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Vol. 31.

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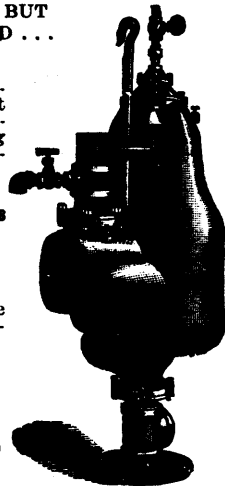
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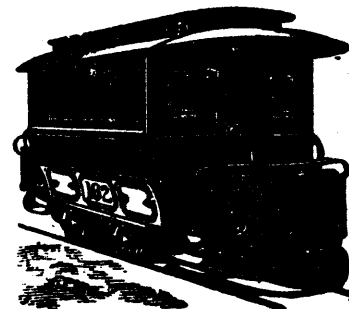
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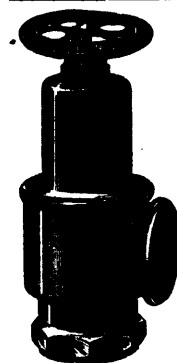
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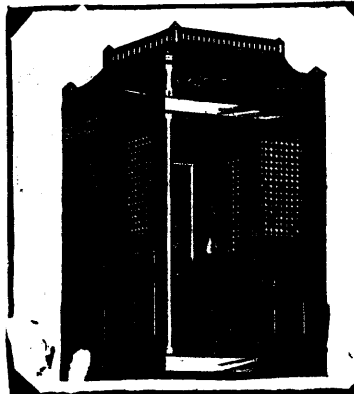
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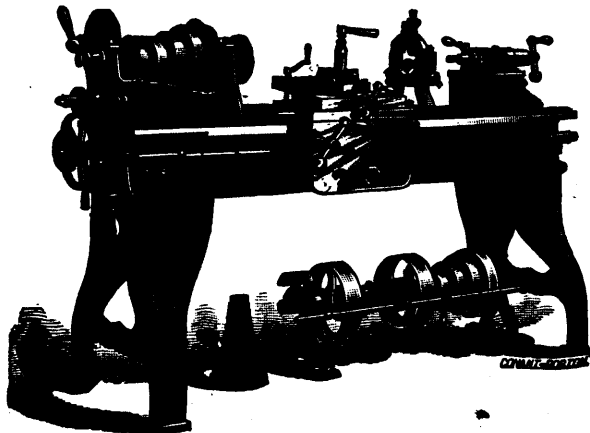
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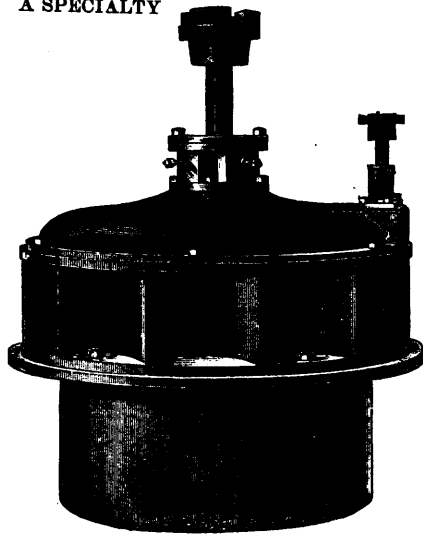
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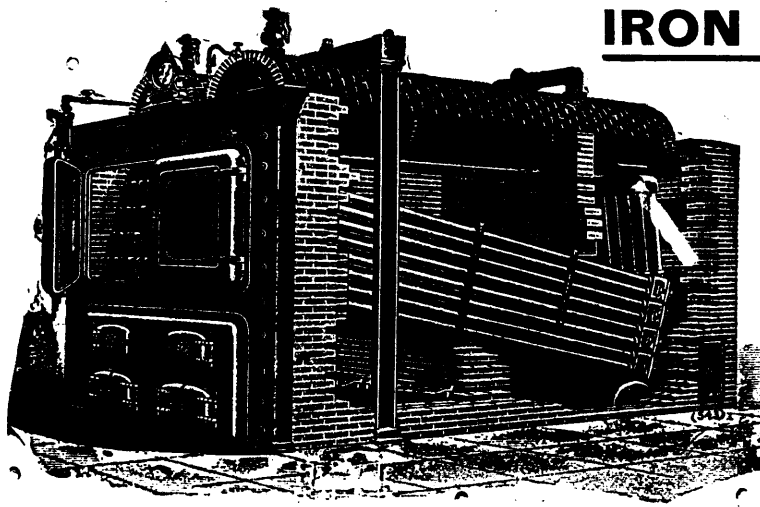
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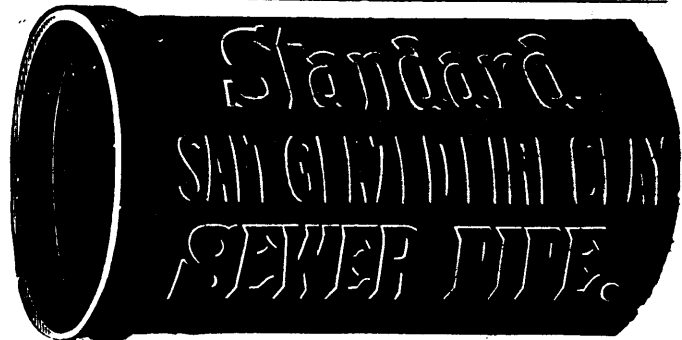
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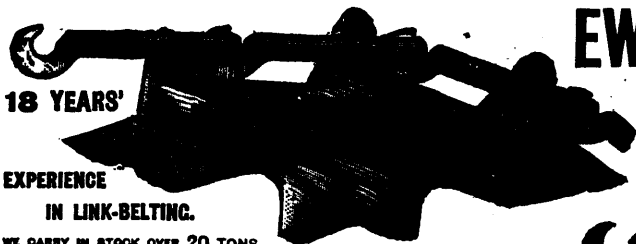
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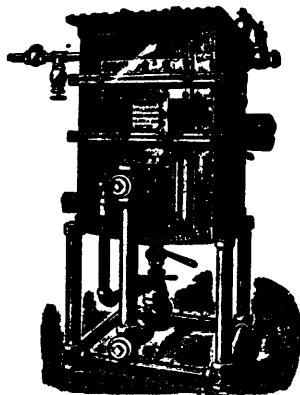
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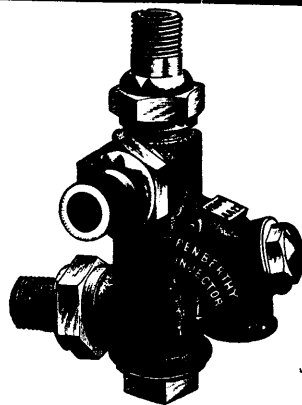
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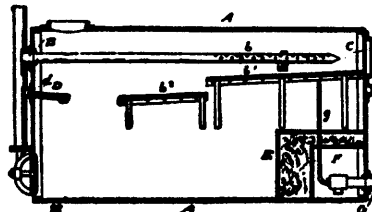
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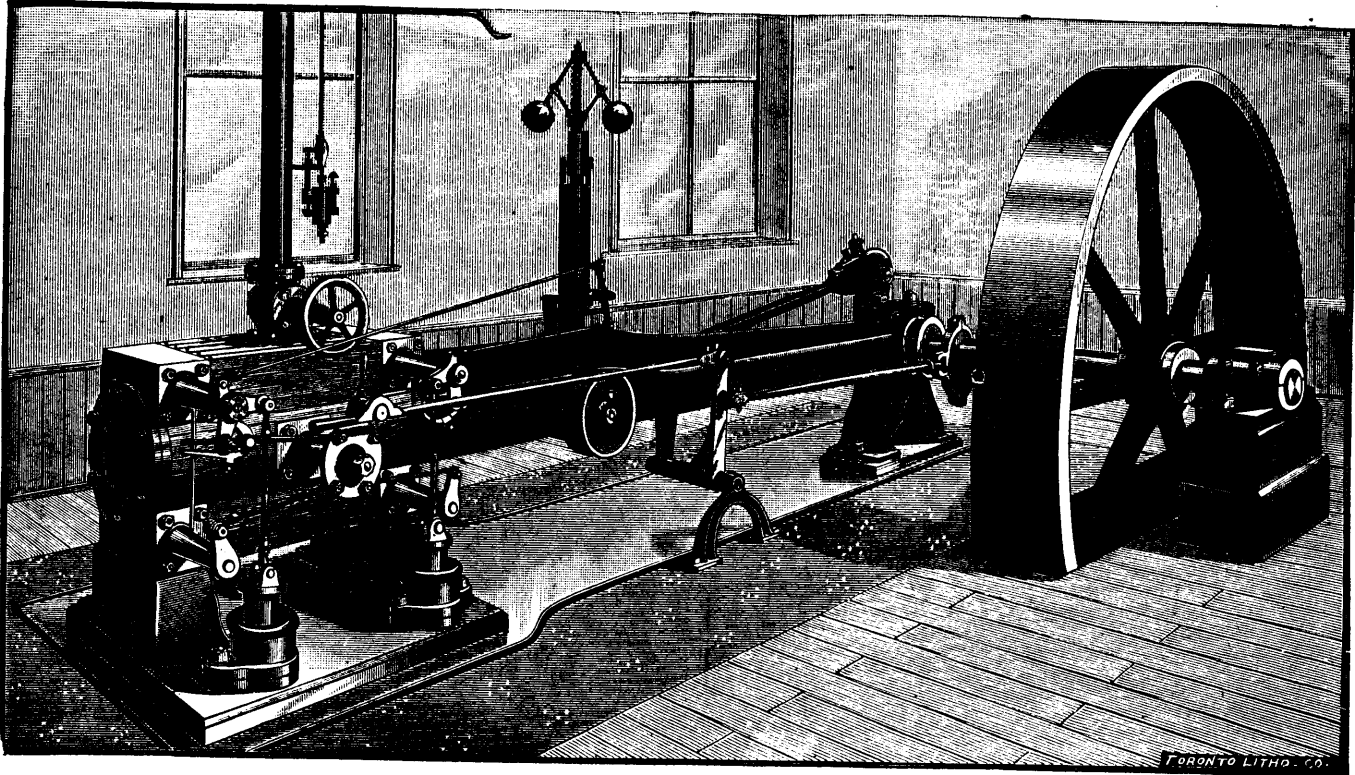
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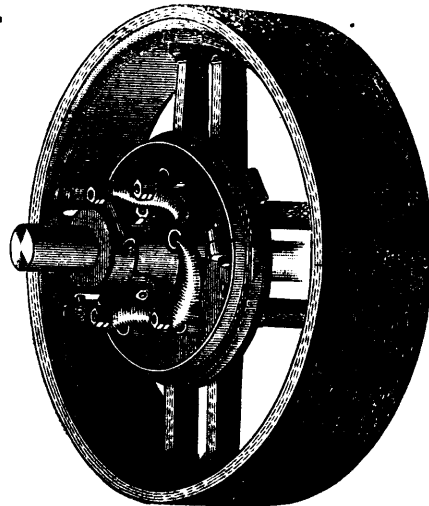
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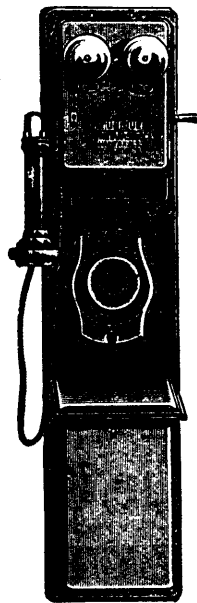
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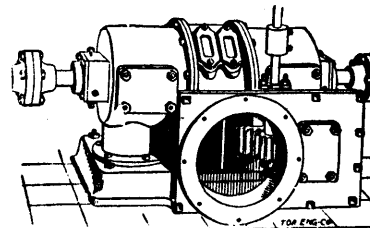
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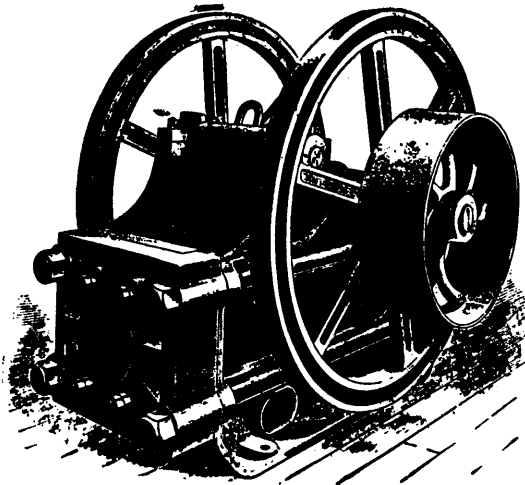
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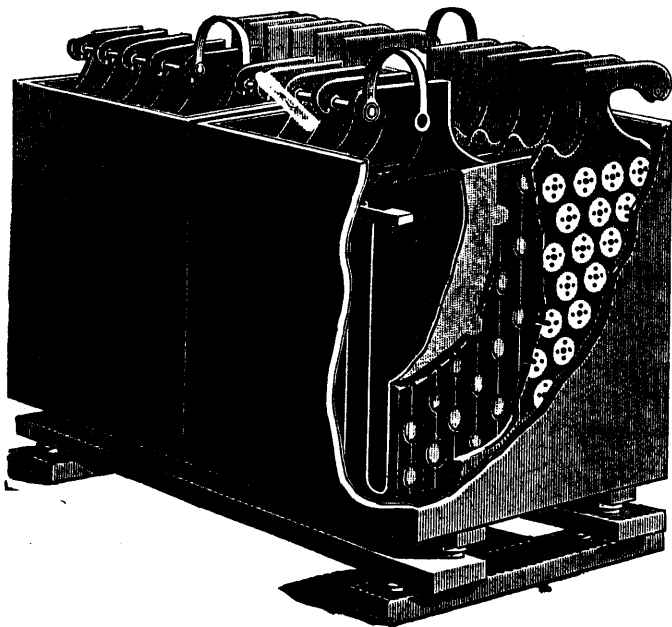
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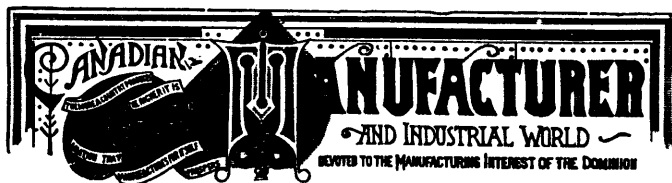
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LEGISLATORS SHOULD BE BUSINESS MEN.

In an editorial in a recent number of this journal it was stated that in a review of the life of Sir John Thompson Mr. O. A. Howland had ventured the assertion that only a lawyer could be a statesman. Mr. Howland is himself a lawyer, and his review was of the life of Sir John Thompson recently written by Mr. J. C. Hopkins. In a later issue of this journal allusion was made to the fact that Mr. Howland had complained that we, in common with other Canadian journals, had done him injustice in attributing that sentiment to him; and we there stated, that although we did not find in his

review just the precise words attributed to him, it was evident that the spirit of what he did say had been correctly caught, as shown not only in our interpretation of it but also in the comments of other journalists.

Mr. Howland seems to nurse a sore spot, for he declares in effect that he does not entertain the idea that only lawyers can be statesmen, and he feels that injustice has been done him in thus supposing.

In his review he speaks of Mr. Hopkins' biography as being hurriedly written, and that the biographer falls into a curious mistake in a passage in which he states that, "as a rule, and despite the number of lawyers who play at politics, and the politicians who meddle with law, the qualifications are not often combined in any great degree. A training in law is apt to limit the intellectual horizon and restrict the broad-minded interpretation of precedents, and that freedom of mental action so essential to a man who aspires to true statesmanship." This is the sentiment of Mr. Hopkins which Mr. Howland considers a curious mistake. Mr. Hopkins followed up this mistake by saying:—"The great English party leaders have never been lawyers, and men like Brougham, Eldon or Campbell would perhaps have been greater in character and reputation had they adhered to law and not dabbled in politics," to which Mr. Howland answers that "the only great American statesman, Webster, was a lawyer. The chief of Canadian leaders have been lawyers. Alexander MacKenzie, who was not a lawyer, is the truest instance of a really able mind whose intellectual horizon was limited. Had he perceived, as a lawyer, that the difference between revenue and restrictive duties under the circumstances of 1878 was a difference of names merely, he would, perhaps, have acted differently. For the want of the training of a lawyer he suffered the fate of a doctrinarian."

Daniel Webster was undoubtedly a smart lawyer, but there are those who incline to the opinion that he was less a statesman than a tricky attorney if judgment of him may be arrived at by some of his acts in which British and Canadian interests were involved; and in our opinion Mr. Howland was not happy in offering the name of Mr. Webster as his ideal of a lawyer-statesman. He also offers the names of Baldwin, Lafontaine, Sir John Macdonald, John Sandfield Macdonald and Edward Blake as being prominent Canadian leaders who were lawyers, to which we do not dissent, but his allusion to Alexander Mackenzie, who was not a lawyer, does, we think, bear us out in supposing that a fair construction of Mr. Howland's language would lead to the conclusion that in his opinion none but lawyers could be statesmen. The only prominent Canadian leader not a lawyer whose name he mentions was, he tells us, possessed of an able mind, whose intellectual horizon was limited, inferentially because he was not a lawyer, and who, for the want of the training of a lawyer, suffered the fate of a doctrinarian.

Mr. Hopkins having said that Sir John Thompson's first essay in political life was not successful from a party point of view, because he was inclined to look too much at legislation from a legal standpoint, and to think too little of popular sentiment in connection with it, Mr. Howland replies by saying: "We have, unfortunately in this province particularly, had too much of the advantage of a class of legislators who cannot be accused of looking at the work of law-making from the standpoint of lawyers, nor of thinking nor taking too little

account of popular sentiment in shaping their views of legislation."

It must be freely admitted that if we are to have good and just laws we must have competent and honest legislators. The Fathers of Confederation, to some of whom Mr. Howland alludes, performed a grand task that would reflect credit upon the statesmen of any country, and in what they did the legal knowledge possessed by most of them was of the greatest importance; and we are all agreed with Mr. Hopkins that many of the undertakings assumed and carried out by Sir John Thompson could not have been accomplished but by a trained lawyer; but there are many things required of our legislators other than fathering confederations and negotiating treaties, in which, as we have contended, the practical knowledge of men familiar with different branches of non-professional business—familiar with the fiscal affairs of the country—familiar with the manufacturing and industrial needs of the people, is more to be desired in making our laws than the theories of lawyers. Mr. Howland is familiar with the saying that no act of parliament was ever passed through which a coach and four could not be driven. Lawyers usually outnumber all other callings in all legislative assemblies, and yet they would be few in number and lean and hungry withal if the laws they give the people did not leave loopholes and opportunities for misconstruction that are prolific in litigation, and most costly to all concerned, except to the lawyers themselves.

We do not feel impelled to very extensively sympathise with Mr. Howland in his view that Ontario, or the Dominion either, is unfortunate in having legislators who are not lawyers, and who shape their views of legislation from the standpoint of practical business men who take account of the sentiments of those who elected them. The salvation of the country, in our opinion, rests more reliably in the keeping of the manufacturers, the merchants, the mechanics and the farmers, who are legislators, than with lawyers pedagogues and theorists.

We can but repeat what we have already said, that the manufacturers of Canada, and others, have had frequent cause to regret that the number of business men in Parliament was not much larger than what it really is. We have been cursed with having professional men in Parliament who got there chiefly by the loud professions of fealty they made to the principles of the National Policy and devotion to the interests of the manufacturers, but who, owing probably to their earlier associations and training, were pedantic in views that lifted them far above the practical affairs of life, and into an atmosphere through which only abstruse theories could filter. Manufacturers and business men have had this fact most painfully enforced upon them when, having business to transact with the Government, have found their representatives of no earthly use to them, further than to introduce them to the ministers, after the performance of which perfunctory duty they leave their clients to do as best they can without them. Manufacturers know to their disgust that but too often when their representative has accompanied them when they desired to submit some important matter to the consideration of the Government, the so-called statesman, not being a practical business man, could render them no assistance whatever, and to whom the matter under discussion was as a sealed book or an unknown language.

Canada, and particularly the manufacturers, are suffering from a plethora of such statesmen.

FREE RAW MATERIALS AND THE MASSEY MOVE.

Under the editorial caption, "Massey's Move," the London Advertiser perpetrates the following:—

With free raw materials, the Massey-Harris Company would manufacture all their machines in Canada. These raw materials are denied to this company, as well as to other manufacturers, and to the railway companies, and necessarily they are seriously handicapped when competing with the United States, unless they are favored at public expense. It is for this reason that the Massey-Harris Company is said to have secured a site for a new factory, to be erected at Niagara Falls, N.Y. The Massey-Harris Company act solely in their own interests. What the public must do is to see to it that its interests are fully guarded. The best way to effect that is to adopt the policy of giving the Canadian manufacturer his raw materials free of tax, or at as low a rate of taxation as possible, and then providing that the Canadian farmer and the Canadian citizen generally shall be given equal fair play through the imposition of a tariff for revenue only. Under such a system, the Massey-Harris Company would continue to do all its manufacturing for Canada and the world in Canada, and would have no occasion to seek untaxed coal, iron and other raw material by establishing a factory in a foreign land.

In our last issue we took occasion to reproduce and comment upon a somewhat similar item from our veracious contemporary in which Detroit was to be the objective point of the Massey Move; and but few days or weeks are allowed to go gliding by when the public are not advised by well prepared telegrams that this most remarkable peripatetic concern are contemplating the removal of their works from Canada to some American city, for the causes given in the above article. We are quite sure if the Massey move should ever eventuate into a bona fide migration, Canada could withstand the shock and continue to live, move and have its being after the hiatus; but as we have heretofore and frequently said, whether the Massey concern are actively or quietly, or not at all instrumental in this constant giving out of information to the effect that they are about removing their works to the United States, such a move will never be made. They will never make it.

It is rather remarkable, however, that the free trade statesmen, orators and newspapers should so persistently claim that the proposed Massey move from Canada to the United States would be to secure in that country free raw materials that they cannot obtain in this. The Advertiser informs us that these materials are denied to this company here, and that they are thereby handicapped when competing with the United States; and that it is for this reason that the Massey move is moving. The Advertiser knows, however, as all intelligent people know, that there is no article of raw material used in the manufacture of agricultural implements in the United States that is not liable to pay tariff duty, the list there covering more dutiable articles than are covered by the Canadian tariff. The Advertiser seems to expect that the Canadian public should rise up in its might and see to it that its interests are fully guarded by making it to the interest of the Massey concern not to move; and it tells us that the best way to head off the Massey move is to adopt the policy of giving the Massey concern its raw materials free. Under such a system, it says, the Massey concern would continue to do all their manufacturing for Canada and the world in Canada.

This is a wonderful scheme. To obtain free raw materials

the Massey concern are to migrate to a country where the duty upon raw materials is much higher than upon similar materials in Canada, and unless Canada gives the concern free raw materials, it will remove to a country where raw materials are taxed more heavily than here, from whence it will engage in a foreign trade impossible to be done from Canada where raw materials are not so heavily taxed. The proposition is as clear as mud.

Before making such exhibitions of themselves as ignoramuses, these free traders should have enquired into the situation, for if they had done so they would have discovered that the question of duty or no duty upon their raw materials cuts but an inconsequential figure in the business of the Massey concern. Owning or controlling as they do the Canadian right to several scores of patents covering about every important feature of the machinery made by them, and manufacturing as they do machinery that possesses great merit, and that is in high favor with the users of it, it would be impossible for any other concern, either in Canada or elsewhere, to produce or dispose of in Canada any such machinery without their consent. Similar machinery is probably made in the United States, and the Massey concern are protected to a certain extent against the importation of it into Canada by the existing duty of 20 per cent. ; but even if there was no duty the foreign manufacturer, or the importer could not use or sell the foreign article in Canada because of the absolute monopoly afforded the Massey concern by their patent rights.

The same argument also applies the other way. Not possessing the right to manufacture these patented articles in the United States, no matter how much their desire might influence them to migrate to that country, it would be impossible for them to manufacture or dispose of such machinery there, and this is why we say that all this talk about the Massey move is a huge bluff. There is nothing in it.

But why don't the Advertiser accept our invitation to explain in a comprehensive manner what raw materials really are? We await the definition.

McKINLEYISM.

Three years ago, under the whip and spur of a most insane attack upon the tariff policy of the United States Government, the free trade Democratic party, with the assistance of the solid South, swept the country and placed Mr. Cleveland and his friends in power. As the free traders in Canada are now endeavoring to do, the laboring classes were taught, and induced to believe, that the tariff was a tax, and whatever the duty might be upon imports, it was the measure of the oppression under which they were suffering. It was in vain that protectionists preached the contrary doctrine, and the election of that year gave a free trade majority in the House of Representatives that gave to the country the Wilson tariff.

Following this free trade victory, one of the most painful financial and industrial panics ever known to the United States settled like a black pall upon and over the land. Scores of banks and banking institutions failed, hundreds of factories and industrial establishments closed their doors, and thousands of working people tramped the streets in idleness and went hungry to bed. The country became flooded with cheap foreign goods, which the people were unable to buy, and the

products of farms, much of them, rotted upon the fields for want of purchasers. In short, an existence of ideal free trade had prevailed. McKinleyism had received its quietus.

In sackcloth and sorrow the misguided ones who placed Mr. Cleveland's gang in power, perched upon the stool of repentance and cogitated, and, having thought the matter all over, determined to retrace their steps at the first opportunity, and that came to them last month.

A comparison of the election figures for eight States in the year preceding the Presidential election of 1892 and the year preceding the Presidential election of 1896 is indeed startling. Here, it is with the majorities of the present year :—

	1891.		1896.	
	Dem.	Rep.	Dem.	Rep.
New York.....	74,935		97,169	
New Jersey.....	13,609		25,998	
Massachusetts.....	6,467		64,776	
Ohio.....		21,511		95,348
Pennsylvania.....		58,152		174,247
Iowa.....	7,816		64,143	
Kentucky.....	28,081		8,474	
Maryland.....	30,151		19,016	

This verdict was against the tariff policy of the free traders and a notice that McKinleyism must be reinstated. The people have realized that protection was what the country needed, and they intend to restore it.

CANADA-AUSTRALIA TRADE.

As our readers have been heretofore informed, Mr. H. Cockshut, of the Cockshut Plow Co., Brantford, Ont., has recently returned home from an extended business trip to Australia, via Great Britain and other European countries. Mr. Cockshut has written a most interesting letter regarding his observations of the opportunities of building up a trade between the Australian colonies and Canada and the United States, from which we select the following. He says :—

After a long voyage we reached Albany, West Australia, the most westerly port of the Island Continent. It is, at the present time, a very prominent place on account of being the landing port for most of the passengers who are at present flocking to the newly found gold regions of Coolgardie. A good deal of American mining machinery is being sent there. I learned from engineers and miners that it is much appreciated. I believe a large trade can be developed by those who push it. In fact, a number of firms are now doing a good business there, and others can secure a share of it if they exert themselves.

From Albany we went to Adelaide. After finishing my business in Adelaide I went by rail to Melbourne, and was much surprised and pleased with that city. To my mind it is the finest city for its size I was ever in. Its buildings are splendid, and in a great many cases very expensively built. The streets are wide, well paved and cleanly kept.

Melbourne, a few years ago, was booming. The boom has burst, and everything is now very quiet and dull, but a very large amount of business is still being done by some very large houses. I found the prospects for opening up a trade in that city very good.

From Melbourne I went to Sydney. While in that city I met a great number of Americans, among them being J. S. Larke, Esq., the newly appointed Canadian Trade Commissioner. This gentleman has been sent out by the Canadian Government to promote trade between Canada and Australia. I found him of great assistance in many ways. He has done much toward building up a friendly commercial feeling between the two countries.

From Sydney I went on to Brisbane, in Queensland, and I found it very much like a new American city. Great things

are expected of this place before long, as it is the capital of the colony in which there are very large mining and agricultural interests that are as yet only in their infancy, but are now being developed rapidly. Brisbane is bound to assume a more important position than it at present occupies. From this place I returned to Melbourne via Sydney, crossing over to Launceston, Tasmania. From that colony I again returned to Melbourne, and went from there to Adelaide and back again to Sydney. From Sydney I sailed to New Zealand. Before giving any description of New Zealand it will perhaps be well to tell about Australia as a whole. I had a very good opportunity to meet the business men in these colonies, and formed the opinion that both commercially and socially the Australians are a hard people to beat. They are fond of business and most agreeable to deal with. They appreciate Americans and their goods, as almost everywhere I went I met with gentlemen who represented some American house. In my own line I found a great many dealers handling American plows.

The larger kinds of agricultural implements are nearly all American. The firms which appear to be doing the largest implement business at present in Australia are the Massey-Harris Company, of Toronto, and the Walter A. Wood people of Minneapolis. Both firms have branch houses located in Melbourne and are pushing business energetically.

American novelties are very much sought after. I had a great many inquiries regarding such things, and believe any one with a novelty of a useful kind can do a good business in Australia if the proper people are secured to handle it.

The railway transportation is a peculiar feature in these colonies. Nearly every colony has a gauge of its own, and consequently an intercolonial traveller is compelled to change cars frequently. This is a source of much delay and annoyance. One of the things that struck me as being most peculiar is the lack of harmony between the colonies. Each one appears to be jealous of the other. Federation, to my mind, is the one thing which Australia needs before it can become a great country. It must be federation, both politically and commercially if it is to be a success. With that accomplished, the country is bound to progress, and the business that can then be developed will be enormous.

Perhaps it will not be out of the way for me to say something regarding our own trade in these colonies. We are, of course, very much interested in the manufacture of plows and cultivators. My object in making the trip was to see agents, learn their requirements and to appoint new agents where necessary. This I found no great difficulty in doing. Our plows have been most successful in the foreign field. The trade we started only a few years ago has now grown into a considerable item of our business.

I believe a large trade can be done by any manufacturer who has the capital and determination to push out for foreign business, but few firms feel that they are prepared to make very large expenditure without receiving an immediate return. This, however, is one of the necessary points to secure export business.

CHEAPER ALKALIS.

There is undoubtedly an impending revolution in the chemical manufacturing industry of the British Kingdom, which will certainly greatly lower prices in Canada. Next, perhaps, after the manufacture of iron and steel and textiles, the chemical industry is one of the largest, furnishing a number of products which are practically founded on the decomposition of common salt. The existence, therefore, of cheap salt, cheap coal and cheap sulphur ores (which the English import from Spain), furnishes good facilities for the prosecution of the chemical industry on the Clyde, Tyne, Mersey and Thames.

The introduction of new methods in the production of caustic soda, soda ash and bleaching powder have tended to

reduce, and still continue to lower, the cost of manufacturing each of them, as shown in the London Iron and Steel Trades Review. Pure caustic soda, which sold in 1863 at £18 per ton, is now quoted at £7 5s.; while bleaching powder, quoted at the date first named at between £9 and £10 per ton, is now held from £6 15s. to £7, with a greatly increased output. The same authority states that, whereas the production of bleaching powder in the United Kingdom in 1863 did not exceed 30,000 tons, it amounted in 1894 to 150,000 tons per annum, and the output of caustic soda increased during the same period from a few thousand tons to more than 160,000 tons per year.

The soda ash industry in Great Britain, as elsewhere, has been revolutionized by the introduction of the Solvay process, first put into commercial operation in 1865 and introduced into the United Kingdom a few years later. In 1890 various British producers, using less efficient processes, united their interests, but the experiment, it is declared, has not been entirely successful. The union enterprise, it is added, is about to have a new competitor in the production of caustic soda and bleaching powder by the electrolytic process. This is to be developed by a union of interests, the principal aluminum producers of the United Kingdom having united with the introducers of the Solvay process, after an exchange of patents, the outcome of which is that large works will be established in England at once for the production by the joint process of aluminum and various alkali products. Under the electrolytic process the electrical efficiency is declared to be between eighty-eight and ninety, far exceeding anything hitherto attained. It is declared that one outcome will be solid caustic of almost chemical purity, something hitherto not known in alkali manufacture, the most important feature of which is that the process is, for the large part, automatic. It is estimated that the new process will allow pure caustic to be produced at £4 5s. per ton, and bleaching powder at £3 per ton, which figures are far below existing costs of production. The Solvay Company, it is declared under the terms of the amalgamation, will proceed with the erection of similar works on the Continent of Europe, "while the Mathieson Alkali Company has concluded to build a large establishment in the United States."

ACETYLENE.

It is only comparatively recently that the general public have begun to awaken to the importance of the commercial production of acetylene gas. The combustion of this gas has been described as producing something akin to real sunlight. Even the brilliancy of the arc electric light, not to mention, of course, the milder incandescent electric light, pales its fires before the burning rays of light given by this new illuminant. Such, at least, is declared by those who are in a position to know. It has also been announced that illuminating gas companies throughout the country have, in many instances, acquired the right to use acetylene gas, the idea being that its primary importance consists in its use as an enricher.

Now, however, if one may judge from published opinions and statements by those who are regarded as experts, says Bradstreets', the value of acetylene gas, as an illuminant, is to prove trivial compared with its real commercial significance. It may be recalled, the gas was discovered somewhat accidentally; that it is evolved by heating a mixture of coal and

lime, or charcoal and chalk, in an electric furnace, and throwing the resulting compound into water. Here was a cheap and easily procurable substance, which, as described, was primarily to raise the illuminating power of ordinary illuminating gas, and which in time, as has been projected, would be carted about and delivered from door to door, to business places and shops, in tanks ready for use, much the same as tanks are delivered to proprietors of soda water fountains. It has even been outlined how specially manufactured lamps containing acetylene within them in sufficient quantities to run for a day, or for days, would practically supersede many of the older forms of illumination, and, in fact, one had almost begun to wonder what would become of the enormously expensive illuminating distributing plants with which the streets of cities and towns are lined.

Now, however, it appears that the illuminating qualities of acetylene gas, as stated, are among the least important of its commercial qualities. Acetylene is turning out, it is declared, to be even a more extraordinary substance than the wildest flights of the imagination of its discoverers suspected. If all that is claimed for it be true, it means the cheaper manufacture of a great many substances used in the arts, which heretofore have had to be produced laboriously and expensively in commercial and chemical laboratories.

"Thus," says an exchange, "acetylene, on being passed through an iron tube heated to dull redness, turns rapidly and completely into benzine. This is a product of prime importance, and is the base of thousands of organic substances. In illustration of the transmutations which can be effected, it may be pointed out that if the resultant benzine vapor be passed into strong nitric acid it is transformed into nitro-benzine, and this, on treatment with hydrochloric acid and iron filings, goes into aniline. With the formation of aniline the road is opened for the production of the immense series of dye substances of which aniline is the starting point. Instead of transforming acetylene into aniline, however, it may be changed into carbolic acid; thence it is but a step to picric acid, the foundation of the modern high explosives. Or it may be made into aniline, and then boiled with acetic acid, when it is transformed into anti-febrin, the well-known fever specific. Again, by passing it through a tube heated to bright redness, naphthalene is produced, which is also the starting point of a legion of valuable chemicals. It would seem as though almost all the needs of man were able to be satisfied by this protean substance. The further investigation is pushed into its possibilities, the more astounding and bewildering they become. By the action of nascent hydrogen acetylene becomes ethylene, and this, on treatment with sulphuric acid and water, becomes alcohol, which, apart from its other uses, is absolutely necessary to the production of an enormous number of economic substances. In similar ways we can get such deadly poisons as oxalic acid and prussic acid, while acetylene is a cheap source of the aldehyde so much used in the production of artificial essences and the manufacture of mirrors. When, therefore, it is considered that from acetylene can be derived whole systems of dyes, medicines, essences, perfumes, poisons, explosives—not to mention cheap whisky—it will be seen that the latest product of the electric furnace has a utility out of all proportion greater than that which can be derived from its peculiar light-giving powers."

EDITORIAL NOTES.

At the recent State elections the Republicans gained two United States Senators, one in Maryland and one in Ohio. They also appear to have gained one in Kentucky. It has been erroneously stated that these Republican gains will affect the present Congress. The Senators who have lost their seats will still hold them until March 4, 1897.

Andrew Carnegie, of Pittsburg, is asking for a canal to Lake Erie in order to increase his business facilities. If Mr. Carnegie were to build smelting and foundry works at the Sault, where he can handle Sudbury nickel and Lake Superior iron, he could challenge the world for supplying nickel-steel armour plates. Algoma has the needed minerals and fuel, and all the world wants nickel-steel.—Sault Ste. Marie Pioneer.

It does not look as if there would be much use for soup kitchens this winter. Any able bodied man who is willing to work can find employment, for the demand for labor is, strange to say, greater than the supply. This may not be strictly correct locally in all instances, but there is work in the country, and if it cannot be found in one place it can in another. Lumbermen find it hard to get men for the woods. Last year the labor market was overstocked, this year the demand is greater than the supply. This is a healthy sign.—Canada Lumberman.

America expends \$150,000,000 annually on an idiotic public school system that inspires her children with contempt for honest labor and unfits them for earning a living—which spoils millions of prosperous farmers and expert mechanics to make putty-headed and worse than worthless professional men. It were much better to teach the average boy how to build a house or construct a boat, dress a beef or rebottom a pair of breeches, than to read Euripides in the original or construe a Latin sentence. Better teach him to be useful and independent than fill his fat head with false ambitions, then see him hang, as a genteel pauper, on the bedraggled skirts of a servile "respectability."—St. Louis Grocer.

The exploitation of the so-called Monroe doctrine by the present administration is calculated to give sensible people that tired feeling. Why should Uncle Sam proceed to play policeman for South American single-hovel republics that delight to insult the American flag on the slightest provocation, and almost as soon as they have donned their initial republican diaper? They don't trade enough with this country to justify any such interference on our part every time an European power is compelled to hold one of them up by the ears and pound the impudence out of it or collect a debt. We can not afford to risk blood and treasure protecting republics de jure but despotisms de facto, and it would be really to our advantage to have some European civilization injected into those opera-bouffe republics. This jejune diplomacy should cease.—St. Louis Grocer.

Mr. C. C. James, Deputy Minister of Agriculture for Ontario, has published some interesting reflections on agriculture and the natural industries of Canada. The statistics with which the writer introduces his remarks are worthy of careful study. The annual agricultural productions of Canada amount

to about \$500,000,000 in value: the forest products \$80,000,000, the mineral products \$20,000,000, and the fishery products \$20,000,000. It will thus be seen that the four streams or fountain sources of wealth aggregate \$620,000,000 a year, and that four-fifths of the total volume comes from the farm. In 1890 out of 1,659,355 workers 735,207 were engaged in agriculture. The natural occupations—farming, mining, fishing and lumbering—engage 47.6 per cent. of the workers, manufacturing 19.3 per cent., domestic and personal service 14.9 per cent., trade and transportation 11.2 per cent., the professions 3.8 per cent., and the non-productive class contains 3.2 per cent.

The Massey-Harris Company have written a letter contradicting the report so energetically and persistently circulated regarding the removal of their works from Canada to the United States. They state that they have not decided to locate a plant at any point in that country, and that they were not parties to any of the reports which have been circulated to that effect. They also announce that they have no intention of removing from Canada; but, on the contrary, intend to prosecute their Canadian business with increased vigor. They explain that at the Chicago Exposition their implements attracted much attention, resulting in many enquiries for them in that country, which was the reason that had led them to consider the advisability of locating a branch of their business in the United States; but no locality has as yet been decided upon. It is to be observed that in one part of their letter they state that they have no intention of removing from Canada, and in another part they say that they have not yet decided upon a locality there. Are they going, or are they not?

There are eleven factories in England where bicycle tubing is made. There is one factory in France, another in Belgium, and a great plant in Wales. In the United States there are three tubing plants in operation and three more are getting ready to manufacture this article. One of the plants in the United States is five times as large as any of the others referred to, except, perhaps, the Mannesman plant in Wales. It will turn out ten million feet of tubing this year. These figures would seem to justify the establishment of one or more tubing plants in the Dominion of Canada. The industry could be added as an accessory to some company that is now engaged in the iron and steel business. The acclimatizing of the industry in Canada would be greatly facilitated if the question of tariff were scientifically considered in its relations to this particular manufacture.—Toronto World.

The Canadian duty upon bicycle tubing is now only fifteen per cent., and we are satisfied that unless the duty is increased there will be no works for the manufacture of the article established in Canada. But if the duty is increased sufficiently we have the assurance of a large concern recently gone into business in Canada that they would immediately erect such a works.

The law to which McKinley's name is attached was founded on the theory that it is good policy for the United States to make the most of its own resources, to offer the largest opportunity for employment to its own people, and to use the products of its own farms, and shops, and factories, in preference to the output of cheap foreign labor. There is no assumption that American workmen are inferior to other workmen. There is a distinct recognition of the fact that they are

superior in skill, and ingenuity, and productive power. Moreover, there is a refusal, in the protective policy, to subject our wage-earners to the unrestrained competition of the degraded labor abroad. To that end the protective policy makes foreigners pay for the privilege of bringing their goods into our markets—that is, such goods as can be supplied by home industries. The result in a thirty years' trial has been the elevation of the working people of the United States to a higher plane of prosperity, intelligence and self-respect than is known in any other part of the world. It is to maintain this superiority, and encourage its further development, that the protective policy is advocated in its relation to labor—Rochester, N. Y., Democrat.

The Customs Department, Ottawa, have issued a notice to Collectors of Customs in which they are instructed that in future lead coverings or packages containing tea are to be valued for duty purposes as follows:—2 cts. each for pound packages; 1½ cts. each for half-pound packages. And the packages to be rated for duty at 30 per cent, under Item No. 333 of the Tariff.

In considering the election prospects in Cardwell, the Dufferin Post says:

These are the times when the loyalty of the Conservatives of Cardwell will be tried. In Mr. Willoughby they have a candidate of whom they ought to feel proud; a native and resident of the riding, a gentleman of high education and unblemished character, and a man who, though young, has done splendid service in battling for his party. Mr. White's parting words to the electors of Cardwell are an appeal to them to rally around and elect Mr. Willoughby, and we hope

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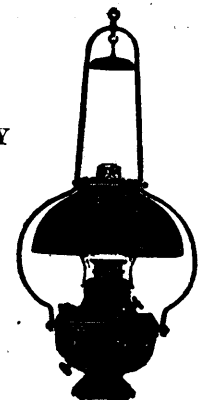
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they will heed the appeal. Mr. Willoughby is already busy at work in the riding, and will be assisted in what will likely be a brief and lively campaign by men prominent in provincial and federal politics. Cardwell has ever been faithful and true to the great historical Conservative party, and we sincerely trust that it will not be induced to swerve in its allegiance by disappointed factionists or mercenary intriguers.

No doubt Mr. Willoughby is all the Post claims for him, but why not put up a man who is a manufacturer and has a vital interest in maintaining the National Policy? What is wanted in the House of Commons is more practical men who know the needs of the country, and fewer theorists. If the Conservative party leaders desire the vote and influence of the manufacturers in the coming elections, the wishes of the manufacturers should be consulted.

Attention has often been called to the increase in the demand for copper, caused by the extension of electrical work in various directions. An instance of a new demand for the metal, which had hitherto been hardly suspected, is found in the recently issued annual report of the Western Union Telegraph Company. We find there that the company, during the year ending with June last, added to its wire lines a net length of 11,859 miles, and that over 10,000 miles of the new wire are of copper. The report states moreover that the company has adopted the policy of replacing all defective iron wires on its line with copper, the intention being to use that metal alone on all the principal lines hereafter. The advantages of saving in weight, increased capacity for electrical transmission, and diminished liability to interruption from atmospheric conditions are sufficient to make the copper wires

more economical in the end, notwithstanding their greater first cost. The decision has been assisted also by the fact that the improvements in processes for drawing copper wire have enabled makers to furnish material well adapted for telegraphic use. The renewals and additions made by the Western Union Company last year do not represent more than an average year's work. The size of copper used for telegraph wires is generally No. 9 or 10 B. & S., weighing about 199 lbs. to the mile. This would require, for 10,000 miles, about 888 tons of copper; an amount not so important in itself but as indicating a tendency to increased demand.—The Engineering and Mining Journal.

The truth about the operation of the Wilson tariff is exactly expressed in an article in the London Financial News, which confesses that "the lowering of the American tariff has been our (England's) salvation." Not only have British exports to this country enormously increased because of Mr. Wilson's efforts, but, as the Financial News observes, England, "instead of taking the increased value of its shipments across the Atlantic in kind, seems to have bought less American produce." The statistics of our Treasury Department fully sustain these assertions. If the Wilson tariff had been prepared by Englishmen it could hardly have served British interests better. The Southern statesmen in the last Congress went far towards repaying the obligations conferred upon the late Confederacy by its British friends. It is notable also that in the opinion of the Financial News "practically every penny subscribed in England toward the recent American loan has been got back through the expansion in the exports of woollens and worsteds." Thus, for our bonds, England gave us, not money, but stuffs made in her factories.

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We pretended to buy gold. What we did buy were manufactured articles which we could have made at home; and because we did not make them, our own industries are hurt, and our labor and capital idle. Meantime, while we are thus buying more from England, England is buying less from us.—The Manufacturer, Philadelphia.

Speaking of the advocacy by Mr. E. B. Eddy of the imposition of an export duty on spruce logs, The Paper Mill and Wood Pulp News, of New York, says:—

Mr. Eddy knows full well that all the spruce (in Canada) will be wanted for pulp and paper. He knows that Canada wants the pulp and paper manufactured within her own borders, to give value to the forests and employment to her own population. As the matter stands now, Canada sees hundreds of thousands of cords of spruce wood being exported to the United States to enrich the pulp grinders here, while the pulp and paper industries languish in Canada. If she is to furnish a large percentage of the raw material, she wants part of the manufacturers' profit.

No doubt The Globe will raise a fearful howl against the imposition of any export duty on spruce logs; but as our New York contemporary shows, if Canada, where the material is grown, is to have any part of the profit arising from the manufacture of it into pulp or paper—if Canada is to enjoy any part of the enrichment now going to the pulp grinders of the United States—if Canada is to derive any material benefit from her wealth of spruce timber, then it will be in order for the Canadian Government to protect those interests by the imposition of an export duty on spruce logs. Why should the pulp and paper mills of New York, Michigan and

Wisconsin, which obtain thirty per cent. of their logs from Canada, not be made to bear the burden of a reasonable export duty on the material? Let the export duty be imposed.

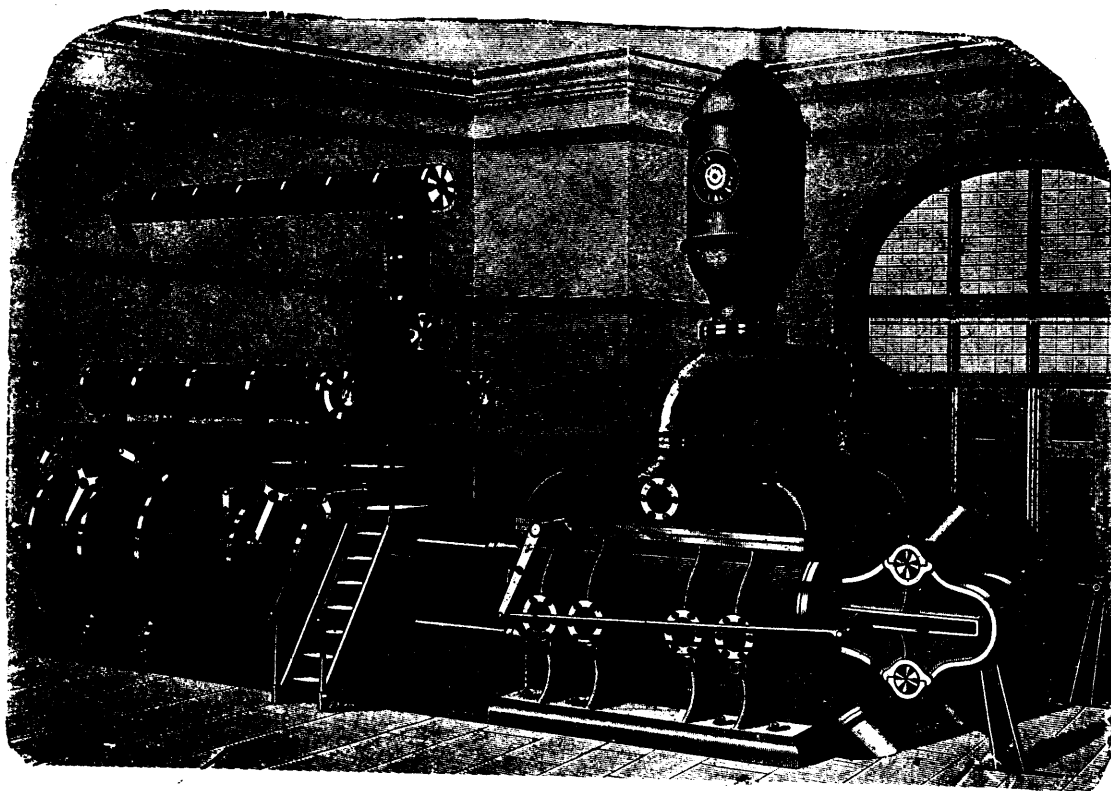
A schooner load of cement for the beach bridge has been returned to the shipper in Montreal, not being up to the standard.—Hamilton Spectator.

One of the most abominably aborted monstrosities in the existing political economy of Canada to-day is the theory acted upon by the Government, that no cement can be made in Canada suitable for use in the construction of even a railway bridge. Here we see, according to the Spectator, a vessel load of cement rejected because of its unfitness, and returned to the shipper in Montreal. This cement was imported from abroad, and is of similar make to such as is required by the Government to be used in all public works, the cement made in Canada being given the go by. There are works within forty miles of Hamilton that produce as good and serviceable cement as can be made anywhere else in the world. The old Welland canal was constructed with Thorold cement; the Sarnia tunnel consumed a quarter million barrels of Thorold cement; many of the finest and best railway bridges and culverts in Canada were constructed with Thorold cement, and it is in evidence that masonry constructed fifty years ago with this Canadian cement, is as good and solid now as ever, showing no signs of deterioration. The distance between Thorold, Canada, and the bridge alluded to by the Spectator is less than forty miles, and yet, because we have officials at Ottawa that are so entirely English, you

JOHN McDOUGALL

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know, and who therefore cannot comprehend that Canada can and does produce as good cement as can be made in England or Belgium, the cement to be used in the construction of the bridge near Hamilton must be brought thousands of miles, from the other side of the Atlantic. The incident emphasises what is a burning shame to Canada.

In a recent issue of this journal comment was made upon the fact that the Dominion Government, to enable the Massey-Harris Company to save \$2,87 upon each machine they export, were sacrificing some of our most valuable industries. The Toronto Globe reproduced our article, and a correspondent of that paper, who is, we presume, a non-exporting manufacturer of agricultural implements, writes it as follows:—

Referring to the extract from THE CANADIAN MANUFACTURER of November 15th, in your "Notes and Comments" in last Friday's Globe, I should like to call your attention to an effect of the rebate of duties on exported implements not mentioned by THE CANADIAN MANUFACTURER or in your comment. As intimated, the Massey-Harris Co., through being able to obtain the ninety-nine per cent. rebate on materials entering into implements which they may export, are enabled practically to compel the producers of iron, paints, etc., in Canada to accept the United States prices. Manufacturers of these goods may quote the Massey-Harris Co., which prices are, of course, away below the prices Canadian makers of these articles are charging non-exporting implement manufacturers of Canada. (If the prices of the United States manufacturers of these goods were not below the prices of Canadian makers, of course there would be no benefit to our iron, paint, etc., producers in having the heavy customs duties we have upon these goods.) This enforced meeting of American prices by our manufacturers of iron, paint, etc., not only results in

almost no profit to them in their trade with the Massey-Harris Co.—while probably leading them to increase their prices to other Canadian implement manufacturers—but as these prices at which the Massey-Harris Co. buys are not limited to the goods used in machines for exporting, but embrace the materials used in implements for the Canadian market, it follows, therefore, that the rebate regulation is practically giving the Massey-Harris Co. (and other exporting implement manufacturers) an advantage over all other Canadian makers of implements equal to the amount of our customs duties on most of the various materials that enter into the manufacture of implements.

Cheap as the bushel of wheat is, it will do more for the farmer to-day than it did in 1878. It will go further towards paying for his reaping machine to-day than it would in '78; it will pay a larger proportion of the price of his mowing machine now than it would then; it will pay as great a part of the price of his waggon now as it would then; the same with the price of his buggy; it will buy far more sugar to-day than it would in '78, and far more cotton; it will go further in paying for a suit of clothes now than it would then; it will buy a better spade, a better scythe, a better pitchfork to-day than it would in '78; it will go as far in paying for his horse-rake and will buy twice as many hand-rakes now as it would then; it will buy more nails and go further towards paying for his cross-cut saw; it will go further towards paying his shoemaker's bill, and will buy a better undershirt to-day than it would then; it will do more towards paying for his wheelbarrow, and it will buy a better washtub in 1895 than it would in 1878; it will go a great deal further towards paying

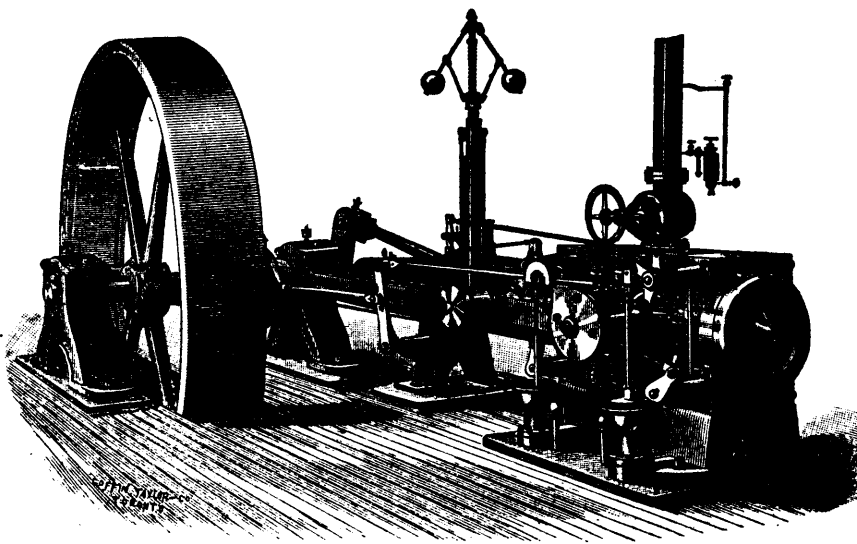
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for his set of harness and will buy more wooden pails to day than it would then ; it will to-day buy more coffee and twice as much tea as it would then ; it will buy a better axe, a better pair of overalls, more fruit jars and more starch than it would in '78. In a word, although the opening up of the fertile fields of India, South America, the Western States and our own North-west has brought down the price of the farmer's bushel of wheat, the prices of almost everything he has to buy have been reduced in a still greater ratio by the keen competition in the manufacture of the same, in our own country, under the benign influence of the National Policy.—*Petrolea Advertiser.*

The argument is offered by the free trade journals that the rapid development of our manufacturing industries has been made, not because of protection, but in spite of it. Consider such figures as these :

	Tons.	
	1880	1890
Great Britain	7,749,000	7,875,000
United States	3,835,000	9,203,000
Germany	2,739,000	4,563,000
France	1,725,000	1,962,000

This shows that the only country in which there was no considerable enlargement of the pig iron product is the free trade country. Was this failure to enlarge, a failure in spite of free trade? Of what use are facts and experience if, when they show a theory to be wrong, we must reject both facts and experience and believe that the theory is right? That this particular product increased two and a half times in ten

years under protection surely cannot be regarded as proving that protection cripples the industry ; and, if it be contended that the increase would have been even greater without protection, how shall that claim be sustained, when, without protection, the British iron product made no increase at all? Note, also, that the total American product was consumed at home. We took the iron and used it in our own industries. Those "markets of the world" of which we hear so much from the free traders, were wide open to British iron-masters, who, however, did not occupy them to a sufficient extent to require the British furnaces to enlarge their product. Now, suppose we had opened our market to British iron with the expectation that we should find a better place to sell our iron in the "markets of the world"—how should we have fared? Well, we have done precisely that thing in the case of woollens, to our heavy loss and the great gain of Englishmen.—*The Manufacturer, Philadelphia.*

The recent convention of the National Association of Paint, Oil, and Varnish Manufacturers, held in New York, adopted a resolution calling on Congress to create a perpetual non-partizan tariff commission, charged with the duty of "adjusting the tariff from time to time," in accordance with the changing conditions of national industry. Such a step, according to the resolution, would remove what is essentially a great business question "from the domain of partizan politics and relegate it to the hands of practical business men." A number of newspapers have warmly indorsed this recommendation. The Philadelphia Ledger (Rep.) says that "Congress could do no wiser, better, or more profitable thing

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for the whole country than to create such a commission." The New York Journal of Commerce (Ind.), regards the plan as totally impracticable, and its reasons are as follows: "The politicians from whom the paint, oil, and varnish manufacturers wish to take the settlement of the tariff question care for absolutely nothing except votes; they try to do what they think in the country at large, but particularly in their own sections of the country, will be popular, and especially popular among the practical business men who have a good deal of money and can be depended on for large campaign contributions. There is not a Republican or a Democratic politician in the country who does not try to adjust his program to the wishes of the majority of the people, and particularly the practical business men who would control every election without an effort if they were agreed. Nobody would dare antagonize the practical business men if they were all on one side, and every professional politician in the country would make haste to get on their side, no matter what his attitude on the tariff had been or what theirs was. . . . The practical business men are just as much divided over the tariff question as the theorists are, who, by the way, have practically no influence whatever in the adjustment of tariff duties. Every item in every tariff has the approval of some business men and the disapproval of others." This emphasizes our contention that in Canada our representatives in the House of Commons should include a very much larger number of practical manufacturers and business men than we now have, and fewer professional politicians, drawn chiefly from the professional classes. But a tariff commission won't do.

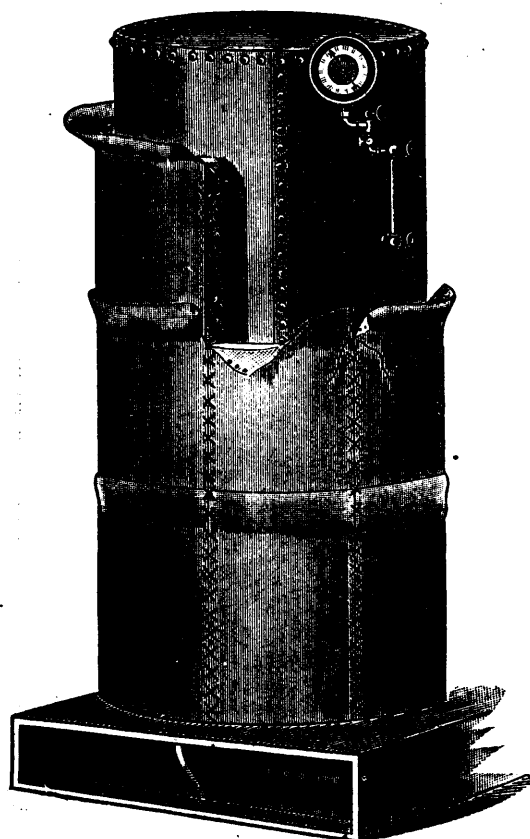
We notice with pleasure that the publishers of the Literary Digest (Funk & Wagnall's Co., Toronto), have recently engaged Prof. J. E. Wells, late of the editorial staff of the Week, to edit a Canadian department for their popular magazine. With the introduction of Canadian matter, The Literary Digest will undoubtedly be the most cosmopolitan periodical published, and one that well deserves the title of "Prince of Weeklies."

The November number of the Canadian Shoe-Leather Journal, Toronto, comes to us as its seventh annual spring trade number, which is a most creditable production in all respects. It contains a fund of useful information regarding what is going on in that branch of Canadian trade, and it also contains many special articles dealing with the styles in footwear of the olden time, the development of the manufacture of morocco, etc. It is of special interest to all interested in that branch of trade, and is one of the evidences of the prosperity of trade journalism in Canada.

Good Housekeeping is a woman's journal, both in birth and being, born of, baptized by, and bred for women of the most intelligent and useful classes of their sex. But home interests touch the party of the other part with equal force, at once as vital, as sensitive, and as far-reaching, in the grand summing up of earthly happiness or misery, as with the gentler sex. For these reasons, in the initial issue of 1896 will be spread viands prepared entirely by the men-folk, giving the men opportunity to have their say as to what the elements, make up and outcome of good housekeeping should be. The discussion will be continued throughout the year. C. W. Clark & Co., publishers, Springfield, Mass.

With its entrance upon its twenty-second year and forty-third volume, the Methodist Magazine makes a special appeal for extended patronage. It is printed in double columns from new type, and will be profusely illustrated with superior engravings. Its marked improvements make it worth double its cost, and should greatly increase its circulation. The articles of stirring patriotism, of biblical illustration, of character study, of the heroism and romance of missions; its illustrated story of Irish Methodism, full of Irish humor, Irish brogue, Irish pathos and Irish piety; its many other serial and short stories will make it more than ever an ideal family magazine. William Briggs, publisher, Toronto.

Outing for December is full of the hearty vigor of these early winter days. The contents are as follows:—"A River Between,"



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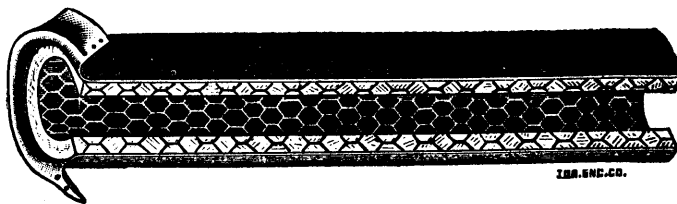
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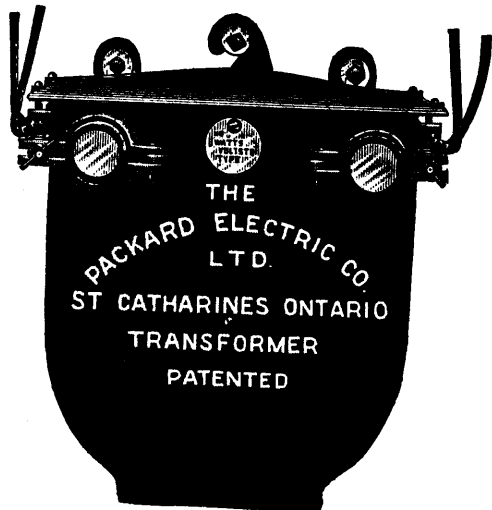
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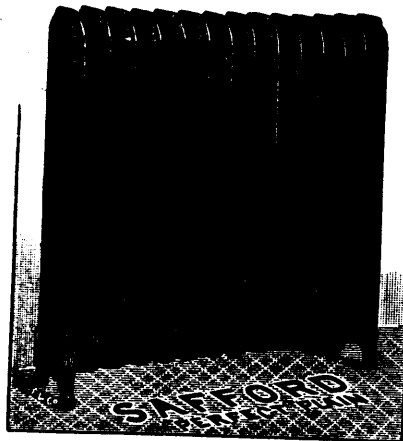
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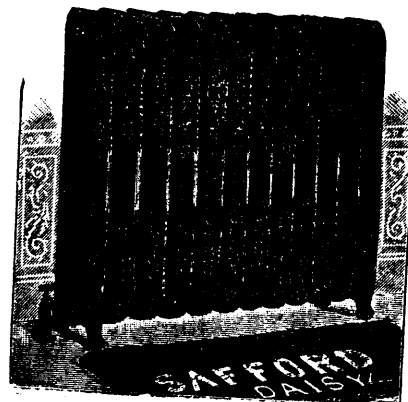
ANTWERP (BELGIUM) EXPOSITION 1894.
SHERBROOKE (QUEBEC) EXHIBITION 1893.

TORONTO (ONTARIO) EXHIBITION 1894
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Largest Radiator Manufacturers
Under the British Flag.



The Toronto Radiator Mnfg. Co. Ltd., TORONTO, ONTARIO

by Florence Guertin; "The Cream of the Vale"; "Charlie," by Ralph Bergengreu; "Skating," by Ed. W. Sandys; "Hunting the Caiman," by Edward French; "Two Hours over Decoys," by E. A. Shepherd; "An Outing in Labrador," by R. G. Taber; "Caribou Hunting in Quebec," by the late E. P. Rogers; "A Flying Visit to Havana," by Annetta Halliday-Antona; "Salmon Fishing on Snake River," by Frank C. Read; "Lenz's World Tour Awheel"; "A Turkey Hunt"; "Up to the Snow in a Dak Gharri"; "Touring Bermuda Awheel," by Thomas B. Dowden; "On the Frontier Service," by Lieut. G. W. Van Deusen; "Characteristics of Canadian Football"; "New Hampshire National Guard," by George H. Moses, and the usual editorials, poems and records.

The Christmas Ladies' Home Journal by far surpasses, both in literary and artistic excellence, any previous issue of that popular magazine. Conspicuous among the contributors are ex-President Harrison, who gives the introductory paper of the series he is preparing upon "This Country of Ours"; Mrs. Mary Anderson de Navarro, who most interestingly tells of "My First Appearance on the Stage"; and Mary E. Wilkins, who gives the first of "Neighborhood Types" papers. Rudyard Kipling's latest and best romance, "William the Conqueror," is begun in this number. James Whitcomb Riley's tenderly reminiscent poem "At the Gate" (superbly illustrated by A. B. Frost), and Kate Greenaway's winsome, dainty little people, are two page features of the number. The musical feature of the number, a hymn, "Jesus, the Very Thought of Thee," is one of Bruno Oscar Klein's best compositions. The Curtis Publishing Company, Philadelphia. One dollar per year; ten cents per copy.

The Copp, Clark Co., Toronto, have sent us the Canadian Almanac for 1896, the forty-ninth volume of this most useful series. Since the first Canadian Almanac made its appearance, in 1848, great improvements have been effected, and the present issue keeps up the record of steady improvement. All the former departments of information are reproduced, and there are several new features. The last two issues have contained interesting articles on the subject of a distinctive Canadian flag, and the series is continued by Mr. E. M. Chadwick, of Toronto, who, in an interesting article, proposes the charging of a triple maple leaf on the field of the ordinary ensign. The article is illustrated by a colored plate representing the blue and red ensigns as they would appear

thus amended. Dr. Bourinot contributes a particularly valuable article on "Forms of Government Throughout the World," prefaced by an article on forms of government in general, and the forms of government through the British Empire.

The publishers of the Montreal Gazette have started a new era in the issue of city weeklies. The price of the weekly edition of the Gazette has been reduced to fifty cents a year. The Weekly Gazette is a large, eight-page paper, well printed, well edited, and, besides giving all the news, contains special features that make it a first-class family journal. To the ladies it gives a special, illustrated page, dealing with fashion changes and other matters interesting to the gentler sex. There is also a literary department, for which the contributions of some of the ablest writers in the English language are being secured. The new story, soon to be started, is by Sir Walter Besant, Chairman of the British Authors' Society, and author of many notable novels. The markets, especially those for dairy products, are fully reported for the weekly edition of the Gazette. It gives all the news of the week, so that its readers are kept informed of all current happenings of importance. After subscribing for a good home paper, no one can do better than send fifty cents for a good general weekly paper, to the Gazette Printing Company, Montreal.

The Christmas number of Scribner's Magazine always has some artistic novelty, and this year it is a series of twelve full-page illustrations by Oliver Herford for a fantastic story, entitled "The Kinetoscope of Time," by Brander Matthews. The illustrations are printed in a delicate tint which is interwoven with the clear black text and flows out into the margins of the page. The whole effect is something new in magazine illustration. Mr. Matthews' story is equally original in conception, and is a fitting companion to his "Primer of Imaginary Geography," published last year. Frank R. Stockton has a Christmas love story, with the characteristic title "The Staying Power of Sir Rohan"—which is in his very best manner. In an entirely different manner is Charles E. Carryl's thrilling detective story, "The River Syndicate," the action of the story is in London, and it is illustrated by the English artist L. Raven Hill. Henry van Dyke, under the title "A White Blot," has a most poetic and imaginative tale of a picture. Joel Chandler Harris has a characteristic tale of a faithful slave, full of touches of homely pathos; it is entitled "The Colonel's 'Nigger Dog.'"

The Royal Electric Comp'y

MONTREAL, QUE.



Western Office... TORONTO, ONT.

Are now prepared to receive orders for the justly celebrated

STANLEY TRANSFORMERS

— A MONEY MAKER FOR THE CENTRAL STATION —

None equal them. They increase station capacity. They diminish operating expenses.

Economy Efficiency Regulation

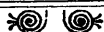
ALSO A FULL LINE OF ELECTRICAL APPARATUS

ARC DYNAMOS ARC LAMPS RAILWAY GENERATORS RAILWAY MOTORS

S. K. C. TWO PHASE ALTERNATING GENERATORS AND MOTORS

Direct Current Generators and Motors, Switchboards, Instruments, Wire, Electrical Supplies.

CORRESPONDENCE SOLICITED For ELECTRIC LIGHTING, RAILWAY, MANUFACTURING AND MINING WORK
ISOLATED PLANTS, CENTRAL STATIONS, LONG-DISTANCE TRANSMISSION
FOR LIGHT AND POWER.



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.

F. McCarty, Revelstoke, B.C., will erect a cold storage warehouse at that place.

Work has been begun upon the foundation of the Cobban Manufacturing Company's new factory in Toronto.

Z. Guimont, Cap St. Ignace, Que., has erected a very practical butter factory, which is considered as a model, the machinery having been supplied by Vidal, Fils & Co., of Quebec.

Wallaceburg, Ont., will become incorporated shortly, and the waterworks question will be revived by the next council.

The Toronto Electric Light Company propose erecting a new arc lighting station at a cost of about \$20,000.

The Council of Vernon, B.C., are introducing a by-law to provide for a waterworks system for that town.

The Chatham Gas and Electric Company, Chatham, Ont., will place new machines and engines in their works and remodel their plant.

The City Council of Vancouver, B.C., have approved of G. T. Moncton's proposal to establish a smelter and refining works in that city, and a by-law will be submitted to the ratepayers to grant him a bonus. The works will cost about \$350,000.

The Citizens' Gas Control Co., London, Ont., are applying for incorporation with a capital stock of \$9,000, to manufacture appliances for controlling and regulating the flow and pressure of gas, etc.

Mr. Charlebois, of Three Rivers, Que., has purchased a steam boiler from Vidal, Fils & Co., to place in his new yacht.

The Ripley Flax Co., Ripley, Ont., are applying for incorporation with a capital stock of \$10,000 to manufacture flax, etc.

The Goderich Knitting Co., Goderich, Ont., are applying for incorporation with a capital stock of \$20,000 to manufacture knitted goods, etc.

Lemieux & Tanguay, of Buckland, Que., have bought from Vidal, Fils & Co., of Quebec, an engine, boiler and all the machines for a saw mill.

Authority has been conferred upon the Toronto Electric Light Co., by supplementary letters patent to increase its capital stock from \$500,000 to \$700,000.

The Pelee Gas and Oil Co., Kingsville, Ont., are applying for incorporation with a capital stock of \$30,000 to bore for natural gas, oil, etc.

A farmers' syndicate, of Ste. Agathe, Que., has just closed a contract with Vidal, Fils & Co. of Quebec, for supplying a butter factory complete.

The City Council of Toronto have decided to construct a new intake pipe across the bay, to replace the present wooden conduit, and tenders will be asked for. The cost is estimated at about \$75,000. Estimates will be asked for both iron and steel pipe.

Mr. V. M. Roberts, C.E., of St. Catharines, Ont., has made a survey of Huntsville, Ont., with a view of establishing a system of electric lights at that place. The cost would be about \$10,000.

The company that recently acquired the Kakabeka waterworks is negotiating with Fort William, Ont., for the putting in of an electric light plant.

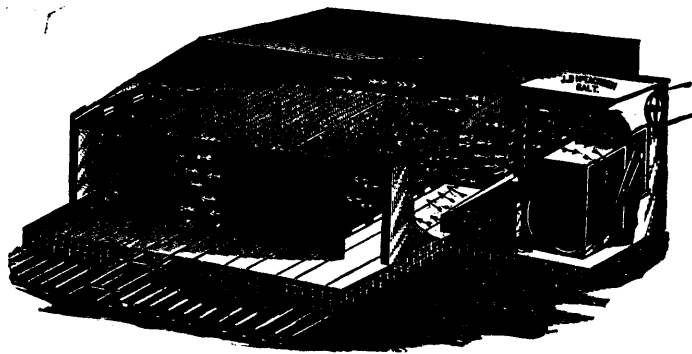
Richard & Cie, of Que., have placed one Westinghouse engine of sixty horse-power, supplied by Vidal, Fils & Cie., of the same city. This is intended to drive their new factory for making all sorts of leather board.

A meeting was held in Owen Sound, Ont., a few days ago to discuss the advisability of starting a sugar beet industry at that place. Mr. J. C. Sinclair and others are interested.

Mr. J. D. Ronald, Brussels, Ont., has been interviewing the authorities of Toronto with a view of moving his steam fire engine works to that city from Brussels. Mr. Ronald said he would bring \$20,000 worth of machinery and spend \$6,000 in buildings.

McEachren's System of Drying, Heating and Ventilating

Under Recent Patents.



CHEAP AND EFFECTIVE.
HIGHLY APPROVED OF BY PRACTICAL MEN.

The following is a specimen of letters received from customers:

J. D. McEACHREN, Esq., Galt, Ont.

OTTAWA, April 1, 1895.

DEAR SIR,—Replying to your enquiry regarding Dry-Kiln purchased from you last summer, we beg to state that our lumber is stained hardwood, principally birch, which is put through a chemical process thereby rendering seasoning a very difficult operation. We tried to have it dried in the several styles of kilns used by factories in this district, all of which failed to take the moisture out of the core of the wood. In August last we put in one of your kilns with a capacity of 10 cars, or 30,000 feet, and since that time have seasoned most satisfactorily about 200,000 feet. The boards come out free from checks and warps, and we are now thoroughly convinced that it is the only dry-kiln in the market which fills the bill both as to efficiency and economy.

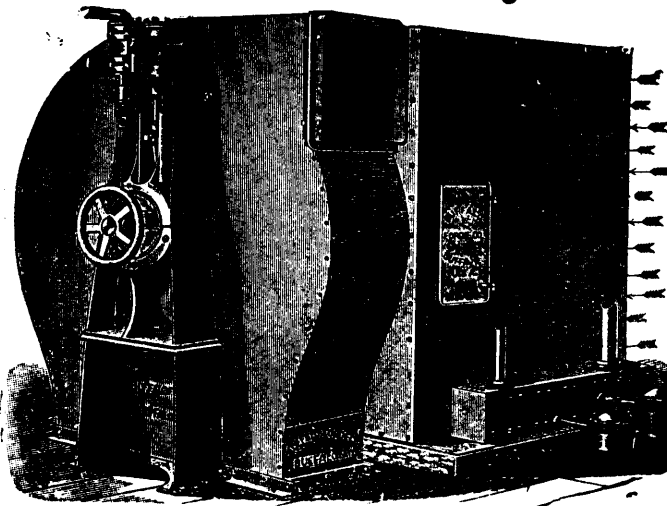
Yours truly,

McRAE BROS. & CO.

For particulars address—

McEACHREN HEATING AND VENTILATING CO.
GALT, ONTARIO

Buffalo Lumber Dry Kilns



THE LARGEST DRIER IN AMERICA IS EQUIPPED WITH A "BUFFALO" HOT BLAST APPARATUS.

THE OWNERS ARE ENTHUSIASTIC.

All users of Buffalo Kilns write letters similar to this one:
"The Kiln answers every purpose to perfection; the Dry Rooms are run with exhaust steam at more nothing in the way of cost, compared with the old way. Your arrangement is very simple and easily managed, besides being a money saver in operation. We are able, with the Kiln you sent us, to dry soft woods in three days, and hardwoods in five days. That's good enough for anyone."—SMITH BROS., Sayre, Penn.

Send for Catalogue.

Buffalo Forge Co., Buffalo, N.Y., U.S.A.

SOLD IN

Toronto, Ont., by H. W. Petrie.
Bantford, Ont., by Canadian Machinery and Supply Co.
Montreal, Que., by Canada Machinery Agency.
Chicago Store, 22 and 24 West Randolph Street

The Sydenham Glass Company, Wallaceburg, Ont., will rebuild their warehouse immediately.

Gagne & Lord, Cap St. Ignace, Que., are building a saw mill, and have got the engine and boiler from Vidal, Fils & Co., of Quebec.

W. B. Berry, Quebec, Que., is erecting a factory near Indian Lorette, Que., for the manufacture of asbestos cloth, etc.

Sherbrooke, Que., has offered the Gardner Tools' Works Company of Brockville, Ont., \$5,000 and twenty years' exemption from taxes to remove to that place. The works at Brockville, Ont., employ about seventy hands.

Page, Lacombe & Cie., of St. Ephrem de Tring, Que., have purchased from Vidal, Fils & Cie., of Quebec, two cream separators, engine, boiler and all the machines for a butter and cheese factory combined.

The annual meeting of the Hamilton Iron and Steel Co., Hamilton, Ont., was held Nov. 14th, when the following named directors were elected: John Milne, C. A. Birge, J. J. Morehouse, J. H. Tilden, Emelius Jarvis, W. V. Reynolds (New York), R. R. Morgan, W. Southam and George Hope. At a subsequent meeting of the directors J. H. Tilden was elected president; John Milne, vice-president; W. V. Reynolds, secretary, and J. J. Morehouse, treasurer and general manager.

Jos. Valliere, of St. Etienne de Lauzen, Que., has bought an engine and boiler for their saw mill, from Vidal, Fils & Co., of Quebec.

The Dodge Wood Split Pulley Company, Toronto, Ont., have just completed and started running at the pulp works of E. B. Eddy Company, Hull, Que., two more mammoth rope drives of 600 horse-power each. These drives or transmissions consist of a series of iron-grooved wheels of immense size, and are used to convey the power from special new water wheels installed recently for the additional pulp-grinding machinery added. The Dodge Company contracted for the erection of the drives complete, and are just in receipt of a letter from the Eddy Company thanking them for the prompt and satisfactory manner in which the work was completed. The Eddy Company are one of the largest power-users in Canada, and their immense success with rope drives put in by Dodge Wood Split Pulley Company would warrant other power-users looking into the system when making changes or additions.

Vidal, Fils & Co., of Quebec, have supplied a cheese factory complete to Levesque & Danjou, of St. Pacome, Que.

Devereux & Prevost, Sandon, B.C., contemplate putting a waterworks system in that place.

James Walkerton, C.E., of Walkerton, Ont., is in Creemore, Ont., making the necessary surveys for a system of waterworks.

X. Savard, of St. Ambroise, Que., has bought a Westinghouse steam engine for his saw mill, from Vidal, Fils & Co., of Quebec.

Hill & French's lumber mill at Ship Harbor, N.S., was destroyed by fire Nov. 20th. Loss about \$7,000.

The Messrs. Miller of Chatham, N.B., will erect a new foundry at that place.

A syndicate of the Island of Orleans, Que., have made an agreement with Vidal, Fils & Cie., of Quebec, for the machinery of a new saw mill and a butter factory complete.

The Montague Paper Company have purchased that extensive sawmill, owned by Mr. Dudley, at Lake Megantic, Que. This is for the purpose of increasing their output of pulp.

Mr. O. Hopkinson, Waterville, Que., is erecting a machine shop at that place.

P. Boivin, of St. Ambroise, Que., has purchased from Vidal, Fils & Co., of Quebec, a steam engine and boiler for his saw mill.

The Buffalo Forge Co., Buffalo, N.Y., have sent us a circular containing a description of a new steel plate bellows forge built by them to be used by bridge builders, boiler-makers, structural ironworkers, etc. The circular informs us that these forges yield a powerful, positive and continuous blast, produced by the improved double-acting bellows manufactured at their works, while the new Buffalo escape valve prevents all possibility of gas explosion. The drum or barrel-shaped body of the forge is made of heavy rolled steel reinforced at top and bottom, and so constructed that it will endure the roughest kind of handling. The bellows are made of carefully selected oak-tanned leather. The total height to top of bowl is thirty inches and the diameter nineteen inches. All that is necessary to prepare the forge for shipment is to secure the lever. The simplicity of construction and compact form commends this forge to the practical purchaser at sight.

...INCANDESCENT LAMPS...

Manufactured by....

THE EDISON AND SWAN UNITED ELECTRIC LIGHT CO.

STAND HIGHEST IN THE MARKETS OF THE WORLD
FOR GENERAL ELECTRICAL AND MECHANICAL
PERFECTION, AND ARE MADE FROM 1 TO 2,000 C.P.
IN ALL VOLTAGES, COLORS AND SHAPES . . .

Electrical Supplies of Every Description

JOHN FORMAN, 650 CRAIG STREET
MONTREAL



.....Extracts, Fruit Juices.....
Colors, Essential Oils, Acids,
and Bottlers' Supplies.

“Blue Seal”

Is the Trade Mark that Bottlers are fast finding out stands
for the Most Delicately Flavored, Always Uniform,
and Most Economical

Vanilla Extract

Made. Of guaranteed excellence, it is sold at a reasonable price
and gives absolute satisfaction to every user. Try it once.

SEND FOR SAMPLE

.... AND

BOTTLERS' PRICE-LIST.

McKey & Co.,
36 Hamilton Street,
Boston, Mass.



James Sims, Blackville, N.B., is erecting a large sash and door factory.

Work on the power plant for the Canadian Niagara Company, Niagara Falls, Ont., will begin very shortly. The franchise calls for the furnishing of power in 1897, but Mr. Rankin says the company will be doing it long before that time. The plant on the Canadian side of the river will be considerably larger than that on the American side.

It has been decided that the Niagara Falls Park and River Railway Company can sell its surplus power until such a time as the Canadian Niagara Power Company develops and has ready for market the power of the Falls, which it is claimed it will do within the period prescribed by its charter that expires in 1897.

Mr. John McKenzie, Petrolia, Ont., has purchased the Kincardine planing mill and sash and door factory.

The Royal Carpet Company, Guelph, Ont., have added a dye plant to their equipment.

D. M. Fraser, Almonte, Ont., is having a new water wheel put into his knitting mill by Messrs. J. C. Wilson of Glenora, Ont.

Charles Raymond, sewing machine manufacturer of Guelph, Ont., has decided not to remove his factory to Brantford, Ont. A joint stock company is being formed to carry on the business on a much larger scale, and the city has granted exemption from taxes.

The Dodge Wood Split Pulley Company, Toronto, have recently supplied complete outfits of friction clutch pulleys and cut-off couplings to the Collingwood Electric Light Company, Collingwood, Ont.; the Halifax Electric Light and Power Company, Halifax, N.S.; the Perth Electric Light and Power Company, Perth, Ont. They report lots of orders for their new split friction clutch.

Enterprising bottlers who desire to use only the best and most delicate extracts in their productions will be interested in the full page advertisement of McKay & Company to be found in this issue. This house is securing an enviable reputation for their productions, and will be glad to send free samples of any of the many extracts that they manufacture to any bottler who will mention that they saw their advertisement in the CANADIAN MANUFACTURER. Their goods are right and their prices are right, and we believe many of our subscribers will be pleased with the outcome of this introduction to this pushing, energetic firm.

John Humberstone will erect a large flax mill at Ripley, Ont.

The Farmers' Binder Twine factory, at Brantford, Ont., is to be materially enlarged, and the addition to be fitted with new machinery. A rope plant will also be added.

The Northern Lumber Co., Montreal, are applying for incorporation with a capital stock of \$20,000 to manufacture lumber, etc.

The Bedford Manufacturing Co., Bedford, Que., are applying for incorporation with a capital stock of \$65,000 to manufacture edge tools, etc.

A syndicate is being formed in Montreal for the purpose of obtaining a charter for constructing a highway bridge from Montreal to St. Lambert, Que. It is intended to connect Montreal, via the proposed bridge, with Longueuil and Laprairie, by means of electric railways. The bridge, as designed, will have ample roadways for wheeled vehicles, double tracks for electric cars, footpaths, and special accommodation for bicyclists. The cost of the proposed bridge will be about \$1,250,000.

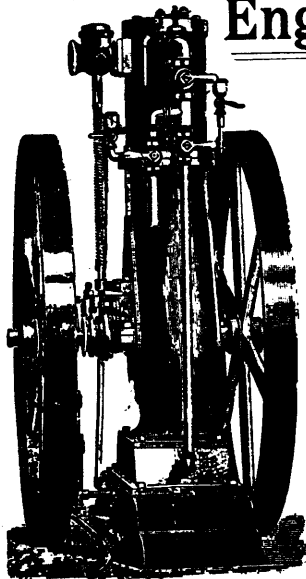
A by-law is to be submitted to the town of Petrolia, Ont., on January 24th next, to decide whether the corporation will appropriate \$172,000 for the construction of a system of waterworks for that town.

The Toronto Electric Motor Co., Toronto, inform us that within the last few days they have supplied their motors as follows: McLaughlin Carriage Works, Oshawa, Ont., one 300 light dynamo, to replace dynamo of Edison make; Henderson Cycle Manufacturing Co., Goderich, Ont., one 150 light dynamo; Masterman Lumber Co., Chatham, N.B., one 300 light dynamo; Duncan McLennan, Campbelltown, N.B., one 75 light and three 20 light dynamos.

The Goold Bicycle Co's works, at Brantford, Ont., are being extensively enlarged. The big office building will be nearly double its present size. Here the Brantford Supply Co., recently formed by the shareholders of the Goold Bicycle Co., will have its headquarters. The Bicycle Company have put in an extensive oil plant. A tank with a 5,000 gallon capacity has been erected, and the manufacture of gas for brazing purposes will be carried on on the premises. They will also manufacture all their bicycle rims, casings, etc., instead of importing them from the States. They employ over 200 men, and will increase the number to 300 very shortly. Mr. Linton is manager.

THE ELECTRICAL GAS OR GASOLINE...

Engine



WRITE FOR PRICES AND TESTIMONIALS

J. R. BAIRD

WOODSTOCK, - - - ONTARIO

Firstbrook Bros.

Dovetail and Packing Boxes

Pop-Pins, Side Blocks and Cross Arms. Wood

Printers, Etc.

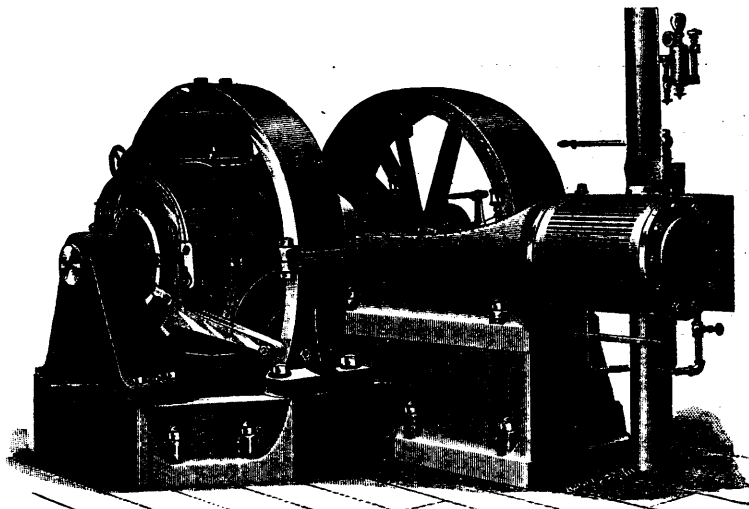
Cigar Boxes. Shipping Cases.

TORONTO, - - - ONTARIO.

Write for Prices.

ROBB-ARMSTRONG ENGINES.

Simple, Tandem and Cross Compound.



Correct Design

Superior Workmanship

We highly recommend the Robb-Armstrong Engine for direct connection to Dynamo.

Robb Engineering Company (Ltd.)

AMHERST, N.S.

AGENTS-- Canadian Machinery Agency, 321 St. James Street, Montreal. William McKay, Seaforth, Ont., Traveller.

Messrs. Wells Bros. are about to erect a weaving mill at Chicoutimi, Que., which will give employment to about fifty hands.

The Tillson Co., Tilsonburg, Ont., have been incorporated with a capital stock of \$200,000 to acquire the milling business, now being carried on by E. D. Tillson, of that place.

J. W. Carmichael & Co., New Glasgow, N.S., are applying for incorporation with a capital stock of \$250,000 to carry on business as manufacturers, miners, etc.

The Dodge Wood Split Pulley Co. report a steady demand for their patent Wood Split pulleys, and Split Friction Clutch pulleys. They have recently supplied the following factories with outfits: H. H. Lozier & Co. Bicycle Works, Toronto Junction; Kemp Mfg. Co., Toronto; E. B. Eddy Co., complete outfit for new pulp mill; Dominion Gold Mining and Reduction Co., Rat Portage; Langmuir Mfg. Co., Toronto; Jno. Piggott & Sons, Windsor, Ont.; Montreal Cotton Co., Valleyfield, Que.; Robb Engineering Co., Amherst, N.S.; Ottawa Porcelain and Carbon Co., Ottawa.

The Toronto Electric Light Co., Toronto, who now operate a large lighting plant, find it necessary to enlarge the same, and will make a considerable addition to their works, including a new power house in which will be placed an 1,800 h.p. vertical high pressure engine, now being built for them by Messrs. John Inglis & Son, Toronto, to drive three large incandescent generators. It is understood that this company will reach out for a considerable portion of the city patronage for incandescent lighting, power, etc.

Messrs. H. A. Lozier & Company, manufacturers of Cleveland cycles, Toronto Junction, write us as follows:—We have noted with much pleasure your article regarding our industry in your issue of Nov. 15th. It is true we have bought a large supply of machinery from Messrs. Bertram & Sons, but we also bought largely from McGregor, Stevens & Hamilton, and the Goldie & McCulloch Company of Galt, Ont., the A. R. Williams Machinery Company, London and Toronto, etc. We have not purchased a single machine in the United States which could be manufactured in Canada. We would be glad to have you call at our works and allow us to show you a bicycle plant the like of which has never been seen in Canada—but few factories in the United States or England being equal thereto. Our machines are all of new and modern design, many of them intricate, all of them perfect.

Mr. A. Moore, carriage maker, Petitcodiac, N. B., whose premises were recently destroyed by fire, will rebuild immediately.

Messrs. Leiser & Hamburger, Nanaimo, B. C., will erect a 26x24 ft. addition to their premises.

British Columbia Paper Manufacturing Co., Alberni, B. C., have sold their factory to the Alberni Paper Mills Co.

H. C. Peacock, Botsford, N. B., will put a new wheel in his grist mill, and make other improvements which will double its working capacity.

The British Columbia Pottery Co., Victoria, B. C., are putting new machinery in their works.

The Rochester Lamp Co., Rochester, N. Y., have opened a warehouse at 69 Bay street, Toronto, where they will carry a full line of their celebrated Rochester lamps. Mr. George C. Card is the manager for Canada.

A saw mill near Kent Junction, N. B., owned by the Sumner Co., of Moncton, N. B., was destroyed by fire Nov. 12th. Loss, about \$1,700.

AUSTRALIA.

Boswell, Cross & Co.

CANADIAN MANUFACTURERS' AGENTS

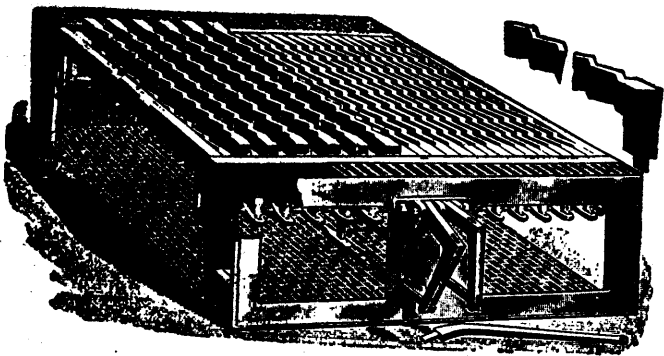
Wynyard Square, Sydney, New South Wales.

All Communications promptly attended to.

References: { Menzie, Turner & Company, Toronto.
Dominion Suspender Co., Niagara Falls, Ont.

THE VOLCANIC PATENT SHAKING GRATE

MANUFACTURED BY THE GURNEY FOUNDRY CO., Ltd., Toronto.



THE TORONTO FERRY COMPANY, LIMITED.

TORONTO, July 11th, 1895.

MESSRS. THE GURNEY FOUNDRY CO., LTD., TORONTO.

DEAR SIRS—I have much pleasure in stating that the Volcanic Grate bars you placed on our Str. "Island Queen" have proved most satisfactory. They are the best shaking bars I have yet seen and my engineer is very much pleased with them, and reports a great saving in fuel. The exact saving I will be able to figure out in a few days. They are far superior to the ordinary grate bars we have been using which need renewing almost every season, and as far as I can judge at present your bars promise to last a number of years.

Yours truly,

(Sgd.) W. A. Esson, Manager.

THE GURNEY FOUNDRY CO., Ltd., TORONTO.

DOMINION BRIDGE CO.

(LIMITED).

MONTREAL AND LACHINE LOCKS, P.Q.

Steel Bridges for Railways and Highways,
Steel Piers and Trestles, Steel
Water Towers and Tanks, Steel
Roofs, Girders, Beams, Columns,
for Buildings.

A Large Stock of....

ROLLED STEEL BEAMS, JOISTS, GIRDERS
CHANNELS, ANGLES, TIES, Z BARS
AND PLATES ALWAYS ON HAND

IN LENGTHS TO THIRTY-FIVE FEET

Tables, giving Sizes and Strength of Rolled Beams
on application.

Post Office Address, - - MONTREAL

J. H. MCGREGOR, Agent, Canada Life Building
TORONTO, ONT.

The Canadian General Electric Co. will instal a 300 light electric plant in the sawmills of E. D. Davison & Sons, Bridgewater, N. S.

Messrs. Howard & Co., South Edmonton, Assa., have started a pork packing industry at that place.

Warden Early Kay, Salisbury, Ont., is erecting a steam saw mill near that place.

Mr. Martin McGillis' saw mill, at St. Andrews, Ont., was destroyed by fire Nov. 16th.

A rich silver vein has been discovered on the north shore of Lake Superior, near the mouth of the Paysplat river, not far from the Indian reservation.

The Western Electric Light, Heat and Power Co., Vancouver, B.C., are applying for incorporation with a capital stock of \$150,000, to operate works for the production of electricity for the purposes of light, heat and power, and to manufacture electrical appliances.

The Safety Barb Wire Co., Toronto, are having two of the latest rotary two and four point barb wire machines built for them by the Diamond Machine and Tool Co., Toronto.

The Londonderry Iron Co., Londonderry, N.S., will commence to make puddled bar iron soon. This will give employment to about 150 men.

Henry Heise, Preston, Ont., is erecting a saw mill at that place. Wm. Field's wagon shop, at St. George, Ont., was destroyed by fire Nov. 8th.

Wm. A. Marsh, Quebec, Que., will erect a large boot and shoe factory at that place.

Taylor, Scott & Co's brush-making machinery building, Toronto, was damaged by fire Nov. 14th, to the extent of about \$6,000.

The output of the New Glasgow Iron and Railway Company, New Glasgow, N. S., notwithstanding a temporary shut down of the works, will amount to about 25,000 tons of pig iron this year, which is a considerable increase over the furnace yield of the previous twelve months. In 1893 the production was 22,500 tons, valued at \$270,000. The company employ steadily about 500 men, 400 tons being the amount of ore mined per month.

William Wright's grist mill, at Bradford, Ont., was destroyed by fire Nov. 19th. Loss, about \$20,000.

E. Roblin's saw mill and evaporator, at Ameliasburg, Ont., were destroyed by fire Nov. 14th. Loss, about \$4,000.

Murney & Co., Sarnia, Ont., will erect a saw mill with a 10,000 ft. capacity.

The M. M. Boyd Lumber Co., Bobcaygeon, Ont., have purchased the saw mill and timber limits at Cowichan, B. C.

The Victoria Canning Co., Victoria, B.C., will build a new canning factory.

The Waterous Engine Works Co.'s new works at Brantford, Ont., are fast nearing completion. The main building is 300 ft. long and 120 ft. wide, and has a central space of 40 ft. wide extending to the roof, over which a travelling crane will be operated. On each side of the centre is a 40 ft. space, with a gallery the full length of the building. The foundry is 80 ft. wide and 100 ft. long, with a central space of 40 ft. and two side spaces of 20 ft. each. The blacksmith shop is 80x50 ft. The boiler shop is 120x87 ft. The power house is 60x40 ft., in which a 250 h. p. engine will be located. The heating will be by the hot blast system. The new quarters will accomodate about 400 men. Plenty of light and ventilation form two of the leading features, and the whole effect produced by the structures is one of solidity and roominess, while the comfort of the hands has been steadily kept in view.

Kay Electric Manufacturing Co.

255 James St. N., Hamilton, Ont.

Makers of.....

ELECTRIC MOTORS

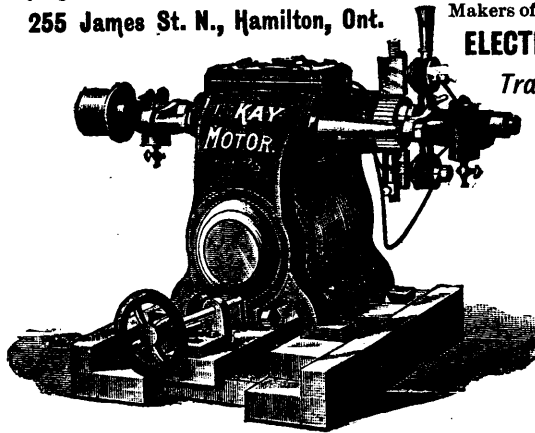
Transformers

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PLATING

MACHINES

ETC.



Please let us know your requirements.

Write for latest prices and testimonials.

F. LEADBEATER

Manufacturer of the

LEADBEATER

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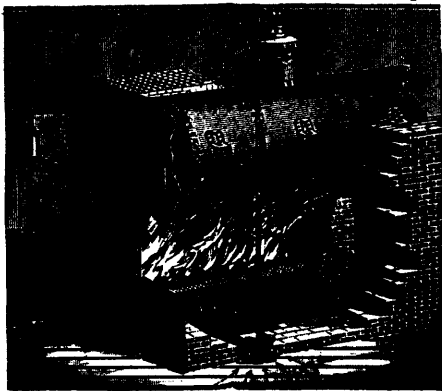
FURNACE

OR AIR FEEDING
DEVICE

For burning hard coal and coke, screenings, soft slack, sawdust, tan bark, cinders, etc.

441 24th Street
Detroit, Mich.

In ordering this device be sure to give diameter and length of boiler.



JORDAN CHAMBERS 17 JORDAN ST.

W. J. KRAMER SIGNER & ENGRAVER ON WOOD

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EVERY LIVE BUSINESS MAN

WANTS A....

List of the Manufacturers of Canada.

The Buyers' and Sellers' Guide of Canada

1895-96, CONTAINS:

- 1st—A list of such articles as are manufactured in Canada under 4,000 sub-headings, under which are 3,000 manufacturers of over 10,000 different articles.
- 2nd—A list of Grain Merchants of the Province of Ontario and Manitoba who are classified as in the article list under sub-headings of the kind of grain that is shipped from their locality.
- 3rd—A list of Flour and Feed Merchants of the Province of Quebec and the Maritime Provinces who handle in car lots or larger quantities.
- 4th—A list of the Hardware Merchants throughout the Dominion who handle hardware goods only.
- 5th—A GENERAL LIST, alphabetically arranged for addressing purposes, comprising Saw, Lath and Shingle Mills, Heading and Stave Factories which cut from the log.

A list of Planing Mills, Sash, Door and Blind Factories, Furniture, Piano and Organ Factories, etc., which manufacture from lumber.

A list of Grist, Flour, Chop, Corn Meal and Oat Meal Mills, etc., which grind grain.

A list of manufacturing Machinists, which includes all metal workers using steam power. A total of over 7,000 addresses.

Address....

PRICE \$5.00 PREPAID DELIVERY.

The Manufacturers' List Co., 224 Board of Trade Bldg., MONTREAL.

LAURIE ENGINE CO., ST. CATHERINE STREET EAST, MONTREAL
ENGINEERS AND CONTRACTORS

COMPLETE MOTIVE PLANTS, ETC.

IMPROVED **Corliss Engines**

High Pressure, Condensing and Compound

FEED-WATER HEATERS and PURIFIERS

Heavy Fly Wheels a Specialty.

Sole Agents in Prov. of Quebec for

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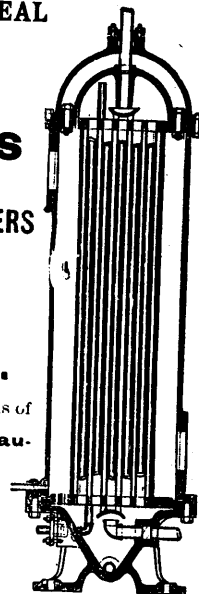
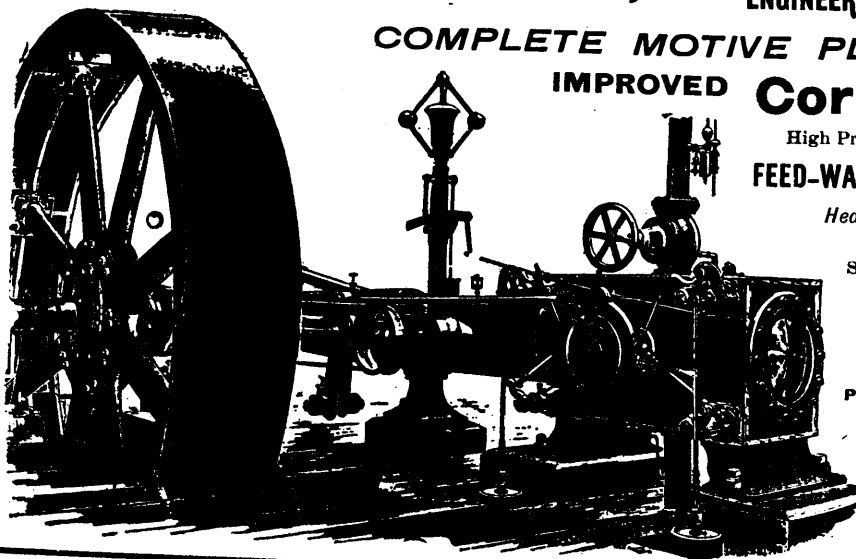
Manufacturers of all kinds of

Pumps, Condensers and Hydraulic Machinery

Sole Agents in Canada for the

HOLLY GRAVITY

RETURN SYSTEM



INSOLVENT NOTICE.

In the matter of

La Cie Electrique
St. Jean-Baptiste

Of the City of Montreal, Canada, P.Q.

In Liquidation.

The undersigned will sell by Public Auction, in three lots, at the office of Chs. Desmarteau, Liquidator, No. 1598 Notre Dame St., Montreal, Canada, P.Q., on

Thursday, the 19th of December, 1895

At Eleven o'clock in the Forenoon.

All the immovable properties and movable assets, of the said Company, consisting of:

(1) All those tracts and parcels of land situated in St. Jean Baptiste Ward, in the City of Montreal, Province of Quebec, Dominion of Canada, described as follows:

(a) The north-easterly parts of lots numbers 32 (thirty-two), 33 (thirty-three) and 34 (thirty-four), according to the official subdivisions of lot number 10 (ten), of the official cadastre, of the Village of St. Jean Baptiste, comprising an area of 4970 (four thousand nine hundred and seventy) feet, more or less; and bounded towards the North-East by Montana Street; towards the South-East by Rachel Street; towards the North-West by lot number thirty-five of said official subdivision of said lot number Ten; and towards the South-West by the remaining parts of said lots numbers thirty-two, thirty-three, and thirty-four, of said official subdivision of said lot number Ten, with buildings and dependencies thereon erected.

(b) Lots numbers 35 (thirty-five), 36 (thirty-six), 37 (thirty-seven), 38 (thirty-eight), 39 (thirty-nine), 40 (forty), 41 (forty-one), and 42 (forty-two), of said official subdivision of said lot number 10 (ten), comprising an area of 17206 (seventeen thousand two hundred and ninety six feet), feet, more or less; bounded towards the North-East by Montana Street; towards the South-West by lot number sixty-one (a) of said subdivision of lot number Ten; towards the North-West by lot number forty-three; and towards the South-East by lot number thirty-four of said subdivision of said lot number Ten, together with the right of passage in common with adjoining proprietors in the lane at rear of said lots.

(c) All Engines, Boilers, Dynamoes, Tank (45,000 gallons), machinery, Belting, Shafts, and general plant used for manufacturing and generating electricity, as well as the wires and posts, transmitters, meters, lamps, etc., used for distributing and furnishing electric light to the citizens of Montreal and suburbs; the material and stock used for repairing the lines of the Company, the whole amounting as per inventory to One Hundred and Forty-Four Thousand, Three Hundred and Seventy-One Dollars, \$144,371.00.

(d) The Franchise Rights and Privileges

acquired by said Company to plant poles in the Streets of the City of Montreal.

(2) The office furniture and fixtures, etc., amounting to \$196.00.

(3) The book-debts amounting as per list to \$3,456.00.

The purchaser of the immovable and dependencies described in paragraph (1) shall have to make a Cash Deposit of Five Thousand Dollars Currency (\$5,000), at the time of adjudication.

The purchasers of movable assets described in paragraphs (2) and (3) shall have to make a Cash Deposit of Ten Per Cent. at the time of adjudication.

For further information apply to

CHS. DESMARTEAU, Liquidator,

1598 Notre Dame Street,

Montreal, Canada, P.Q.

MARCOTTE FRERES, Auctioneers.

Steam Traps

Pipe Machines

Buffing and Polishing Lathes

Strapping Machines

Shafting Hangers

G. T. Pendrith

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73 to 81 Adelaide Street West

TORONTO

Welland Vale Manufacturing Co.

LOCK No. 2, ST. CATHARINES, ONT.

Manufacturers of.....

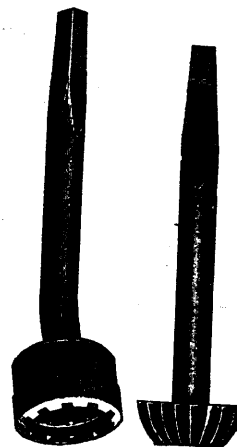
AXES, SCYTHES, FORKS, HOES
RAKES and EDGED-TOOLS

BALL CHECK VALVES.
BALL GLOBE VALVES.
BLOW-OFF VALVES FOR
BOILERS A SPECIALTY
OIL AND SALT WELL SUPPLIES.

T. Draper

Manufacturer of

Refacers for Globe Valves



Valve Refacer.

Seat Refacer.

Jenkins' Valves and Water Taps

Perfectly True Brass Balls

For all purposes—Hollow or Solid.

PETROLEA, ONT.

FOSTER MACHINE CO.
Foster 1894
Eighteen Ninety Four.
18-90-4
Cone Winder.
WESTFIELD, MASS.

J. Allard, Cookshire, Que., will erect a sash and door factory at that place.

The Merrickville Milling Co.'s works at Merrickville, Ont., were destroyed by fire Nov. 13th. Loss about \$15,000.

The Rubber Tire Wheel Co., of Springfield, Ohio, are contemplating the establishment of a branch factory at Hamilton, Ont.

The directors of the Canadian Cold Storage Company have decided to construct warehouses in Montreal, Toronto and Brantford, Ont., immediately, and to erect a complete system of warehouses throughout the Dominion.

The St. Lawrence Starch Co., Port Credit, Ont., have recently built extensive additions to their works.

Mr. W. F. Fitch, of Marquette, Mich., who was recently in Montreal, is interested in the iron ore regions of Ontario. He says that there is a great future for Canadian red hematite ore. This ore, he says, is very pure, and almost free from phosphorus, and as a matter of fact the Standard Oil Company and other concerns are quietly buying up Canadian red hematite iron mines.

The Ottawa Novelty Co., Ottawa, Ont., have been incorporated with a capital stock of \$10,000 to acquire the business now carried on by the Ottawa Novelty Co. at that place, and to manufacture lamps, electroliners, etc.

The Goderich Knitting Co., Goderich, Ont., are applying for incorporation with a capital stock of \$20,000 to manufacture knit goods, etc.

Messrs. J. and R. Richie, Bathurst, N.B., are putting in a new turbine wheel, and making other improvements to their premises.

It is announced that the Pelee Gas and Oil Company, in the second trial, have found the long-looked-for fluid, petroleum. The well was struck on the Dr. Scudder estate of 3,500 acres, held by this company. The Standard Oil Company have lately secured a foothold of several thousand. The oil is very lively, and tested at Windsor 35 specific gravity. Petrolia and Oil Springs go only 30 to 32. This may prove to be the best quality as yet found in Canada. The vein from which the oil flows is 760 feet below the surface, and is supposed to be the same as the Ohio oil fields. The whole island contains 13,000 acres, of which the Pelee Company have 7,000.—Amherstburg Echo.

A company is being formed at Leamington, Ont., to erect a sugar beet factory. The Mayor will give information.

The Robb Engineering Co., Amherst, N. S., will supply the machinery for the workshops of the Dominion Coal Company, at Glace Bay.

The Merchants' Dyeing & Finishing Company, Toronto, are building another addition to their works and will add more machinery. Among the new machines being put in are six dyeing machines of an entirely new pattern, which are being built by the Diamond Machine and Tool Co., Toronto.

The People's Heat and Light Company is being organized at Halifax, N. S., with a capital stock of \$200,000, to build a large gas-making plant for commercial purposes. Among the names connected with the enterprise, besides well-known Halifax men and some strong and influential Canadian, Philadelphia and New York monied business men, are Messrs. W. L. Elkins of Philadelphia, H. M. Whitney of Boston; Jas. Ross of Montreal and Wm. McKenzie of Toronto. The men chiefly interested in the Halifax scheme are all more or less directly interested in large gas properties in the United States and Canada and consequently in a position to take active hold of the scheme in Canada and the United States as soon as the Halifax experiment is proved to be a success. The syndicate has unlimited capital, and includes the Dominion Coal Co. Some \$200,000 will be expended in establishing the plant in Halifax. Ten miles of pipes have already arrived and contracts are let for laying it. The company will supply gas for fuel and illumination; ammonia, which can be manufactured into sulphate, nitrate, carbonate chloride or liquid ammonia; benzole, an enricher for illuminating gas and also used in the preparation of aniline dyes; cyanogen compounds for cyanides in the extraction of gold from low grade ores; tar distilled into several compounds; pitch, for the manufacture of artificial fuel, and ingredients in asphalt pavements, and sulphur. Coke, to take the place of anthracite, will be the chief commodity. If the syndicate carries out its intentions it will involve an expenditure of several millions of dollars in the States and Canada. The operation of the several plants contemplated will involve the consumption of immense quantities of coal, probably a million tons annually, and the syndicate will purchase largely its supplies from the Dominion Coal Co.

Ferroline - -

The best material for coating structural iron work or iron machinery.

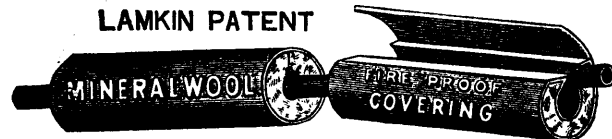
The only sure preventive of rust.

Has the highest recommendations.

For Pamphlets and Particulars apply to the Agents,

W. T. Benson & Co.

31 COMMON STREET, - MONTREAL.



BY THE USE OF - - Mineral Wool Covering

For Steam Pipes, Boilers, etc.,

A Large Saving in Fuel is made.

Radiation and Condensation Prevented.

Steam Carried Long Distances Without

Loss of Power.

We manufacture our own Mineral Wool and can put you on the ground floor in regard to prices. Beware of imitations and infringements.

CANADIAN MINERAL WOOL CO.,

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24 SCOTT ST., TORONTO.

Canadian Rubber Co., MONTREAL. OF

A. ALLAN, President.

F. SCHOLLES, Managing Director.

J. O. GRAVEL, Secretary-Treasurer.

CAPITAL, \$2,000,000.

J. J. MCGILL, General Manager

Manufacturers of Superior Quality

Rubber Belting

of following grades

"Extra Star," "Fine Para"

"Extra Heavy Star"

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"C.R. Co. Stitched"

All kinds of **Rubber Hose**

Made with our Patent Process Seamless Tube, including

Engine Hose, Hydrant Hose, Conducting Hose, Steam Hose,

Suction Hose Galvanized Wire,

Suction Hose Galvanized Smooth Bored

Suction Hose Hard Rubber,

Rubber Valves, Gaskets, Packings, etc.

WESTERN BRANCH:

Cor. Front and Yonge Sts., TORONTO

:-: J. H. WALKER, Manager.

The Jenckes Machine Company, Sherbrooke, Que., are about removing their plant into the large and commodious shops they have recently erected in that place.

The Gardner Tool Company, late of Brockville, Ont., are about occupying the shops in Sherbrooke, Que., heretofore occupied by the Jenckes Machine Company.

Plans and specifications have been received at the office of the Harbor Master, of Collingwood, Ont., showing and describing the work required to be done in deepening and widening the entrance channel and harbor of that town. The specifications and notices accompanying the drawings state that tenders will be received for the whole work up to noon, the 2nd day of January next. It is not known what the Government's estimated cost of the work will be, but the town gives \$25,000 towards it.

The London Street Railway Company are rushing the various extensions of their railway with as much expedition as is possible. They have various gangs of men at work, and are using every effort to have electrified as much of their system as is possible before winter weather puts a stop to their labors. Considering the time at which they were enabled to begin the changes, the work has been accomplished with marvelous speed. There have been delays and inconveniences, it is true, but these are incident to all works of this kind, and the public have not been impatient. Even now the service is getting into good shape, and the public are well served in many directions not previously reached.—London Advertiser.

What is claimed to be the first three-phase electric light plant in Canada has been contracted for by the Trenton Electric Company, Trenton, Ont. The William Hamilton Manufacturing Company, Peterborough, Ont., have secured the contract for putting in the entire water power machinery, and it is stated that the Canadian General Electric Company will furnish the electrical appliances necessary.

The Robertson & Martin Veneer Company, Toronto, are having a large veneer machine built for them by the Diamond Machine and Tool Co., of this city. The machine will cut veneer to the width of 7 feet, 2 inches, and from 1-80th of an inch to 1/8th of an inch thick, and will weigh over 10 tons.

On behalf of a syndicate which are considering the advisability of establishing a factory to manufacture all kinds of electrical plant in Canada, E. A. C. Pew has written to the Hamilton, Ont., city council making a proposition for the establishment of the works there. He asks that the city grant a bonus of \$40,000 and buy the old Wanzer property and hold the title of it until the company employs 500 men. At first the company will employ 250 men.

Niagara Falls is to be illuminated by an electric search-light, placed on the Canadian shore by the Michigan Central railway. The light will enable visitors to see the Falls as well between sunset and sunrise as now between dawn and dusk. Mr. Frank J. Bramhall, an official of the Michigan Central, has recently returned from Schenectady, where he consulted with the General Electric Company about the establishment of a search-light on this side, his idea being to place the light either at Falls View, or on the tower of the Museum building, on the hill beyond Clifton, these being the highest available points. The experts of the electric company dissuaded him from placing the light so high and far away, and told him that the best effect would be obtained by placing the artificial luminary on the edge of the Canadian bank, about half a mile below the falls. The powerful rays of the search-light would then strike the volume of falling water at right angles with a large portion of its surface, producing the most brilliant effect. Mr. Bramhall was provided with estimates of the cost of establishment and maintenance of a light and plant to operate it, which he will lay before the railway directors for their approval.

George White Fraser

C.E., D.T.S., A.Am. Inst. Elec., Eng.

CONSULTING ELECTRICAL ENGINEER

Electric Railways and Electric Light
Construction Superintended.

18 IMPERIAL LOAN BUILDING
TORONTO

(COPY).

Messrs. The John Abell Engine and Machine Works Co., Ltd.,
Toronto, Ont.

SIMCOE FLOUR MILLS

Simcoe, Ont.,
October 11, 1895

DEAR SIRS—We enclose you cheque in payment in full for machinery supplied for our new mill recently erected. This makes the fifth mill that I have been interested in erecting and remodelling, and I am pleased to state that it is far ahead of any of them, and I believe ahead of any mill running in Ontario to-day not using similar machinery. Your bolts and air belt purifiers are simply perfect, and the system of separations is all that can be desired, and best of all the power required to run it. We used two wheels of twenty-eight horse power each to run our old mill, and we are driving this mill (same capacity), with the one wheel, and we think your expert, Mr. Patch, as well as yourselves, deserve great credit for setting up such a simple, easy-running, up-to-date mill. Wishing you every success. Yours etc. (Sgd.),

W. B. BROWNE & CO.

The John Abell Engine and Machine Works Co., Ltd.

TORONTO, ONT., CAN.

The Canadian Rand Drill Company, SHERBROOKE, QUE CANADA

Straight-Line
and
Duplex
Air
Compressors.



The "Sluggers"
and
"Little Giant"
Rock Drills
For Mining and
Tunneling.

Duplex 12" x 18" Compound Condensing Steam Air Compressor,
WITH HALSEY'S PATENT POSITIVE MOTION AIR VALVES

We furnish a line of Belt and Steam-actuated Compressors for mechanical purposes in connection with manufacturing plants for compressing gases and for use in chemical works, breweries, and other establishments where large bodies of liquids are to be moved.

Branches—16 Victoria Sq., MONTREAL, 129 Hollis St., HALIFAX, N.S., 632 Cordovia St., VICTORIA, B.C.

The Toronto Junction Foundry Co., Toronto Junction, Ont., are applying for incorporation with a capital stock of \$24,000 to carry on a general foundry business.

Messrs. Menzie, Turner & Co., Toronto, have given an order to the Diamond Machine and Tool Co. of this city for a new four-ton embossing machine and roll combined.

William C. Wilson, mill and fire supplies, Toronto, has just supplied the corporation of Durham, Ont., with helmets, boots, coats and buckets for their fire brigade. This is now claimed to be the best equipped brigade west of Toronto.

The Electric Light Co., Niagara Falls, Ont., have secured a site for a steam plant, and will advertise for tenders shortly for building. The additional plant will provide for 550 additional horsepower.

Mr. W. S. Rockwell, New York, is the patentee of a system by which, by the application of a principle in science, ordinary fuel is burnt in forges in combination with steam to produce a most intense heat. He has just completed a contract for equipping the Gould Bicycle Company's extensive works at Brantford, Ont., throughout with these unique forges. The forges are placed wherever required in the works, and are fed from one central oil tank, which is capable of holding upwards of two car loads of oil. The oil is heated to about 150 or 160 degrees Fahrenheit, and then pumped through pipes from the tank to the entire system. Just before entering the furnace of the forge the pipe carrying the oil is joined by one carrying steam. The steam and oil are forced with a great pressure into the furnace. The force atomizes the oil, and it burns with the steam, creating a most intense heat. There is no smoke nor soot, the carbon being all consumed by the extreme heat. The forges can be kept going continuously for an indefinite length of time, there being no clinkers to clog them. A great saving of time is thus effected, for the old forges heated by coal clogged every few hours, and required to be cleaned out at a loss of half an hour each time. In starting up these forges a suitable heat can be had in fifteen minutes, and a maximum temperature reached in short order, which, it is claimed, far surpasses the greatest heat possible in the old coal forge. The labor of attending to the forges is reduced practically to zero. The entire system throughout is a labor and a time saver, and, of course, a money saver.

Luce & Co., Komoka, Ont., will put a new engine in their mill.

Benjamin Bros. & West, manufacturers of carriage wheels at Yarker, Ont., have sold their factory, plant, etc., to J.H. West.

The Millbrook Electric Light Co., Millbrook, Ont., are applying to the Ontario Legislature for a charter.

The Parry Sound Electric Light Co., Parry Sound, Ont., have been incorporated with a capital stock of \$20,000 to construct and operate works for the production of electricity for light, heat, power, etc.

The Belleville Traction Co., Belleville, Ont., have been incorporated with a capital stock of \$100,000 for the purpose of constructing and working lines of street railway by electricity in that town and vicinity.

W. Thompson, London, Ont., will build an addition to his oatmeal mill at a cost of about \$2,500.

The Toronto Granite Co., who purpose operating a granite polishing industry, are asking for exemption from taxation on condition that they erect premises suitable for the carrying on of their work.

Electric railway projectors have made a survey of Chatham, Ont., and pronounce the prospects good. They will invest \$150,000 in the enterprise, and will build a loop line in the city, and give a six-minute service.

METAL ROOFING

Those contemplating building the coming season would do well to send for our catalogue. Cheap as a wooden shingle. Will last a life time.



Guaranteed to be Water, Wind, Storm, Fire and Lightning Proof.

THE PEDLAR METAL ROOFING CO.

Office and Works, - Oshawa, Ontario
In answering please mention this paper.

BRUNNER, MOND & CO., (LTD.), Northwich, Eng.

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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

SOAP, GLASS, PAPER, WOOD PULP AND COLORS

Also for Printers and Bleachers

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Winn & Holland, Montreal

SOLE AGENTS FOR THE DOMINION OF CANADA.

Wm. J. Matheson & Co., Ltd.

423-425 ST. PAUL ST., MONTREAL

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IMPORTERS AND MANUFACTURERS OF

DYE STUFFS NATURAL AND ARTIFICIAL

Works—Long Island City, Port of New York
Main Office—178 Front Street, New York

WE MANUFACTURE AND IMPORT

Every Modern Dye Stuff

Sole U.S. and Canada Agents for

- Leopold Cassela & Co., Frankfort-on-the Main, Germany.
- W. C. Barnes & Co., London, England.
- Manufacture Lyonnaise de Matieres Colorantes Lyons, France.
- Albany Coal Tar Dye & Chemical Co., Albany, N.Y.

CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office, from September 13 to September 27, 1895.

Information regarding any of these patents made be had on application as follows:—

Fetherstonhaugh & Co., Bank of Commerce Building Toronto.

Ridout & Maybee, 103 Bay Street, Toronto.

C. H. Riches, Canada Life Building, Toronto.

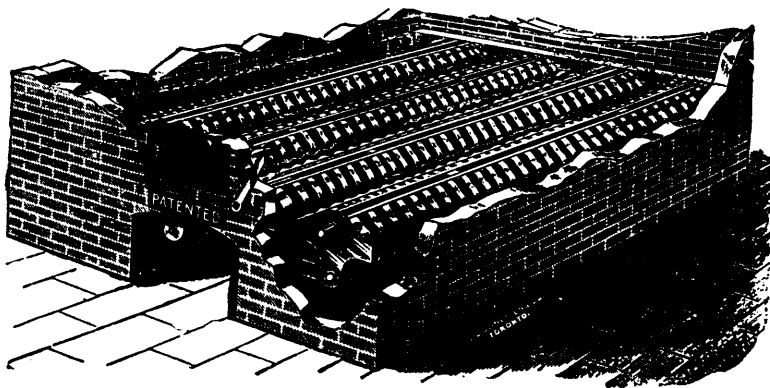
A. Harvey, Central Chambers, Ottawa.

Copies of American patents can be procured from either of these attorneys for the sum of twenty-five cents each.

- 49,973 Seat, the Pottier and Stymus Co., assignee of John S. Johnston, New York, N.Y.
- 49,974 Potato digger, Aaron Smithurst, Salt Lake, Utah.
- 49,975 Tug buckle, Julius C. Clausen, Hensall, Ont.
- 49,976 Travelling swing drill, William H. Law, Peterboro', Ont.
- 49,977 Electrolysis and apparatus therefor, Henrich C. F. Storrmer, Christiania, Norway.
- 49,978 Device for cleaning bicycle chains, Charles G. Polleys and John T. Reagan, Newport, R.I.
- 49,979 Compound for building, etc., The Cheney Dry Mortar and Supply Co., assignee of George W. Lytle, Troy, N.Y.
- 39,980 Car-coupler, Edward K. Ober and John P. Ober, Hooversville, Pa.
- 49,981 Mould for making glass articles, Jessie D. Claypoole, Penn Grove, N.J.
- 49,982 Piano, George P. Bent, assignee of Martin Henry McChesney and Joseph G. Kunze, Chicago, Ill.

- 49,983 Device for measuring garments, Harris Kantorovitz, Philadelphia, Pa., and George Retzer, Walla Walla Washington.
- 49,984 Drawing pen, Emil Pongs, Gladbach, Prussia.
- 48,985 Music support, Amos B. Buckland, Rochester, N.Y.
- 49,986 Rotary steam engine, Bela Vilmos, Debreczin, Hungary.
- 49,987 Ball castor, William S. Bowie, Boston, Mass.
- 49,988 Tools for rossing bark, etc., Jeremiah Daigneau, Salem Mass.
- 49,989 Shipping bill and bills of lading, Jas. Edward, Lachine, Que.
- 49,990 Slide rule, Thaddeus Norris, Washington, D.C.
- 49,991 Electric alarm, Adrien J. Moulart, Paris, France.
- 49,992 Lightning arrester, Alexander Wurts, Pittsburg, Pa.
- 49,993 Fruit basket, Joseph E. Asan and Frank Muhlenbeck, Saginaw, Mich.
- 49,994 Composition of matter and method of making the same, Albert P. McKean, Sunbury, Pa.
- 49,995 Gate, Edgar H. R. Evans, Melrose, Cape of Good Hope.
- 49,996 Amalgamator, George H. Chick, San Francisco, Cal.
- 49,997 Watt meter, Jesse Harris, Lynn, Mass.
- 49,998 Dish drainer, Charles N. Johnson, Vancouver, B.C.
- 49,999 Tie plate, William Goldie, Pittsburg, Pa.]
- 50,000 Grate bar, Charles T. Coe, New York, N.Y.
- 50,001 Baling press, Tritos H. Thurmond, Denver, Col.
- 50,002 Roller skate, Frank J. Gibbs and William Wright, Birmingham, Eng.
- 50,003 Roller skate, Frank J. Gibbs and William Wright, Birmingham, Eng.
- 50,004 Window frame and sash fittings therefor. George H. Couch, Craydon, Surrey, Eng.
- 50,005 Window frame with sliding sashes and fittings therefor, George H. Couch, Craydon, Surrey, Eng.
- 50,006 Convertible furniture, John S. Shearer, Vernona, Pa.
- 50,007 Carriage jack, James Davis, jr., Gananoque, Ont.

NEW TESTIMONY EVERY ISSUE



From The "Empire" Printing Company, Toronto.

When we moved into our new building, we adopted the Heeson Rocking Grate for our boilers, and we are more than satisfied with the service it has given us. We consider this grate the best we have ever used, and as far as we know superior to any at present in the market. Not only is it satisfactory, but we find it very economical, giving us a saving of fuel which more than repays for the investment during the time that we have used it.

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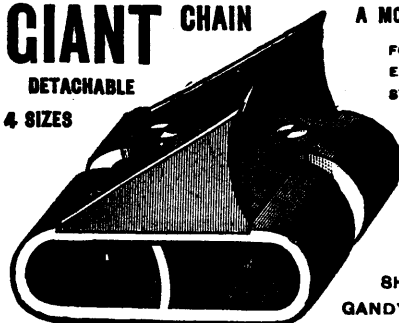
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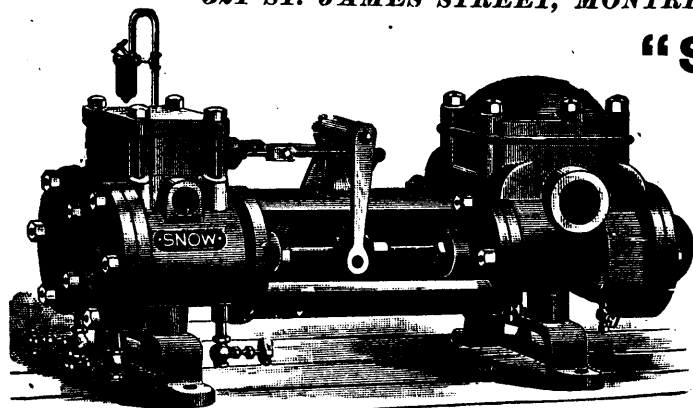
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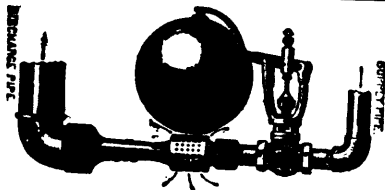
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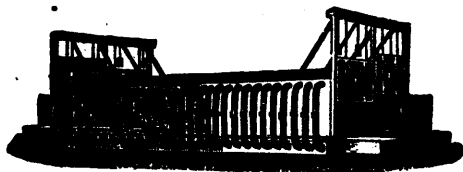
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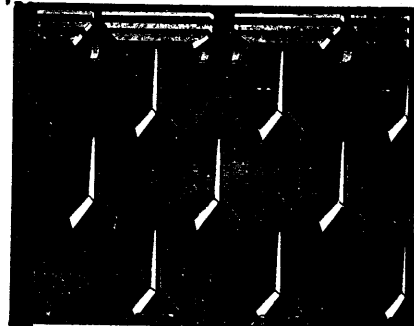
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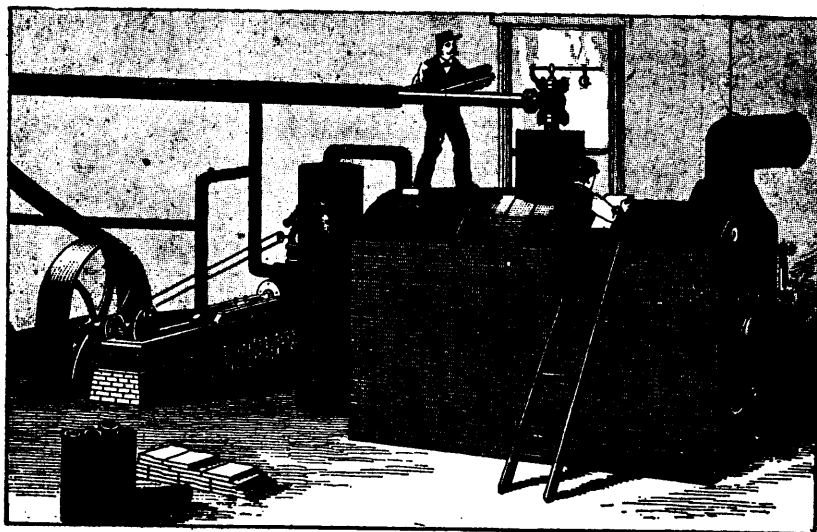


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- 50,069 Holder for umbrellas, etc., August H. Albershardt, Crawfordsville, Ind.
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- 50,071 Syringe, The Butler Hard Rubber Co., New York, assignee of Isaac Q. Gurnee, Butler, N.J.
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- 50,095 Churn and butter worker, Charles S. Brown and Frank B. Fargo, Lake Mills, Wis.
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- 50,099 Heating stove, William H. Loy, and Fred H. Grant, What Cheer, Iowa.
- 0,100 Machine for shafting and finishing leather loops, Allen J. Lloyd, Oakland, Cal., assignee of Friend J. Brigham, Chicago, Ill.
- 50,101 Burial casket, Julian P. Hill and William Love, Buffalo, N.Y.

United States Patents to Canadian Inventors.

Since our last issue, United States patents to Canadian inventors were issued as follows, as reported by Mr. Chas. H. Riches, Solicitor of Patents, Canada Life Building, Toronto:—

- 549,593 Sewing machine, O. Bellefeuille, Montreal, Que.
- 549,489 Checkrein swivel, J. C. Clausen, Hensall, Ont.
- 549,566 Car coupling, J. M. Grady and R. McMillan, Kingston, Ont.
- 549,601 Wrench, D. Gross, Berlin, Ont.
- 549,723 Lamp shade, W. R. Hitchcock, Cornwall, Ont.
- 549,724 Bracket for incandescent electric lights, W. R. Hitchcock, Cornwall, Ont.
- 549,528 Automatic governor regulator, H. J. Page, St. Mary's, Ont.
- 549,582 Water wheel, O. Parent, Montreal, Que.
- 549,660 Copying-book, W. H. Rodden, Toronto, Ont.
- 549,555 Wire nail, J. White, London, Ont.
- 549,951 Seal-padlock, T. Belanger, Montreal, Que.
- 550,109 Box-pile, J. H. Poole, St. John, N.B.

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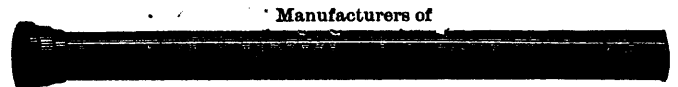
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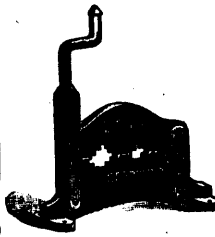
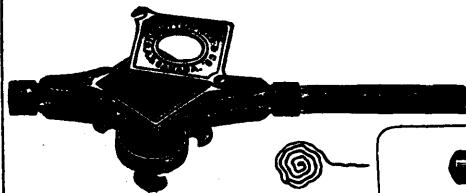
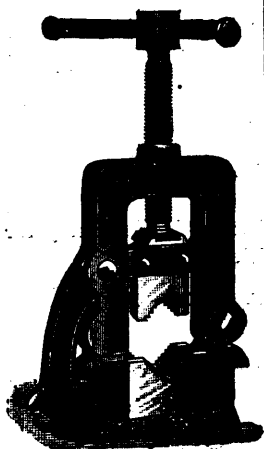
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1¾	1¾	5.01	"	3	2¾	22.59	"
1⅞	1⅞	5.94	"	3½	3¼	26.60	"
2	1⅞	7.46	"	3¾	3⅝	30.94	"
2	1¾	9.83	0 04	4	4	42.33	0 05
2¼	2¼	12.53	"	4½	4½	53.57	"
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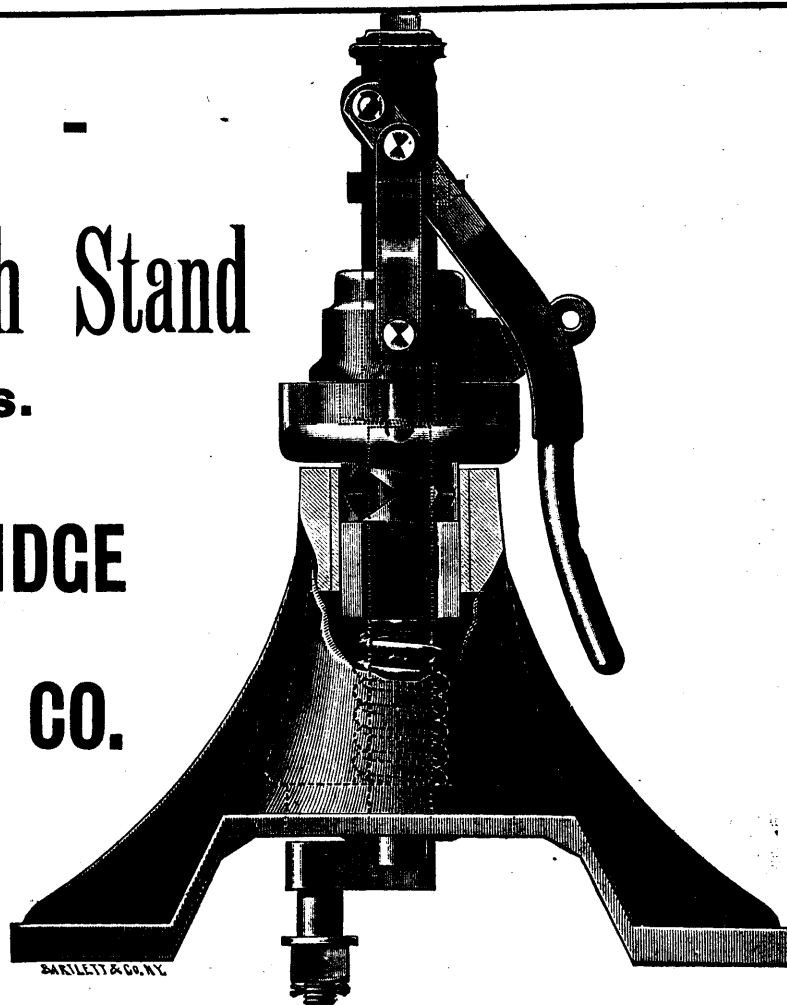
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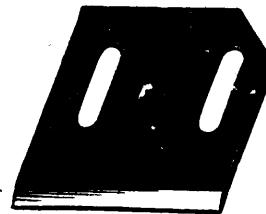


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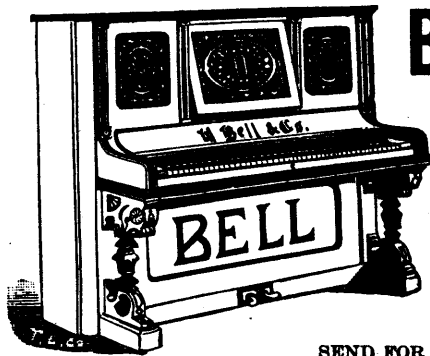
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