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Vol. 36. TORONTO, MAY 6, 1898. No. 9.

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All made of the best material and finest workmanship.

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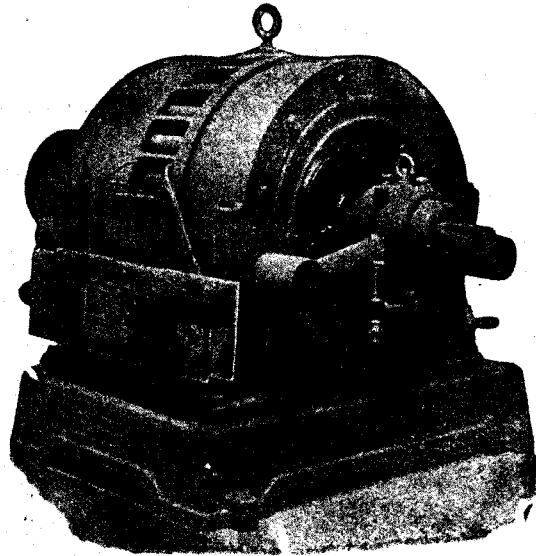
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This Machine Leads; Others try to Follow!

The floor space required is so little that sufficient room can be spared in the smallest mills.

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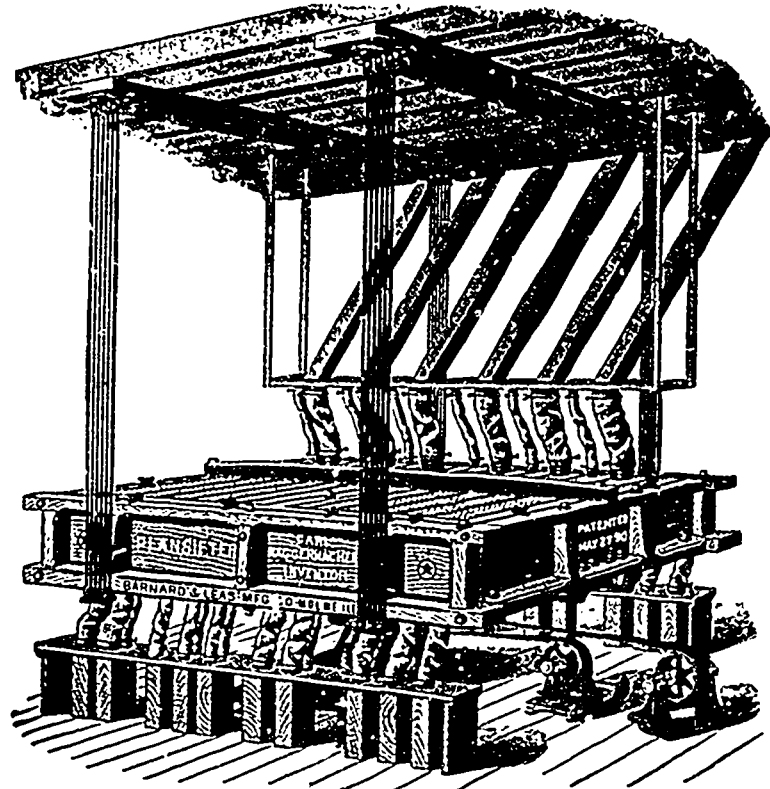
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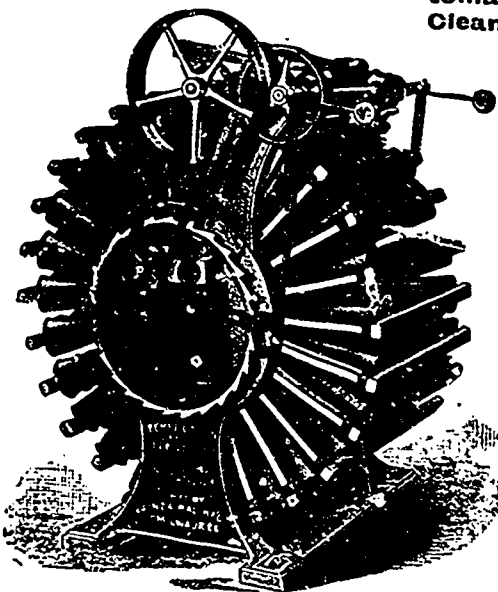
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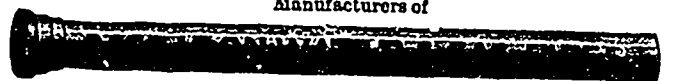
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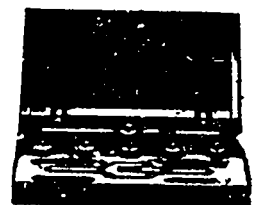
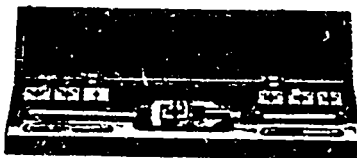
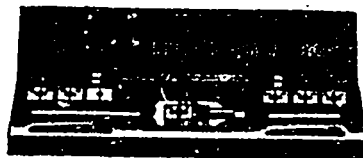
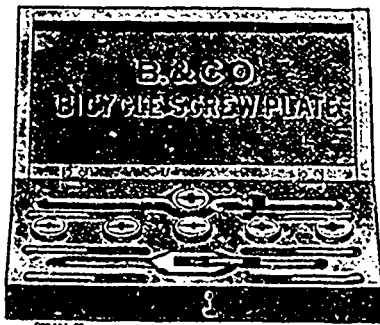
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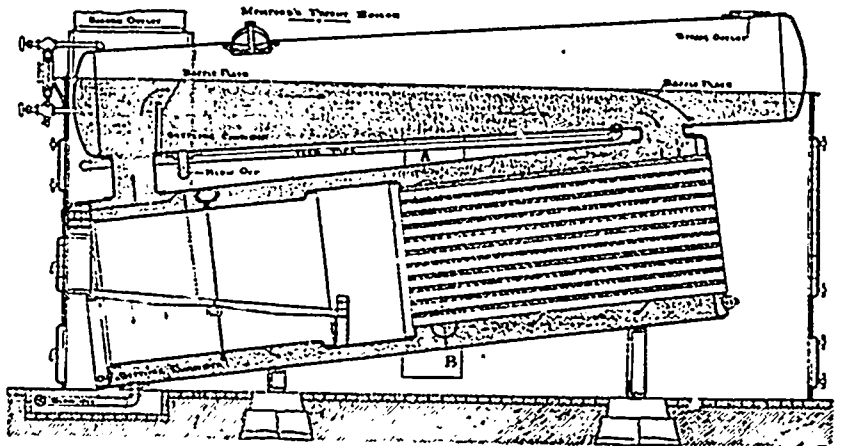
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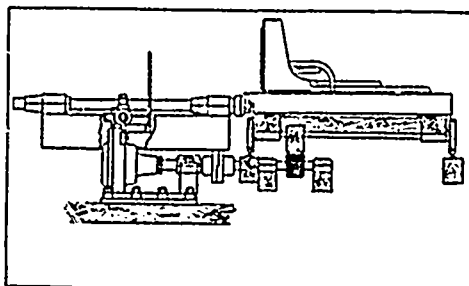
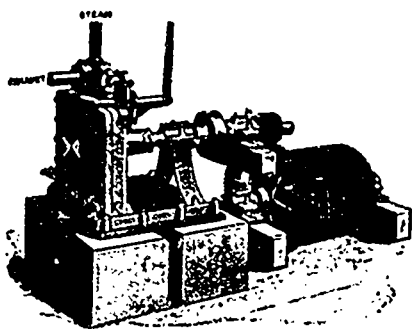
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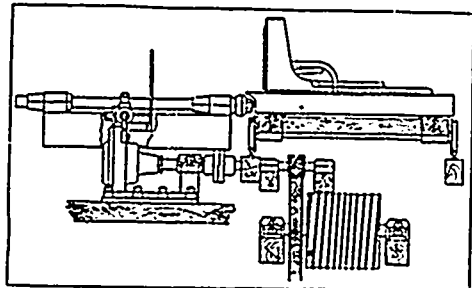
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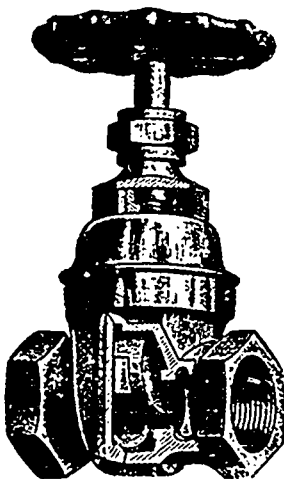
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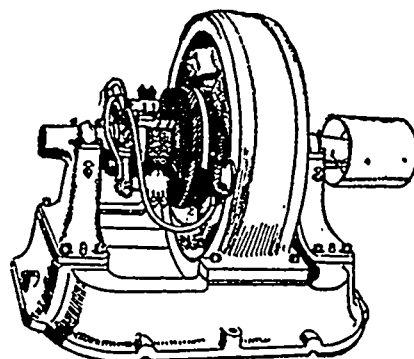
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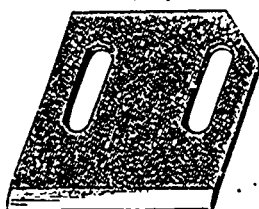
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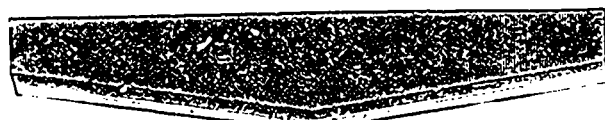
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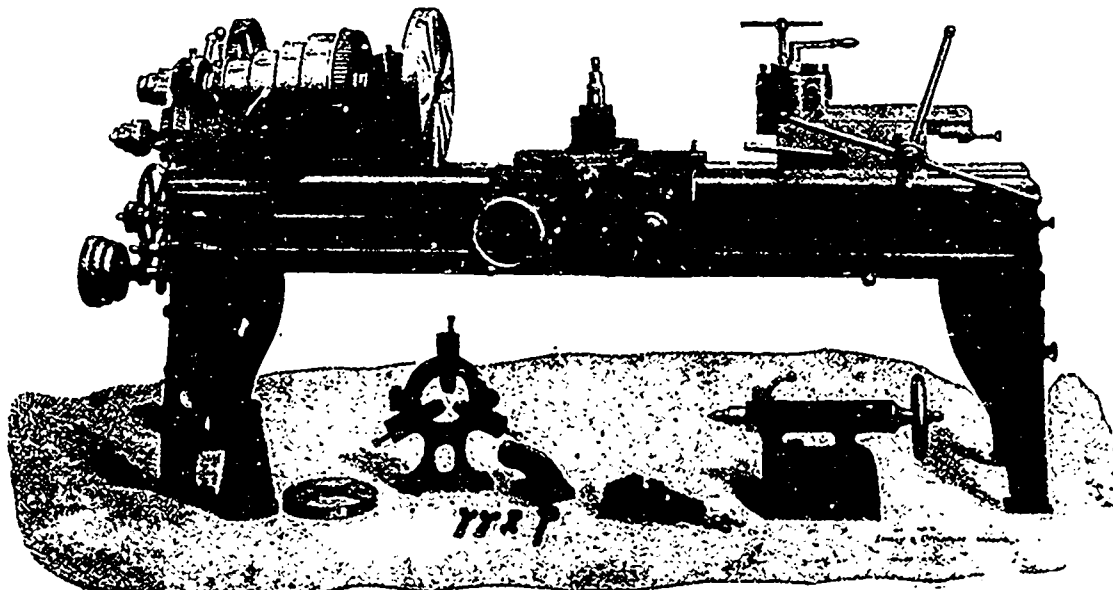
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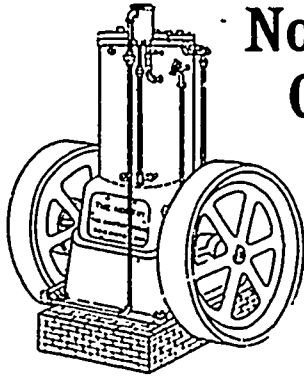


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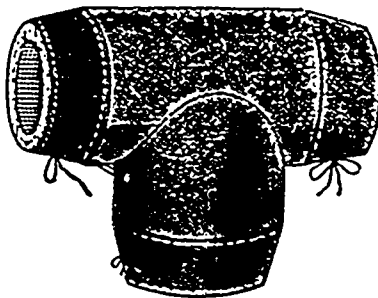
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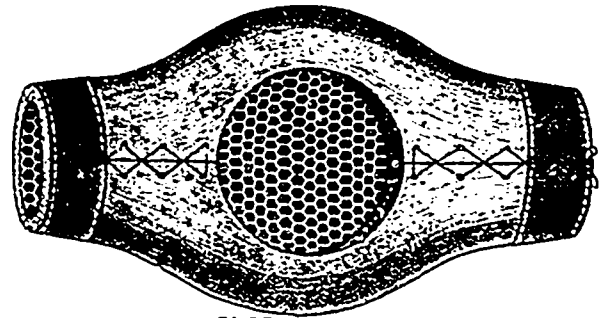
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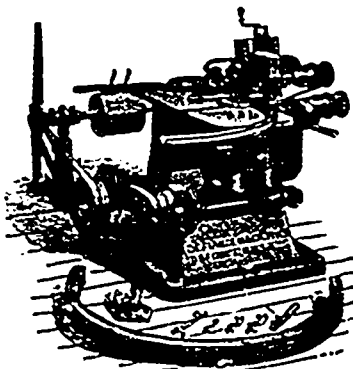
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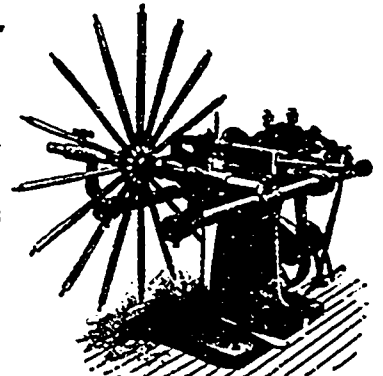
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CANADIAN COMMERCIAL AGENTS.

In order that our readers may be aware of the location of Canada's trade commissioners in foreign countries we append a list of the commissioners and their addresses. This list will appear permanently on this page.

- J. S. LARKE, Sydney, N.S.W., agent for Australasia.
- G. EUSTACE BURKE, Kingston, Jamaica, agent for Jamaica.
- ROBERT BRYSON, St. John, Antigua, agent for Antigua, Montserrat and Dominica.
- S. L. HORSFORD, St. Kitts, agent for St. Kitts, Nevis and Virgin Islands.
- EDGAR TRIPP, Port of Spain, Trinidad, agent for Trinidad and Tobago.
- EDWIN McLEOD, Georgetown, Demerara, agent for British Guiana.
- C. E. SONTUM, Christiania, Norway, agent for Sweden and Denmark.
- D. M. RENNIE, Buenos Ayres, Argentine Republic, agent for Argentine Republic and Uruguay.

In addition to their other duties, the undermentioned Canadian agents will answer inquiries relative to trade matters, and their services are available in furthering the interests of Canadian traders.

- I. G. COLMER, 17 Victoria Street, London, S.W., England.
- THOMAS MOFFAT, 16 Church Street; Cape Town, South Africa.

AS TO NEWSPAPER POSTAGE.

The religious press, or that portion of it that vegetates in Toronto, recently sent a delegation to interview Hon. Mr. Mulock, the Postmaster General, to protest against the proposition of the Government to impose postage upon newspapers going through the mails, or rather, upon the religious newspapers. The gist of their argument was to the effect that the imposition of postage would be a serious tax upon their newspapers without benefiting the revenue of the Post Office Department to any appreciable extent. They showed that Canada lies contiguous to a great nation that produces vast quantities of literature, some of it of a very pernicious character, that has free passage through the Canadian mail, that in this way this objectionable reading matter has easy access to Canadian homes, and, because of its perniciousness, has an injurious effect upon the minds of the Canadian people, particularly upon the younger portions; that because of existing

treaties and laws this cannot be absolutely prevented, and that the evil can best be counteracted by the freest possible circulation of a purer and cleaner and better class of Canadian newspaper literature. It was also argued that no customs duty whatever is imposed upon newspapers coming into the country through the mails; that such newspapers can be produced for less money abroad than in Canada; that the newspaper industry of Canada is handicapped by the duties imposed upon presses, paper, ink, etc.; and that there are other circumstances which would go to make American newspaper competition unbearable, were Canadian newspapers required to pay postage.

With the spirit of which we disagree. In the first place, we cannot see why religious newspapers, or trade newspapers, or any other class of newspapers should be entitled to free transportation through the mails any more than letters, circulars, miscellaneous articles, books, American newspapers, British newspapers, or any other newspapers, or any other sort of literature or merchandise. If any American literature is of a pernicious character, it can only be prevented from coming through the Canadian mails, by Act of Parliament; and by the same token Canadian literature of a pernicious character should be suppressed by the same authority; and to our mind it is ridiculous to suppose that the pernicious influence of improper reading matter, having the free use of the mails, can be counteracted or suppressed by Canadian religious or other literature, unless it also has free use of the mails. It is begging the question, too, to say that American newspapers have free use of the Canadian mails, while Canadian newspapers would not enjoy the same privilege. Under our postal arrangement with the United States, any newspapers or other matter admitted to the use of the mails in that country, are entitled to free carriage to destination in Canada through Canadian mails, and all such mailable matter, originating in Canada, destined for points in the United States, is privileged to free transportation through the United States mails. We cannot see why the claim of the religious newspapers for free transportation through the mails should be supported on the ground that they are, from their character, the religious educators of the people, any more than the clergymen of the churches that these newspapers represent, are entitled to free transportation over the railroads for the same reason. The people who patronize and read American newspapers do so because they desire to do so, and it does not speak much for Canadian newspapers when they acknowledge a failure in creating and maintaining an equal interest among the people for themselves, and that they cannot possibly exist unless they are the pampered favorites of the Government.

FREE TRADE AND PROTECTION IN ENGLAND.

There is a protective movement going on in England to which we have frequently called attention. Attempts have been made, and practically endorsed by the Government, to form a customs union between Great Britain and her colonies on a basis of free trade among themselves and protection against outsiders. This plan has been dropped for the present, but the protective sentiment remains.

Behind this, there is a reason why Christendom has not adopted free trade and why in Great Britain itself there is now a protectionist movement. Gunton's Magazine comment-

ing upon this subject says that the continental nations retained protection for exactly the same reason that England adopted free trade, because it was to their economic interest to do so. It was not, at bottom, a moral sentiment that controlled Britain's policy, but merely the fact that she no longer needed protection for her manufactures, and saw a definite economic advantage to herself in free trade and wider foreign markets. Had not this change of economic interests come, she would have remained a protectionist country for the same reasons that caused her to maintain the policy during five centuries.

Continental Europe and the United States did not refuse free trade because of any moral inferiority to Britain. They refused it simply because the same circumstances that made protection unnecessary to Britain made it doubly necessary to themselves. Britain, having developed the factory system almost exclusively, and protected it rigidly, had gotten away beyond reach of competition. Nobody could undersell her manufactures in her home market, but she could enter any other market and drive all others out; therefore, continental Europe and the United States had either to abandon manufacturing or retain protection. With them it was a question, not of gaining foreign markets, but of retaining home opportunities. Granted that manufacturing industries were very desirable, it was plainly to their interest to protect them, which they did; just as Britain relinquished protection because it was to her interest to gain more foreign markets.

But why should there now be talk of re-establishing protection in some form in Great Britain? Is it possible that moral sentiment is less strong there now than fifty years ago? Not at all. In truth, the theory of protecting one's own best opportunities for development is even more moral than that of throwing down all barriers and letting in whatever may come. All social, religious and domestic institutions are based upon this protective principle. After economic interests have determined economic policies, it is natural to seek to give those policies a moral justification; and this is really all there was of the alleged moral foundation of British free trade.

#### PURE DAIRY PRODUCTS.

Hon. John Dryden, Ontario Minister of Agriculture, has issued a bulletin of very great importance to the growing dairy interests of Canada. He has taken a line which THE CANADIAN MANUFACTURER has always advocated, viz., that Canada must keep up her reputation for producing the best of everything and not yield to the temptation to use adulterants to compete with United States products sold at low prices. Canada don't want to become a producer of cheap dairy products or of cheap anything else, whenever cheap products mean cheap labor. For the benefit of any of our readers who are interested in dairying and have not seen Mr. Dryden's bulletin, it is appended. His long experience and proved ability in agricultural matters make his words of special interest and paramount weight. Mr. Dryden says:

In building up the dairy industry of Ontario two things have been taught and urged, namely, purity and high quality of products and economy of production. Whatever setbacks this great industry may have met in the past few years can be traced to a neglect of one or the other of these important points. The cheese industry of Ontario is now fairly well established, and the annual production of a large amount of well made, whole milk cheese of uniform quality

has given Canada a controlling influence in the British cheese market. Our creamery industry is now rapidly developing, and it is of vital importance that the strictest attention be paid to the turning out in an economical manner of butter of uniformly high quality, pure and unadulterated. The industry will, if properly conducted, assume very large proportions, since the average consumption of butter is much greater than that of cheese, and the British imports of butter greatly exceed those of cheese. In the British market our butter meets in competition similar goods from Ireland, Denmark, France, the United States, Australia and Argentina. Denmark has attained a chief place by studying the requirements of the market, and now produces nearly all of her creamery export butter from pasteurized milk or cream with the use of special ferments. In some of the countries exporting to Great Britain—Australia in particular—it has become a practice to use some kind of "preservative" in butter-making. Sometimes this is added to butter as a salt; sometimes it is added to the milk. These preservatives are sold under various names, such names as preservale, preservatine, preservitas, being favorites. They are nearly all mixtures of boracic acid. The increasing use of these preservatives has alarmed the British consumer, and most radical measures are now proposed to exclude all butter in which traces of these preservatives are found. The British public has become alarmed, the press is actively discussing the matter, and public officials are now on the lookout for butter so adulterated. It must be carefully noted that all butter made from milk or cream to which anything but common salt has been added is adulterated. The butter producers of Ontario must make no mistake. The use of any of these preservatives is dangerous to the dairy interests of this country. Everything possible should be done to discourage the use of such substances, and the press should as far as possible prevent the advertising of them in this country. Ontario has a reputation for producing pure dairy goods of high quality. That reputation must be maintained, and every person interested in the dairy business of Ontario should assist in preventing these "preservatives" from getting a foothold in this province. "An ounce of prevention is better than a pound of cure." We have a reputation now for making pure butter and cheese. Help to maintain that reputation. Do not advocate preservatives. Do not advertise preservatives. Do not use preservatives.

#### "WILL THE MOTION BE SUSTAINED?"

"That the good faith on the part of the present Government with the farmers of the Northwest should compel them to place agricultural implements on the free list."

The above motion was introduced in the Ottawa (Can.) Legislature by Mr. Davin on March 31. In arguing the question he said that he did so from the standpoint of a protectionist, and that as the agricultural implement manufacturers of Canada had become strong under protection, they were now competent and able to compete with the manufacturers of the world. What will become of the motion is not at present known.

Canada's present tariff duties on agricultural implements are not exactly prohibitive, yet they are high enough to place a check on foreign competition. The rate on mowing machines, harvesters, self-binding or without binders, binding attachments, reapers, cultivators, plows, harrows, horse-rakes, seed drills, manure spreaders, weeders and malleable sprocket or link chain for binders, is twenty per cent. ad valorem.

On steam engines, boilers, ore crushers, pumps, windmills, horse-powers, portable engines, threshers, separators, fadders or feed cutters, potato diggers, grain crushers, fanning mills, hay tedders, farm wagons, and all machinery composed wholly of iron or steel, twenty-five per cent. ad valorem.

On freight wagons, drays, sleighs, and similar vehicles, the duty is twenty-five per cent. ad valorem, and upon buggies,

carriages, pleasure carts and similar vehicles, etc., the duty is thirty-five per cent. ad valorem.

In case agricultural implements should be admitted into Canada duty free the manufactures of the United States would find a valuable market in which to dispose of large quantities of certain products. No doubt they would haul with delight any such legislation.—Farm Machinery, St. Louis and Kansas,

The present Canadian Minister of Finance, in the course of the recent budget speech at Ottawa, was kind enough to warn the manufacturers of Canada that the price of protection would be eternal vigilance. On behalf of the manufacturers we beg to express our thanks to the hon. gentleman for his thoughtfulness. It shows a spirit of fairness in that we are warned what to expect. It is in fact a sort of declaration of war. We appreciate Mr. Fielding's forewarning and desire to assure him that, despite the tariff originated by himself and his colleagues, we have not for one moment believed that they would not ultimately take tariff action detrimental to the interests of the manufacturers, and through them to the interests of every industry in Canada. Furthermore, Mr. Fielding may as well understand that the very moment he makes a move in the direction promised he will find the Canadian Manufacturers' Association ready to contest with him every inch of ground.

A word to the manufacturers of Canada. Take note of the quotation above from one of the most prominent trade journals west of the Mississippi River. Take note particularly of the last paragraph of the quotation. Consider for a moment that if Mr. Davies' resolution had applied to any other industry or to all other industries, the United States journals representing them would have found just as good ground for delight. Couple that with Mr. Fielding's frank avowal and do not allow yourselves to be deluded into believing that the Laurier Government will extend to the manufacturers' interests of Canada their necessary protection.

#### MANUFACTURERS ARE WARY.

The Toronto Evening Telegram bemoans the sad fate of the Queen City and complains of its hard luck in attempts to secure manufactories, because of superior inducements offered by other cities and towns, of which The Telegram says:—

They will not only give exemptions from taxation, but will erect a building or loan a manufacturer money to be repaid at such times as suits his convenience, and, if he goes bankrupt—as frequently happens—they lose what they have advanced with cheerful magnanimity and welcome another manufacturer on the same or better terms.

The grievance is not that Toronto cannot make as good terms as any other city, but that Toronto will not do it. We quote again:—

As a sample of what other cities offer and of how they outbid us, take the case of a manufacturer whom the Assessment Commissioner was trying to induce to locate in Toronto some few weeks ago. To start with, he would rather live in Toronto than any other place in Ontario. On this point there is a wonderful unanimity among the manufacturers of the province. He also admitted that Toronto was the best distributing point in Ontario, and naturally the best place to do business. Toronto offered this man water at cost and exemption from all taxation. But he would have to get a site and pay lease rent for it. The city has no land of its own to give to manufacturers, except the vacant property down on

the Bay front to the west of Yonge street, and this is too valuable to be given free to any manufacturer. This manufacturer, then, could carry on business in Toronto without paying anything except rental. But he said that in Hamilton he could get a free site of land, near the very centre of the city, with no rent to pay, with water at cost, and exemption from all taxation. So that in Hamilton, which suited his purpose as a distributing point, he gained over Toronto the advantage of yearly rental of his manufacturing site, which, as the business was large, would amount in the course of a year to a considerable sum of money. But this manufacturer didn't go to Hamilton. Hamilton's offer was a good one for his purposes, but Hamilton was away outbid by other municipalities in the province.

One city offered him all that he had been offered in Hamilton—that is to say, a free site, exemption from taxation, water at cost, and in addition offered to erect him a building in which he could carry on his business, at a cost of \$30,000. He had other offers of cash subsidies, of loans; in fact, he could make his own terms if only he would consent to come.

The Telegram's article looks more like a defence of Toronto's attitude and action, than a common sense view of affairs such as our practical contemporary usually takes. "Nearly everyone" must mean The Telegram if nearly everyone is ready to admit that the system of bonusing and exempting manufacturers from taxation is all wrong." The Telegram says again:—

Many citizens urge that although the bonusing system is wrong, Toronto should go in and outbid other cities and towns in every case. If this were done these outside places which have a greater pull with the Ontario Government than Toronto has, would get the Legislature to abolish bonusing. And then Toronto, as well as outside places, would get such industries as naturally belonged to her.

This is a very poor excuse to shelter behind, and very poor logic to use. As a matter of fact the present Ontario law prohibits the bonus system. The very first person to override this statute was Hon. G. W. Ross, and since then the practice has grown so common that the Legislature is inundated with private bills for that purpose every session. The statute is in existence. It does not at all fulfil The Telegram's prophecy concerning it. What are The Telegram and Toronto Assessment Commissioner going to do about it? Other cities in Ontario realize the advantages to be gained by securing factories. Toronto apparently does not. Galt, Berlin, Hamilton, Peterborough, Woodstock, Brantford and other cities will be on the high road to prosperity when Toronto wakes up to find her prestige as an industrial centre has flown away. And yet there is no reason why manufacturers should not receive from Toronto every inducement offered anywhere else, and an additional inducement by way of cheap power that would operate to secure for Toronto that share of the manufactories that naturally belongs there, and many that naturally belong elsewhere, but would certainly come to Toronto if businesslike effort was made to secure them.

#### WHY NOT IN CANADA?

Our friends across the line in the United States are hammering away at the sugar beet question, and the arguments in use apply with equal force to Canada, and are well worthy of attention at the hands of our readers. The United States is estimated to consume annually some 2,000,000 tons of sugar, which at the generous estimate of 3,000 pounds per

acre, means that if it were produced in the United States, 1,333,333 acres of land would be under cultivation to contribute to the sugar industry. The sugar imported means about \$140,000,000 for cost and freight or an amount paid out nearly equal to the amount the United States receives for wheat and flour exported.

The latest report of the Department of Agriculture at Washington, U.S., shows that during the last season nine factories were in operation in the United States, namely, at Alameda, Los Alamitos, Watsonville and Chino, Cal.; Lehi, Utah; Eddy, N. Mex.; Grand Island and Norfolk, Neb., and Rome, N.Y. Forty-one thousand, two hundred and seventy-two acres of beets were harvested, with an aggregate weight of 389,685 tons, a yield of almost 9½ tons per acre. This is less than the average in Europe, but with more scientific agriculture and judicious fertilization the yield in Ontario could doubtless be brought up to, if not above, the average of the best yield of Europe. The experiments of the New York Experiment Station, at Geneva, N. Y., produced an average yield of sixteen tons of first-class beets to the acre. During 1897 beet sugar made in the United States totalled 90,491,670 pounds, an average of 232 pounds per ton of beets or 11.6 per cent. sugar. The report upon the experiments conducted in Ontario, in 1889-90 showed that Canadian-grown sugar beets averaged 13.63 per cent. sugar. Yet while the United States and each separate state of the United States is working hard to establish the sugar beet industry there, Canada is allowing her opportunities to slip through her fingers.

In the United States the advance of the industry is marked by the fact that during 1898 there will be in operation seven new factories, one each in Utah, Oregon, Michigan and New York, and four in California. Experts estimate that the industry in the United States will develop in 1898 seventy per cent. over 1897. The beet sugar crop of the United States in 1897 formed 2½ per cent. of its entire consumption of sugar. If it develops as expected in 1898 the United States will produce four per cent. of its sugar consumption itself.

A sugar beet factory and equipment costs about \$200,000, and must have three or four thousand acres of sugar beets as a base of supply. Pure water, pure limestone, and cheap fuel are also essentials to success.

As to what the farmer may expect as his share of the profit we can only give the statements of a couple of Nebraskans who raise beets. The first table is an average of outlay and income per acre for five years on 128 acres of beets, and the second is an average of cost and profit for the past year per acre on twenty-five acres of beets.

FIRST TABLE.

Plowing one acre.....	\$ 1.50
Fitting ground and planting.....	1.00
20 lb. of seed at 15 cents.....	3.00
Bunching and thinning.....	5.00
Four hoeings.....	5.00
Six cultivations.....	1.50
Lifting, topping, hauling (3 miles), siloing one-half of crop.....	10.00
Rent of land.....	4.00
<hr/>	
Total cost for one acre.....	\$32.00
Gross receipts from 12½ tons of beets at \$4.00 per ton.....	50.00
<hr/>	
Net profit.....	\$18.00

SECOND TABLE:

Plowing.....	\$ 1.00
Preparing ground.....	.50
Planting.....	.50
20 lb. seed at 15 cents.....	3.00
Bunching and thinning.....	4.00
Two hoeings.....	5.50
Pulling weeds.....	1.00
Four cultivations.....	1.00
Lifting, throwing in piles and topping.....	4.75
Siloing one-half of crop.....	1.50
Rent of land.....	6.00
Delivering 12.6 tons one mile at 25 cents.....	3.15
<hr/>	
Total cost per acre.....	\$31.90
Receipts from 12.6 tons at \$4.00.....	50.00
<hr/>	
Net profit per acre.....	\$18.10

Perhaps some experienced agriculturalist in Canada will be kind enough to supply us with the best information he can as to how these estimated expenses of cultivation compare with the probable expenses of cultivation in Canada. We should be very glad to have a statement of that nature to help us in placing the exact circumstances that would surround the industry in Canada carefully before the public. In the meantime let us lose no opportunity of exercising our influence to secure to Canada an important industry.

The history of the beet sugar industry in the United States will be but a repetition of the history of their development of the manufacture of tin plate. Canada imports 40,000,000 pounds of beet sugar annually from Germany. Some fine day we shall wake up to find the United States supplying us with it and ten thousand farmers in the United States making their living out of Canada. The time to act is now and if our Governments spent more time in dealing with such matters and dropped discussions and wrangles over picayune personalities Canada would be the gainer.

#### WHAT MANUFACTURERS ARE TO EXPECT.

When the Minister of Finance, Hon. W. S. Fielding, on April 5th, moved that the Dominion House of Commons, resolve itself into committee to consider of the Ways and Means for raising supplies, in addressing the House he said things regarding the tariff and the manufacturers, some of which we reproduce. He said:—

Let it not be supposed that the tariff is settled for ten years, or even for five years. \* \* Nothing is settled until it is settled in accordance with right, and so long as there are high duties we may expect agitation for reduction. I am afraid there is no rest for the protected manufacturer. I am inclined to think that he will find eternal vigilance to be the price of his protection. He must be on guard all the time against the attack that he knows must always come. I think that the manufacturers will show the best understanding of their own position, and best consult the permanent interests of manufacturing enterprises if they will realize that very important fact. It is well if they are to-day in a position which affords them some comfort and advantage, that they should apply their time and use their opportunity to get their business upon such a basis that it will be as little as possible dependent upon tariff aid. \* \* What a world of good might have been accomplished for the true interests of manufacturers if all the time and all the energy, and all the labor, and all the money that has been expended in the last twenty years in tariff watchings and tariff wire pulling at Ottawa, had been expended in the factories in the development of business, in the discovery of new inventions, in finding means for the use of labor-saving machinery, in learning

what might be done with the waste products, in dealing with all those forms of industrial progress which have to be dealt with by the manufacturer when he has keen competition. We would therefore say to the manufacturer that if he desires permanency in the tariff he must never expect permanency until the tariff gets down to a moderate point; and to-day there are duties in the tariff so high that I am sure the Government are not prepared to treat them as part of a permanent tariff. While the manufacturers are in a fairly good position to-day, it would be a mistake for them to realize the fact that Canada has turned her face away from a high tariff policy; and though we may proceed slowly, whatever progress we make from this time forward must be in the direction of greater freedom of trade.

It would be well for our manufacturers to read, study, ponder upon and inwardly digest what the Finance Minister says of them.

#### COVERING THE WHOLE GROUND.

A remarkably sensible article re the Anglo-American rapprochement is that contained in The Manufacturer of Philadelphia, in which it congratulates its readers on the result that has come out of recent events, and that is drawing Great Britain and the United States closer together. It tells us that there are many over-nervous people in its country who do not regard the matter in as happy a light as it does, even though they bear English names, trace an Anglo-Saxon ancestry, are joint heirs with the English people to a great language, a rich literature, and have political and social feelings which are common in a sense that no other two peoples' are or ever can be. Why such differences as exist should be magnified as they have often been in the past, it is hard to say. "Speaking for our own side, the only side for which we have any right to speak," says our contemporary, "it would seem that the chief cause of our desire to disown our British ancestry is a question of currency. It is a thorn in the flesh of many of our good countrymen, if their own accounts are to be believed, that England should regulate her currency to suit herself instead of consulting the political economists of the Rocky Mountains. She has raised prices to the poor man, which is bad, they say, though they argue in the next breath that high prices are a good thing and defend a protective tariff on that singular ground. England will not buy the output of our silver mines, and not only that, but she is such a tyrant in her way that she prevents France, Germany and the United States, and in fact every other civilized country on the globe from selling silver at a respectable price. England, too, is busy trying to increase the world's gold supply, and is actually turning out such volumes of the metal that she is disproving all the pet theories of our bimetallic economists.

"This terrible left-handed service which England has done the world is not all, however. She has always had an insatiable appetite for islands and waste places. She hauls all but some twenty or thirty per cent. of our imports and exports in spite of the fact that we do not want her to haul them. We would rather haul them ourselves. She is so smart that she always comes out right in a bargain, like the Jew. In fact, our anti-English movement is somewhat comparable to the anti-Semitic movement on the European Continent, and 'a bas les Juifs' is here in the minds of some of our strange seers 'a bas l'Anglais.' The English furthermore are so rich.

They can invest money in every part of the earth, and even then their banks are still bursting full. Why do we see English banks all over the world, and why do English syndicates pre- in to occupy the field all over the world? It is because they are too rich by reason of their conquests and their gold standard. Moreover, the English propagate at such a rate. Why did they populate Canada, the United States, the South Seas, and why are they pushing into Africa? There are too many of them. Why do we speak the English language instead of French or German, and why is it that every German who has lived a few years here or in England, when he goes back to the Fatherland proclaims his conversion to Anglo-Saxon institutions? Why is there no propelling, no projecting social or political force in other nations comparable to this which comes out of the British Islands? We confess that we do not know, and ask only for information.

"Just now it should be a great satisfaction to us to note that the two nations are on more cordially friendly terms than during any recent period. There is no doubt of this at all. Our interests in the far East are almost identical, and that field is so vital with interest for Western nations, now, that the confidence the two peoples feel in each other should certainly long endure. It will touch Americans that England is to all appearances in accord with us in our Cuban policy, and upon such a friend in Europe no light estimate should be placed. It certainly reduces to a negligible quantity the possibility of a European alliance against us, of which little fear has been entertained at any rate, though the erratic character of the German Emperor and certain dynastic influences in Austria need to be kept constantly in view. The English Poet-Laureate tuned his lyre to the Anglo-American rapprochement a few days ago, and a good old chord is struck in the breast of most of us when he sings of the 'Voice from the West' and its sympathetic message:

A message to bond and thrall to wake,  
For, wherever we come, we twain,  
The throne of the Tyrant shall rock and quake,  
And his menace be void and vain;  
For you are the lords of a strong young land, and we are lords of the main.

Yes, this is the Voice on the bluff March gale,  
'We severed have been too long:  
But now we have done with a worn-out tale,  
The tale of an ancient wrong,  
And our friendship last long as Love doth last, and be stronger than Death is strong.'

#### COMPREHENDING THE SITUATION.

At a recent regular monthly meeting of the New York Chamber of Commerce, the following minute on the subject of a treaty of reciprocity with the Dominion of Canada and Newfoundland was unanimously adopted:

"Whereas, The cultivation, extension, and development of close commercial relations between the United States and the Dominion of Canada and the Crown Colony of Newfoundland, would, in the opinion of this Chamber, subserve the best interests of this country;

"Whereas, This Chamber has consistently favored the establishment of reciprocal trade relations with Canada and Newfoundland;

"Resolved, That the Chamber of Commerce, of the State of New York, respectfully urge upon the Government of the United States the advantages to be gained by a treaty of reciprocity with the Dominion of Canada and the Crown Colony of Newfoundland.



"Resolved, That a copy of these resolutions be transmitted to the President of the United States, to both Houses of Congress, and to the Hon. John A. Kasson, Special Commissioner Plenipotentiary under tariff act."

Regarding which, our esteemed contemporary, The Manufacturer, of Philadelphia, remarks:—

Another voice makes itself heard for a reciprocity treaty with Canada, and this time it comes from a no less influential body than the New York Chamber of Commerce. Boston and Cincinnati have spoken in the same sense and the movement will perhaps gain headway at a rate which no one can resist. It is not easy to see why there should be a desire to resist it, though there is no doubt that such a disposition is here and there manifested. Indeed, it must have been a weighty conviction in the past among enormous bodies of people that there could be no value in such a treaty, otherwise we might have had it. Canada has made advances enough, and probably all that she has any intention of making. At any rate it would seem so since she has turned to Great Britain and given her a 25 per cent. preferential tariff, which is enough to pay the freight on almost any given line of goods across the Atlantic Ocean. When the new Liberal tariff law of 1897 was passed at Ottawa, it left a loop hole for other countries. Great Britain was not specifically mentioned as the beneficiary of the law, and as an actual fact a score or more governments, our own not among them, have so far gotten as much out of the reductions as Great Britain herself. All this, however, is soon to be changed, as it was anticipated that it would be. The budget which has just been presented to Parliament amends the clause and limits the scope of the law, a Montreal Correspondent says, to Great Britain and Ireland, British India, New South Wales and the British West Indies. This, it will be noted, does not even include all the British Empire. It is added, however, that the Minister of Customs may at his discretion admit other countries to the privileges of the minimum tariff if they in his opinion are entitled to this preferential treatment. It is at this door that we will come in, if we get in, and we can unite with the New York Chamber of Commerce in "respectfully urging upon the Government of the United States the advantages to be gained" by a treaty of reciprocity with Canada. Commissioner Kasson should give the subject his earnest attention, especially at the time when the outlook for trade with the Southern countries of the continent is dimmed by the war cloud.

#### AN EXAMPLE TO BE FOLLOWED.

The Manufacturer's Club, of Philadelphia, have recently sent out a circular letter to manufacturers with a view to extending the usefulness of that organization, and the manufacturer to whom it is addressed is requested not only to sign it himself, but also to obtain the names of one or more other manufacturers to it. Heretofore the members of the Club were classified as "active" and "associate," the former class including those who are actively engaged in manufacturing enterprises within a certain radius of the City of Philadelphia, and the latter those manufacturers who did business at a greater distance. The proposition contained in the circular is that active membership shall not be limited to only those who are actively engaged in manufacturing within the previous radius, but to any and all who are in sympathy with the aims and objects of the Club, and who are in any way, even remotely, identified or connected with any of the manufacturing interests of the country. Among the many advantages offered by the Club, is included the privilege of forming sections devoted to special lines of business, the Club offices furnishing adequate conveniences for their meetings, quite a large number of such sections being already formed and in operation.

This Philadelphia Manufacturers' Club is but one of many similar organizations in existence in the United States, all of which are in harmony and affiliation with each other, the chief object being to have all the manufacturers of the country in sympathetic touch with each other, so that the great body of manufacturers, as a whole, may work and act together so as to ensure by any legitimate means the aid of both public opinion and governmental policy in favor of the development and protection of all manufacturing enterprises; and to enable those in all branches of manufacturing enterprises to act in concert as a united body whenever action in behalf of any particular industry, or of the whole body is necessary.

It will be observed that the aims and objects of these various American associations of manufacturers, are precisely similar to those of the Canadian Manufacturers' Association, the most discernable difference being the greater spirit and interest that is shown in keeping up their organizations, and in promulgating their principles by our American friends. They not only maintain their respective sections in their more local organizations, but they maintain with great vigor their organizations in all the more important sections of the country, and these again are banded together under a national organization, the history and transactions of which have heretofore been alluded to in these pages; and the motto, E Pluribus Unum, is quite as applicable to the National Association of American Manufacturers, and all the ramifications thereof as to the National Union of the various states comprised in the United States.

This thorough and complete organization of American manufacturers, and the view and spirit with which they maintain it, is an example that Canadian manufacturers ought to imitate.

#### COMMERCIAL EFFECT OF THE WAR.

The United States and Spain are at war. The great powers of the world are in armed neutrality. The readers of the world's myriad newspapers eagerly scan them to see the latest news from the scenes of conflict. The financial operators who control millions of bushels of grain and other commodities are playing a large game with the world's supplies. And already we in Canada are beginning to notice the change in prices of food products caused by the war. The prices of flour, potatoes, and meats of all kinds have suddenly advanced within the past two weeks, to the alarm of the economical housewife and the delight of the butcher, the green grocer and the baker. The advance in flour has been most marked, but it is not altogether due to the war.

Leitro's tremendous operations in the Chicago wheat pit gave the initial impetus to the increase. Prices for some time back have been under the average, a condition ascribed by grain men to the cheapness of Ontario wheat, and the foolishly opposing tactics adopted by millers. The war but hastened the advance which must have come at no very distant date, even without a war to precipitate it. As we have stated in these columns, the export demand has been good, and those holding stocks of flour in Canada were naturally in no hurry to sell. Under such conditions, with the buying demand increasing, we find the price in Canada going up with every probability that it has not reached its maximum yet by a good few notches. Should Great Britain become involved in a war during the Hispano-American hostilities, the situation in the

Old Land would become acute and unprecedented in commercial history.

Potatoes at this particular season of the year are wont to rise in price and the annual increase has but been accelerated somewhat by the war talk. The same, in a lesser degree, may be said of meats, which have been influenced to rise by the increase in the market value of their concomitant foods potatoes and breadstuffs.

#### IMPERIAL CUSTOMS UNITY.

Of great interest to Canadians is the recent utterance of The New York Post's correspondent in London, England. Canada has secured the abrogation of the Anglo-German treaty, and now Germany is threatening Great Britain with tariff legislation derogatory to Britain's export trade with Germany and her possessions, unless Germany's trade privileges with Great Britain and her Colonies is forthwith restored. Canadian Free-Traders, especially those of the type who ignorantly believe Great Britain was built up by trade, and therefore would not forge her free trade policy for any consideration of herself or colonies, may find food for thought in The New York Post's view of the situation, which is as follows:—

Friendly though Germany is to China, she does not mean to yield without a struggle to the British demands in the new trade treaty negotiations now pending. The Anglo-German treaty, which was denounced by England, practically at Canada's bidding, because it prevented British colonies from granting England tariff preferences not extended to Germany, lapses in July next; Germany, by a bill now before the Reichstag, grants a *modus vivendi*, containing the most favored nation treatment to British goods for one year; but attached to the *modus vivendi* is the unpleasant threat that any continuance depends upon there being no change to the disadvantage of Germany, and particularly upon Germany not being treated in the British colonies more unfavorably than the British Mother Country.

But the threat, notwithstanding, the British Government having made a stand for the British Empire as a trade unit in the face of the world, will not withdraw, and already the Ministerial journals are talking of a possible British weapon if Germany will not yield.

"Dependent as Germany is to so enormous an extent upon the beet sugar industry," says the Pall Mall Gazette "we have but to impose a countervailing duty against her bounty system, and the outcry from the farming industries might be calculated to give a more friendly note to German remarks upon our trade relationship with our own colonies."

This is an heroic remedy, and Mr. Balfour's reply to friends of the West Indies, Thursday, shows that the British Government might adopt it as a last resort. This West Indies deputation desires the Government to give the British plenipotentiaries to the forthcoming Brussels conference, power to threaten France with countervailing duties if she persist in the bounties on beet sugar, by which the West Indian cane sugar industry is being crushed out of existence. Mr. Balfour would not pledge the Government, but made a reply so sympathetic as to suggest that the Government is prepared to go this length on two conditions: first, that the out-and-out free traders here do not make too active a protest; and, second, that the course of the conference shall indicate that the threat alone would suffice to lead France to abandon her bounties. Even the present British Government, with its weak-kneed free trade members, dreads the political effect of an actual resort to protectionist devices.

#### EDITORIAL NOTES.

In Jackson, Miss., the People's Telephone Company have 400 subscribers. They charge \$18 and \$24 respectively, for business offices and residences. The Cumberland Telephone Company is canvassing the city for subscribers at 50c. per month. It might pay Toronto municipal authorities to communicate with the Cumberland Company.

Venezuela is a country on the northeast corner of South America. It has an import tariff of \$4 a barrel on flour, but nevertheless imports a large quantity of flour annually from the United States. Here is another chance Canadian mill men will do well to take a look at when they are investigating the possibility of trade with the West Indies.

Mr. Benj. Higgins, manager at London, Ont., of the branch of the big egg buying firm of Thos. Robinson, Sons & Co., of Hartlepool, England, shipped 350,000 dozen eggs the second season after the branch opened, and reports that the demand in Great Britain for Canadian eggs is so great that he cannot begin to secure enough to fill the demand. Dressed fowls shipped in cold storage would also find a ready market in Great Britain, says Mr. Higgins. Here is a hint that should be sufficient to induce Canadians to embark in the export of poultry products.

Mr. Frank Hunnisett, of the well-known cattle exporting firm, Crawford & Hunnisett, Toronto, Ont., has returned from his trip to Europe. During his absence he did not fail to keep his eyes open, and he has picked up a deal of valuable information about the cattle trade. The first point of remark is that South American ranchmen are rapidly becoming keen competitors for the export trade in cattle for the English market from the United States and Canada. Mr. Hunnisett was informed that the South Americans paid special attention to breeding, and purchase the best English bulls for siring, never on any account breeding from South American bulls. By this means they produce heavy stocky animals that make the best of beef. Canadian breeders might do worse than take note of this.

New Zealand yearling lambs shipped in cold storage are also killing our mutton export trade, as the juicy yearling is preferred to the Canadian bucks and ewes that have been fattened for shipment. The cold storage system and the method of handling meats shipped from Canada, are also open to criticism, says Mr. Hunnisett, and better arrangements must be put into operation if Canada expects to keep up her export trade to England in meats.

The annual report of the Minister of Mines for British Columbia has just been received. It covers the calendar year 1897. The value of the minerals produced in the province during that year is put down at \$10,455,268, as against \$7,507,946 for 1896. In gold alone the increase is equal to almost \$1,000,000, the total value of last year's placer and lead mines being \$2,636,340, as against \$1,688,206 in 1896. Silver shows a still greater increase, the value of the 1897 output being \$3,272,836, against \$2,100,689 for 1896. Copper rose from \$190,926 to \$266,258 during the year, and lead from \$721,384 to \$1,390,517. Coal fell off a little, there being 892,854 long tons, worth \$2,648,562, in 1897, compared with 894,882 tons, worth \$2,688,666, in 1896. Of coke there

were 17,832 long tons, worth \$89,155, produced in 1897, as compared with 615 tons, worth \$3,075, in 1896. Of other minerals the total value was \$151,600 in 1897, and \$15,000 in 1896. The increase in coke was due to the demand from the Kootenay smelters. A shipload was sent to one of the large smelting works in Mexico. The total coke output is from the ovens at Comox, Vancouver Island. To still further expand the coke trade large barges are being built on which the loaded cars may be carried from the island to the mainland to avoid reshipment there. The Kootenay gold fields and the Comox coke ovens thus react on each other, the lower the price at which the coke is delivered the greater the activity in the Nelson and Trail smelters, the activity of the smelters in turn giving more impulse to the demand for coke.

The World takes little stock in the contention of the many newspapers that demand the free carriage of their papers through the mails. To our mind they have no more rights than any other class of the community. Although we would not like to see the rate made in any way harsh and discouraging. The World will always be ready to pay a reasonable postage rate on its papers going through the mails, provided always that all newspapers are treated alike. We fail to see why the religious papers should ask for any special favor or consideration. The Methodist Book Room of this city may be cited as a representative of the denominational concerns that ask for special favors. That institution we know to be one of the keenest business enterprises in Toronto. It is run on strictly business principles, and it should be treated as a purely business concern. It should pay postage on its publications like any other newspaper. Some of the newspapers have been selling their publications for the mere cost of the white paper in order to build up circulation statements. If the enterprising publishers who do this sort of thing choose to continue it, there is no reason why the rest of the community should provide them with free transportation. Newspapers, like everyone else, should pay their own way, asking charity from no one.—Toronto World.

A sensible statement put in a businesslike way. We heartily endorse it.

Our fellow citizens over-sea have of late heard much of Canada's natural wealth, wonderful resources and illimitable possibilities. They have next to learn concerning the invigorating healthfulness of its climate, and how that conduces to longevity. As a land of centenarians Canada ought to rank high. The number of persons in this country who reach the century mark before passing over to the great majority is something phenomenal. Among the French-Canadians this is particularly remarkable, as any one who has travelled through the country parishes can testify. After all, health is the greatest of earthly blessings, and a country of which it can be truthfully said, as we can say of Canada, that it is a land of blooming health, offers the home-seeker the most precious of all material attractions. Montreal Witness.

Great Britain, which usually operates more quietly and also more slowly than some of the other Powers, though not less surely, is at last having its innings in China. Germany and Russia have been engaging our attention so fully for the past few weeks and months and there have been so many predictions that England would be a loser in the Far East that it is worthy of remark that affairs now appear to be taking a different turn. It is stated that through the efforts of the British Minister at Peking, China has agreed to open all her inland waters to navigation. There will be free trade with the interior of the country. More ports are to be opened. The Yangtze valley will be accessible to the traders of the world. Furthermore it is asserted that the Chinese loan has been finally arranged for, through a London Bank. This will

provide the Chinese government with \$80,000,000 in ready money, which will enable it to invite Japan out of Wei-hai-wei, which has been held as a pledge for the payment of the indemnity ever since the invasion, some four years ago. The triumphs of a peaceful, commercial nation such as England is, are an inspiration to the rest of the world. Dignity with firmness and shrewd intelligence, will win where much else fails. We can only feel pride in such a result in the Far East, which is a tribute, not to the English people alone, but to the whole Anglo-Saxon race, of which we as Americans are one of the offshoots.—The Manufacturer, Philadelphia.

New Zealand is a country which affords possibilities for trade with Canada in a much greater degree than many other countries about which a deal of talk is afloat with scarce a probability of it ever amounting to anything. We are in receipt of a communication from a firm of ironmongers and woodenware manufacturers in Daneverke, New Zealand. The firm desire lists from manufacturers of general hardware who can export in equal terms with American makers. Here is a chance for Canadian enterprise.

Mexico's annual trade exceeds \$50,000,000. In 1897 Canada sent to Mexico goods to the value of \$37,425, and bought from Mexico coffee and cigars amounting to \$10,000. The United States took seventy-nine per cent. of Mexico's exports and furnished her over half her imports. Why cannot Canada secure her fair proportion of this trade both in exports and imports?

The Private Bills Committee of the House of Commons have sanctioned the bill to incorporate the Nickel Steel Co. of Canada, with the exception of some of the minor points set forth in its application. Let the good work go on, and when the bill becomes law let it be with an export duty on nickel and copper ore and matte that will bring Stevenson Burke and Robert M. Thompson to Canada or shut them out of business. The incorporators of the Nickel Steel Company of Canada are:—Messrs. John MacLaren, of Brockville; George D. Douglas, of New York; Alexander Fraser and David MacLaren, of Ottawa; J. F. Vaudevoort, of Pittsburgh; Hon. George A. Cox, of Toronto; Nathaniel Dymont, of Barrie; Alexander MacLaren, of Buckingham; Andrew Trew Wood, John Moodie, and John Patterson, of Hamilton.

Lilian Bell is now in Russia for the Ladies' Home Journal, and one of her recent achievements was to secure a photograph of the Czar with her own camera. This is most difficult to do in Russia, where every one with a camera becomes a suspect. But the Russian officers helped this bright American girl. Miss Bell will tell the story of her capture of the Czar in the June Journal.

Outing for May contains among other articles the following: "A May-day Trout," "Ponies," "A Bit of a River," "Yachting in the Sunny South," "With a Pack-Train in the Sierra Madre," "Buckboarding in Switzerland," "A-Trouting We Did Go," "Rogue Elephants," "Her Photograph," "A Canoe Trip With a Vengeance," "Wild Goat Hunting on Santa Catalina."

The May Cosmopolitan contains many interesting articles and illustrations. Among them are "On the Great Lakes," "The Victoria Shrine of Kameido," "A Family of Engineers," "Gloria Mundi," "Her Letter to His Second Wife," "The Old and the New," "The Coronation of Wilhelmina of Holland," "The Wilderness We Bought from France," "Mario Duplan's Child," "The Autobiography of Napoleon Bonaparte," "The Profession of Motherhood," "The Voice in Conversation," "The Mills of the Little Tin Gods," and the usual selections from the world of art and letters.

# CANADIAN MANUFACTURERS' ASSOCIATION.

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First Vice-President:

**JAMES KENDRY, M.P.**

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**P. W. ELLIS.**

Treasurer:

**GEORGE BOOTH.**

Chairman Executive Committee:

**R. W. ELLIOT.**

Chairman Tariff Committee:

**W. K. MCNAUGHT.**

*The Executive Committee meet on the Second Tuesday of each month.*

OFFICES

**McKinnon Building,**

**TORONTO.**

**Tel. 1274.**

**J. J. CASSIDEY, - SECRETARY.**

**THE OBJECTS OF THIS ASSOCIATION ARE:**

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

CANADIAN INDUSTRIAL LEAGUE,

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WOOLEN MANUFACTURERS' ASSOCIATION,

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**ANNOUNCEMENT.**

This department of THE MANUFACTURER will in future be devoted to the work of the Canadian Manufacturers' Association. Members of the Association are cordially invited to contribute their opinions and queries with regard to any and all matters of interest to themselves or which they deem likely to be of assistance to other members. There are questions constantly cropping up that are of vital importance to the manufacturers of Canada, and upon which united action is necessary in the general interest. As the Association deals with these questions their resolutions will be announced in these columns and those members who do not reside near the headquarters will be kept in touch with the work. There is plenty of work for all to do. The Association desires all possible information about every industry in Canada, and every manufacturer should be enrolled as a member of the Association and take an active part in its work. It must be apparent to everyone that the Association is an all-important factor in Canada's industrial success. The united effort of the manufacturers of the Dominion should be put forth to make it the moulder of Canada's destiny as the great supply basis of the world.

It is not intended to fill the department with editorial matter advising the Association as to its action. Prominence is to be given to information such as is most likely to be beneficial to the manufacturer. If other manufacturers are adopting advantageous methods the manufacturers of Canada want to know it that they may adopt methods even better. This applies not only to the factory but to the sales department, and to every one of the various ramifications of the modern manufacturing establishment. There are hundreds of ways in which every member of the Canadian Manufacturers' Association can be helpful to every other member. The bright business man will learn from any other bright business man, no matter whether they are both in the same, or even in similar, lines of business.

That the manufacturers may feel free to express their ideas and interchange opinions by the medium of the CANADIAN MANUFACTURER, this department is set apart for them. If it results in better acquaintance among manufacturers, and the establishment and maintenance of a fraternal feeling and a desire to assist each other and their country by every means in their power, its end will have been accomplished.

**THE EXECUTIVE MEET.**

The Executive of the Canadian Manufacturers' Association met yesterday in their offices in the McKinnon Building, Toronto, and transacted general business. The question of the sugar beet industry came up for discussion and the members were unanimous in their advocacy of Government measures to secure the establishment of the industry in Canada. The discussion culminated in the following resolution, which was passed unanimously:—

"Whereas, No industry would be likely to furnish more general and valuable benefit to the agricultural and commercial interests of the Dominion of Canada than the beet sugar industry; and

"Whereas, The Executive Committee of the Canadian Manufacturers' Association understand that a syndicate of German capitalists will construct a beet sugar factory in Ontario at a cost of from \$400,000 to \$500,000 and operate it, if the Dominion Government will allow them to import free of duty, such parts of their machinery as are not made in Canada, and will give them a bonus of one-half cent per pound on the sugar they may produce for five years; and

"Whereas, Considering the tariff on iron and steel in connection with the bonus on the production of domestic iron and steel, the total ad valorem bonus to the Canadian iron industry is greater than that asked for by this beet sugar syndicate:

"Resolved, That the Executive Committee of the Canadian Manufacturers' Association strongly recommend the Government to encourage the establishment of the sugar beet industry in Canada.

"Resolved, That a copy of this resolution be forwarded to Sir Wilfred Laurier, Premier, with the request that it be laid before the Government for their consideration."

On behalf of the Canadian Manufacturers' Association Mr. P. W. Ellis, 2nd vice-president of the Association, attended the regular monthly meeting of the Toronto Horticultural Society. The Manufacturers' Association are always desirous of assisting in the development of every phase of national and home life that tends toward the elevation of the nation, and realize that the cultivation of flowers is a great means to that desirable end by reason of the development it occasions of the tendency toward the beautiful and artistic. There is no place where the work can be so well begun as with children, and accordingly, on behalf of the Association, Mr. Ellis offered a medal for a prize in the school children's branch of the chrysanthemum show to be held in the autumn.

The Executive expressed their approval of the action.

Manufacturers desirous of increasing their export trade should study the advertisement of the Henry W. Peabody Co. on another page of this issue.

OF THE WAR.

The present hostilities between the United States and Spain have an important effect upon certain lines of Canadian manufactures. Perhaps the line most benefitted directly is the paper manufacturers who turn out what is known to the trade as "news." Many inquiries for "news" have been received from the United States, and prices mentioned, it is said, will likely result in the sale of a large quantity of paper to United States newspaper publishers by Canadian paper mills. Eddy's mills, The Canada Paper Company, and the Riordan mills are our biggest producers of "news" and they should reap corresponding benefits.

In this connection, as in relation to food products prices, there is one point that must not be overlooked. If the impression gets abroad in Canada that the sudden increase of prices is due wholly to the war then the cessation of hostilities will see something of the nature of a panic that will result disastrously to Canadian commerce. While the war has hastened the increase of prices it is not really the cause of that increase, and should not be looked upon as such. The formation of the International Paper Company to control the output of "news" in the United States, was the prime cause of the demand for Canadian "news." Newspaper publishers in the United States wanted to show the Trust that it did not control the situation—hence the proposition to Canadian paper mills.

Another important feature of the "war" boom is the danger that United States manufacturers may bolster up their trade by selling in Canada immense quantities of their wares at slaughter prices. Travellers are already in Canada for some United States firms which have not tried to do business in Canada for many years. This is a feature of the situation that will bear watching. The Canadian Manufacturers' Association are well aware that these United States manufacturers are always slaughtering goods in Canada, but they do not want the manufacturers of the United States to be forced by the war into driving Canadian manufacturers, with but a working capital, and with only the home market to depend upon, to close their doors.

TORONTO'S APRIL TRADE.

A large increase in business is shown by the customs returns of the port of Toronto during last month. During April 1898, goods imported free of duty were valued at \$890,252, against \$403,816 during the corresponding period of 1897. Exports from Toronto last month amounted to \$626,108, against \$470,713 a year ago. The chief increase in exports was in meats, which in April, 1897, were valued at \$255,665, while last month they totalled \$364,617, of which \$331,719

was port products. Tea exports were very large last month, being \$11,701. Agricultural implements to the value of \$130,673 were exported, and agricultural products valued at \$49,605 against \$25,321 during April 1897. Among the free goods imported were wool, \$30,190, and crude rubber, \$66,825, two unusual importations in large amounts. Imports of anthracite coal were only \$40,424, as against \$77,912 in April, 1897. Hides and skins imported last month were valued at \$118,942 against \$56,615 imported during April 1897. Tea was entered at \$50,479, an increase of \$20,000; settlers effects, \$14,919, a decrease of \$5,000, tree fruits, \$18,599, an increase of \$5,000. Rags, valued at \$13,304 were imported.

WORTH NOTING.

Messrs. Rust, Trowbridge & Co., of Port of Spain, Trinidad, send an interesting letter to the Montreal Board of Trade with the request that it be given to the press. Accompanying the letter is a comparative statement, compiled from Government returns, showing the foodstuffs, etc., imported into Trinidad from Canada and the United States, respectively, in 1897. Messrs. Rust, Trowbridge & Co. say:

We think, if your millers and others made vigorous efforts, much of the trade now done between the British West Indies and the United States might be diverted to Canada, as in most instances the quality of the Canadian produce is superior to American.

They express pleasure at the preference to be given British West Indian raw sugars in Canada, and add:

We are also very glad to learn that they intend subsidizing a fast line of steamers to the West Indies, as the want of such a line has been the cause of the very poor trade done with Canada by merchants here.

They report the successful placing of 1,200 barrels of Canadian flour, shipped direct from St. John, N.B., and advise that they will send market reports regularly.

The following articles are selected from the comparative statement enclosed:

	United States.	Canada.
Bread .....	\$ 43,000	nil.
Butter .....	9,467	\$ 489
Cheese .....	24,345	1,915
Coal .....	59,553	22,430
Oats .....	59,553	22,430
Flour .....	611,390	nil.
Fruit .....	9,948	48
Meats .....	206,563	547
Wearing apparel .....	32,031	14
Peas and beans .....	27,360	2,852
Lard .....	75,705	nil.

These figures indicate how small Canada's trade is, and what room there is for expansion.

INGERSOLL-SERGEANT Rock Drills

FOR MINES, TUNNELS AND QUARRIES

PISTON INLET Air Compressors STRAIGHT LINE DUPLEX and COMPOUND.

FOR ALL DUTIES.

... COMPLETE MINE EQUIPMENT ...

AMES COOPER MANUF'G CO., Limited, - 299 St. James St., Montreal.

Other Offices - - - ROSSLAND, B.C. RAT PORTAGE, ONT. HALIFAX, N.S.

## CAPTAINS OF INDUSTRY.

The following items of information, which are classified under the title "Captains of Industry," relate to matters that are of special interest to every advertiser on these pages, and to every concern in Canada interested in any manufacturing industry whatever, this interest extending to supply houses also.

If a new manufacturing enterprise of any kind is being started, or an electric lighting plant instituted, or an electric railroad, or a telephone, or a telegraph line is being constructed; or a saw mill, a woolen, cotton, or knitting mill; or if any industrial establishment has been destroyed by fire with a probability of its being rebuilt, our friends should understand that possibly there may be something in the event for them. Do you catch on to the idea?

The starting of any such concern means a demand for some sort of machines, machinery, or supplies, such as steam engines and boilers, shafting, pulleys, bolting, lubricants, machinery supplies, wood or iron working machinery, ventilating and drying apparatus; pumps, valves, packing, dynamos, motors, wire, arc and incandescent lamps, and an infinite variety of electrical supplies, chemicals, acids, alkalies, etc. It is well worth the while of every reader of the Canadian Manufacturer to closely inspect all items under the head of Captains of Industry.

The Laurentide Pulp Mills, at Grand-Mere, Que., are nearly complete. The big flume will be 14½ feet in diameter.

The G.T.R. expect to have the grain elevator at Goderich, Ont., completed and ready for operation by August 1st. A Government dredge is there, ready to begin digging a channel to the site.

The Rathbun Company's Terra Cotta works at Deseronto, Ont., were destroyed by fire last Sunday. Loss about \$100,000.

The Metallic Roofing Company, of Toronto, recently supplied a handsome metal ceiling for the chapel of the Central Prison, Toronto. This material is particularly adapted for church work.

A factory for dried codfish is to be established at Lockport, N.S. It will use 1,000 quintals of fish per month.

E. Stuckey has reopened his sawmill at Nelson, B.C.

The White Candy Company, St. John, N.B., are located in their new factory, 240-2 Union street, in that city. Increasing business necessitated their extensions.

Knight & Munro, Halifax, N.S., have contracted to supply 5,000 sets of military accoutrements to the Canadian Militia department.

The Gillies Manufacturing Co., of Gananoque, Ont., are considering removal to Montreal, whence they have advantageous propositions.

A shears and scissors manufacturing Co., of Macon, Ga., are negotiating with Galt, Ont., regarding the location of the factory at the Ontario town.

Geo. J. Kelly, of Bridgewater, N.S., is putting a steam plant in his marble works.

Drummond Colliery, Stellarton, N.S., have secured the contract to supply 30,000 tons of coal to Montreal Street Railway.

Selenite is being shipped from Enfield, N.S., to New York City.

Under the title T. M. Davis & Co., farmers, near Bennick, N.S., are applying for incorporation to run a creamery and cannyery business.

One hundred men are at work building the new pulp mill at Mispec, N.B.

Waterloo, Ont. Knitting Mills have put on twenty extra hands.

Dundas, Ont., is a live town. An establishment to manufacture axes, files, chisels, and other ironware is on the programme now.

The Canada Tool Works, Dundas Ont., have shipped the last section of the thirty-one ton rolling mill to the Montreal Rolling Mills.

Jacob Shelly has succeeded H. McCullough in the grist mill at Hawkesville, Ont.

The Globe Furniture Company, Walkerville, Ont., have secured the contract for Kindergarten furniture for Toronto schools.

The Council of Richmond Hill, Ont., have passed a by-law exempting all manufacturing machinery from taxation.

The Fire and Light, Property, and Parks and Gardens Committees, of Toronto City Council, are dealing with the question of electric light for Toronto Island.

The Molsons Bank building which contractor Thos. Tompkins is constructing at Vancouver, B.C., is to cost \$120,000.

Brockville, Ont. citizens are querying the Ottawa Government as to an appropriation for the erection of an armory at Brockville.

The Gutta Percha and Rubber Manufacturing Co., of Toronto, have in press a handsome new illustrated catalogue.

The Empire Carpet Co., of St. Catharines, Ont., are putting in a 50 h.p. boiler, and 30 h.p. engine in their mill.

# ARC LIGHT CARBONS.

Full Lines  
Electrical Supplies....

JOHN FORMAN, 644 Craig St., Montreal.



# Emery

WRITE FOR LATEST CATALOGUES AND SAMPLES TO

THE LONDON EMERY WORKS CO.,

10/12 VINE ST., CLERKENWELL,  
...AGENTS WANTED...

LONDON, E. C.

CLOTH AND PAPER.  
GLASS & FLINT PAPER.  
"Atlas Brand"

"FLORA" Knife Polish  
in 3d. 6d. & 1/ Tins.

Ground, Washed & Flour

WHEELS of highest  
quality for general  
& special purposes.

Grinding Machinery.



The Cameron, Carruthers Co., of Toronto, manufacturers of interior woodwork, have dissolved. Peter Cameron continues the business.

The Forbes Manufacturing Co., Halifax, N. S., have dissolved partnership.

The Canadian Office and School Furniture Company, Preston, Ont., have been awarded the contract for school furniture by the Toronto Public School Board.

The James Cooper Manufacturing Co., Limited, Montreal, have just completed a shipment for Messrs. Larkin & Sangster, contractors, Iroquois, of four Lidgerwood double cylinder, double drum, hoisting engines, with five Sargeant drills, and quarry bar outfit.

A new turntable has been put in at the C.P.R. shops in Carleton Place, Ont.

The electric cars on the Hull-Aylmer line are to be equipped with two additional motors each. Five new cars are being built at Peterboro for this line.

The Wolf Lake Gold Mining Company have been chartered under the Ontario Statute with \$180,000 capital. Sir Melville Parker, of Cooksville, Ont., is to be president of the company.

The Zryd Gas Machine Company, of Hespeler, Ont., have been chartered with capital stock of \$5,000 to make and deal in acetylene gas machines.

Contractors for the Pembroke Southern Railway are pushing the work with all possible speed. Large gangs of men are employed.

The Duluth Mining Company of Ontario, has been incorporated with capital stock of \$30,000. The only Canadian member of the syndicate is Wm. McBrady, of Port Arthur, Ont.

Messrs. Innis Bros. flouring mill, at Richmond Hill, Ont., is now in running order.

The Messrs. Richardson, of Kingston, Ont., have leased the 225,000 bushel Ogilvie elevator at Goderich, Ont.

Work is being rushed on the \$20,000 improvements to St. Charles Seminary, Shorbrooke, Que.

Manager Edwin Squire expects soon to have the Norwood, Ont., cheese factory ready for operation.

Doan & Sons tannery at Clinton, Ont., was damaged to the extent of about \$5,000 by a recent fire.

Mr. Parson has his sawmill frame and machinery at Barry's Bay, Ont., ready to set up.

La Compagnie, D'Electricite de Soulanges, of Coteau Landing, Que., are applying for incorporation.

The Laurentide Pulp Company, of Grand-Mere, Que., have secured supplementary letters, increasing their capital stock to \$1,200,000.

The Beaver Suspender Co., of Quebec, have dissolved.

Walter Dean, the well-known Toronto boat builder, is constructing for the inventor a working model for a new style of roller boat.

The Corticelli Silk Co., of St. John's, Que., have received official sanction to the increase of their capital stock to \$125,000.

The Dominion City Farmers' Elevator Company, of Dominion City, Man., have been incorporated.

M. A. Cleveland, who has a contract on public work, Cardinal, Ont., is now starting in on his rock work after placing an order with the James Cooper Co., of Montreal, for one of their latest model Sargeant drills.

The Macdonell Rolling Mills Co., of Sunny-side, Toronto, report business booming, they are putting in another furnace and another mill, and will run night and day.

W. S. Russell, cigar manufacturer, Berlin, Ont., is negotiating with Hull, Que., with a view to moving thither. He employs fifty men and expects to employ more shortly.

The Goldie & McCulloch Co., of Galt, Ont., have shipped a big Wheelock engine to the Montreal Belt Line Railway Company. The engine weighed 19,440 pounds.

A big building on Bay street, near Wellington street, Toronto is being altered for the Jessop Steel Company, Richmond street, Toronto.

W. J. McGuire & Co., King street west Toronto, are adding extensively to the size of their premises.

The new building of the Toronto Electric Motor Company, on Pearl street, Toronto, is well under way.

Wharton's sawmill, New Denver, B.C., is to be refitted and its capacity increased to 20,000 feet per diem.

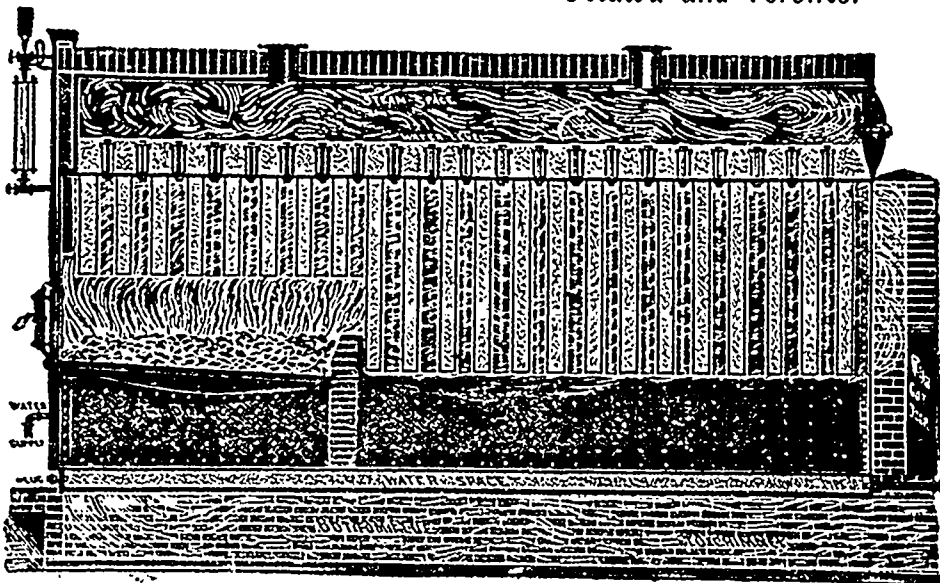
# E. A. WALLBERG, C.E.,

Bell Telephone Building, - MONTREAL, QUE.

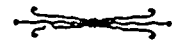
HEAD CANADIAN OFFICE FOR

## KINGSLEY WATER TUBE BOILERS

Manufactured in Montreal,  
Ottawa and Toronto.



*For Steam, Power  
and Hot Water  
Installations...*



*The Most Economical Boiler,  
and the Cheapest, when  
based on Evaporat-  
ing Capacity.*

Can be installed in any Basement  
requiring only 6 1/2 feet in height.

**GUARANTEED:** A Saving in Fuel of 30 per cent. over Return Tubular Boilers.  
A Saving in Fuel of 50 per cent. over any Cast Iron Heater.

...Catalogue Free.

J. A. Culverwell and Geo. Whyte-Fraser, of Toronto, are organizing a company to be known as the Fenelon Falls, Lindsay Electric Power Transmission Company. Their purpose is to utilize the immense power at Fenelon Falls to generate electricity which they will transmit to Lindsay, sixteen miles away.

The Brockville Navigation Co., of Brockville, Ont., have obtained a charter.

The James Cooper Manufacturing Co., Limited, Montreal, have just secured an order for an additional plant for the Regina, (Canada) Gold Mine, Limited, of Rat Portage, consisting of Duplex Cross Compound Condensing Ingersoll-Sergeant piston inlet Compressor, ten drills, battery of boilers, pumps, heaters, and all necessary connections to install plant complete. The first shipment in this contract has gone forward.

The Boundary Creek District of British Columbia is coming forward, and it is very likely that a number of large development plants will be put in during the coming season.

A lath machine has been added to McLachlin Bros' sawmill plant at Arnprior, Ont.

The James Cooper Manufacturing Co., of Montreal have completed shipment of contract for complete mining plant entered into with the Montreal-London G. & S. Development Co., to equip their "Dufferin" property, at Salmon River, N.S. This plant consists of a duplex cross-compound condensing Ingersoll-Sergeant piston inlet air compressor, eight drills, battery of three boilers, one 50 h.p. and one 40 h.p. Lidgerwood link motion and friction, double compartment shaft hoisting engines, and all necessary piping and connections to install plant complete, ready for operation.

The British Columbia Copper Co., of Anaconda, B.C., have just contracted with the James Cooper Manufacturing Co., Ltd., Montreal, for the installation of an Ingersoll-Sergeant ten drill Compressor plant, complete with ten drills, battery of boilers, Lidgerwood Hoisting Engine, pumps, heaters, and all necessary equipment to make plant complete.

A syndicate of United States citizens have been incorporated as the Buffalo Northwestern Gold Mining Company of Ontario, capital stock, \$1,000,000.

The Richmond Lumber Company of Stephenson, B.C., have been incorporated. Gillies Bros. new sawmill at Braeaside, Ont., is now in operation.

The Peoples Heat and Light Co., of Halifax, are increasing their plant for greater facility in handling materials at the power house, and have placed an order with the James Cooper Manufacturing Co., Montreal, for one of the Standard Lidgerwood 30 h.p. link motion and friction double drum double cylinder hoisting engines which will be shipped during the coming week.

Ontario Letters Patent have been issued to the Adjustable Shower Bath Equipment and Novelty Company, of Toronto, with \$24,000 capital.

Knight Bros., of Burk's Falls, Ont., have increased the size of their lumber dry kiln, and changed the system in use.

We have had many inquiries as to burners for acetylene gas. There have been many difficulties to overcome in securing an effective burner. Some were complicated in construction and liable to get out of order. Some were so delicately made that they had to be handled as gingerly as egg shells.

# MACHINERY and EQUIPMENT

FOR

# Mines

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MANUFACTURED BY

Canadian Rand Drill Co.,  
MONTREAL.

## A. KLIPSTEIN & CO.

122 PEARL STREET, NEW YORK.

## Anilines, Dyestuffs and Chemicals.

DELIVERY MADE AT NEW YORK, MONTREAL OR HAMILTON.

## WRIGHT & DALLYN,

AGENTS,

HAMILTON, ONTARIO.

# Sulphur

ROCK  
ROLL  
FLOUR  
GROUND

English Recovered  
- Sicilian -

Etc,

The Anglo-Sicilian Sulphur Co.,  
Limited.

## Arthur P. Tippet & Co.,

CANADIAN AGENTS,

30 St. Francois-Xavier Street,  
MONTREAL.

## ABBEY IMPROVED CHILLED SHOT CO.

(LIMITED)

NEWCASTLE, GREAT BRITAIN.

THIS SHOT IS NOW MADE BY A NEW PROCESS.

Samples sent on application.

Read the following Reports on our New Make of Shot:—  
*Sporting Goods Review* states:—"The size and shape of pellets are good and are exceedingly hard. We understand that the demand for this shot has considerably increased and gaining in favor with sportsmen, to whom its excellence of manufacture appeals."

*Arms and Explosives* states:—"For soundness and general regularity of surface the pellets possess a very high degree of excellence."

W. W. GREENER, "the Great Authority on the Gun," speaks highly of Chilled Shot, and strongly recommends it in preference to soft shot.



ESTABLISHED 1823.

Telegrams :-- "WILSONS, CORNHOLME."--A.B.C. Code Used.

# WILSON BROS. BOBBIN CO.

(LIMITED)

CORNHOLME MILLS, TODMORDEN, ENGLAND.

## BOBBIN AND SHUTTLE MANUFACTURERS.

THIRTY PRIZE MEDALS AWARDED.

HIGH-CLASS WORKMANSHIP. SEVENTY YEARS' REPUTATION.

LARGEST BOBBIN MAKERS IN THE WORLD—(Over 1,200 Workmen).

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BRANCH ESTABLISHMENT :

**ATLAS BOBBIN WORKS, GARSTON, LIVERPOOL.**

OFFICE AND SHOWROOMS :

**14 MARKET PLACE, MANCHESTER.**

The Victoria Shoe Factory, of Quebec city, have dissolved. Joseph Lepine and Narcisse G. Vegina, will conduct the business under the old name.

The Bole Drug Co., Winnipeg, are applying for incorporation.

E. Werner, expects shortly to have his felt boot factory in operation at New Hamburg, Ont. The machinery is now nearly all in place.

The C.P.R. are engaging men to work on the docks at Fort William, Ont.

The Wehrle Brush Manufacturing Co. of Toronto, have removed from 134 Bay street, to 118 King street, east, where they will occupy premises twice as large as their Bay street premises. The progress of this firm has been very rapid. In 1894 Mr. Wehrle began the manufacture of brushes in a small way. In 1896 the present company were incorporated to handle the business, and now, in 1898, they have had to secure much more commodious premises to carry on their increasing business. The development of this industry is a credit to its energetic and capable promoters.

The Moore Patent Packet Company, of Montreal, are applying for incorporation.

**THE TORONTO PATENT AGENCY, (LIMITED) . . . TORONTO, CAN.**

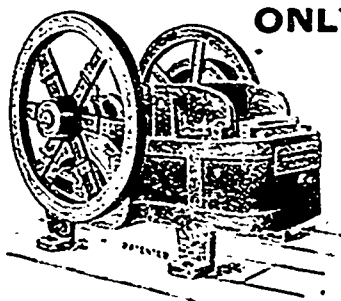
Head Office, 79, 80, 81 Confederation Life Building.  
CAPITAL, \$25,000.00.

Patents obtained. Patents sold on commission. Provincial rights sold. Most actual sales. Best results. Quickest work. Honest Treatment. Oldest company. Reliable references. All patent business promptly attended to. Valuation and prospects of any patent furnished on application.

## The DRIER the STEAM the GREATER the POWER.



**OUR SECTIONAL PIPE AND BOILER COVERING**  
Almost Entirely Prevents Condensation of Steam when Passing Through the Pipe  
**EUREKA MINERAL WOOL & ASBESTOS CO.**  
192 BAY STREET, TORONTO.  
ASBESTOS GOODS. MINERAL WOOL. ENGINE PACKING.



ROLL JAW CRUSHER.

ONLY

# FINE CRUSHER

BREAKS LARGE, or when set close  
Reduces to GRAVEL and SAND.

**FOR ROADS.**

**STURTEVANT MILL CO., BOSTON, MASS.**



## THE CROCKER IMPROVED ...TURBINE.

SEND FOR OUR NEW CATALOGUE  
JUST ISSUED.

A HIGH-GRADE, MODERN WHEEL—ECONOMICAL  
AND EFFICIENT IN THE HIGHEST DEGREE

The best combination of hydraulic science with practical results now on the market. Complete Water Power Plants built and installed.

*It will interest you.  
Our Prices will Please,  
and to Purchase  
Our Machinery will Pay you.*

**The JENCKES MACHINE CO.,** 28 Lansdowne St.,  
SHERBROOKE, Que.

An electric railway is on the programme to connect St. Catharines and Port Dalhousie. H. C. Symmes, of Niagara Falls South, Ont., interested.

The Toronto Machine Screw Co., 109½ Adelaide St. west, Toronto, lost no time in getting in working shape after their recent fire. They have installed an up-to-date plant and are hard at work.

The Joliette Shoe Company, of Joliette, Que., are applying for incorporation.

The Jones & Moore Electric Company, have recently installed in the Hunter, Rose Co's new printing establishment, in the Temple Building, seven slow speed motors for direct connection to their printing presses.

Montreal Grain Elevator Company, capital \$300,000 are seeking incorporation.

A project is being discussed to start a piano factory in the old Waterous buildings in Brantford, Ont.

Geo. H. Hees, Son & Co., Toronto, are occupying the McMurrich street premises formerly tenanted by the Warren Organ Company, pending the construction of another building.

Mr. James Whitton has installed a cream separator in the old planing factory building at Sterling, Ont., and is doing a rushing business.

Rumor saith that the Royal Paper Mills Co. intend building another pulp mill to operate by the sulphite process, and locating it higher up the river than the present mill at East Angus, Que.

The Cushing Sulphite Pulp Co. is asking a charter to erect a sulphite pulp mill at Fairville, N.B.

C. B. Wright's lime kilns, Hull, Que., were damaged \$600 by a recent Sunday morning fire.

Mr. G. E. Corbett is having the sawmill recently damaged by fire at Lequille, N.S., refitted as a saw, planing and stave mill.

Pulp is being shipped in large quantities from Digby, N.S., to the European market.

Rat Portago Lumber Co., Rat Portago, Ont., have expended some \$13,000 on improvements to their mill this spring.

The Jenckes Machine Co., Sherbrooke, Que., will supply a large quantity of shafting, log handling and other apparatus for the sawmill of Joseph Guilbert, Windsor Mills, Que.

It is reported that the C.P.R. have decided to erect a lead smelter at Trail, B.C.

**TORONTO MACHINE SCREW CO.**



Manufacturers of  
Hexagon, Square and Round Cap Screws.  
Steel and Iron Set Screws.  
Hanger and Planer Bolts, Studs, etc.

Send for Price List and Discounts.

109½ Adelaide St. W., - TORONTO.

**WM. BARBER & BROS.**

GEORGETOWN, ONT.

Manufacturers of

**BOOK AND FINE PAPERS**

A. C. NEFF, Chartered Accountant. JAMES WOOD, Late Sec. The T. Eaton Co., Ltd.  
**NEFF & WOOD**  
PUBLIC ACCOUNTANTS, AUDITORS ASSIGNEES, ETC.  
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CONSULTING and Electrical Engineer. CONSTRUCTING  
Railways, Lighting, Power Transmissions, Factory Plants, Reports, Specifications, Tests.  
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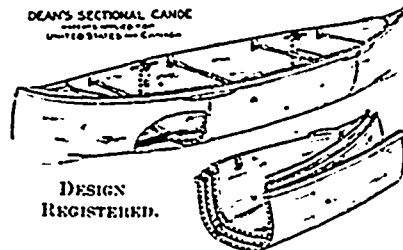
**H. F. STRICKLAND, Electrical Contractor.**

77 ADELAIDE ST. E., TORONTO. Telephone 1838.

SPECIALTY: - Electric Wiring, by skilled men. All work done according to latest methods, at lowest possible prices. Complete Isolated Plants.

**DEAN'S Sectional Canoe.**

Patents applied for United States and Canada.



The only Klondike Canoes carried by the Express Companies. Bulkheads may be placed between the sections when bolted together, making each section a water tight compartment. The only serviceable Portable Canoe made. Write for catalogue and prices.  
**WALTER DEAN, Toronto, Can.**

Progressive Manufacturers use the....

**Blackwell up-to-date VARNISHES**

....For Finishing....

Pianos, Carriages and Railway Coaches. MADE IN TORONTO.

**ROBT. A. ROSS, E.E.,**

Consultant to Canadian Pacific Ry. and Boiler Inspection Co.

**CONSULTING ENGINEER.**

Specifications, plans, advice upon Steam and Electric Plants, Power transmission and distribution. Special machines designed.

17 St. John Street, MONTREAL.

**PATENT FOR SALE.**

Canadian Patent No. 53178, relating to apparatus for rapidly discharging cargo from vessels, whereby the necessity of shoveling grain, coal, etc., in small quantities is avoided. Apply to

**JOHN W. GLAHOLM,** Nanaimo, B.C.

**Leitch & Turnbull**

Canada Elevator Works,

Queen and Peter Streets, Hamilton, Ont.

Patent Safety Hydraulic Hand and **POWER ELEVATORS**

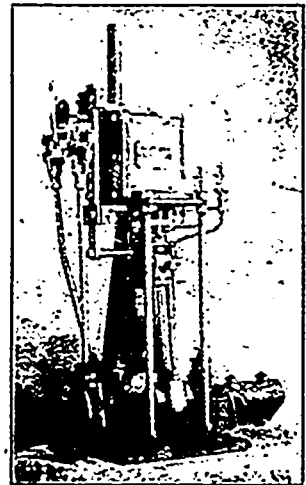
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**ALBERT BELL ENGINE WORKS**

DUNNVILLE, ONT. Makers of

YACHT ENGINES, 1 H.P. to 50 H.P. Safety Water Tube BOILERS PROPELLER WHEELS Stationary Engines and Boilers



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Fleming & Chapin, **TAPES** Twilled and Plain. 228-231 Church St., In Rolls or on Spool. PHILADELPHIA.

**CARBONIZER** A neutral substance, harmless to animal fibre or tissue, while it destroys burrs, etc., as efficiently as acid. It leaves the wool in fine condition. Manufactured by the Merrimac Chemical Co., 13 PEARL ST. BOSTON.

**BOILERS.**

YOU WANT THEM. WE MAKE THEM

WRITE FOR PRICES

**BANNERMAN & FINDLATER,** Boiler Makers, OTTAWA, ONT.

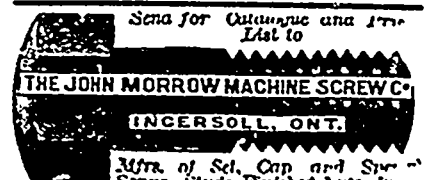
**WANTED**

Mechanics, Engineers and Firemen to enclose 20 cents in stamps for Working Model of Valve for Steam Engines.

Address, H. F. LOWE, M.E.,

Patent Solicitor,

Confederation Life Bldg., Toronto, Canada.



**J. ALEX. CULVERWELL,**

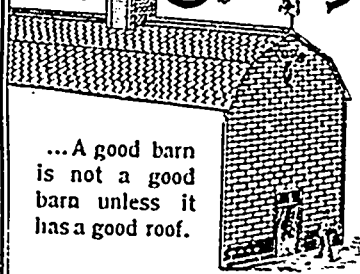
DISTRICT AGENT

Toronto and District.

**Royal-Victoria Life** (HEAD OFFICE MONTREAL)

5 King Street West, - TORONTO.

**ROOFS FOR THE BARN'S.**



... A good barn is not a good barn unless it has a good roof.

We would therefore press on you the importance of enquiring into the durability of our Steel Shingles before deciding on the covering of your barn.

We guarantee all our steel products to be water, wind, and storm proof and to last a lifetime.

We will give you the benefit of our 32 years' experience in roofing, our illustrated catalogues, and up-to-date information on these goods on receipt of a post card.

**The Padlar Metal Roofing Co.**  
OSHAWA, ONT.

Monroe & Rowantree's flouring mills at Thorold, Ont., were nearly destroyed by a leak in the Welland canal.

Acton, Ont., has had a proposition from Stayner Electric Light Co., for electric light.

**ECO MAGNETO WATCHMAN'S. ELECTRIC CLOCK.**

Without Batteries.

Write for descriptive circular to

**Eco Magneto Clock Co.,**

Room 71, 620 Atlantic Avenue,  
BOSTON, MASS.

**MONTREAL ELECTRIC CO.,**  
1898 Notre Dame Street,  
(Balmoral Hotel Block).

Agents for Province of Quebec.

**John Starr, Son & Co. (Limited),**  
HALIFAX, N.S.,

Agents for the Maritime Provinces.

The Dominion Government will likely spend some \$20,000 to maintain the proper level of the water in Lake Manitoba.

The Toronto Smelting Company will have a ten ton smelter in operation at Madoc, Ont., very shortly. They will treat mispickel ores for arsenic, with gold and mineral wool as by-products.

The buildings of the new paper and pulp mills at Grand Mere, Que., are roofed in and machinery is being put in.

Francis Lapointe's plans for the Lachine canal bridge are for a bridge 217 feet long, 44 feet wide, and to cost \$85,000. Two 50 h.p. motors will supply the power.

In Bradford, Ont., there is an agitation for an electric light plant.

Andrew Bill, C.E., is seeking a waterworks franchise from Carleton Place, Ont. He wants a similar franchise from Almonte, Ont., and agrees to spend \$100,000 on the work in each town.

Wellandport, Ont., wants a waterworks system, to be supplied from Chippewa Creek.

The steamers Arbel and Ironside have loaded some 6,000,000 feet of lumber at St. John, N.B., for Liverpool.

Joseph Lechette and others have been granted letters patent incorporating them as the Sherbrooke Cigar Company, of Sherbrooke, Que.

James Goldie & Sons, Limited, are asking incorporation with \$100,000 capital to carry on flour milling, and the preparation of oat-meal and cereals in Guelph, Ont.

Olivier Bresse is about starting a shoe factory in the St. Pierre Building, Crown street, Quebec City.

Mills & Bethune, boot and shoe manufacturers, Vancouver, B.C., have dissolved partnership. Mr. R. C. Mills will continue the business.

W. H. Lawrence is to build a boot and shoe and larrigen factory at Fredericton, N.B.

Shaw, Cassels & Co., the Port Elgin, Ont., tanners, are opening up the tan bark trade on Manitoulin Island.

The Reliance Cigar Company, of Montreal, are seeking incorporation, capital \$50,000.

Doon, Ont., wants an electric line to connect with the C.P.R.

The Williams Shoe Co., of Galt, Ont., have a model establishment in their new factory, where they employ seventy-five hands. They report business as exceptionally good.

Steinhoff and Gordon, Wallaceburg, Ont., recently shipped a cargo of cooperage stock to Sandusky, Ohio

The Sydenham Glass Company, Wallaceburg, Ont., are adding a flint glass furnace to their plant.

The McEachron Heating Co., of Galt, Ont., are working overtime.

The premises of the Cookshire Mill Co., Cookshire, Que., were damaged \$1,500 by a recent fire.

Victoriaville, Que., is to have a pulp mill, the promoters of which are Hon. R. R. Dobell, of Quebec, and Mr. Panveton, of Three Rivers.

The new pulp mill at Chicoutimi, N.B., recently shipped a carload of pulp to Manchester, Eng., via New York.

The Niagara Falls Park & River Railway are making improvements in their power house on the Canadian side at the Falls, and expect to have 1,200 h.p. of 2,000 voltage for sale to power users.

**Felts for Pulp Mills**

20 years in the business — the first to make Felts in Canada; capacity 1,000 lbs. per day. All our Felts will last longer and make dryer Pulp. All up-to-date mills use our Felts. New mills, when in need, write for samples and prices.

Felts are woven endless, without a splice. Our Felts will last longer and make dryer Pulp. All up-to-date mills use our Felts. New mills, when in need, write for samples and prices.

**HAMELIN & AYERS, Lachute Mills, P.Q.**

**ELECTRIC REPAIR & CONTRACTING CO.**

GEO. E. MATTHEWS, Manager. 621 LaGauchetiere St., MONTREAL. TEL. 2177.

COMPLETE ELECTRIC PLANTS INSTALLED.

ELECTRIC APPARATUS OF ALL KINDS REPAIRED ON THE SHORTEST NOTICE.

Armatures Rewound for all Systems. Commutators Refilled. Write us, our Prices are reasonable and work good.

**FOR SALE!**

Premises recently occupied by THE A. S. WHITING MANUFACTURING Co., CEDAR DALE.

Consisting of Valuable Water Privileges, Buildings, and about Twenty Acres of Land.

APPLY TO.....

**H. R. LUKE, Oshawa, Ont.**

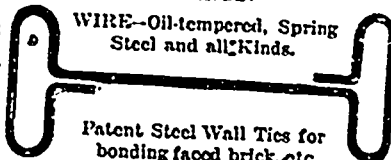
**CLEVELAND WIRE SPRING CO.,**  
CLEVELAND, OHIO, U.S.



SPECIAL SPRINGS of all description to order, and for Upholstery, Furniture, Beds, Chairs, etc. Close prices upon application.

**TEMPERED STEEL MACHINE SPRINGS.**

WIRE—Oil-tempered, Spring Steel and all Kinds.



The Gambridge, Ont. cheese factory is being remodelled into a creamery, in which eighty farmers are stockholders. The Canada Dairy Supply Company, of Montreal, are furnishing the outfit.

Sisman's boot and shoe factory at Markham, Ont., is in full operation.

F. A. Clarry has purchased the Markham, Ont., Woolen Mills, and after having the place thoroughly overhauled and refitted, opened business.

James Carr's sawmill at Havelock, Ont., was recently destroyed by fire. Loss \$4,000.

A fire at Vancouver, B.C., destroyed part of the building of the New England Fish Company, and several loaded C.P.R. cars.

The Gilmour and Hughson sawmills in Ottawa, Ont., are at work.

Lenark County Electric Railway Company have formally broken ground.

Oakville, Ont., is asking the Ottawa government for harbour improvements.

The work of construction on the C. P. R. transcontinental copper telegraph line is already well under way.

The Highway Advertising Company of Canada, (Limited), are applying for incorporation with a total capital stock of \$75,000, headquarters at the City of Toronto, to maintain signboards, print books and other advertising devices; and to engage in the general business of advertising. The names of the applicants are as follows—John Fitzallan Ellis, manufacturer; James Kennedy McCutcheon, insurance superintendent; Thomas Milburn, manufacturer; John Henry Charles Willoughby, physician, all of the city of Toronto; James Thomas Henry McKay, of the village of Alviniston, oil producer, and Charles Sydney Hotchkiss, of the city of Port Huron, in the state of Michigan, gentleman.

The Cherry Flour Mill at Galt, Ont., is running full time again.

The Nova Scotia Pork Packing Company, Limited, of Middleton, N.S., are applying for incorporation.

J. Ballantyne & Co., Preston, Ont., shipped the following machines recently:—An automatic back knife gauge lathe to Knechtel Furniture Co., Hanover; one surface planer to Rhodes, Curry & Co., Amherst, N.S.; a No. 2 power feed rip saw and a dimension saw to J. Peggott & Son, Chatham; an improved sash sticker, to J. Dempster and Co., Halifax, N.S.; a new variety shaper to McPherson & Shell, Alexandria; and a four-sided revolving bed moulder to R. F. Houston, Tweed.

The H. R. McLellan Company, Limited, have been incorporated to do a general lumbering business, with headquarters at Ottawa and a capital of \$500,000. The directors are: Harry McLellan and David W. King, of St. John N.B.; John W. Smith, of Moncton, N.B., and the Messrs. McLaren, of Ottawa.

The Toronto Electric Motor Co., Limited, of Toronto, Ont., are applying for incorporation with \$50,000 capital.

The Druggists Corporation of Canada, Limited, are asking incorporation with capital of \$40,000 and headquarters at Toronto, Ont., to manufacture medicines, perfumery, photographic and mathematical instruments.

The Canadian Acetylene Co., Limited, capital \$50,000, headquarters at Levis, Que., are asking incorporation to deal in acetylene gas and apparatus. Among the incorporators are—The Honorable Charles Auguste Philippe Robert Landry, Senator, of Limoilou; Raymond Profontaine, advocate, of the city of Montreal, the Honorable Alexandre Chauveau, Judge of Quarter Sessions.

C.P.R. Superintendent Leonard has completed arrangements for the new bridge over the Grand River at Galt, Ont., and selected the site for the new station at Galt.

Leonard & Sons, London, Ont., are supplying the boilers for the St. Thomas, Ont., Electric Railway power house. The road is expected to be running May 24th.

Renfrew, Ont., creamery received during February of this year 197,452 pounds of milk. Butter made from it sold for \$1,655.09.

The Hastings Hat and Cap Manufacturing Company, Limited, of London, Ont., have been incorporated with a capital of \$24,000 to take over the business now carried on by Thomas William Hastings under the above firm name.

Monroe & Gordon, Sudbury, Ont., have sold 8,500,000 feet of lumber to the Crump Manufacturing Company, of Saginaw, Mich.

Large quantities of lumber have been shipped to France and Portugal from St. John, N.B., and cedar shingles have also been shipped from St. John to the Barbadoes.

The Northrup Loom Company of Canada, Limited, Valleyfield, Que., are applying for incorporation.

John Cotten has sold his carriage factory at Souris, Man., to D. Petty.

W. D. McKay has purchased the stock of the estate of the McKay Woolen Company, of Charlottetown, P.E.I.

The Kemp Manufacturing Company, of Toronto, Ont., want a twelve inch main laid from their factory into the Don river, so that they may have an inexhaustible water supply close at hand in case of fire.

A fence wire factory is on the programme for Windsor, Ont.

The British Columbia Legislature are pressing the Dominion Government to establish a mint in the Pacific province.

Farmers appear to be alive to the boom times. Another pork packing establishment is proposed to be run by a joint stock of farmers in St. Mary's, Ont.

The Metallic Roofing Co., Toronto, have just completed their contract for putting a handsome metal ceiling in the retail grocery store of Michie & Co., of this city.

Citizens of Amherst, N.S., are discussing the possibility of making the town a seaport by constructing a canal to deep water.

The cable from Vancouver Island to the mainland has been laid successfully. It is forty miles long.

Contractor Brown's men are at work on the two miles they propose to add to the sewer system of London, Ont.

The Montreal Cotton Company have made an arrangement with the town of Valleyfield, Que., and will erect their new mill there.

In Ottawa, Ont., permits have been granted as below:—William Flegg, brick veneered house, McLaren street, cost \$1,200; Smith & Whelan, two s.d. brick houses on Gilmour street, cost \$2,500; Hewitt & McLaren, architects, alterations to Dr. Courtney's residence, cost \$1,800; H. Gilmour, two brick veneered residences on Osgoode and King streets, cost \$2,800.

At Toronto the following building permits have been granted: Sarah Barton, pair two storey brick dwellings, east side Bathurst street, north of Bloor, cost \$5,000; S. H. Sharp, two storey brick house, 24 Maynard avenue, cost \$3,500; S. H. James, two storey office building on Victoria street, cost \$10,000.

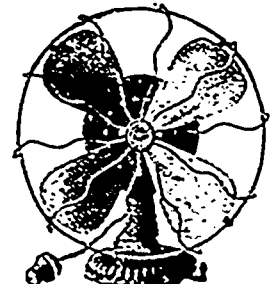
R. C. Jamieson. A. T. Higginson.  
**R. C. JAMIESON & CO.**  
 Manufacturers of  
**Varnishes and Japans.**  
 Importers of Oils, Paints, Colors, Turpentine,  
 Methylated Spirits, Shellacs, Rosins,  
 Glues, Gold Leaf, Bronze, etc.  
 OFFICE—13 ST. JOHN STREET.  
 FACTORY AND WAREHOUSE—23 to 29 ST.  
 THOMAS STREET.  
 MONTREAL.

The name of  
**WESTINGHOUSE**  
 is a guarantee.

**Westinghouse**  
 Electric & Mfg. Co.  
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**Westinghouse**  
 Electric.

**Fan Motors,**  
 Alternating Current Circuits. & &  
 Every feature worked out with  
**Scientific Exactness.**  
 Immense Stock to Supply any Demand.



New York, Boston, Chicago, Philadelphia, St. Louis, San Francisco, Buffalo, Syracuse Atlanta, Tacoma. Mountain Electric Co., Denver. For Canada. Ahearn & Soper, Ottawa. Westinghouse Electric Co., Limited, 32 Victoria St., London.

Perth, Ont., Woolen Mill is running full time.

The Agricultural Works at Smith's Falls, Ont., are running night and day.

A boiler explosion in Miller's tannery, Orillia, Ont., did over \$5,000 damage.

The butter-dish factory at Coboconk Ont., is running night and day and cannot keep up with the orders.

Manitoulin Island, Ont., is agitating strongly for a railway.

The Consumers' Cordage Company, of Brantford, Ont., have started their works in operation again.

The Farmers' Binder Twine Company, of Brantford, Ont., report business as booming.

Pilgrim Bros. are putting up a two-storey brick addition to their mineral water factory in Hamilton, Ont.

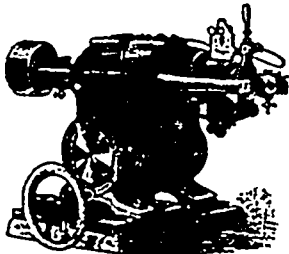
Farmers about Harriston, Ont., are talking of erecting a pork-packing factory.

Bruce County, Ont., will build a House of Refuge at Walkerton.

The Standard Natural Gas Company, of Essex, is preparing to pipe gas to Chatham if the Government prohibits the export of gas to Detroit.

A brick in the wall of the green tank at the glass factory, Wallaceburg, Ont., gave way and let the molten glass run into the pit. The damage was slight.

## Jones & Moore Electric Company



Manufacturers

**DYNAMOS AND MOTORS**

1/2 to 100 K.W.

**SLOW SPEED MOTORS**

A SPECIALTY.

200 Light Dynamo, second hand, cheap.  
6 H.P. Motor, second hand, cheap.  
1/2 H.P. Motor, second hand, cheap.  
and several others.

22 ADELAIDE WEST.

Contractors Corey and Laverdoure, of Peterborough, Ont., have received a big steam shovel which they will use in canal excavation on the Trent Valley Canal at Armour's hill.

Marsh and Henthorne, Belleville, Ont., report business booming. Their staff are at work fifteen hours a day, and they have orders for a number of horse powers and five steam hoists. The hoists weigh about four tons each.

Deseronto, Ont., has voted to bonus a smelting works.

The Beaver File Company, Hamilton, Ont., have put in four file cutting machines made by Chas. James, of Hamilton.

F. W. Fearman has put in a refrigerating plant in his pork packing establishment at Hamilton, Ont.

Douglas, Ont., is looking for a company that wants to locate a mill where the water power and pulp wood supply is unlimited.

P. W. Ellis & Co., the well-known Toronto jewellery manufacturing house, find their business increasing so rapidly that they will shortly double the size of their present commodious premises and equip their factory with a complete plant of the very best machinery to be had in the world.

The Hobbs Glass Works, London, Ont., had a narrow escape recently when a locomotive spark set fire to the shavings box.

Cracksmen drilled the safe in the foundry of Gillies & Martin, Listowel, Ont., but got no valuables.

Geo. Gale & Sons are building an addition to their foundry at Waterville, Que.

Sarnia, Ont., is hunting for a brick factory.

Andrew Louth has purchased the Becher, Ont., cheese factory.

Contractor John N. Gibb, of Wallaceburg, Ont., has begun the new bridge over the Thames between Ekfrid and Dunwich. It will be finished in August.

The Melchers Gin and Spirits Distillery Company, Limited, of Montreal, P.Q., are applying for incorporation.

La Banque Nationale has opened a branch at St. John's, P.Q.

The Bank of British North America will open a branch at Dawson City.

The foundry of F. Routhier & Sons, Vankleek Hill, Ont., was recently destroyed by fire.

A change has taken place in the personnel of the firm of Charles Boeckh & Sons, Toronto, Ont. Mr. Chas. Boeckh, sr., retires, and the business will hereafter be conducted by Messrs. Emil and Charles Boeckh, jr., under the style of Boeckh Bros. & Co. The big broom and woodenware factory reports business on the increase.

The Planet Cycle Company, Queen Street, east, Toronto, Ont., are doubling the size of their present premises.

Two thousand dollars worth of buildings were blown into match wood by the explosion of a large quantity of nitro-glycerine at the dynamite works of the Ottawa Powder Co., on the Chelsea road, about three miles out of Hull, Que. This is the second time this factory has been demolished.

McLachlan Bros., of Arnprior, Ont., have 130,000 logs in their drive coming down the Bonnechere river.

The C.P.R. has the first product of the Facer Car Wheel Works, Perth, Ont. They weigh about 780 pounds.

Gaw's Planing Mill, Place d'Armes, Kingston, Ont., was recently destroyed by fire. The damage is estimated at \$12,000, and this is the third time the mill has been burned.

A. H. Henderson, A. Miner, Geo. F. King, and T. M. Johnson have registered as proprietors of the American Furniture Co., Oxford, N.S.

The town of Richmond Hill, Ont., is in communication with the Canadian Motor Syndicate, of Toronto, with regard to terms upon which the Syndicate will locate in Richmond Hill.

The Hamilton Electric Power Company, of Hamilton, Ont., are constructing big works for the plant at De Cow's Falls. The power house is 180 feet by 40, with two foot brick walls and iron roof and floor. The penstock is a steel pipe, a quarter of a mile long and seven feet in diameter, laid on a masonry foundation.

The Hamilton Brass Manufacturing Co., Limited, of Hamilton, Ont., are making cash registers. If you are approached by the agent of any cash register concern in the United States it will pay you to see the Hamilton Brass Manufacturing Company's machines before buying.

J. M. Ross, Son & Co., Brampton, Ont., have in process of construction twenty-five engines, many of which are already sold.

The Eureka Mineral Wool Company, of Toronto, Ont., are stocking a full line of engine packing and pipe covering of all kinds, other than mineral wool, and are ready to fill all orders.

The Eclipse Manufacturing Company, of Ottawa, have begun the manufacture of metal bar buttons and are meeting with great success.

Chas. King & Sons have asked a loan of \$15,000 from Whitley, Ont., in order to re-open the tannery there.

John Reid, Almonte, Ont., will operate a woolen mill this summer at Garden Hill, Ont. Mr. Reid is a brother of Mr. Geo. Reid, of Toronto.

Mayor Rumpel, of Berlin, Ont., has purchased the Tilsonburg, Ont., Woolen Mills from D. Tilson & Co., and will remove the machinery to his factories in Berlin.

The rush of railway traffic at Niagara Falls is such that five extra rate clerks have been put on, and the freight sheds and yards staff have been increased.

Messrs. W. J. Matheson & Co., of New York city, have removed their warehouses from 178 Front street to their new premises 182-4 Front street, corner Burling slip.

The contract for laying waste pipes across the bed of the St. Francis River at Shorbrooke, Que., has been awarded to Mr. Buchanan, of Montreal.

## CUT NAILS

Bar Iron and Steel

Railway Spikes

Pressed Spikes

Washers

Rhode Island Horse Shoes

**ABBOTT & CO., - MONTREAL**

**BUSINESS BRINGERS.**

Paying Pointers for Wide-awake Business Men who are Watching for Trade Opportnities.

The Diamond Jubilee Temperance Association of Truro, N.S., have called for tenders for a new hall, two stories, 40x80 feet.

A Hornerite church will be built in Goodstown, Ont.

The M.C.R. will build a steel bridge over Big Creek in Hilbury West, Ont.

The C.P.R. are inviting tenders for a station and dining hall at Moose Jaw, Assa., N.W.T. Separate tenders will be asked for steam heating, and acetylene gas plants.

The C.P.R. will build ten cottages for their employees at Meddam, N.B.

A new English church will be built this summer in Portage la Prairie. \$3,000 has been subscribed.

Rev. S. D. Hague, Balderson, Ont., will receive tenders for the erection of a parsonage for St. John's church.

Rev. Father Laporte will receive tenders for the erection of a \$10,000 convent and school at Maniwaki, P.Q. The architect is J. Alcide Chausse, of Montreal.

Messrs. Clift & Pope, architects, Montreal, are designing a building for the Sun Life, at Sherbrooke, Que., and also a church for the same town.

F. W. Mellish, architect, Galt, Ont., is preparing plans for a big addition to Turnbull & Co's factory and for a couple of residences.

Charles F. Wagner, architect, Toronto, Ont., has charge of the remodelling of the big Heintzman building on King street west. Extensive operations will be made.

Reston, Man., will have the following new buildings this year:—Methodist church; livery stable, W. Jackson; school houses; warehouse, W. H. Brady; residences, T. Baldwin, A. Matthews, A. Mattson; furniture store, W. B. Sherwin.

THE - - - -

**WM. HAMILTON MANUFACTURING CO., Limited**

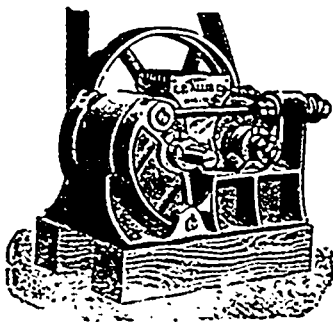
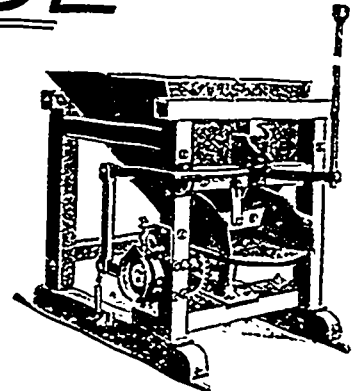
MANUFACTURERS OF

**THE "RELIANCE"**

**Mining, Milling**

AND

**Smelting Machinery**



FOR THE DOMINION OF CANADA

(Under License from The E. P. ALLIS CO., Milwaukee, Wis.)

Crushers, Rolls, Jigs, Concentrators, Screens, Stamps, Pumps, Compressors, Hoists, Boilers, Engines, Water Wheels, Etc.

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**PETERBOROUGH, ONT.**

**B. GREENING WIRE CO.**  
(LIMITED)  
WIRE MANUFACTURERS  
& METAL PERFORATORS  
**HAMILTON**  
& MONTREAL.

J. McGowan is building a dam between Fergus and Elora, Ont., to furnish power for a large mill to make flaxseed oil.

Estimates for Canada's expenses for the next year include an item of \$80,000 for clothing for the militia. Woolen manufacturers take note.

W. S. Gould, Walkerton, Ont., clerk of the county of Bruce, will receive tenders for the erection of a House of Refuge for the county, at Walkerton, according to plans prepared by architect H. J. Powell, Stratford.

Architect Joseph Sawyer, of Montreal, has under way plans for a tenement house on Amhorst street, in that city for F. X. Lapierre.

In Quebec, Messrs. Tanguay & Vallee, architects, are preparing plans for a cottage on Avenue des Erables, for Professor C. J. Magnan, for which tenders will shortly be invited.

The Winnipeg Committee on Supplies has requested the School Board to grant permission to call for tenders for supplying desks to the public schools.

At Indian Head, N.W.T., plans have been prepared for the following:—Methodist church, brick, cost \$4,500; town hall, brick, \$7,500; block near Gordon Hotel, brick, \$3,500; frame implement warehouse, \$1,000. Plans are also in course of preparation for several residences.

At London, Ont., the following permits have been granted: Rev. J. McEwan, two storey brick residence on St. James street, J. A. Gauld, architect; J. A. Matthews, two and one-half storey brick veneered dwelling on South street, cost \$1,200; Andrew Sharp, two storey brick dwelling, north side Pipe Line road, cost \$1,200; William Pegsley, brick addition to dwelling, 76 York street.

The Merchants' Cotton Co., of St. Henri, Que., have decided to increase their capital by \$100,000. The increase will be utilized in building an extension to the mill, to contain spinning and weaving machinery. The addition is expected to increase the company's output by \$300,000 annually.

Hon. Mr. Justice Chauveau, of Quebec City, has purchased some old corporation property under conditions of sale which necessitate the erection of a \$35,000 building. The property is 120x167 at St. Louis and St. Maule streets.

At Hamilton, Ont., building permits have been granted as below: Thomas Allen, two storey brick dwelling on Walnut street, cost, \$1,400; F. J. Rastrick & Sons, two two-storey brick dwellings on King street west, for F. Crawford, cost \$1,900; Robert Clohecy, brick addition to Brown & Bogg's foundry, cost \$2,700.

The Melita, Man., Enterprise, gives a list of new buildings which will be erected at that place. These include a new stone store by T. D. Sturgeon, hardware dealer. Dunford, butcher, and Powell, hardware, will erect a stone block. A new office for The Enterprise will be built.

**C**ANADIAN **C**ORRECTLY **C**IVILITY  
**H**EMICAL **OM**PILED **A**REFULNESS  
**CO**MPOUND **HE**MICAL **CO**MPLTENESS  
**CO**MPANY **OM**POUNDS **ON**TINUIITY

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Are very often caused by scale and mud forming upon the fire sheets, and may be

Scale and Water Analyzed

**PREVENTED**

We are Beyond the Experimental Stage.

**FREE.**

By the Use of our

**ZINKOLENE.**

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Offices ..

Factory....

TRY US.

66 RIVER STREET.

WE CAN SAVE YOU MONEY.

ROOMS 310 & 311

TEMPLE BUILDING.

Phone 1115.

**TORONTO**

Phone 8047.

## THE OTTAWA PORCELAIN AND CARBON CO., Limited, OTTAWA, ONT. . . .

MANUFACTURERS OF

**CARBON POINTS** for all kinds of Arc Lamps, including Cored and Solid Carbon for Incandescent Circuits.

.....ALSO.....

**M**OTOR BRUSHES and Specialties in Carbon for Telegraph, Telephone and Electric Light Supplies.

**P**ORCELAIN INSULATORS, Cleats, Door Knobs, and all kinds of Pressed Porcelain for Electrical and Hardware Lines.

ALL GOODS GUARANTEED TO GIVE SATISFACTION.

## A Saving.

The first cost is not the test of an actual saving. The truly Economical Manufacturer knows this to be true. For instance, the cheap, trappy Pulley, by its inferior working qualities, is a source of loss to the user the moment it is put in operation, and this loss continues all the time the Pulley is working. You do not get the full or proper results from your power plant. Higher price, though, is not always a sign of better quality, for instance—you may or may not have to pay more for

## "THE REEVES" PATENT WOOD SPLIT PULLEY

but in either case you are getting the best value on the market. Because with THE REEVES the saving is continual, in Power, in Time, in Shafting, in Belting, and last but not least, and as a result of all the other savings, a saving in Money. CAN YOU AFFORD TO BE WITHOUT "THE REEVES"? Is this best too good for you? WRITE TO-DAY FOR OUR CATALOGUE AND GET OUR PRICES.

Also COLUMBUS, IND.

- REEVES PULLEY CO., Toronto, Ont.

A pulp mill is to be erected at Koowatin, Ont.

S. A. Clark, architect, Regina, N.W.T., is making plans for J. H. Kern's hotel at Moose Jaw.

Rev. Father Minehan's parish in Toronto will erect a \$15,000 church at Bloor and Markham streets this summer.

Sussex, N.B., is likely to have a two-sett woollen mill. Estimated cost \$18,000.

The Standard Bank, Parkdale, Toronto, is to have new front, floors, ceilings and office fixtures. Plans are being prepared.

Lucas & Co., proprietors of the Lucas House, Toronto, have plans for a four storey addition, cost \$15,000.

Wm. Armistean, Ravenscliffe, Ont., will receive tenders for the erection of a school-house.

St. Thomas, Ont., Board of Education have been voted \$36,000 for new school buildings.

A sewer will be built in Hamilton, Ont., from Wilson street to the G.T.R. line. Cost \$22,000.

A. D. Holmes, Toronto, is preparing plans for a two-roomed Separate School building to cost \$3,000, on Caer Howell street, Toronto.

**FACTORY FOR SALE**

*GOOD WATER POWER.*

**ENGINE, BOILERS AND SHAFTING**  
IN GOOD ORDER.

On Main Lines G.T.R. and C.P.R.  
Within three miles of Toronto.  
Buildings brick and stone, suitable for heavy manufacturing.

25 Acres of Land. A Great Bargain.

Apply

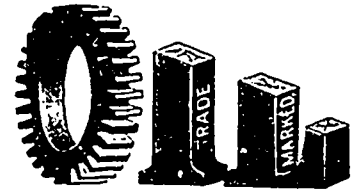
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**THE QUEEN CITY OIL CO., LIMITED,**  
TORONTO.

SAMUEL ROGERS. President.

MANUFACTURERS AND DEALERS IN

**LUBRICATING GREASES** and  
**MILLING SUPPLIES.**



Our Oils are tried and well-known to stand hard service under all conditions. We have Oil adapted to every known use in Lubricating Machinery.

Cotton Waste, Castor Oil, Laco Leather, Turpentine, Linseed Oil, Paraffins Wax Candles, Benzine, Gasoline, Compression Cups, Lubricators.

**ARCTIC  
CUP  
GREASE**

**INTERESTING** TO ..MILL OWNERS.

**OAK TANNED  
LEATHER BELTING.**

**Lancashire Hair Belting.**

**ENGLISH CARD CLOTHING.**

**D. K. McLAREN**

Manufacturer and Mill Furnisher,

**Montreal—Ottawa—Galt—Winnipeg.**

**WESTERN TRADE:—**

Our Mr. R. M. W. McLaren, in charge of Galt Branch, will be pleased to give quotations as well as receive orders.

**Dominion Oil Cloth Co.,**

Manufacturers of....

**OIL-CLOTHS OF EVERY DESCRIPTION**

*Floor Oil-Cloth, Table Oil-Cloth, Carriage Oil-Cloth, Enamelled Oil-Cloth, Stair Oil-Cloth, etc, etc.*

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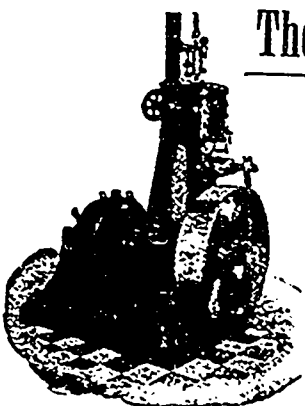
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**CENTRAL BUSINESS COLLEGE**

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Send postal without delay and mention this paper.

The Present Session continues until July 1st, and members will be admitted at any time up to that date, and allowed to complete any Course selected after the holidays.

Write for particulars to—  
W. H. SHAW, Principal.

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Only Multiple burner ever invented. Any number of flames, from one upward, on a single burner tip. Will not Carbonize. Samples—single flame, 25 cents; three flames, 50 cents.

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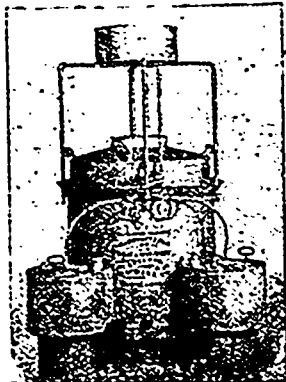
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Address Communications to  
**HAMILTON ACETYLENE GAS MACHINE CO., Limited.**  
71 York Street, HAMILTON.

The J. E. Ellis Co., Toronto's well-known jewellers are having plans made for alterations to their big store.

From 500 to 1,000 cords of cedar blocks are wanted by Winnipeg city.

Shelburne, Ont., will this summer spend \$8,000 on road improvements.

Beaumont Jarvis, architect, Toronto, is preparing plans for a \$30,000 residence for Major Pellatt.

Railway contractors should keep an eye on the Sunny Brae-Guysboro, N.S. railway, 80 miles, which is to be built this summer.

Mispec, N.B., pulp mill, will soon be on the road to completion. Machinery men take note.

A new batter factory is to be erected at Bonshaw, P.E.I.

Olmstead, Bright & Co's mills were burned to the ground in a big fire at Sutton, Que., recently.

The Commercial Bank, of Windsor, will this summer erect a fine three story brick and stone head office building in Windsor, N.S.

Superintendent Jones, of the Wabash Railway, contemplates the erection of repair shops at St. Thomas, Ont.

The Hees Metallic Furniture Company are building a large factory at Niagara Falls, Ont., and expect to operate it by electricity. The Carborundum Company are also expected to build there.

The drainage scheme of the British Columbia Government is a large one. The sum of \$350,000 will be spent in draining 440,000 acres known as the Boyne marsh, near Oakville, B.C.

Woodstock, Ont., is rejoicing in the promise of C.P.R. Superintendent Leonard, that a new station will be erected there this summer.

Willis Chipman, C.E., of Toronto Ont., the well-known expert in waterworks and sewage systems, is making plans and estimates for Berlin, Ont.

Seaforth, Ont., is agitating for a new city hall clock.

Messrs. McCulloch & Herriott, flour millers at Souris, Man., will build a 300-barrel mill at Souris during the coming summer.

T. A. Code, proprietor of the Tay Knitting Mills, Perth, Ont., will erect a new wool house. He now employs 105 hands, and business is increasing.

Sections of the Great Northern Railway, from St. Pauline to St. Norbert, and from St. Norbert to Joliette will shortly be open for contract. Engineers are now locating the line.

E. J. Rainboth has secured a franchise for the construction of a waterworks system for the village of East Ottawa, Ont.

The Consolidated Electric Light Co., of Victoria, B.C., are preparing to utilize the water power at Goldstream. The work will cost \$100,000.

Messrs. Havill and Whitham, of Brantford, Ont., have secured the contract for the erection of the new shops of the Verity Plow Company of that city.

Granby, Que., is to instal an electric light system.

Mr. Irving of the Sundridge Woollen Mills, Kingston, Ont., is offering to build a mill at Edmonton, N.W.T.

Rev. Father McAuley, South Osgoodo, Ont., will furnish particulars concerning the proposed new Catholic church there.

Extensions to Goderich, Ont. waterworks system will cost some \$5,000.

Rat Portage, Ont., will build a school-house similar to the Mulvry school in Winnipeg, Man.

Two new schools will be built in Winnipeg, Man., during the coming summer.

A movement is on foot to build a Catholic church at Totrauville, Que.

Wardsville, Ont., is to have a new Methodist church.

St. Cecile, Que., will shortly have a new Catholic church. Cost \$5,500.

A town hall to cost \$6,000 is to be built at Selby, Ont. Particulars from J. McGinnis, clerk, at Selby.

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**NIAGARA FALLS  
ACETYLENE  
GAS  
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This is the  
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little or no atten-  
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made in 10 sizes  
costing \$15 and  
upwards.

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THE  
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(LIMITED).  
LONDON, ONTARIO.

Here are a couple of French items which Canadian electrical supply firms should note:

1. Proposed electric lights and electric tramways at Angouleme, Charente. Communications should be addressed to MM. P. & M. Durand & Co., Lyons, France.

2. Proposed electric lights and trolley line for the city of Cognac. Communications should be sent to M. Jules Brisson, Maire de la Ville de Cognac, Charente, France.

R. E. Monzie, Toronto, Ont., has taken out a permit to build a \$3,000 brick dwelling on Jamieson avenue.

Geo. W. Gouinlock, architect, Temple building, Toronto, has made plans for a \$20,000 restaurant to be erected adjoining the Temple building on Bay street. The building will be 30x70 and five storeys high.

An eighty mile railway is to be built from Sunnybrae, N.S., to Guysboro, N.S.

The Waterloo Manufacturing Co., of Galt, Ont., propose to enlarge their moulding shops sufficiently to enable them to double their output.

Mr. John A. Turner, Nelson, B.C., is president of Kootenay Lake General Hospital Society, which is about to erect a \$25,000 hospital.

London, Ont., is to have a hospital, to which Middlesex county is expected to contribute one-fifth of the estimated cost of \$70,000. The buildings will be of brick with stone foundations and slate roof. The style will be Italian Renaissance.

The Paterson Biscuit Works, Brantford, Ont., have an additional factory in prospect, if the city will agree to tax them only on an assessment of \$15,000.

Moose River, N.S., is to have a pulp mill, as is also Weymouth, N.S.

The Labatt Brewing Company, of London, Ont., are putting up a \$75,000 bottling works on Elm street, Toronto. The building will be 140x48 feet and 2½ storeys high. A residence for the manager, a coach house and barn will also be built. A. H. Williams has the contract.

Messrs. Geo. Hees, Sons & Co., of Toronto, will rebuild their factory which was recently destroyed by fire.

W. D. Dandurand, of Montreal, (236 McGill street), wants tenders for lumber to build the bicycle track at Verdun.

Peter Brennan, of Arnprior, Ont., has the contract for building the bridges and trestle work on the Pembroke Southern Railway.

The sewer system of Lindsay, Ont., is to be extended during the coming summer.

The Hudson Bay Company are discussing the location of a creamery at Fort Garry, Man.

The contract for five miles of the Golden Lake end of the Pembroke Southern Railway has been let to J. G. Sherwood, of Emsdale, Muskoka, who has forty men at work.

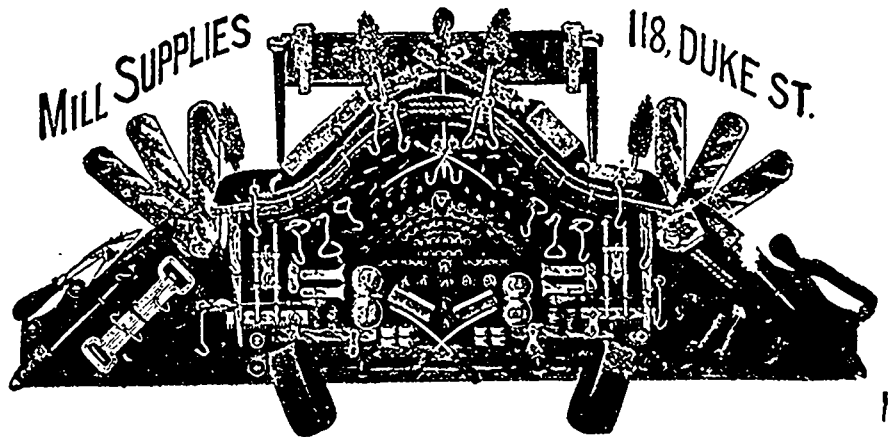
A mill and elevator are to be erected at Dresden, Ont.

Manitoba Legislature has granted \$1,700 per mile and \$20,000 for a bridge to the Northern Pacific Railway for their extension from Harvey to Belmont.

M. Beatty & Sons, Welland, Ont., want a lot of maple 4½ in. thick and 10 to 15 wide.

Menzie, Turner & Co., Toronto, Ont., are looking for tenders for the supply of 500,000 feet of basswood, No. 1 and 2, 1½ and 2 inch, and 10x12 feet.

**GEO. REID & CO.** Successors to The PAUL FRIND Woollen Machinery Co., Limited, TORONTO. 'PHONE 956



**SPECIALTIES:** Hamilton Cotton Co's Beam Warps.

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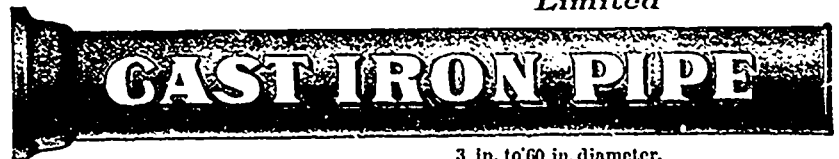
Warp Yarns of all descriptions, in Skein, Chain or on Beams.  
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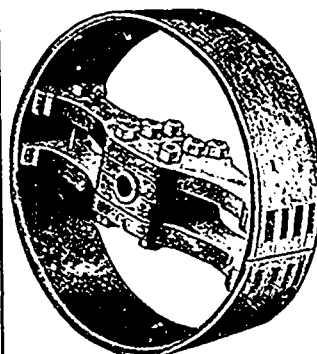
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**WATER WORKS SUPPLIES**

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**BENT WOOD SPLIT PULLEYS,**  
RIM... (REID'S PATENT).

*The Strongest, Lightest and Best Belt Surface in the World*

No Glue, no Nails in Rim like Segment Rim Pulleys, to be affected by Steam, Dampness or Moist Temperature.

**EVERY PULLEY GUARANTEED.**

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**Aniline Colors,  
Dyewood Extracts,  
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**LUXFER PRISMS**



The latest device for

**LIGHTING**

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**By Daylight**

For catalogue  
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write to

**Luxfer Prism  
Co'y, Limited.**

58 Yonge Street, - **TORONTO.**

The Jubilee addition to Winnipeg hospital is up for tender.

Bloor Street Baptist church, Toronto, is to be greatly enlarged. The present schoolhouse will be taken into the auditorium, and a new schoolhouse will be erected.

T. C. Silverthorn, of Brandon, Man., is preparing plans for a new building for St. Mary's church congregation, Portage la Prairie.

Architect Edward Maxwell, of Montreal, has completed plans for the new London & Lancashire building in that city. It is to be of buff sandstone, seven storeys high, 40x80 feet.

W. F. Van Buskirk, city engineer of Stratford, Ont., has completed plans for a change in the sewage system. Two filtering basins are included in the proposed change.

Tenders for new ceilings, church furniture, etc., will be received by C. S. Smith on behalf of St. Peter's Lutheran Church, Heidelberg, Ont., up to May 18th. Chas. Modgk, Waterloo, Ont., is the architect.

Messrs. Darling and Pearson, architects, Mail Building, Toronto, are preparing plans for the new Bank of Commerce building, at the corner of Yonge and Collego streets, which will be constructed of pressed brick, terra cotta, with stone base. This will be four storeys in height and will be 80 x 25 feet. They are also planning a number of residences.

Architect E. J. Lennox, will superintend improvements to the value of \$12,000 to the Bijou Theatre, Toronto, and a \$10,000 addition to the House of Industry at Toronto. A \$1,500 Island residence is also on his books.

The Toronto city engineer has recommended the construction of the following pavements: On Parliament street, from Queen to Gerrard, brick on gravel, cost \$14,100; Euclid avenue, from Collego to Ulster, asphalt, with stone curbs, cost \$10,650; St. Patrick street, from Bathurst to Denison avenue, cedar block, cost \$1,350; Station street, from York to Simcoo, asphalt, cost \$11,200; Cowan avenue, from King to Queen asphalt, cost \$8,470. In connection with the Lake street loop line, he recommends that a double track be ordered for Lako street, the track allowances to be paved with brick on concrete from York street to Yonge street dock, at a cost of \$5,000, the remaining portion to be macadamized, at a cost of \$4,400. Concrete sidewalks are recommended on Lombard, Wellington and Queen streets.

Architect F. H. Herbert, York Cambers, Toronto, has under way plans for the following: A hotel, 101 Jarvis street, for MacFarlane Estate, cost \$11,00, to be completed in November; residence, Elm avenue, Rosedale, for Mrs. Mary E. Davies, cost \$13,000, to be completed in October; residence, North Drive, Rosedale, for Mr. Henry Stark, cost \$5,000, to be completed in September; residence Maple avenue, Rosedale, for Mr. James Henderson, cost \$4,500, to be completed in September; pair semi-detached residences, north side Wilcox street, for Mr. George L. Wilson, cost \$7,500, to be completed in November; new detached residence, east side Walmer road, for Mr. John A. McKee, cost \$6,500, to be completed in October; new store, detached residence, west side St. George street, for Mr. F. H. Herbert, cost \$18,000, to be completed in October; new stores 94 and 96 Yonge street, Henry Cawthra Estate, cost \$3,000, to be completed in July.

**Hamilton Blast Furnace Co.**

HAMILTON, - - ONTARIO

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Manufacturers of

**HIGH GRADE  
PIG IRON**

**The McEACHREN Lumber Dry Kilns**

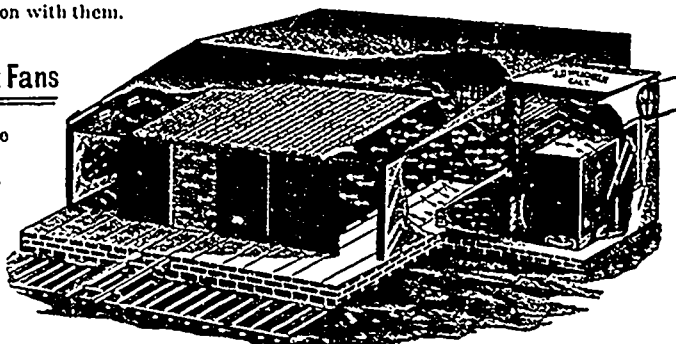
They are quick-drying.  
Economical with Steam  
and it requires less power to  
drive our fan in connection with them.

**ARE THE BEST**

**Steel-plate Exhaust Fans**

For removal of refuse  
from Wood-working  
and other machinery.

SEND  
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**SECOND-HAND FANS AND HEATERS**

For Lumber Dry Kilns for sale at reasonable figures.

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Manufacturers of and Dealers in

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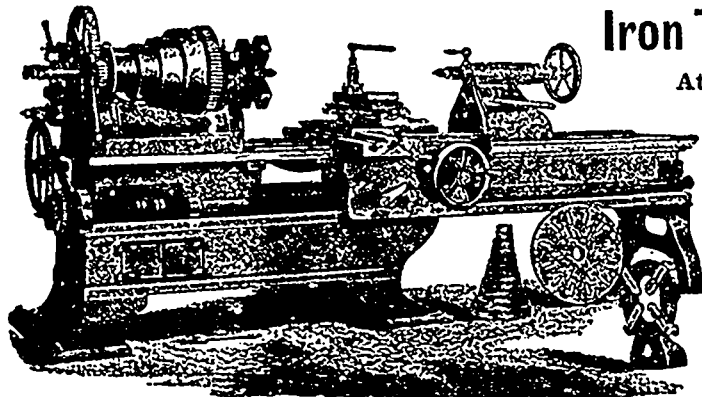
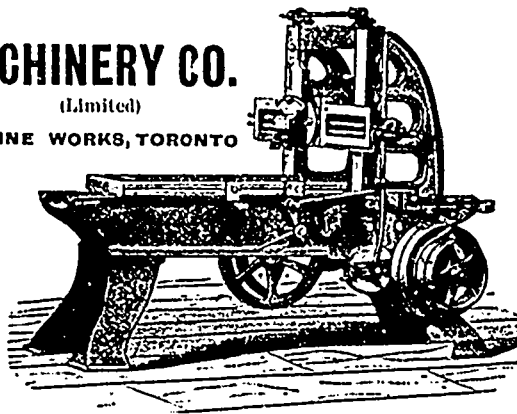
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Engines, Boilers,

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and Supplies.



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Send for Circulars,  
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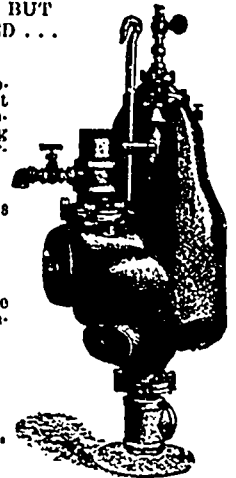
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NEVER EQUALLED ...

◆◆◆  
The handiest simplest and most efficient steam pump for general Mining, Quarrying and Contractors' purposes.

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Muddy or Gritty Liquids Handled without wear.

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Descriptive Catalogue with prices, furnished on application.

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CORNWALL, ONT.

Manufacturers of....

Engine Sized Superfine Papers  
White and Tinted Book Papers

Blue and Cream Laid and Wove Foolscaps, Account, Envelope and Lithographic Papers, etc.

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**Heating and Ventilating**

APPLICABLE TO ALL CLASSES OF BUILDINGS

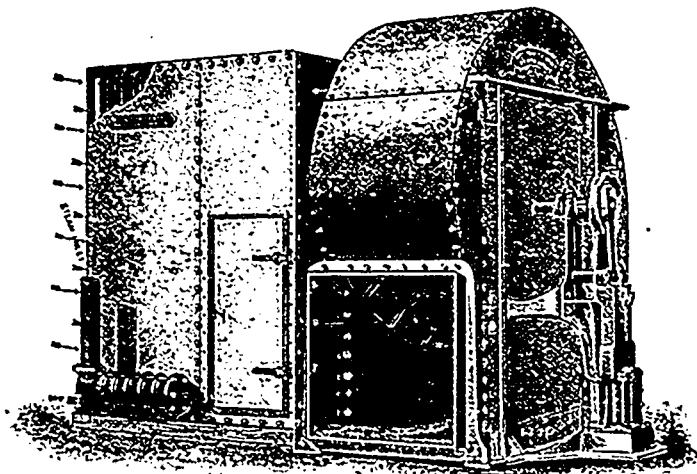
Has had a THOROUGH TEST in the Dominion  
AND THE  
Northern Portion of the United States.

Over 300 Plants in Successful Operation in  
this Cold Climate.

Send for Catalogue No. 84, Describing this System  
and No. 86, Showing 2,500 Representative  
Buildings Heated and Ventilated.

**B. F. STURTEVANT CO.**

BOSTON, MASS., U.S.A.



*The Sturtevant Steam Heating and Drying Apparatus*

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{ *This Apparatus is unexcelled for Lumber, Cotton, Wool, Hair, Brick, Pottery, Glue, Soap, Cloth and all Textile Goods.*

**A. R. WILLIAMS MACHINERY CO., LIMITED**

General Canadian Agents

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**DEAN'S SECTIONAL CANOE.**

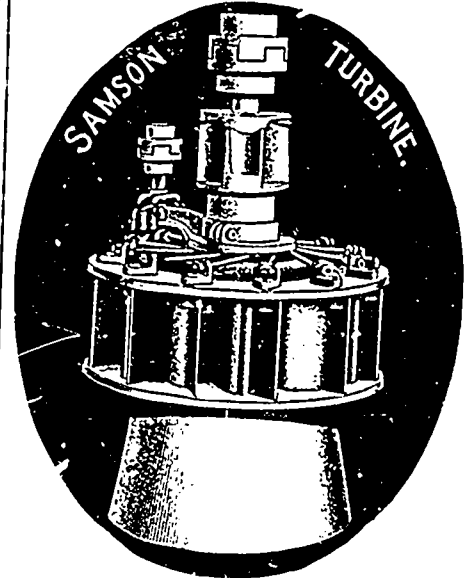
The canoe here illustrated is the invention of a clever Torontonian, Mr. Walter Dean, whose many years' experience at boat building enabled him to see the necessity of such a craft and then forthwith to construct it. The Sectional Canoe is an unexcelled advantage to the prospector. In many cases canoes and boats have to be portaged long distances over ice and snow on slogs or toboggans, and over mountains; and when the length of boat or canoe is shortened, it is much easier handled. The sections can be put together in ten minutes, and taken apart in five, being fastened by bolts and thumb nuts with rubber between the joints. The saving in freight is a big item, as will be seen from actual figures. The ordinary

broken the other being watertight will carry the weight until repairs can be made. These canoes are from 12 to 25 feet in length, weigh from 55 to 185 lbs., and will float from 800 to 4,000 lbs. of freight. They are made with the ribs very close, thus being very strong and suitable for rough usage. Canoe patches are furnished with each canoe, whereby repairs can be effected in from ten to 20 minutes if a canoe should meet with an accident. Price lists and information Walter Dean, 1751 Queen street, west, Toronto.

large power in proportion to diameter; high speed; great economy of water when running at part speed; a gate quick in opening and closing. The large power with such small wheels, has the advantage of less frictional surface, less penstock area, higher efficiency, etc.; while the very high speed for

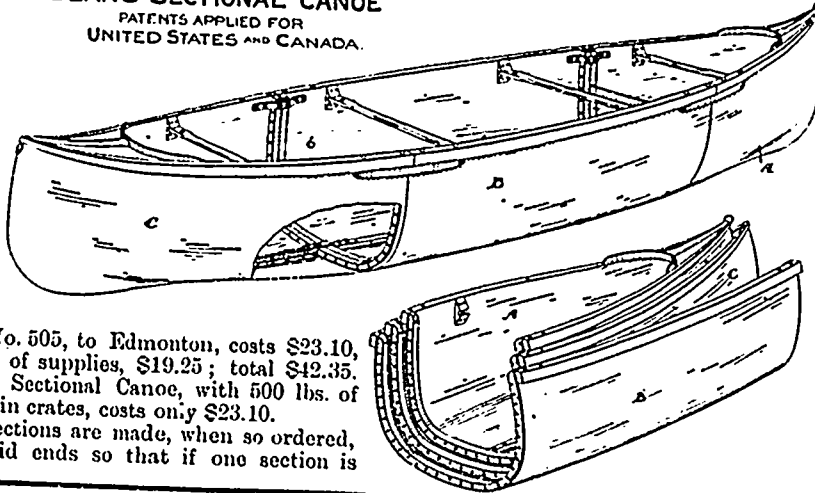
**THE SAMSON TURBINE.**

Severe tests of the Samson Turbine have been made by many of those interested in water power development. The results show



a given power, admits of lighter gearing, shafting, pulleys, couplings, journal boxes, etc., which are less expensive than with a wheel of the same power, but of a less number of revolutions per minute. The James Lefel & Co., Springfield, Ohio, positively guarantee their wheels. Write for catalogue.

**DEAN'S SECTIONAL CANOE**  
PATENTS APPLIED FOR  
UNITED STATES AND CANADA.



canoe, No. 505, to Edmonton, costs \$23.10, 500 lbs. of supplies, \$19.25; total \$42.35. No. 505, Sectional Canoe, with 500 lbs. of supplies in crates, costs only \$23.10. The sections are made, when so ordered, with solid ends so that if one section is

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AND IMPORT...

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or talk to you about increasing it.

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**NEW RADIATOR SYSTEM.**

The question of heating apparatus is always of great importance to the house owner and to the constructors of big office buildings and large churches and halls. Every now and again we are told of improved methods of heating, and intricate and costly apparatus is offered to the public upon the claim that it is far superior to anything of that kind ever offered to the public before. Users of

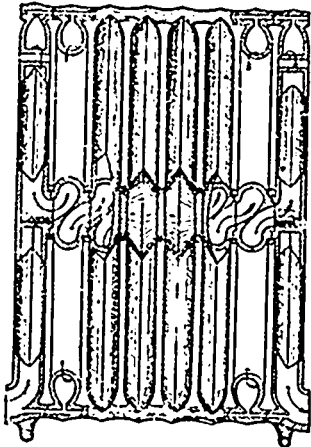


Fig. 1.

heating plants are always on the alert to adapt themselves to the times and are fully alive to their own interests. THE CANADIAN MANUFACTURER numbers among its friends a large majority of the big heat users of Canada and desires to draw their attention to a recent addition of heating appliances that is claimed to be far and away the best in existence.

The Ontario Radiator Company, Limited, have their office headquarters at 53 Canada Life Building, Toronto, Ont. They are arranging to enter into the manufacture of radiators on a large scale, and build a radiator which is positively circulating. Their radiator is adapted to either steam or hot water, thus avoiding the purchase of two sets of radiators in case a heating plant is

to the radiator's adaptability to either hot water or steam. The constant circulation in such a radiator causes the hot water or steam to keep flowing upward, thus giving a uniform temperature all over the radiator. The interior tubular pipe that makes the connection across the tops of the loops is in circulation with the loops, but yet is small enough not to interfere with the circulation. A similar passage at the bottom of the loops allows condensation to escape into the feed and return pipe, according as the system is one or two pipe. The joints of the radiator are screw joints without bolts or packing, being joined by screwing malleable coupling nuts on to externally threaded hubs. By this means the coupling nut never comes in contact with the steam or water passing through the radiator and thus can never corrode. In addition to that the expansion of the metal in the radiator loops, when heated, will rather tend to tighten than to loosen the joints.

The system of circulation and the new joint constitute the features of the new radiators, and an added advantage is the facility with which a radiator of this type may be extended or diminished by reason of the external joints.

These radiators are made in every style and size, and graded to suit all purposes from the workshop to the drawing room. It is needless to go into details in this regard further than to say that the latest designs are very handsome and perfectly adapted in fit and finish to every imaginable purpose for which heating apparatus is required. The Ontario Radiator Company have many testimonials as to the efficiency of their radiator which has been operated on the same steam circuit with those of other makes with a result which should delight the hearts of the proprietors of the new radiators. It is a radical departure from old styles. It is endorsed by the best authorities as remarkably efficient, and if you are a user of heating apparatus you are interested in the "Ontario" radiator, cross-sections of which are herewith illustrated. You may secure many particulars of which space forbids the presentation here, by dropping a card to 53 Canada Life Building, Toronto, Ont.

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 Canada for Canadians!  
 Patronize Canadian Industries!  
 The Union Jack is your flag—stand by it!  
 Canadian money spent in Canada develops Canada.  
 The employment of Canadian Labor creates the best market for everything you produce!  
 Canada—England—Ireland—Scotland—Australia—New Zealand—South Africa—India The Greater Great Britain, is your rich heritage. Do you appreciate it?  
 Build up trade with Great Britain, and our sister Colonies—good prices—sure pay—prompt pay—the largest and best market in the world.  
 Canadian workmen eat Canadian Flour, Butter and Eggs. Do you want more or less workmen in Canada?  
 The United States people turn back our Nurses, Mechanics and Laborers—they do their best to keep out all the products of your farm. Will loyal Canadians support United States industries when they can buy as good or better goods from Home Industries?—Massey-Harris Illustrated.

**THE HAMILTON BRIDGE WORKS COMPANY, LIMITED.**

The works of above company are at present exceedingly busy and running to the utmost capacity.  
 They are working on several large bridges for the Canadian Pacific Railway and Grand Trunk Railway Systems.  
 The Rouge River Bridge for the G.T.R. at Port Union, 135 feet double track span, weighing about 260 tons, which is about the heaviest span of its length in Canada. They have just closed a contract with the Canadian Pacific for the Galt bridge to take the place of the present structure. The new bridge will consist of 5 spans of 150 feet and 3 approach spans of 90 feet. The total estimate weight being 1,000 tons.

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Our "OWL BRAND" Corrugated Iron is reliable; made from sheets of the very best quality—you will find it entirely free from pin holes, scale or other defects.

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Full information on application.

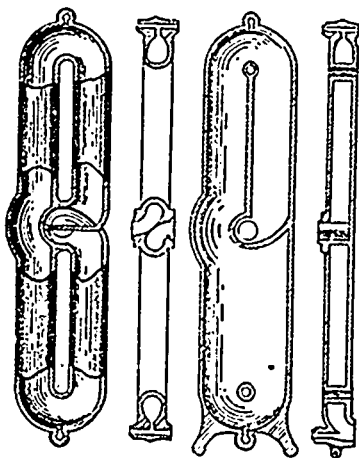
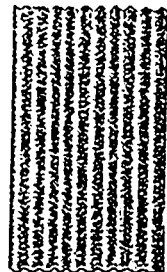


Fig. 2.

changed. A trouble common with radiators is the inadequate means of draining off air from the inner loops. The new radiator is built with an air passage across the top which prevents the "pocketing" of air in the tops of the loops. This modification is the key

**METALLIC ROOFING CO., Limited**  
 1181 King Street West, Toronto

The new steel roof for the Westo block of Departmental Buildings, Ottawa, is being constructed by this company, and will be a fine piece of work when completed.

The metal work for the Soulanges Canal Lock Gates is another large contract which is well under way.

This company are not entirely devoted to bridge building as one would note from above, structural work and all kinds of steel work being strictly in their line. Steel water feed pipes are a speciality, and form an important part of the work just now, as they are making for the Cataract Power Co. a large quantity of eight foot steel pipe for the plant at Thorold. The company have orders on hand for a large number of highway spans for different municipalities, amongst which are three highway bridges for the Department of Public Works, Northwest Territories, which are destined to be placed beyond Regina.

A few of the important works this energetic company have successfully completed are the Stoney Creek arch bridge for the Canadian Pacific Railway in the Rocky Mountains. The magnificent steamer Chipewa, of the Niagara Navigation Co., is a sample of what this company can do in the way of ship building. The Simpson building, one of the finest commercial buildings of Toronto, which is composed of steel and is entirely fireproof, was built by this firm and is a great credit to them. There are many large and creditable undertakings which have been performed by this company that for lack of space we are unable to enumerate.

The company is under the control of the Messrs. Hendrie, which is surety that anything undertaken will be well done.

#### BOILER SCALE TREATMENT.

Boiler economy is a big factor in business success for power uses. The efficiency, safety, and economy of a boiler are seriously impaired if it is scaled. Using water from Lake Ontario, a 100 h.p. boiler requiring 3,000 gallons for a ten hour run, would deposit 103 pounds of scale in a month as chemical analysis shows that a gallon of water contains eight grains of scale forming substance. Boiler scale must be treated scientifically, because in different localities water has different properties. Power users should have the water supply for their boilers analyzed and treated accordingly.

Engineers estimate that 1-16 of an inch of scale in a boiler causes a waste of 13 per cent. of fuel; one quarter-inch of scale wastes 38 per cent. of the fuel, and one-half inch 60 per cent.

The Canadian Chemical Compound Co. will make a free analysis of water and scale, and furnish whichever of their three compounds "Canadian," "Automatic," and "Zinkolene" is best suited to the conditions found. In case none of these regular fluids is applicable, they will furnish a compound for your special case. Their compounds are guaranteed not to injure boilers, valves or packing, and not to affect dyes, cereal goods, meats, cooked foods or any goods with which the steam comes in direct contact in the process of manufacture. They will stop pitting and will not cause foaming or priming. Send for catalogue to the Canadian Chemical Compound Company, Rooms 310-311 Temple Building, Toronto, Ont.

#### CONSUMPTION CAN BE CURED.

This Terrible Disease Overcome in Many cases by Cannabis Sativa.

"Given up to die with consumption" is an expression everybody has heard, but which will be heard less and less as our knowledge of the cause and cure of consumption becomes broader and deeper. Recent discoveries of nature's secrets promise to rob consumption of its horrors, just as diphtheria and small-pox have been brought into subjection by medical skill.

The natural remedy for consumption, catarrh, asthma and all other throat and lung diseases is believed to be Cannabis Sativa, Dr. Stevens' East Indian Consumption Cure. It has cured many cases that seemed to be hopeless otherwise, and those who have been benefited by it are hearty in their praise of Cannabis Sativa and in their gratitude to its discoverer. In order to extend its benefits, W. A. Noyes, of 820 Powers Block, Rochester, N. Y., has liberally offered to send free to any address a sample package sufficient for twelve days' treatment.

The following letter tells of one cure out of many hundreds effected by Dr. Stevens' Remedy:

Deseronto, Ont., February 21, 1888.

W. A. Noyes—Dear Sir:

I was troubled with a pain in my left lung for about three years. Doctors told me that I had hurt myself in some way. In November of '86 I was taken with a bad cold and continued getting worse, and taking medicine from a doctor regularly. About March 29, 1887, I had hemorrhage from my left lung, which left me in bed sick for some time, still doctoring with a doctor. One day while reading the paper, Family Herald and Weekly Star of Montreal, I came across an advertisement "All lung troubles cured, address W. A. Noyes, Rochester, N. Y." I read it a few times over, then I said to myself, "That remedy will cure me." Ever since my first package of remedy I have taken nothing else, and to-day can do all kinds of work. When I first started to take Cannabis Sativa I could not carry five quarts of water with my left arm. Any person troubled with weak lungs, or easily to take cold, I strongly recommend to try it. I weigh to-day as much as I ever did in my life. We cannot do without it in the house. I cannot recommend remedy too highly. (Signed) EDWARD JEFFERSON.

Other experiences, even more remarkable, testify to the wonderful power possessed by Cannabis Sativa to check the ravages of consumption, and aid nature in rebuilding the wasted tissues.

Hon. John Costigan, Hon. Peter White, and Hon. John Eaggart are members of the Tobique Gypsum Company, Limited, who are seeking incorporation with \$40,000 capital stock, to carry on business in Gordon, N.B.

Davis & Son, Kingston, Ont., ship builders, have in their yards the following craft. A steam pleasure yacht, 36 feet long, 7 feet beam, 36 inches deep, 3 tons, water-tube boiler, compound engine. A steam launch, 48 feet long, 8 feet beam, 4 1/2 feet deep, 12 tons, water tube boiler, compound engine. Passenger and freight steamer for Homer & Co., Gravenhurst, Ont., 65 feet long, 14 feet beam, 6 feet deep. Rebuilding the private yacht Charlie M., for C. Mickle, Gravenhurst, Ont; she is now 60 feet long, 10 feet beam, 6 feet deep. They are adding 13 feet to her length. Rebuilding the steamer Kanonha for the Muskoka Navigation Co., she is 108 feet long, and they are adding 18 feet, rebuilding the hull, adding new cabins and making other improvements.

Douglas & Co., mill supplies, Amherst, N.S., have issued a circular as follows. "We beg to advise you that we have this day associated in our firm Mr. Harold N. Stevens, formerly in our employ and at present engaged with a prominent city hardware firm, and Mr. Walter Wood now in charge of our office work. We purpose continuing our business on the same lines as formerly, giving special attention to the hardware trade both wholesale and retail. Having enlarged and improved our premises, we hope with the increased facilities to merit a continuance of your confidence.

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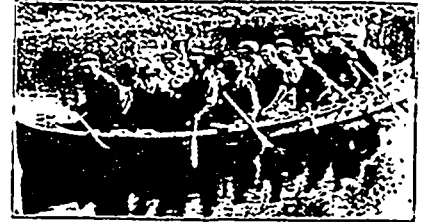
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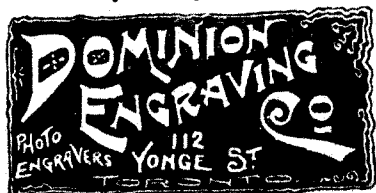
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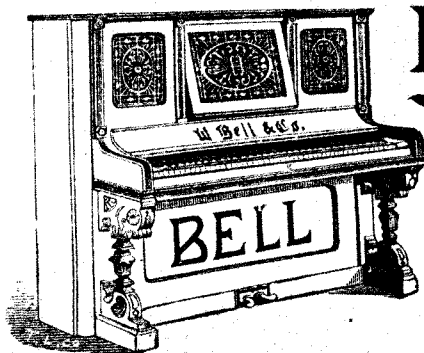
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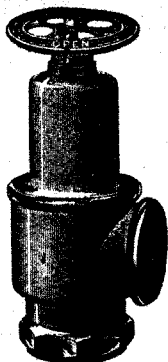
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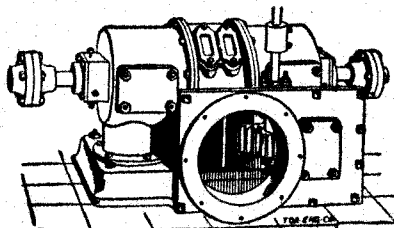
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