the contrary it is very much alive, and profiting by the experience of the past, it proposes to broaden its scope and increase its usefulness to the Canadian people generally.

#### UNRESTRICTED RECIPROCITY.

In my address last year, I endeavored to show from our standpoint, some of the reasons why Canadian manufacturers would be disadvantaged by Unrestricted Reciprocity with the United States, and, so far as I am aware, these arguments have never been fairly met, much less refuted by the advocates of that propaganda. Since then a deputation from our government have fully discussed the question of reciprocity with the American Government, who were unwilling to negotiate such a treaty unless Canada agreed to discriminate against every other country (Great Britain included), and regulate our tariff from Washington. As these were terms which no self-respecting British Canadian could seriously consider, the negotiations came to an abrupt termination. Since then the people of the United States have declared for freer trade relations with other countries; and it is just possible that the incoming administration may be disposed to treat with our government on a fairer and more liberal basis than their predecessors. While it would be of undoubted advantage for our people to have free access to the United States market for their lumber, barley, horses and eggs, these are practically the only articles which affect our trade, and the Americans may as well understand first as last that these concessions are not going to be purchased by Canada either at an excessive price, or at the cost of National honor.

#### FREE TRADE WITH GREAT BRITAIN.

Some people have seriously proposed to have free trade with Great Britain and maintain our present tariff against all the rest of the world. Apart altogether from the fact that owing to existing treaties, the same favor allowed to Great Britain would also have to be extended to Germany and Belgium, such a procedure on our part would be certain to engender a feeling of hostility on the part of every nation discriminated against, especially our nearest neighbors and second largest customers, the United States. Further than this, such an action would be simply suicidal so far as many of our manufacturing interests are concerned.

If Unrestricted Reciprocity with the United States—a country in which the price of labor is about level with our own—would be ruinous to our manufacturing industries, what might be expected if we were forced into direct competition with Great Britain, whose manufacturing industries, fostered

for centuries by the most rigid system of protection that the world has ever seen, have attained a high degree of perfection, where labor is considered fairly paid at wages far below those which obtain in this country. To my judgment one of two results would speedily follow: either the wages of our artizans would have to sink to the European level, or our industries, which come into direct competition with European manufacturers, would be wiped out of existence.

To say nothing of the hundreds of manufacturers who would be totally ruined, and the millions of dollars of capital invested in plant and machinery which would be practically valueless, would it be to the advantage of the artizans of this country to have their wages lowered in order that they might perhaps be able to purchase some few articles of foreign manufacture a little cheaper than they are doing at present? Or would it advantage our farmers to get rid of the problematical tax which the National Policy is said, by its enemies, to impose upon them, if such relief had to be purchased, as it certainly would be, by the loss of a large part of their best market for the small products of the farm?

The loss of revenue from Customs duties could only be made up by a system of direct taxation which would fall most heavily on those least able to bear it. Those who talk so glibly about uprooting our present institutions and substituting free trade in its place, should be aware that such a change would amount to a commercial revolution which would jeopardize the stability of every monetary institution in the country.

Talk about exodus under the N. P. Why under such a condition of things, unless our artizans were willing to work for European wages, they would either have to turn farmers and raise produce for the European competitors who had usurped their functions, or emigrate to some protected country where they could as heretofore continue to pursue their usual calling at living wages. If the desire of these speculative theorists is to see Canadians "hewers of wood and drawers of water" for the people of Europe, this is the easy and natural way to carry their ideas into practice. But if they desire to have Canada develop into a great, powerful and self-reliant nation, capable of taking her own part against all comers, then they must support some other and more practical policy.

#### PREFERENTIAL TRADE THROUGHOUT THE EMPIRE.

In the foregoing I have not touched upon one of, if not not the most important argument against free trade with Great Britain, and that is, that such a fiscal policy would practically destroy any chance which Canada may have of obtaining preferential treatment in the markets of the Mother Country. The Manchester school of politicians who dominate the fiscal policy of Great Britain, have no sentiment whatever in regard to commerce. Trade with their own flesh and blood in the colonies is no more to them than trade done with foreigners, and the strongest weapon which could be put into their hands would be for Canada to voluntarily admit British goods into their ports free of duty. If preferential trade with the Mother Country would be of benefit to Canada, it will only be obtained when the people of Great Britain are convinced that such an arrangement would work to their own advantage; and if we on our own account in the meantime admit their goods free of duty, we will have deliberately thrown

away the command of the position. So far as preferential trade with Great Britain and the Empire at large is concerned, I am strongly in favor of it, not only because as a Canadian I think it would be of great benefit to Canada by helping to populate the magnificent agricultural lands of our North-West, but because, as a British subject, I think it would help to consolidate and strengthen, by real and tangible ties, the grand old Empire of which we are all proud, and of which Canada forms no small or ignoble part. While I unhesitatingly pronounce for "Canada First," I sincerely desire to see our trade arrangements with the Mother Country and our sister colonies made as free and untrammelled as is consistent with the imperative duty of adequately protecting the manufacturing industries of our own country. Although the protection of our own trade and manufacturing industries should always be paramount; I think we should consider the interests of the Mother Country and the rest of the Empire, in preference to those of foreign countries; for under the existing conditions of trade and tariffs throughout the world, it is only by so doing that the unity of the Empire can be preserved.

#### CANADA UNDER A REVENUE TARIFF.

Some political doctors tell us that "what Canada wants is a revenue tariff." They contend that our manufacturing industries have been fostered long enough, and that if they cannot now thrive under a tariff of 15 or 20 per cent. they ought to go to the wall. This country has tried a revenue tariff when the conditions were much more favorable for it than they are to-day, and what has been the result. Let us turn the searchlight upon that period of Canadian history and see how the country prospered under such a system.

It is generally conceded that from the time of Confederation up to the year 1872, Canada was fairly prosperous. Although the tariff was only 15 per cent. it appeared to be a sufficient protection to the manufactures which then existed, because the disorganization of business in the United States consequent upon their civil war, was so great as to prevent the manufacturers of that country from being dangerous competitors. By that time, however, the revival of American industries was an assured fact, and Canadian manufacturers began to feel that they were gradually being forced to the wall by the unfair competition to which they were being subjected. Their appeals to the Government of the day were unheeded. Sir Richard Cartwright, the then Minister of Finance, declaring that he and his colleagues were only flies upon the wheel of trade and therefore powerless to afford them any relief. For the benefit of those who look back to those as halcyon days, we let the facts and figures in regard to our trade at that time speak for themselves.

In 1878 Canada's total import trade, amounted to \$90,392,301. Of this amount \$59,773,039 was dutiable imports, on which revenue was collected to the amount of \$12,791,532, or an average of 21 per cent. The goods imported free of duty amounted to \$30,619,262, equal to 52 per cent. of the dutiable goods brought in, or 14 per cent. of the total imports of all kinds.

We are told that the N.P. was framed entirely in the interests of the manufacturers, and that it presses unduly upon the artisans and farmers. To-day, as every person knows, we

have a free breakfast table. Tea, sugar, coffee, molasses and rice, all of them articles of necessity to the working classes, are now practically admitted free of duty, and are cheaper than they ever were before in this country. How were these necessities treated in 1878 under Sir Richard Cartwright's revenue tariff? In that year, according to the trade and navigation returns, the following duties were collected upon them:

Article.	Total Imports.	Duty collected.	Percentage of Duty.
Sugar .....	\$5,982,078	\$2,515,655	43 per cent.
Molasses.....	940,725	235,173	25 "
Tea.....	2,597,847	611,313	23 "
Coffee.....	352,369	37,273	10½ "
Rice.....	241,572	83,669	35 "
Total.....	\$10,114,591	\$3,483,083	

In addition to these taxes which none could escape, duty was levied upon tin plate, an article of necessity in every household, and a large factor in our canning industries. This article under the N. P. is placed upon the free list.

In those days postage was charged upon all newspapers. Under the N.P. they are now carried free of charge, to the special advantage of the agricultural community.

At that time no promissory note was legal unless it had paid a tax to the country in the shape of a bill stamp. This irritating tax has also been removed by our protective policy much to the satisfaction of the commercial community.

In 1873 our total import and export trade amounted to \$217,801,000. In 1879, the last year for which a revenue tariff is responsible, it had gone down to \$153,455,000, a decline of \$64,346,000.

To prove that we were being slowly but surely swamped by our jug handled fiscal arrangements with the United States, it is only necessary to state that our purchases of manufactured goods from that country had risen in the same period from \$47,000,000 to \$51,000,000 and that we had imported from there in one year nearly \$18,000,000 of agricultural produce which, on account of its cheapness, simply displaced so much of the products of our own Canadian farms.

While trade with the United States was expanding so enormously, that with the Mother Country was rapidly contracting, in 1873 our total imports from Great Britain amounted to \$68,492,000, while in 1878 they had decreased to \$37,431,000, a shrinkage of \$31,061,000.

In consequence of the unsatisfactory condition of our manufacturing industries the imports of raw materials materially decreased, scores of factories were idle, or running only on short time, and thousands of our most skilled artisans were forced to emigrate to the United States in search of the employment they were unable to obtain in Canada.

Amongst our merchants a similar state of affairs obtained. The business failures throughout the Dominion, which in 1874 were 966 in number and \$7,696,765 in amount, gradually rose under the masterly inertia of Sir Richard Cartwright, until in 1879 (for the effect of which year his policy was undoubtedly responsible), they numbered 1,902 and aggregated the enormous sum of \$29,347,937.

As if to accentuate the folly of refusing to alter our tariff so as to meet the exigencies of the times and protect our own people from the unfair competition of foreigners, our national expenditure increased from \$19,174,647 in 1873 to

\$24,455,381 in 1879, while each succeeding year seemed to show a larger deficit than its predecessor.

Time, however, would fail me to tell in detail the full measure of misery entailed upon this country by the shortsighted and bigoted adherence to a revenue tariff, which events were every day proving was utterly unsuited to the altered conditions of trade and the needs of our people.

CANADA UNDER PROTECTION.

The policy of protection has now been in operation in Canada for fourteen years. Until very recently it was a favorite assertion of its opponents, that although it was primarily framed to give an impetus to our manufactures, not a single new industry had been started through its agency. "Where," they jeeringly asked, "are the tall chimneys which the promoters of the N. P. promised were to follow in its wake?" These and many similar assertions have been thoroughly exploded by the facts contained in the last census returns, a few of which I give in order to show that if a protective policy has not fulfilled to the very letter every promise made on its behalf, it has at least lifted this country out of the slough of despond and advanced it materially on the highroad of prosperity.

The following table showing the growth of our manufacturing industries from 1881 to 1891, while not nearly as favorable as if made from the inception of the N. P. in 1879, still proves beyond a peradventure that it has effected a complete revolution in this department of our national life :

	1881	1891	Increase.	Per cent.
Number of establishments.....	49,923	75,768	25,845	51.8
Capital invested.....	\$165,302,623	353,836,817	188,534,194	114
Number of employees.....	254,935	367,865	112,930	44.43
Wages paid.....	\$59,429,002	99,762,441	40,333,439	67.86
Cost of raw material.....	\$179,918,593	255,983,219	76,064,626	42.3
Value of products, ..	\$399,676,068	475,455,706	165,769,637	53.5

That the condition of our artizans has been considerably improved by our protective policy will be made evident by the following comparison :

In 1881 each workman in Canada produced on the average \$1,214.72, for which he received as wages \$233.11, or 19.19 per cent. of his output.

In 1891, this had increased to an average product per man of \$1,292.44, for which he received \$271.20 as wages, or 20.08 per cent. of his output.

In spite of the oft-repeated assertion that the agricultural community is being ground between the upper millstone of the National Policy and the nether millstone of the McKinley Tariff, I venture to assert that the condition of our Canadian farmers is fully as prosperous as those of any other country in the world. With the exception of barley, wheat and certain classes of horses, every other product of the farm has materially increased in value during the past decade. While farm produce has been going up in value, manufactured goods of every kind have been gradually getting cheaper, so that to-day the Canadian farmer can get more manufactured goods in exchange for nearly everything that he has to sell, than he could at any previous period of our history.

As a great deal of misapprehension seems to exist in regard to the average rate of duty imposed by our present tariff (some of its opponents making it range all the way from 40 to 80 per cent.) the matter may be easily decided by reference

to the governmental returns for the fiscal year ending June 30th, 1892.

For that year our total imports of dutiable goods amounted to \$69,160,737, on which \$20,550,473 was collected, being an average of 30 per cent. on the amount of the dutiable goods, and 17½ per cent. on the value of our entire imports.

Of free goods, \$47,818,206 were imported during the same year, being 68 per cent. of the amount of goods entered for duty.

Comparison with the imports of 1878, shows that while the average tariff on dutiable goods brought into the country has only increased from 21 to 30 per cent., or \$1.12 per head of our population, the proportion of goods admitted free of duty has risen from 52 to 68 per cent.

The opponents of protection assert that Canada is anything but prosperous at the present time, but surely they must either be wilfully or woefully blind if they do not find in our annual Trade and Navigation returns a complete refutation of such assertions. These national records show that under protection our total trade, import and export, has risen from \$153,455,000 in 1879, to \$241,369,443 last year, the highest point ever reached in the history of this country.

Our imports of agricultural products from the United States have decreased from \$17,909,000 in 1878, to \$9,395,747 in 1892, showing that protection can and does protect our farmers to that extent.

Our commercial failures have decreased from 1902 in number and \$29,347,937 in amount, to 1682 in number and \$11,603,210 in amount last year, a certain indication of an improved financial condition amongst our business community.

While our bank and other financial stocks are unprecedentedly high, indicating the confidence which our people at home have in the continued prosperity of these monetary institutions, our national credit was never so firmly established abroad, as is evidenced by the fact that not only are Dominion of Canada bonds eagerly sought after by the money lenders of Europe, but that they stand higher to-day than those of any other colony belonging to Great Britain.

Although our budget has been necessarily increased by large expenditures on public works and other causes, our revenue has been buoyant enough to meet every emergency, and deficits have become unknown since a policy of protection was substituted for a revenue tariff.

That this state of things has been brought about without unduly oppressing our people, may be judged from the fact that the list of free imports has been greatly enlarged under protection. According to the statement of Hon. Mackenzie Bowell, Minister of Trade and Commerce, not only have 113 articles been added to the free list since 1878, but at least \$23,000,000 have in this way been remitted under a protective tariff which would have been collected under Sir Richard Cartwright's revenue tariff.

PROTECTION vs. REVENUE TARIFF.

The following table, kindly furnished by Mr. George Johnson, Dominion Statistician, contrasts in a very striking manner the relative position of this country at the close of a decade of revenue tariff, and at the present time after fourteen years of protection.

If these figures mean ruin, then the more Canada is ruined the more prosperous does she appear to become.

	1878.	1892.	Increase.
Miles of railway.....	6,143	15,000	8,857
Tons of shipping employed.....	23,102,551	43,802,384	\$20,699,833
Letters and post-cards carried.....	50,840,000	123,665,000	72,825,000
Dominion note circulation.....	\$3,120,127	\$7,214,953	\$4,094,826
Deposits in chartered and sav- ings banks.....	\$88,995,126	\$211,881,822	\$122,886,696
Money orders.....	\$7,130,000	\$12,825,701	\$5,695,701
Bank note circulation.....	\$20,215,020	\$33,788,679	\$13,573,659
Discount by chartered banks.....	\$124,888,552	\$210,234,377	\$85,345,825
Fire insurance.....	\$409,899,701	\$759,602,191*	\$349,702,490
Life insurance.....	\$81,751,937	\$261,475,229*	\$179,723,292
Value exports Canadian cattle.....	\$1,152,334	\$7,748,949	\$6,596,615
Value exports Canadian cheese.....	\$3,997,521	\$11,652,412	\$7,654,891
Value exports Canadian sheep.....	\$699,337	\$1,385,146	\$685,809
Value exports of products of farms.....	\$32,028,321	\$50,708,124	\$18,679,803
Brls. apples, exported.....	53,213	690,951	637,738
Value exports, apples.....	\$149,333	\$1,444,883	\$1,295,550
Value products of Canadian fisheries.....	\$13,215,679	\$18,978,078*	\$5,762,399
Value exports of products of mines.....	\$2,816,347	\$5,906,471	\$3,090,124
Consumption of tea, lbs.....	11,019,235	22,593,619	11,574,384
Consumption of coffee, lbs.....	1,831,800	3,348,366	1,516,566
Imports raw cotton, pounds.....	8,011,759	46,322,525	38,310,766
Imports raw cotton, value.....	\$817,559	\$3,673,933	\$2,856,374
Value exports of manufactures of wood.....	\$13,908,629	\$19,802,165	\$5,893,536
Value exports of home manu- factures.....	\$17,780,776	\$26,843,153	\$9,062,377
Production of coal, tons.....	1,152,000	3,623,076*	2,471,076
Consumption of coal, tons.....	1,665,814	5,885,894*	4,220,080

The foregoing are only a few of the evidences that Canada, under a protective policy, is making strides in material wealth and prosperity which will challenge comparison with any country in the world. I presume that the official figures in regard to our rapid increase in wealth are at least as accurate as those in reference to the disappointing increase in population, and if this is so, it is quite evident that as our wealth has increased in a much greater ratio than our population, those Canadians who have stuck to the country have materially benefitted thereby.

#### THE EXODUS.

Much stress has been laid upon the fact that the last census returns show that our population only increased about half a million during the last decade, and the opponents of protection assert that this state of affairs has been directly brought about by the evils of our present fiscal system. I do not for one moment believe that the exodus has been nearly as great as has been represented, and I am firmly of the opinion that had it not been for the employment afforded by the immense expansion of our manufacturing industries, as shown in the figures I have just quoted, the exodus of our artisans and farmers would have been more than double what it really was. It is sheer nonsense to say that any change in Canada's fiscal policy would put a stop to our people emigrating to the United States. In that country the centre of population is constantly shifting; the eastern states are actually decreasing in population because thousands of their farmers are continually emigrating to the cheaper and more fertile lands of their own western states and territories. What is even now going on within the borders of the United States in regard to this movement of population, would likewise continue to prevail in Canada, whether we effected a treaty of unrestricted reciprocity, or became an integral part of the Republic by annexation.

In my opinion, the malicious and persistent depreciation of this country, and the exaltation of the United States,

by a section of the Canadian newspaper press for political purposes, has had much more to do with inducing so many of our farmers to emigrate to the American instead of the Canadian North-West, than our present policy of protection. It is a cheering fact, however, that in spite of this persistent croaking, not only is the tide of emigration from the older provinces setting strongly towards our own prairie lands, but thousands of expatriated Canadians, who have learned by dear bought experience that all is not gold that glitters, are leaving Minnesota and Dakota in order to participate in the prosperity of the agricultural El Dorado in our own North-West.

The crying need of Canada to-day, is agriculturists to cultivate our vast unbroken wheat fields which now lie dormant, and these can only be had by a vigorous emigration policy. Even in this matter the tide seems to have turned at last, and it is more than probable that the thousands who have already taken up their abode with us, are but the avant couriers of millions who, in the near future, will find that prosperity and happiness within our borders denied them in the land of their birth.

#### WHO PAYS THE DUTY.

One would think that the question "Who pays the duty?" had been so often and so thoroughly threshed out that nothing now remains to be said upon the subject. While this is so, in view of the recent statement of Mr. D'Alton McCarthy, M.P., that in every case the consumer pays the duty, I may be permitted to say a few words, in order to expose the fallacy of that old and very misleading statement.

Under free trade (such as obtains in Great Britain), almost the only goods on which customs duties are levied are those which cannot be produced at home. Where similar goods are produced in the country an excise impost, equal to the duty upon the foreign article, is levied upon them in order to make sure that the native producer shall have no advantage whatever over his foreign competitor. In all such cases it is evident that the consumer must pay the entire amount of the customs tax, whether it be imposed in the form of duty or excise; and while such a system undoubtedly produces a revenue, it affords no protection whatever to the native producers of the country into which such goods are imported.

The principle of protection is almost the opposite. While admitting raw materials for manufacturing purposes, and the principal articles of necessity amongst the masses, which cannot be produced in the country free of duty, a protective tariff is levied upon goods which enter into competition with similar lines (whether manufactured goods or agricultural products), produced at home. Luxuries are taxed at a higher rate than articles of necessity, and it thus aims to make living cheap while providing work and fair wages for those engaged in its various industries.

While it is evident that on such articles as tea and coffee, which cannot be produced in this country, the whole of the duty must be paid by the consumer; it is equally evident that on imported goods, similar to those produced in Canada, the question of who pays the duty must be decided by other and very different considerations. If our market of a certain article is satisfactorily supplied by our home manufacturers, and a foreign manufacturer desires to displace it with similar goods made by himself, it stands to reason that he must deliver

them in Canada at a price at least as low as they can be purchased from the Canadian manufacturer. In such a case, as the sworn testimony before our Exchequer Court amply testifies, the foreign manufacturer must and does pay the whole of the duty or else he cannot sell his goods in this market.

Between these two extremes there lie a great variety of ways in which the relative proportion of duty may be, and as a matter of fact, is divided between the Canadian consumer and the foreign manufacturer, the division mainly depending upon whether the seller is more anxious to dispose of his goods than the buyer is to purchase them, and the amount and kind of competition his wares will have to encounter from those of our home manufacturers.

Who pays the duty then cannot honestly be disposed of in the summary manner that Mr. McCarthy and many others have done, by simply asserting that it is always paid by the consumer. The truth is, that the facts in connection with each separate line of goods have to be thoroughly investigated before it can be fairly decided how the duty is paid on it, and to assert to the contrary is either an evidence of wilful misrepresentation, or lamentable ignorance of one of the simplest of commercial transactions.

#### BETTER OCEAN TRANSPORTATION.

The lines of steamships plying between Canada and China and Japan, and Canada and the West India Islands, have thus far realized the expectations of their promoters, and by the decided increase they have given to our trade between those countries, have fully justified the subsidies granted to them by the Dominion Government.

A decided advantage would likewise accrue to this country from a line of freight and passenger steamers between Canada and Australia, and Canada and the African Cape Colonies, by affording us new and enlarged markets for our agricultural and manufactured products, and enabling us to obtain the raw materials of these countries at first hands without the intervention of middlemen.

Our gigantic canal system by which large vessels drawing fourteen feet of water can be floated from the head of Lake Superior to tide water at Montreal without breaking bulk, is fast nearing completion, and if this country desires to get anything like the full return for the millions of dollars invested therein, they must at once set about completing the chain by adding a first-class steamship service to carry our produce from Quebec to Great Britain.

As foreshadowed by the recent public speeches of the Cabinet Ministers of the Dominion, it is probable that at the present session of parliament an appropriation will be asked for, sufficiently large to subsidize such a line of steamships. What Canada wants, and what we must have, is a steamship line equal in every respect to the best plying between New York and Great Britain. Such a line would not only bring this country fully abreast with the United States as regards ocean freights, but would prove one of the biggest and best advertisements that Canada ever invested in, on account of the immense passenger traffic it would induce. With such a line acting in concert with our great trans-continental highway, and our magnificent steamships which now dominate the carrying trade of the Pacific, it seems beyond a peradventure that Canada should reap almost inestimable advantages from the

great tide of freight and passenger traffic which must follow our successful efforts to provide a short and popular route between Europe and the Orient.

Canada's tide in respect of this trade will soon be at its flood, and if our statesmen grasp the opportunity like wise and enterprising men, it will surely be a fortunate thing for the future of this great Dominion.

#### A DOMINION INSOLVENT ACT.

Amongst the other wants of Canada, in my opinion, is a Dominion Insolvent Act. Our leading Boards of Trade have already taken action in this matter, and I think that this Association should also put itself upon record as favorable to the passage of such an act. The necessity of such legislation has long been a debatable question, and men of undoubted ability and much experience are to be found ranged upon either side. At the present time, however, it is hardly a question between an Insolvent Act and none at all, but rather between a general Insolvent Act which will apply to the entire Dominion, as against a lot of provincial acts, some of which, to say the least, are anything but fair to residents of other provinces.

In some of the provinces, an insolvent may elect one or more of his creditors and give him or them a preference over the others, much to their detriment. It is hardly fitting that such a state of things should continue, and the only remedy that we can see is an Insolvent Act, passed by our Federal Parliament, which will apply to every part of the Dominion alike, and over-ride the local acts which allow a debtor to differentiate amongst his creditors.

While there are not a few weighty arguments in favor of the entire abolition of insolvent legislation, it is quite evident that under the existing conditions something of the kind is a commercial necessity. It is simply intolerable that the domestic trade of the Dominion, which should be perfectly untrammelled by any artificial barrier, should be handicapped by unjust and discouraging provincial legislation.

#### CANADA'S FUTURE.

In conclusion, I desire to say a few words regarding Canada's future, about which certain irresponsible and disloyal busy-bodies are endeavoring to create disturbance.

In my opinion the great need of Canada to-day is to be left alone, and those who insist upon an immediate change, whether in the direction of Imperial federation, independence, or annexation, are doing more harm than good to the country, by leading the people to believe that we are in a dangerous position and cannot work out our own future without the assistance of outsiders.

In this connection I wish to draw attention to a passage in the speech of the Hon. George E. Foster, Minister of Finance, while supporting Mr. McNeil's motion for preferential trade with Great Britain, in which he enunciated the idea of Canadian self reliance in language that ought to sink into the memory of every true Canadian. Mr. Foster "desired to state in connection with the question: First, that although it would be a good thing for Canada to have a reasonable trade arrangement with the country to the south, although it would be a better thing in his belief to have—if it could be brought about—the advantage of a proposition of this kind (referring

to preferential trade with the mother country), carried out, he did not believe that the future of Canada, its progress, its development and its prosperity depended upon either one or the other. This was the proposition which he wished to make as firmly and as strongly as he could, because Canada was not in extremis. He dissented from the doctrine which was frequently put forth in the country and in the House that Canada at the present time was being hemmed in, was being restricted in trade relations, was having the cord of restriction and exclusion drawn continually more tightly about her, and that therefore she was in a condition which required vigorous and active effort in one direction or another in order to insure fair prosperity." This is sound common sense, and if our whiners would stop their complaining and get to work, they would soon find that not only is the country all right, but that it is marching on in the procession of nations, and not very far from the front.

Canada may not be so prosperous as some of her people could wish, but neither is any other country that we have any knowledge of; and if the official records and the managers of our great monetary institutions are to be believed, there is no country in the world that has stood the strain of the universal financial depression better, if as well, as our own. It is only a quarter of a century since the Dominion of Canada was called into existence, and anyone who compares the few weak and scattered provinces of that period with the united Canada of to-day, must admit that this country has not only developed in a wonderful manner, but has laid both broad and deep the foundations of a mighty empire. The past has, as it were, been but the seeding time of the nation, and if we do not ultimately reap an abundant harvest, it will be because of our impatience to gather the grain before it has had time to reach maturity. Nations are not built up in a day, and our quarter century of existence will be but as a day in the history of the Dominion. As our people have learned to labor, so they will also have to learn to wait with patience for that solidity and growth which other nations have taken centuries to acquire.

The national future of Canada does not in my opinion depend upon the good will of other countries, so much as, under Providence, what her own people make it. If we are but true to ourselves we need have no fear of what the future has in store for us.

Canadian to the core!—where prairies roll,  
And Northward far to the untrodden pole  
No limit East or West but boundless sea—  
All this fair land is ours!—and we are free!  
Down through the ages yet come and go  
In this new land a nation strong shall grow,  
And send her produce o'er the earth afar,  
Nor shrink to guard her own in time of war!

Nation from Nations?—all of them were free,  
A patriot's boast is "BOUNDLESS FAITH IN THEE!"  
The Britain and the Gaul shall brothers dwell,  
In all that makes for peace seek to excel;  
One name, one language and one destiny,  
No home for traitors shall be found in thee!

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#### EDITORIAL NOTES.

MR. J. D. EDGAR, in the House of Commons, is wanting the Government to explain why a proclamation has not been issued bringing into force the Copyright Act which was passed in 1889. The effect of this Act, if made active, would be to impart much life and energy into a most important Canadian industry. Our printers and publishers are now handicapped in a most distressing manner, not in favor of British publishers, but of those in the United States. As the law now stands, it is cheaper to have book and magazine printing done in the United States than in Canada. More power to your elbow, Mr. Edgar; and may you succeed in having the proclamation issued at a very early day.

At a recent meeting of the Young Conservative Association of Toronto, the following resolution, offered by Mr. W. C. Millichamp, was introduced:—

Whereas the policy of the Conservative party, formulated by the late Sir John Macdonald and known as the National Policy, has knit together the provinces of Canada, developed the resources and industries of this Dominion, and created a spirit of confidence in the great future of our country; and whereas the continuance of that policy is essential to the further development and welfare of the country, this Association desires to place on record its confidence that customs tariffs and all other details of that great policy will in the future, as in the past, be adjusted and administered by our leaders at Ottawa in the best interests of Canada.

This has the true ring, and should embody the sentiments of all upholders of the N.P.

It is said that the Liberal-Conservative party in Toronto, or perhaps the leaders of it, are real mad at the Canadian Manufacturers' Association because the Association will not give aid and comfort to the Liberal-Conservative party in local elections. If this is a fact, it is an exhibition of foolishness rarely met with. The Manufacturers' Association is not a political body any further than it favors the fiscal system of tariff protection to our manufacturing industries under which we now live; and as a body it is not interested in any other issue that exists, or may exist, in either Dominion or local affairs. Some of the best men connected with the Association are dyed in the wool Grits in local politics, always voting with that party, while other equally good members lean quite as strongly towards the Tories. The harmony of the Association will not be disturbed by any participation by it in any local political contests. Conservative politicians must not expect the Association to swerve or deviate from this rule.

A NOTICE of motion has been given in the Dominion House of Commons as follows:

That in view of the early completion of the Canadian Sault Ste. Marie canal and the enlargement and increase of depth of our canal system to the Atlantic seaboard, and also of the ever increasing volume of traffic tending in that direction, it is desirable that Canada should have a complete and uninterrupted waterway from the head of Lake Superior to the Atlantic ocean, through our own territory; that in furtherance of such object the Minister of Railways and Canals should, with all reasonable despatch, cause explorations and surveys to be made to ascertain the most direct and feasible manner of connecting Lake St. Clair, or the River St. Clair by canal with Lake

Erie, through Canadian territory, and report the same with an approximate estimate of cost to this House.

This is a timely notice which should be followed up by prompt action in the direction indicated. In a previous issue of this journal allusion was made to this proposed canal, showing its probable direction and the advantage to Canada to be derived from it. If the canal were built Detroit would become a way station or an unimportant and abandoned route of travel.

CANADIAN Grits who want to place Canada under American fiscal regulations will please observe that bounties were paid last year in the United States upon 378,000,000 pounds of sugar.—*The Empire.*

To put into the pockets of American farmers the \$100,000,000 sent out of the country each year for beet sugar, it is only necessary to establish the beet sugar industry in the United States. This colossal task is in contemplation through a comprehensive plan for co-operation between Eastern capitalists and Western farmers in building and operating beet sugar factories. This immense undertaking is bound to be successful if the farmers will furnish the beets. And the Western farmer, at least, cannot afford not to supply beets in abundance, since beets will pay from ten to twenty times as much profit as corn.—*Farm and Home.*

It is this sort of "fiscal regulation" that this journal wants to see established in Canada. It wants to see a system inaugurated similar to that in the United States which will give Canadian farmers the privilege of producing the raw material—beets—and Canadian manufacturers the opportunity of working it up into sugar, instead of importing the article from abroad. Give us a beet sugar industry.

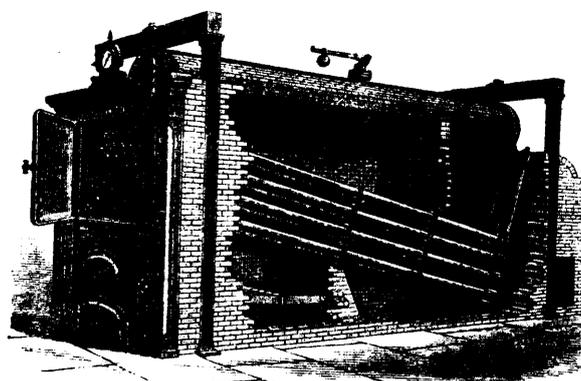
SOME people have queer ideas of morality, and equally strange conceptions of what patriotism really is. The *American Artisan* is of this class. Recently in commenting upon the fact, as stated by this journal, that Canada wanted no annexation to the United States, nor any entangling alliances, it suggested that the days of chivalry were not past, and that an abduction might occur; and in vindication of such rapacity it tells us that Canada is a vassal of Great Britain, a country that became great by robbery, and that if the United States should become a robber also, it would be doing just what Britain has often done. It tells us that "the greatest power upon the American continent may in time grow tired of being annoyed by the small statesmen of a dependency of a foreign

and unfriendly country at her doors, and proceed to attack it after the fashion followed under analogous conditions," by Great Britain: and that "as a matter of fact there is neither reason nor necessity why Canada should continue to occupy her present anomalous position as a sufferable nuisance." All of which means that because Canada is numerically weaker than the United States, and because she desires to be the mistress of her own destiny notwithstanding the wishes of her pirate neighbor, she is to be "attached" *volens volens*. The first step in this piracy process is to detach Canada from Britain, for until that be done the success of the robbery could not eventuate. Let not your heart be troubled, friend, loyalty to Britain may be only a sentiment, but Canadians are a sentimental people, possessing too much common sense to quit a true and tried friend to take up with a people who are too mean to appreciate Britain's virtues, and whose ambitions it is to ape whatever wrongdoing she may ever have committed in the past.

BRITAIN'S purchases of us increase sixteen per cent. in nine months; her sales to us increase only one per cent. Which country should take the first step towards fostering her trade with the other?—*Montreal Star.*

Britain bought an increased quantity of merchandise from us because she required it and would supply her wants better from us than from any other source. If her sales to us in the same time were but inappreciably increased it was because we could purchase the merchandise cheaper elsewhere, or produce it ourselves. Why should we buy anything from Britain that we can produce at home? Why should we sell her anything that can be consumed at home?—CANADIAN MANUFACTURER.

THE MANUFACTURER forgets the existence of the tariff. If Britain put a thirty-five per cent. hostile duty on our horses, wheat, cheese and other exports, does THE MANUFACTURER imagine that our sales to her would amount to much? Contrariwise, remove our tariff, and would "one per cent. in-



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crease" be the limit of the growth of our purchases from Britain? But *qui bono?* asks THE MANUFACTURER. Does that journal imagine that our farmers can make a living supplying the home market alone? Or would it have them go out of the business and out of the country? Then what would become of the home market of the manufacturers? The farmers must export somewhere to live. Britain presents the best market. But to sell well, we must buy; for trade in the long run is barter. That is why we should foster our commerce with Britain. The trouble is that THE MANUFACTURER tries to apply free trade reasoning to protective conditions.—*Montreal Star.*

No, dear friend, we do not forget the existence of the tariff, but you seem to forget that circumstances alter cases. No doubt if Britain put a thirty-five per cent. duty on Canadian horses, wheat, etc., our sales to her would cease; but we know that Britain cannot produce these things in quantity sufficient for her own consumption; that she has not the capacity to do it, therefore she will impose no such duty. She buys abroad only what she cannot produce at home. On the other hand, a very large proportion of what Canada imports from Britain consists of articles which we could produce at home, and would do so if proper tariff encouragement were given. Steel rails, for instance. Now it is clear that the increase of our exports to Britain was due to an inability on her part to produce the articles at home; and it is equally clear that our only "one per cent. increase" of imports from her is due to the fact—not that we do not consume as largely, but that we are self-reliant, and gratify our desires from home products. What difference does it make from whom we buy? Our prosperity at home, trading among ourselves, enables us to pay Britain for what we purchase of her. It is not necessary to buy injudiciously to enable us to sell wisely.

**GREEN'S ELECTRIC DOOR LOCK SWITCH.**

We herewith present an illustration of an electric door lock switch, which calls for more than a passing comment on account of its usefulness, and also on account of its many saving qualities.

This switch is intended for use in hotels, inner offices and flats, or upon any door where the occupant is liable to go out of the room locking the door, but omits to turn off the light.

As soon as the door is locked the light is cut off, and as soon as the door is unlocked the light is turned on and the guest enters a lighted room, instead of a dark room as at present.

The waste of light through guests leaving their room and leaving the light burning for no one's benefit, but at the expense of the landlord, is very considerable, and in rooms where from one to four or more lights are burning, and from ten minutes to hours elapse before the guest returns, the loss in a year would be very great.

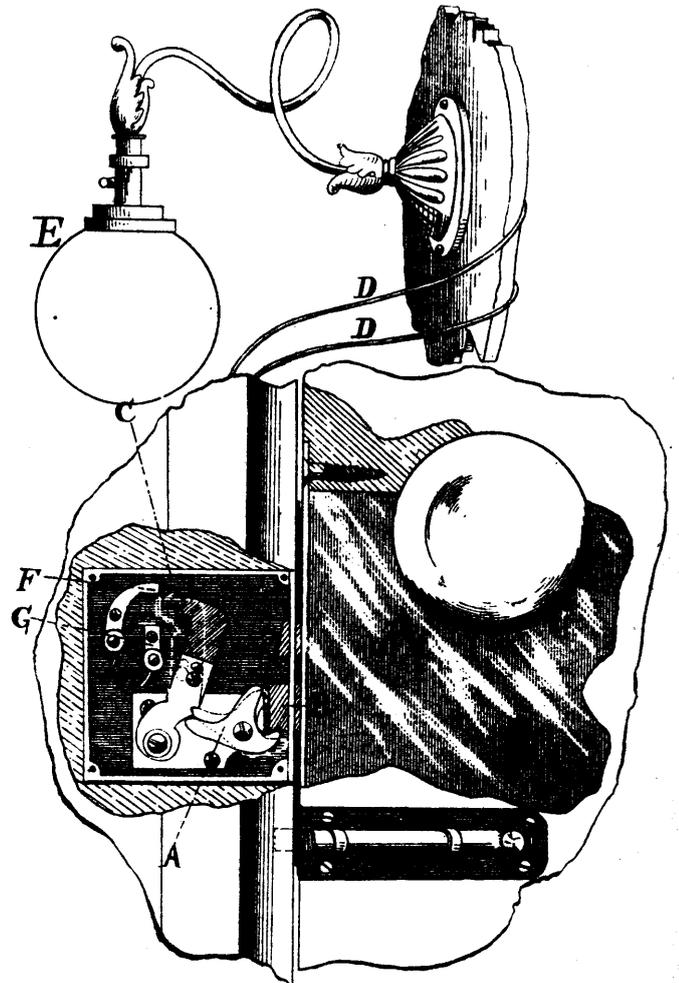
This switch is of special advantage where a meter is used, as

benefit to the landlord is derived from every minute the light is saved.

The door is secured on the inside by a bolt, not locked, it being the intention to have the inside keyhole plugged.

On retiring at night the guest turns off the light, as at present, as the light is not affected unless the door is locked.

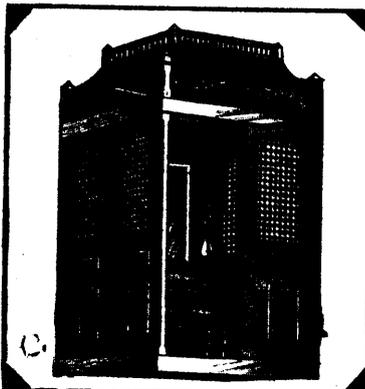
The fact of the guest locking the door when going out shows that the room is not occupied, and therefore there is no necessity for the lights to be left burning.



(Owing to the simplicity of this switch, the cost of supplying a building with them will be very slight in comparison with the after saving.

The combination, with the bolt B of the lock A and the switch C, having a wedge or V-shaped portion (c) and provided with the spring (a) and designed to come in contact with the plates F and G so as to complete or break the circuit through the wires D, as for the purpose specified.

For further particulars apply to Charles Green, 81 Czar Street, Toronto, Canada.



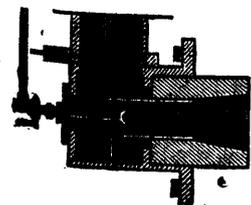
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## HYDRO CARBON BURNER.

The hydro-carbon burner (Meyers' patent), herewith illustrated, is of very simple mechanism, easily adjusted, and, with ordinary care, not liable to get out of repair. It is remarkably free from complicated mechanism. The outer and exposed portion of the burner is a casting with a flanged edge for easy attachment to the front of a furnace, or the back plate of a forge. The inner casing of the shell or combustion chamber, where it is exposed to the heat, is of the same material as the refractory brick used in retorts, and is capable of withstanding the most



intense heat. The combustion chamber opens at the rear end into an air chamber, which can be operated with a slide in such a manner as to regulate with great nicety the quantity of air supplied to the flame. The supply pipe enters the burner from the rear and extends a proper distance towards the combustion chamber, where it terminates in a fimbriated device, technically called a sprayer, by which the liquid fuel is finely divided and mixed with the air that enters with it. The effect of the oxygen the air brings with it is apparent in the flame. The oil is entirely consumed in the combustion chamber, every particle of carbon it contains being turned to good account in the continuous but gentle blast of air. For air pressure use the ordinary fan-blower, which gives a steady pressure of six ounces. To carry the oil from the storage tank to the burner, a rotary pump is used. The piping should be so arranged that the surplus oil will flow back to the storage tank, which can be placed to suit the convenience of the works.

Among the purposes for which burner is adopted are: All kinds of iron and steel forging, tempering welding, annealing, etc.; for brass, mining, chemical, brick, lime-kiln, glass, gas and barrel works; for burning sewer-pipe, heating asphalt, tinning, japanning, oxidizing lead, etc.; for generating steam and for an endless variety of special work.

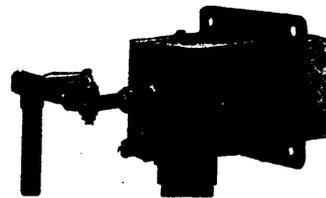
Regarding this burner the manufacturers of it say:—"We make our burner in the most substantial manner, and the tests to which it has been subjected prove it to be very durable. We get a heat

that other burners cannot get, and for this reason none but the best materials should be used in constructing the fires. The burner effects a saving of 25 to 60 per cent. compared with coal and the amount of work the operator is enabled to turn out is much greater, as there is no coal to handle, ashes to remove or any lost time in firing up.

"Our system is as safe as coal and we get a greater heat at less cost. It will maintain a uniform heat for any length of time and is as easily controlled as an ordinary lamp. We do not use compressed air or steam, and the absence of high pressure insures against the danger from fire which might be caused by accident from breaking piping, connections, etc., with the high pressure used by many systems to atomize the oil. Numerous experiments have fully demonstrated the fact that air is vastly superior to steam as an atomizer, and much more economical, and iron workers acknowledge the superiority of the air blast over steam in working iron. Our burner is inexpensive and we obtain better results than can be produced by any of the complicated systems now on the market. Safety is an important point in an oil fuel burner, and it has been effectively provided for in the device described. The heat cannot reach that point of the burner connected with the oil supply, and the oil inlet is so placed that it is at all times surrounded by cool air, the current of which is inward. The oil reservoir can be placed at any distance from the burner, to which the fuel is conducted by the pressure of the pump, the surplus oil flowing back to the tank. If preferred, however, a gravity plant can be supplied, in which the pump is unnecessary, but the pump system is considered the best.

"The completeness with which the fuel oil is consumed in the Standard Oil Fuel Burner is demonstrated at once by its cleanliness. There is no carbon left unconsumed to make soot, or any accumulation of the grosser oleaginous substances that make some burners so troublesome and offensive, but a clean flame of brilliant whiteness and intense heat that will possess the same features whether at half or full capacity."

For further information address the manufacturers, The Standard Oil Fuel Burner Co., Fort Plain, N.Y.



## = Wants =

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

Stationary and marine engineers with proper certificates, and engineers competent to take charge of electric plants, and first-class machinists and expert electrical workmen desiring situations, are invited to make their wants known in this column. No charge will be made for putting applicants in communication with employers who may desire their services. Our friends are cordially invited to avail themselves of this invitation.

In answering refer to number of want. Address all communications to CANADIAN MANUFACTURER, Toronto.

WANTED—New or second-hand 20-inch gear cutting machine. Must be in perfect order. Address No. 1, care CANADIAN MANUFACTURER.

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WANTED—12-inch gear cutter in good working order. Address No. 3, CANADIAN MANUFACTURER.

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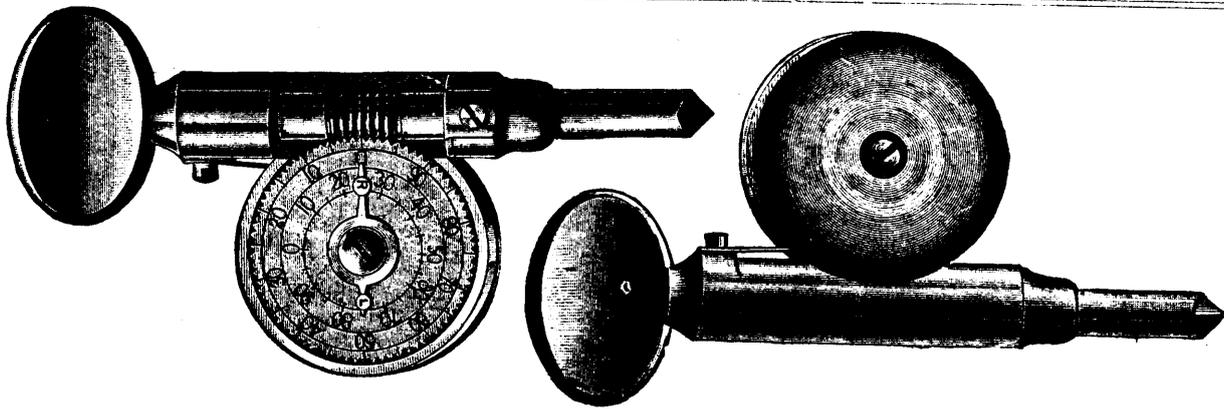
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looking from watch to indicator, and from indicator to watch, you keep your eye solely upon the watch while your ear registers the successive hundreds. The test concluded you close your watch, glance at the indicator hand, which marks the odd revolutions, add them to the hundreds already tallied, and the work is done. A shaft turning to the left in the above cuts is registered by the shorter hand, stamped L, and the inner dial, a shaft turning to the right by the longer hand marked R, and the outer dial. The bell rings when either hand is at its zero and afterwards at every hundred revolutions of the spindle. No confusion, no worry, no division of attention, no strain upon the mind. It is simplicity itself. You watch your second hand—the bell does all the rest. It is conveniently carried in the vest pocket. The cuts show the exact size of the indicator. Greene, Tweed & Co., manufacturers, 83 Chambers Street, New York.



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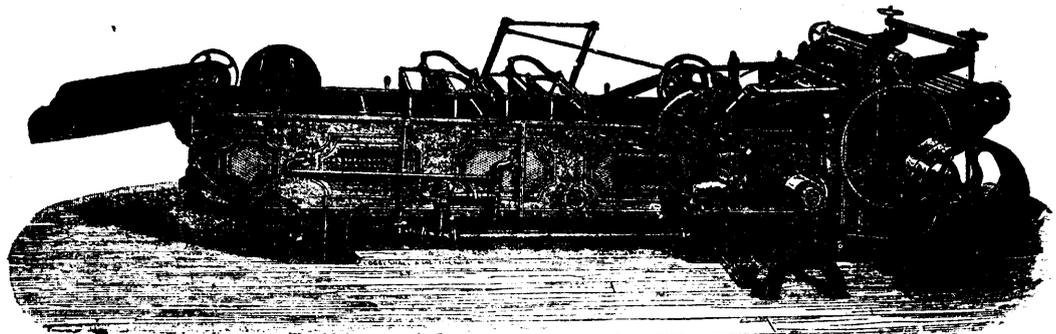
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## CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office from January 17 to January 30, 1893, inclusive.

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

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

### MECHANICAL.

- 41,666 Rein holder, H. G. Weatherill, January 17th.
- 41,667 Bearings for the operating of rods, of signals and switches, A. G. Evans, January 17th.
- 41,668 Combined hat and clothes brushes, H. J. Sims, January 17th.
- 41,669 Piano action, J. Herrburger, January 17th.
- 41,670 Heating and ventilating railway carriages, R. Bell, January 17th.
- 41,671 Cash recorder, A. C. Hough, January 17th.
- 41,672 Neck yoke, J. H. Guion and G. Bell, January 17th.
- 41,673 Game or puzzle, C. E. O. Hager, January 17th.
- 41,674 Spring bottoms for chairs, etc., O. R. Hunt, January 17th.
- 41,675 Casting car wheels, G. W. Cushing and J. W. Rampe, January 17th.
- 41,676 Wrench, W. Bill, January 17th.
- 41,677 Magnetic ore separator, C. J. Reed, January 17th.
- 41,678 Rail joint, J. E. Sarvis, January 17th.
- 41,679 Steadying device for portable engines, E. C. Enide, January 17th.
- 41,680 Starting tram cars and other vehicles, J. Desmedt, January 17th.
- 41,681 Stove pipe airing and drying rack, E. Batters and M. Dugan, January 17th.
- 41,682 Collating or rotary table, J. H. Burland, January 17th.
- 41,683 Nailing implement, H. McCormack, January 17th.
- 41,684 Order tablet, D. H. Roberts, January 17th.
- 41,685 Cigar bunching machine, A. Gordon, January 17th.
- 41,686 Crushing machine, R. McCully, January 17th.
- 41,687 Cart top, H. Bunker and J. H. McKeggie, January 21st.
- 41,688 Band sawmill, T. S. Wilkin, January 21st.
- 41,689 Band sawmill, T. S. Wilkin, January 21st.
- 41,690 Furnace and device for burning coal, S. J. Miles, January 21st.
- 41,691 Watch case spring, W. S. Richardson, January 21st.
- 41,692 Grain drilling machine, G. W. Kirkpatrick, January 21st.
- 41,693 Agitator for mixed paints, C. J. McLennan, January 21st.
- 41,694 Wooden vessel, E. M. Reese, January 21st.
- 41,695 Moccasin or overshoe, T. Clearihue, January 21st.

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- 41,696 Shirt, I. J. Cooper, January 21st.  
 41,697 Saw attachment, B. Gallagher and R. A. Johnson, January 21st.  
 41,698 Malter, G. L. Ball, January 21st.  
 41,699 Nut lock, C. K. Whittier et al, January 21st.  
 41,700 Cases for blasting purposes by casting, J. Paulus, January 21st.  
 41,701 Scalloping attachment for sewing machines, G. W. Kemp and A. G. Forbes, January 21st.  
 41,702 Car coupling, W. H. Violett and J. A. Valentine, January 23rd.  
 41,703 Oil cup, The Penberthy Injector Co., January 23rd.  
 41,705 Waggon axle, M. S. Tyler and J. N. Alexander, January 23rd.  
 41,706 Cash register and indicator, The John M. Waddell Manufacturing Co., January 23rd.  
 41,707 Nail machine, C. E. Houghton and H. R. Johnson, January 23rd.  
 41,708 Clothes horse, H. M. Wells and T. R. Fuller, January 23rd.  
 41,709 Window, G. E. Blaine et al, January 23rd.  
 41,710 Cinder sifter and ash box combined, C. Buckley and I. W. Leeds, January 23rd.  
 41,711 Sign for electric lamp, E. W. Clay and J. McShane, January 23rd.  
 41,712 Centrifugal extractor, W. E. Johnson and R. C. Mitchell, January 26th.  
 41,713 Car coupling, A. B. Allen and P. P. Lull, January 26th.  
 41,714 Friction clutch mechanism, T. H. Worrall, January 26th.  
 41,715 Ventilating plant, M. R. Ruble and J. Vreeland, January 26th.  
 41,716 Bottle stopper, H. Crimmell and D. Hammond, January 26th.  
 41,717 Projectile, P. G. Russell, January 26th.  
 41,718 Pedal stick, W. H. Ivers, January 26th.  
 41,719 Saw Swage, H. Williamson, January 26th.  
 41,720 Protector ring or guard for pen holders, H. Borschel, January 26th.  
 41,721 Horse shoe calk, G. W. Wemple, January 26th.  
 41,722 Carriage, A. N. Parry, January 26th.  
 41,723 Carriage, A. N. Parry, January 26th.  
 41,724 Sleigh guard, C. N. Hartling, January 26th.  
 41,725 Hame fastener, J. Ingells, January 26th.  
 41,726 Adjustably holding plain wooden knobs during the period the stool is operating, to ornament them, W. W. Sloan, January 26th.  
 41,727 Wind-mill tower, J. Luger, January 26th.  
 41,728 Railway signal, G. A. Bartholomew and R. B. Mitchell, January 26th.  
 41,729 Toy Gun, The Rubber Tipped Arrow Co., January 26th.

### A LONG FELT WANT!

**A TYPE WRITER** | Which does the Work  
 of the  
**For \$20.00** | \$100.00 Machines.

A Perfect Type Writer at a Low Price has long been a crying necessity.

**- - THE ODELL TYPE WRITER - -**

is a perfect machine in every particular, at the remarkably low price of

**\$20.00 = \$20.00**

HEAD OFFICE FOR CANADA,

**ROOM 36 CANADA LIFE BUILDING**

**J. W. RUTHERFORD, Manager.**

**THE**

# "OPTIMATES" POWER HAMMER

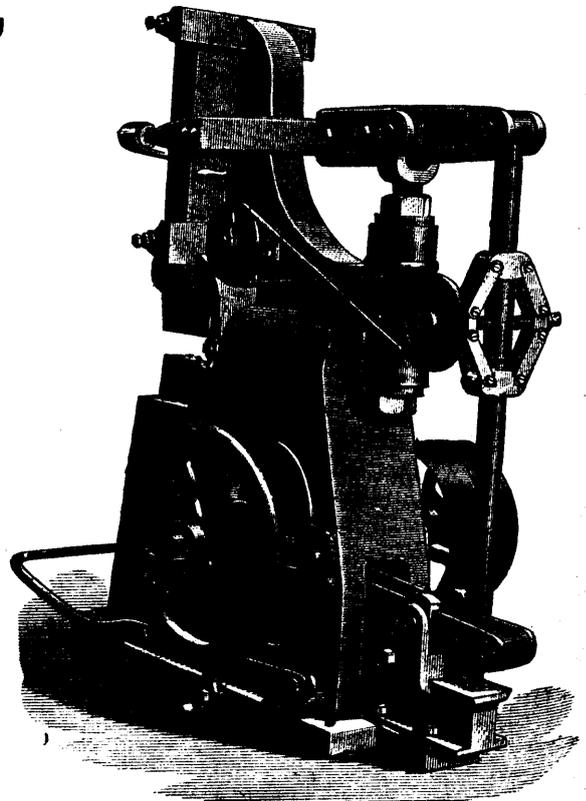
Patented in the United States, Canada, and England.

**W. H. LAW,**  
Inventor.

MANUFACTURED BY

**The Central Bridge and Engineering Co., Ltd.**

**PETERBOROUGH, ONTARIO, CAN.**



- 41,730 Tire punching machine, The Gendron Manufacturing Co. (Ltd.), January 26th.
- 41,731 Hooping and heading keg, J. & W. Mathison, January 26th.
- 41,732 Balance slide valve, J. Parker, January 27th.
- 41,733 Concentric steam joint, J. B. Morgan and H. Adams, January 27th.
- 41,734 Film holder for photographic camera, G. D. Milburn, January 27th.
- 41,735 Potato harvester, J. N. Cocker, January 27th.
- 41,736 Glazed structure, W. H. Coulson, January 27th.
- 41,737 Steam cooker, J. D. Brotherston, January 27th.
- 41,738 Feedwater regulator, J. Thomas, January 27th.
- 41,739 Bogie frame for locomotive engine, G. Lentz, January 27th.
- 41,740 Car life saving fender, S. E. Horne, et al, January 27th.
- 41,741 Earth screw for posts, A. D. Cable, January 27th.
- 41,742 Travelling crane, T. N. Dixon, January 27th.
- 41,743 Bulletin board, P. S. Tumson, January 27th.
- 41,744 Sawing lumber, A. Rodgers, sr., January 27th.
- 41,745 Cultivator, W. J. Copp, et al, January 27th.
- 41,746 Lubricator, J. Clark, January 27th.
- 41,747 Gate for railway car platform, H. Howard, January 27th.
- 41,748 Portable burglar alarm, C. C. Davis, January 27th.
- 41,749 Sulphur candle, S. B. Morss and T. F. Bourne, January 27th.
- 41,750 Pruning spear, F. P. Kern, January 28th.
- 41,751 Ore roasting furnace, R. Pearce, January 28th.
- 41,752 Bottle filling apparatus, J. Jackson, January 28th.
- 41,753 Gate opening and closing device, J. A. Robillard, January 28th.
- 41,754 Bundle carrier and band cutter for thrashing machine, A. Booth, January 28th.

## HIGH GRADE WRAPPING PAPERS

Manilla and Brown Wrapping and English Glazed Casing carried in stock and made to order. Quality unexcelled. Prices right.

Special attention to letter orders.

CANADA PAPER CO., (Ltd.), 15 Front St. West, Toronto.  
CRAIG STREET, MONTREAL.

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Civil Engineers

And Builders of

# Bridges and Iron Buildings

FOR MANUFACTURING PURPOSES

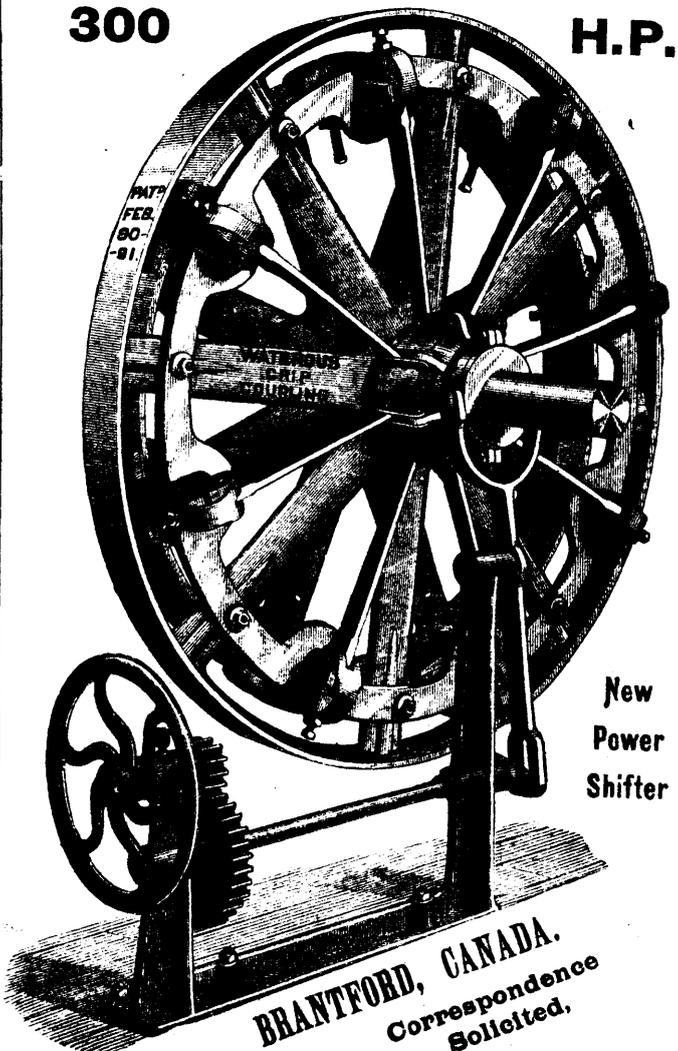
Structural Iron Material Kept in Stock

DESIGNS, ESTIMATES AND SPECIFICATIONS.

7 Place d'Armes - MONTREAL.

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H.P.



New Power Shifter

BRANTFORD, CANADA.  
Correspondence Solicited.

New Glasgow. **I. MATHESON & CO.** Nova Scotia.

Engineers and Boiler Makers

MANUFACTURERS OF

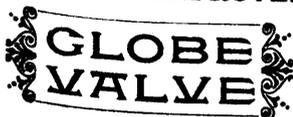
# Corliss Steam Engines

Especially adapted for Mills and Factories.

Agents for

D. H. and G. Haggie's Patent Wire Rope for Mining Purposes

DRAPER'S IMPROVED



Patented.

Constructed to prevent Scales or Grains of Dirt being Caught between faces at point of closing.

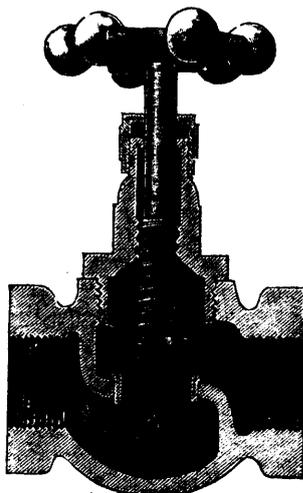
When the projection on valve enters the seat orifice, of which it is an easy fit, only clean fluid rushes past. Scales, etc., are pushed back and the faces meet with nothing between to injure them. Send for prices and particulars to

**T. DRAPER,**

Manufacturer.

BALL VALVES for various purposes.  
Oil and Salt Well Supplies,  
Etc., Etc.

PETROLEA, ONT.



- 41,755 Ventilator and combined ventilator and refrigerator car, E. T. Earl, January 28th.
- 41,758 Fruit carrier, G. W. Stevens, January 28th.
- 41,759 Drying and curing fish, T. S. Whitman, January 28th.
- 41,760 Divider for mowing machine, F. J. J. Schuett, January 28th.
- 41,761 Printing machine, T. McDowell, January 28th.
- 41,762 Oscillating chair, J. P. Anvil, January 28th.
- 41,763 Cold rolling tube, G. H. Everson, et al, January 28th.
- 41,764 Quilting attachment for sewing machine, H. T. Davis, January 28th.
- 41,765 Car coupling, C. D. Roberts, January 28th.
- 41,766 Buck saw, P. Woodring and J. L. Blunt, January 28th.
- 41,767 Automatic draft regulator, The Howard Thermostat Co., January 28th.
- 41,768 Barrel making machine, The New York Barrel Machine Co., January 28th.
- 41,769 Metallic car, W. Pennock, January 28th.
- 41,770 Draw, bar and spring, J. A. Hinson, January 28th.
- 41,771 Brick kiln, S. J. Plant, January 28th.
- 41,772 Belt tightener, J. B. Noble and J. B. Hensley, January 28th.
- 41,773 Derailing device, J. Y. Porter, January 28th.
- 41,774 Housekeeper's memorandum, E. H. Striker and J. McBurney, January 30th.
- 41,775 Grain harvester, M. Kane, January 30th.
- 41,776 Manger, W. A. Vender, January 30th.
- 41,777 Stair bevelling instrument, J. O. Caldwell, January 30th.

- 41,778 Air compressor, F. F. Farrell, January 30th.
  - 41,779 Trouser supporter, C. Lafontaine, January 30th.
  - 41,780 Jar fastening, R. I. Patterson, January 30th.
  - 41,781 Pipe wrench, V. C. Stanley and D. C. Walters, January 30th.
- ELECTRICAL.
- 41,704 Galvanic battery, I. H. Euholm, et al, January 23rd.
  - 41,756 Electric railway, H. S. Pruyn, January 28th.
  - 41,757 Electric arc lamp, F. Hansen, January 28th.

## "PERFECTION"

# Stoves, Ranges and Furnaces,

Enjoy the unique distinction of being made entirely from original designs and original wood patterns. We confidently place them in competition with the best American productions duplicated by Canadian makers.

. . . Write us for particulars

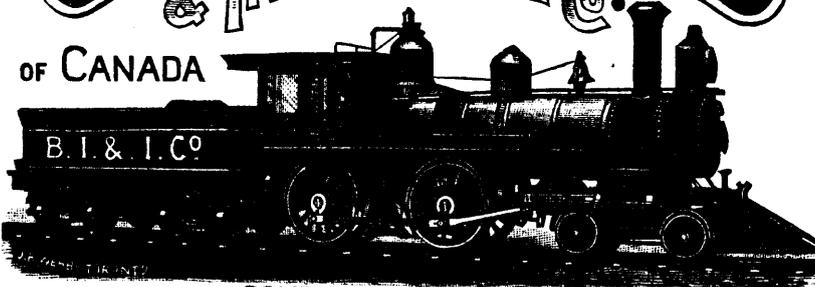
**The Jas. Smart Manufacturing Co., Ltd.**  
BROCKVILLE, ONT. CAN.

**When were  
YOUR  
Boilers  
LAST  
Inspected ?**

JOHN L. BLAIKIE Esq. PRES.      E. W. RATHBUN Esq. VICE-PRES.

# THE BOILER INSPECTION & INSURANCE CO.

OF CANADA



CONSULTING ENGINEERS  
G. C. ROBB CHIEF ENGINEER      A. FRASER SEC. TRES.      HEAD OFFICE TORONTO

**Are you sure  
THEY ARE  
SAFE  
AND IN  
GOOD  
Condition ?**

# THE MONARCH ECONOMIC BOILER

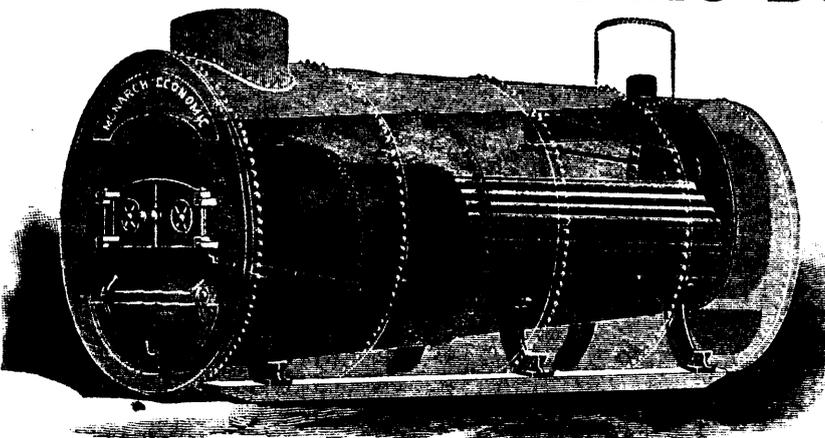
Patented Can. May 6, 1866 ;  
Feb. 10, 1887.

Patented U.S.A. Oct. 5, 1886 ;  
Aug. 23, 1887 ; May 8, 1888.

Is the strongest and most  
**Portable Boiler**

in use, and its high economy  
in fuel makes it specially valu-  
able to gold miners.

Tested evaporation 10.25 bs.  
water per pound of ordin-  
ary Nova Scotia coal.



Manufacturers of  
**The Robb-Armstrong  
Automatic Engine,**  
The Hercules Engine,  
(For all purposes).  
Saw Mill, Electric Machinery  
BELTINGS,  
PACKINGS, OILS, Etc.  
**Robb Engineering Co.**  
LIMITED,  
Successors  
**A. ROBB & SONS**  
AMHERST, N.S.

## 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.*

THE planing mill and pump factory of Messrs. A. & J. McKay, at Trenton, Ont., was destroyed by fire, February 9th. Loss about \$3,000.

THE contract for all the pipes and special castings for the water-works at Buckingham, Que., has been awarded to the Drummond-McCall Pipe & Foundry Company, Montreal.

THE glass works of the Erie Glass Company, at Port Colborne, Ont., were destroyed by fire February 4th, loss about \$30,000. We learn that the works will be rebuilt immediately.

MESSRS. GUAY & Co., Chicoutimi, Que., are starting a telephone exchange in that place. T. W. Ness supplied them with a 30-drop switch-board and thirty telephones for this purpose.

THE Drummond-McCall Pipe & Foundry Company, Montreal, have been awarded the contract for the supply of pipes and special castings for the new Pembroke, Que., water-works.

THE Montreal Auer Incandescent Light Company has been incorporated at Montreal with a capital stock of \$1,000,000, to manufacture and supply electric energy for commercial purposes.

THE Symmes Hay Cap Company has been incorporated at Sherbrooke, Que., with a capital stock of \$15,000 to manufacture the Symmes patent hay and grain caps and vegetable covers, etc.

THE Bostwick Metal Lath Company, recently incorporated in Montreal with a capital stock of \$50,000, have their new factory in

operation, having turned out some 75,000 yards of metal lath within two months.

THE Dominion Wire Manufacturing Company, Montreal, are having another 100 h.p. Monarch economic boiler placed in their works at Lachine. The Canada Machinery Agency of that city are supplying it.

MR. W. H. NOLAN, manager of the Canada Machinery Agency, Montreal, has sent us a beautiful calendar in which is embodied many facts relating to the different lines of tools, machinery, etc., dealt in by them.

THE Magog Print Works, at Magog, Que., during last year, spent over \$80,000 in improvements and addition to their plant. They are now putting in a full set of machines to print indigo blue, a new style of goods.

THE Major Manufacturing Company, Ltd., Montreal, wire goods, etc., are going to move into more commodious premises at corner St. Francois Xavier and Craig Streets, on May 1st, and will add a quantity of new machinery.

MESSRS. MYERS BROS., of Stratford, Ont., are enlarging their present factory and adding a three side moulder, a heavy planer and a large band sawing machine, purchased from the Canada Machinery & Supply Company, of Brantford.

THE Albro-Clem Elevator Company, of Philadelphia, Pa., have opened an office in Boston and appointed Mr. D. P. Goslin their eastern agent. Mr. Goslin will control the Canadian business also, which will be transacted through his agents in Montreal.

THE Delhi Marble Company, Delhi, Ont., are doubling their capacity by putting in another engine and boiler and some special turning and polishing machinery. The Canada Machinery & Supply Company, of Brantford, Ont., have the contract for same.

THE Brantford Electric Light and Power Company have been putting in some large heavy Dodge wood split pulleys, purchased from the Canada Machinery & Supply Company, of Brantford, agents for the Dodge Wood Split Pulley Company, Toronto.

T. W. NESS, electric supplies, Montreal, has installed quite a number of telephone exchanges of late, among which are those of Waterloo, Que., Nicolette, Que., Drummondville, Que., St. Julie,

# Canadian General Electric Company, Ltd.

GENERAL OFFICES:

**63 to 69 Front St. West, Toronto, Can.**

FACTORIES:

PETERBOROUGH, ONT.  
HAMILTON, ONT.

BRANCHES:

Halifax, N.S., Montreal, P.Q.,  
Winnipeg, Man., Vancouver, B.C.

## MANUFACTURERS AND CONTRACTORS

Continuous Current Dynamos,  
Alternating Current Dynamos,  
Generators for the Transmission of Power,

Arc Lighting Apparatus,  
Electric Railway Motors and Equipments,  
Electric Mining Apparatus,  
Electric Motors for Every Possible Duty.

Electric Cables and Conductors for Telephone, Telegraph and Electric Lighting  
and Power Circuits, Flexible Cords, and

General Electrical Supplies of Every Description

**CORRESPONDENCE INVITED.**

Please address all Correspondence to the Company.

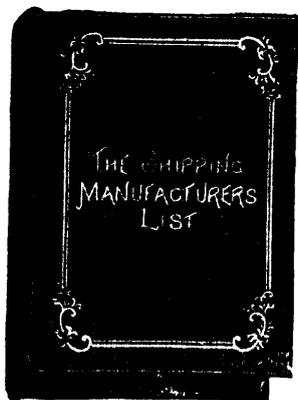
# MACHINERY

**FOLLOWING** list of New and Second-Hand Boilers, Engines and General Machinery for sale by The Canada Machinery and Supply Co., Brantford, Ont., dealers in New and Second-Hand Machinery and Supplies:—

- ONE BOILER, TO BRICK IN, 44 in. dia. x 11 ft. 7 in. long, 41 3 in tubes, in first-class order.
  - ONE BOILER, TO BRICK IN, 44 in. dia. x 11 ft. 8 in. long, 38 3-in tubes, in first-class shape.
  - THREE 25 H.P. PORTABLE loco. fire box boilers, in good order.
  - TWO 6 H.P. FIRE BOX BOILERS for cheese factories.
  - ONE 12 x 16 SLIDE-VALVE ENGINE, Beckett's make.
  - TWO 9 x 12 SLIDE-VALVE ENGINES, Goldie & McCulloch and Morrison makes.
  - TWO 5½ x 9 SLIDE-VALVE ENGINES, Beckett's make.
  - ONE 6 H.P. ENGINE, upright, with 8 h.p. boiler combined on one cast iron base.
  - ONE 15 H.P. ENGINE, English make.
  - ONE 14 H.P. ENGINE, Leonard make, nearly new.
  - ONE 12 H.P. HORIZONTAL PORTABLE ENGINE and boiler on skids; Ames & Co., makers, Oswego, N.Y.
- MACHINERY:**
- ONE 26-INCH MCGREGOR, GOURLAY & CO. make. heavy surface planer, almost new.

- TWO 24-INCH CANT, GOURLAY & CO. make, light surface planers, in good order.
  - ONE ONE-SIDE MOULDER.
  - ONE ALMOST NEW VERTICAL SPINDLE boring machine, McGregor, Gourlay and Co.'s make.
  - ONE ALMOST NEW IRON TOP JIG SAW, Cowan and Co., makers.
  - ONE BLIND SLAT TENONING MACHINE.
  - SIX GOOD SAW TABLES.
  - ONE NEARLY NEW GOLDIE & McCULLOCH tenoner, with double copes.
  - ONE WOOD FRAME TENONER in good shape.
  - ONE SET TWO HEAD BLOCK SAW MILL irons.
  - ONE ALMOST NEW GENUINE "BAILEY" GAUGE, or handle lathe, with countershaft.
  - ONE ALMOST NEW SPINNING LATHE, for spun metal work, with countershaft.
  - FOUR DOWELL MACHINES.
  - ONE 20-INCH "WATEROUS" CHOPPER, almost new, complete with double elevators.
  - ONE LOZENGE MAKING MACHINE, of large capacity, American make, complete with brass dies and printing attachment.
  - ONE DOUBLE ELCELSIOR CUTTING MACHINE, almost new.
  - ONE GOLDIE, McCULLOCH PURIFIER, almost new.
- FULL PARTICULARS CHEERFULLY GIVEN upon enquiry at the Canada Machinery and Supply Co., Brantford, Ont.

ARE YOU IN IT



IF NOT WHY NOT

**Manufacturers'**  
- PURSE -  
A Free for All Race  
No Entrance Fee  
**Over 15,000**  
**ARTICLES**

ARE NOW ENTERED IN THE

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Less than 60 days remain now to enter any articles not reported. We do not put your photo on the front cover of this work, but we do tell the world

**WHAT IS MANUFACTURED IN CANADA AND LOCATE THE MANUFACTURER**

Office, 34 Confederation Life Building  
TORONTO

## Machinists' Fine Tools

DRILLS, CHUCKS, REAMERS, ETC.

WILEY & RUSSELL  
Screw Cutting

# TOOLS

## RICE LEWIS & SON, Ltd.

TORONTO.

## Hamilton Cotton Co.

HAMILTON, - ONTARIO.

## DYERS, BLEACHERS,

AND MANUFACTURERS OF

Warp Yarn, in Beam, Chain or Skein, White or Colored, Single and Double Yarns, Cop Yarn, Single and Double Hosiery Yarn in all Colors, including genuine "FAST BLACK."

PAUL FRIND & CO., Toronto, SELLING AGENTS For Beam Warps

Que., Black Lake, Que.; Breslaw, Ont., Walkerville, Ont., and others.

THE Bostwick Metal Lath Company, who opened a factory in Montreal two months since, have already sold 75,000 yards of their patent fire-proof steel lath. The catalogue, which they are just issuing, is rather unique in its way, having a piece of the steel lath 3 x 6 in. attached.

THE Metallic Roofing Company, Toronto, of which Mr. J. O. Thorn is manager, will start a branch factory in Montreal. At the recent annual meeting of this company Mr. E. Samuel was re-elected president, Mr. A. D. Benjamin, vice-president, and Mr. J. O. Thorn, secretary-treasurer.

THE new knitting factory of the Watson Manufacturing Company, at St. Catharines, Ont., has started work with three circular machines on underwear. The works are operated by electric power and the company have bought on favorable terms the property in which the business is now carried on.

A NEW incandescent electric light company has been organized in Smith's Falls, Ont., and men are now at work placing the plant and stringing the wires. The lights will be run all night and the price has been reduced from 3 cents to 1½ cents per night for each lamp. Mr. J. H. Gould is president of the new company.

THE Metallic Roofing Company, Toronto, are opening a branch factory at 10 Inspector Street, Montreal. They are now placing the new machinery and will be ready to manufacture by the end of February. They have lately made alterations and added new and improved machinery to their Toronto factory, which is now being run by an electric motor supplied by the General Electric Company.

THE Montreal Cotton Company's new cottages at Valleyfield, Que., for their work people are nearly completed and will be occupied at once. Every department of the concern is working full time. It is proposed to make considerable additions to the manufacturing capabilities, both to make larger quantities of goods of the kind already on the market, and to go into the manufacture of a larger number of new lines which are at present imported, and which require machinery specially adapted for the purpose.

THE Cant Bros. Company, of Galt, have just brought out a panel-raising machine which will work panels on one or both sides at one operation. The machine is simple in its design and substantial in its framing. Various cutters can be used so as to produce square, bevel or ogee on the panel as desired. The cutters have a drawing cut, thus making the panel perfectly smooth. The table moves up and down by hand wheel. The machine is fed by hand, and every care has been taken to make the machine all that could be desired.

COLLECTORS of customs have been notified that all union carpets, so called, of which the warp is composed entirely of cotton, and which are either two-ply or three-ply ingrain carpets, are properly dutiable under item No. 225 of the tariff at the rate of 5 cents per square yard at 20 per cent. *ad. valorem*. Special care must be taken when entry of such carpets is tendered at customs to ensure the collection of the duty mentioned, as it has been brought to the attention of the department here that in consequence of misleading descriptions in invoices these carpets have been admitted to entry at a duty of 25 per cent. *ad. valorem* under item 223 of the tariff as being carpets n.o.p. or under item 229 as being "jute carpets."

MR. W. H. DORAN, manager of the Dominion Suspender Company, Niagara Falls, Ont., has sent us a most beautiful souvenir. It is a pair of their Hercules suspenders, made in black, the metal buckles being in fine gilt. In the buckles is stamped a faithful medallion bust of Sir John Macdonald, surrounded by his ever memorable words, "A British subject I was born, a British subject I will die." To have the beautiful article fully appreciated the style of wearing such things should be changed so as to allow of their being worn on the outside of the coat. We suggest that Mr. Doran get up something of the sort specially for the ladies. We are told that they wear suspenders now, and he might cater to this trade with good financial effect.

MESSRS. GILMOUR & Co., who operate extensive mills at Trenton and Campbellford, Ont., have in contemplation on the opening of spring, the building of a railroad or the laying of an endless chain from one lake to another in the Nipissing District, where they recently purchased timber limits for the large sum of \$703,000. The railroad or endless chain will be two miles long, and with its accomplish.

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

Manufacturers of **PURE ALKALI** Guaranteed 58 degrees.

The Strongest and Purest Form of **SODA ASH** in the market, and the most Economical Form of **SODA** for the Manufacture of



# Glass, Paper, Wood Pulp, Soap and Starch

Also for **PRINTERS, BLEACHERS and COLOBS.**

## WINN & HOLLAND, Montreal,

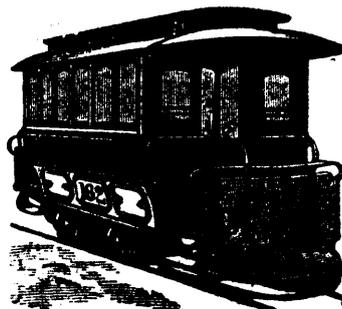
Sole Agents for the Dominion of Canada.

## PATTERSON & CORBIN

FINE

ST. CATHARINES, ONT.

ELECTRIC CARS



MANUFACTURERS OF

Horse and Trail Cars

OUR

OF

SPECIALTY

EVERY DESCRIPTION

ment the company will be able to run all their logs down by way of the Otonabee river, through Peterborough into Rice Lake, and the Trent river to Campbellford and Trenton. It is said that their limits in the Nipissing district are so extensive and so thickly wooded that operations can be carried on for fully thirty years. These mills have, therefore, a long future in store for them.

THE Dodge Wood Split Pulley Company, Toronto, have issued the following notice to the trade which explains itself: We wish to notify the public that wooden pulleys are being manufactured which violate rights secured by us by letters patent 17243 of the Dominion of Canada, and are being offered by sale. In a recent patent case an eminent judge, in giving judgment, stated that an invention is entitled to a liberal construction of its claims, and all persons who make devices or machines operating on the same principle and performing the same functions by analogous means, or equivalent combinations, even though the machine may be an improvement of the original, and patentable as such, are to be treated as infringers. The law also equally prohibits the making, selling and using a

patented article. All persons interested are therefore warned against purchasing or using wooden pulleys manufactured according to our methods, unless such pulleys bear our legal patent stamp. When ordering, specify plainly "Dodge" patent pulleys, as cases have come to our knowledge wherein customers have innocently ordered wood split pulleys, and unscrupulous dealers have supplied the "imitation."

**TO DRAUGHTSMEN, Etc.**

We are the ONLY FIRM in Canada PREPARING OUR OWN **Blue Print Paper**

Supplying a First-Class Article at a Low Figure, using a very Superior Quality of Paper.

Also, a very Superior Article in **Prepared Blue Print Linen**

And would direct attention to a new **Prepared Black Print Paper**

(Black Lines on a White Ground), for which we are Sole Agents. This is as simple as the Blue Process, only a single water bath, and no chemical developer required. Our usual large assortment of **DRAWING PAPERS, TRACING CLOTH, Etc.** Send for Samples and Price List.

R. SHARPLEY & SONS, 225 St. James St., Montreal.

**To Let! FACTORY FLATS**

With power to suit.

From two to fifty horse power. Apply,

F. W. BARRETT, 68 Esplanade West, TORONTO, ONT.

**Hackney Power Hammers**



Are superior in many respects to most in the market.

Made by

STEVENS, HAMILTON & CO. - - GALT, ONT.

**LAMKIN'S PATENT**



**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.

Try our improved Cedar Oil for cleaning boilers. We guarantee it to satisfy or no pay.

ADDRESS

**The Rathbun Company**  
DESERONTO, ONT.

**FOR REPAIRING MACHINERY**



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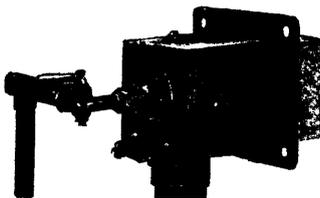
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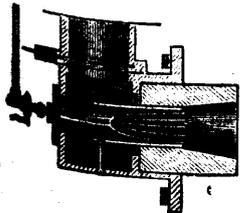
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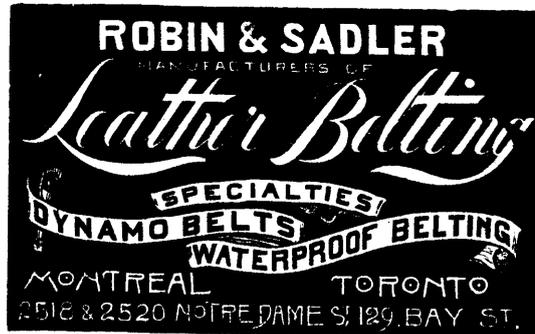
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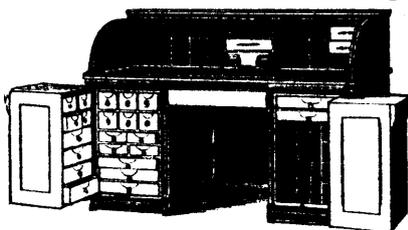
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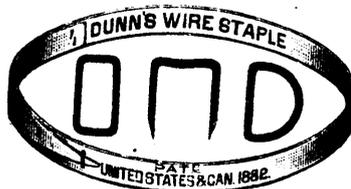
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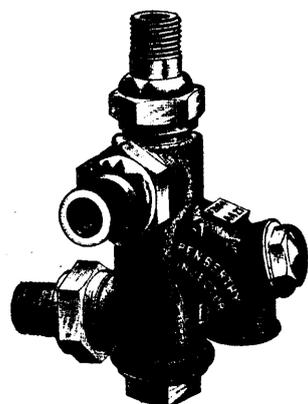
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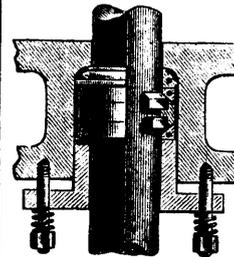


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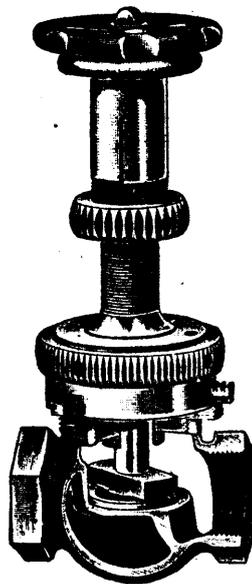
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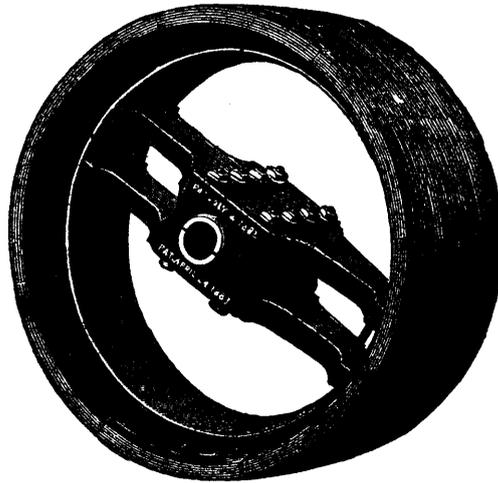
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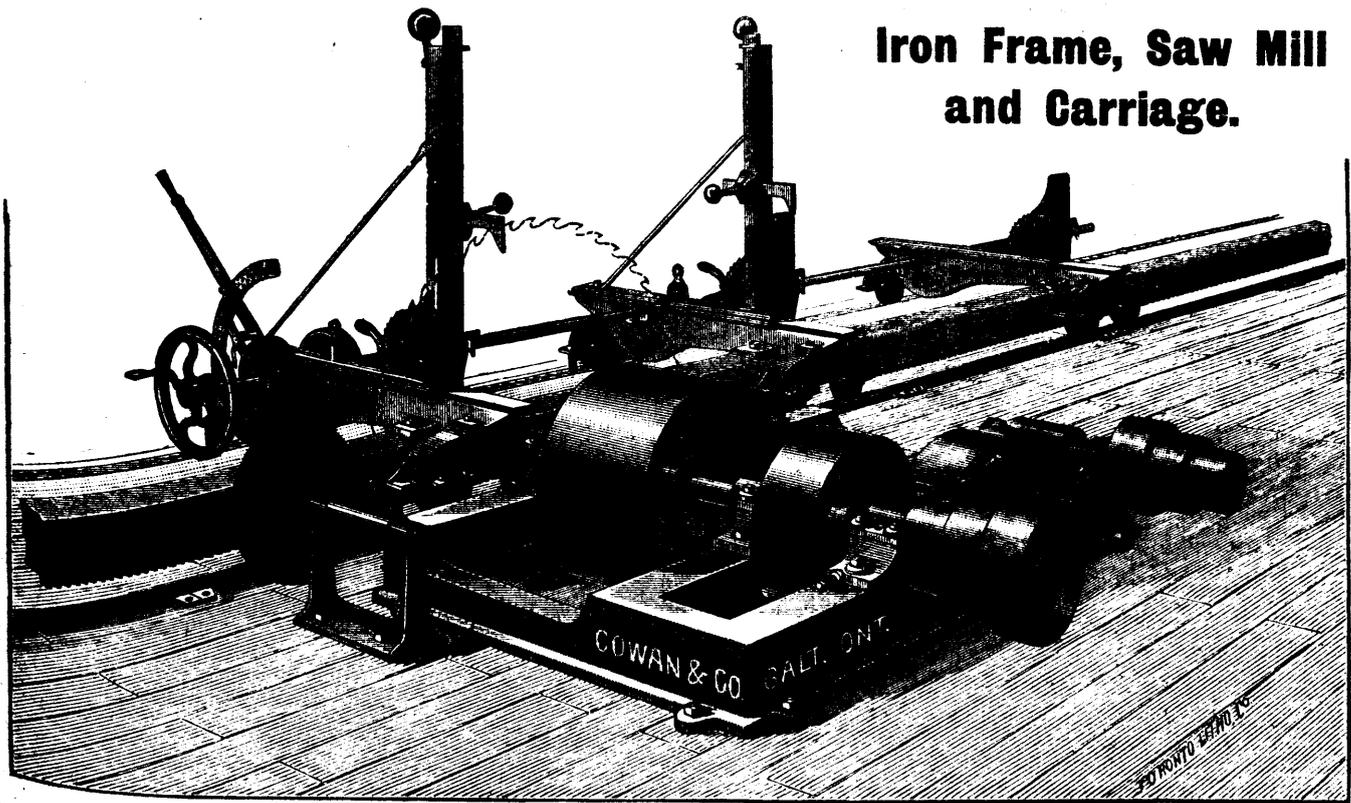
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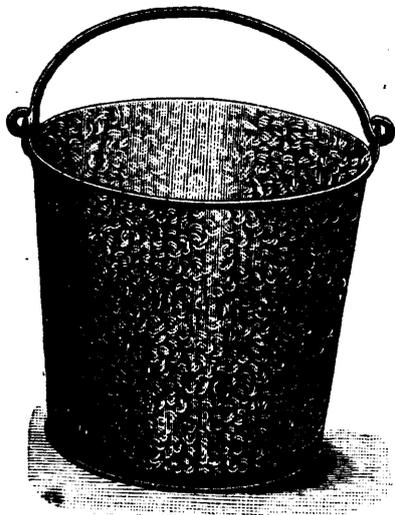
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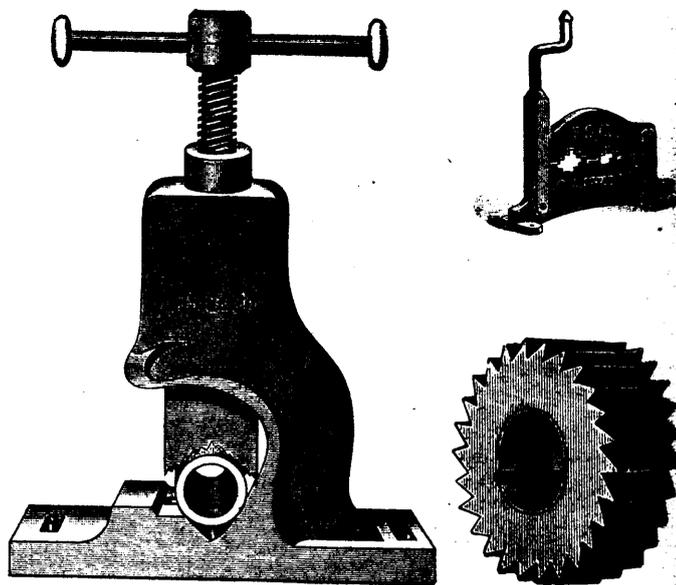
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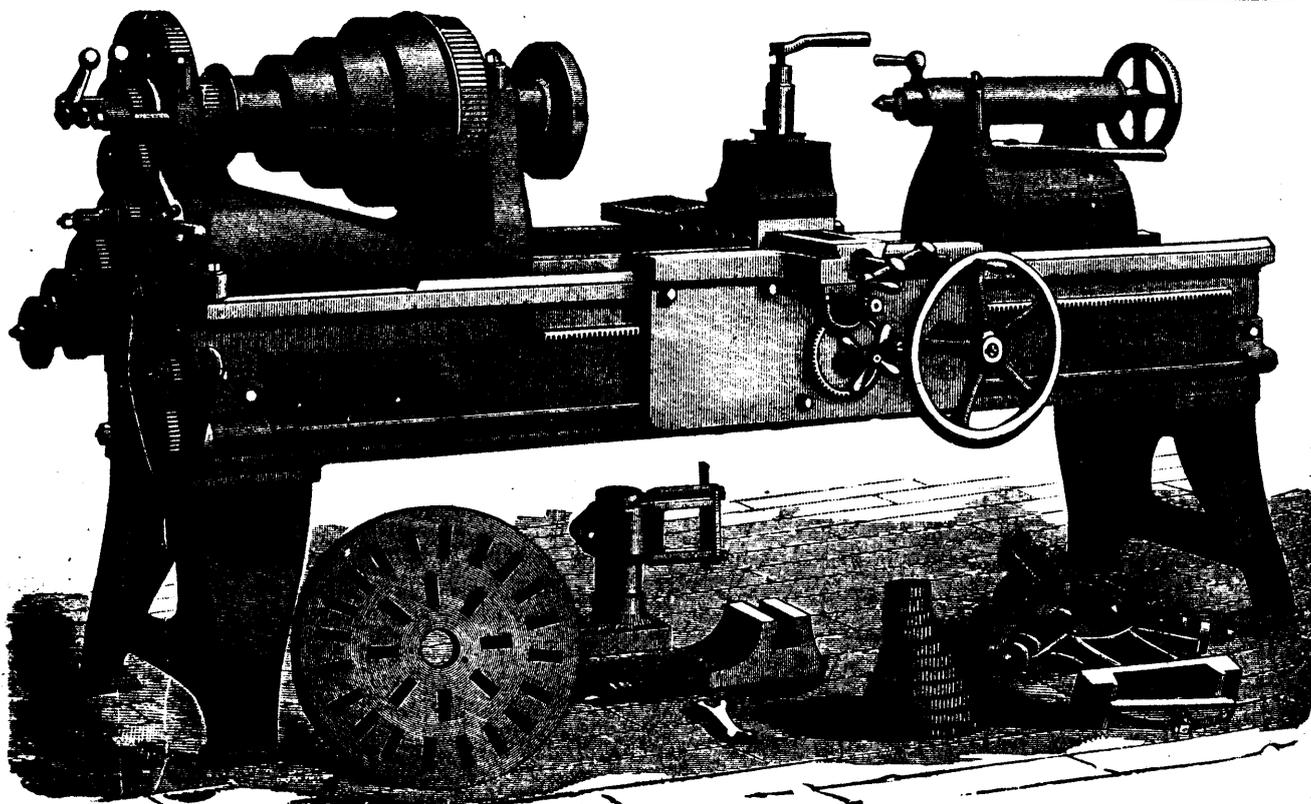
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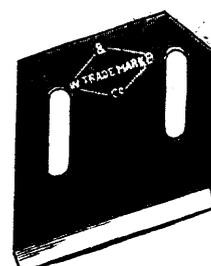
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THE OBJECTS OF THIS ASSOCIATION ARE :

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

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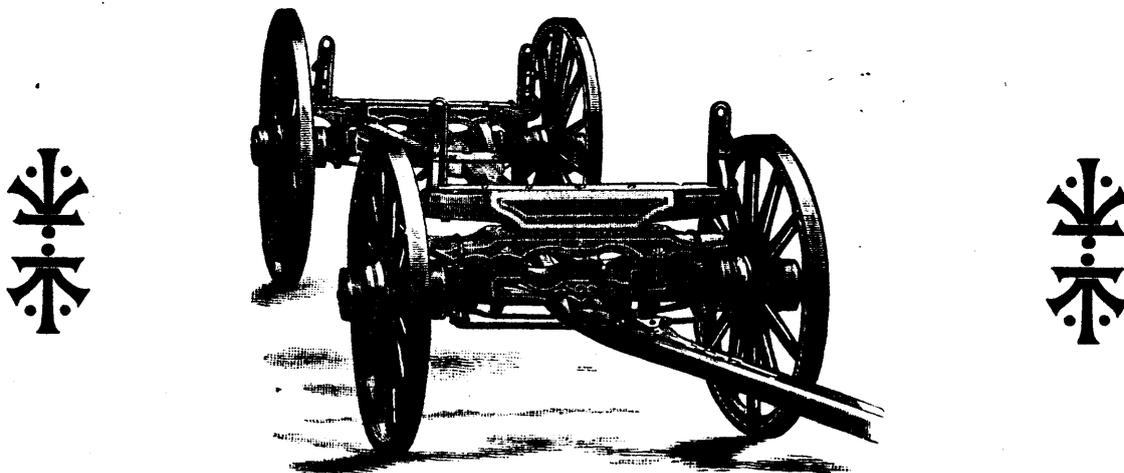
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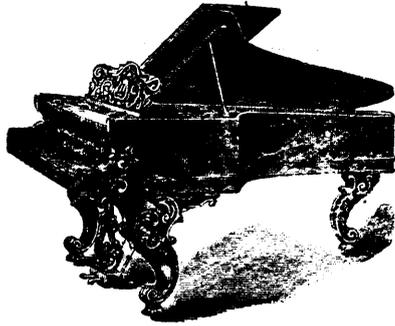
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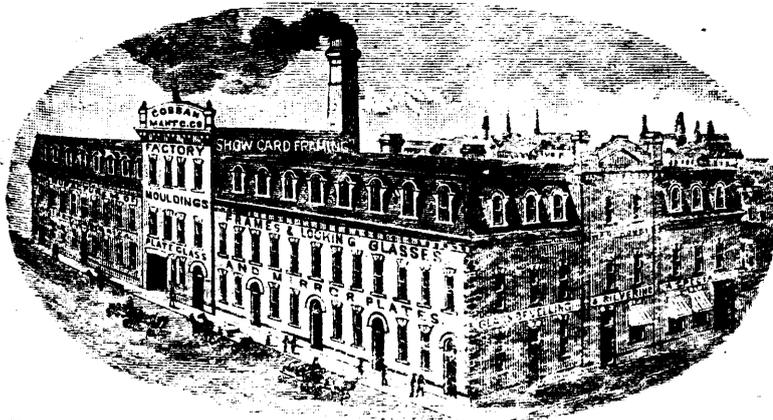
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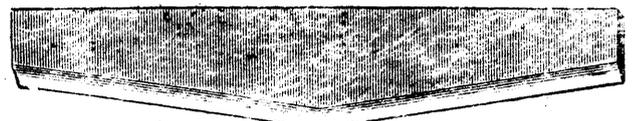
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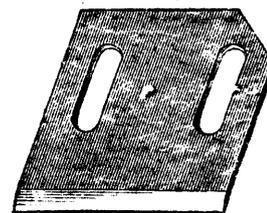


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