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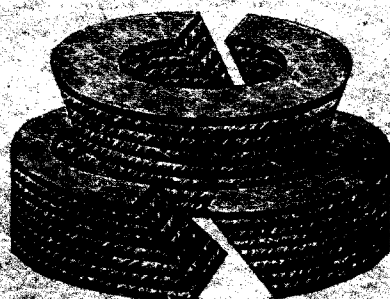
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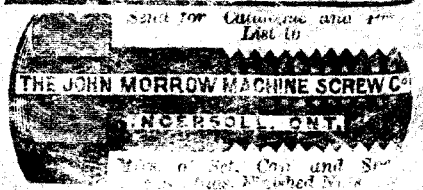
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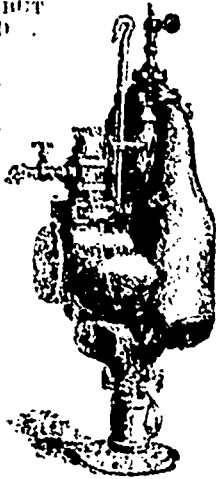
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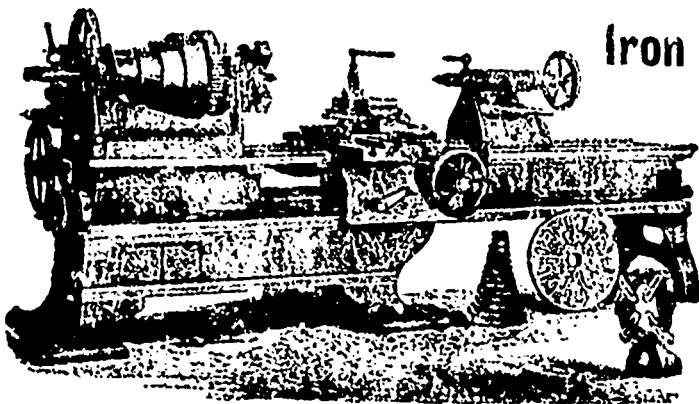
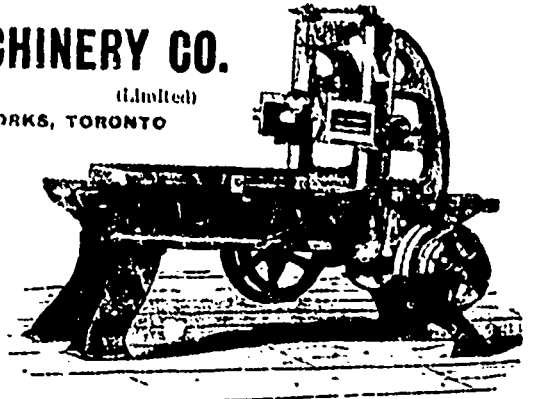
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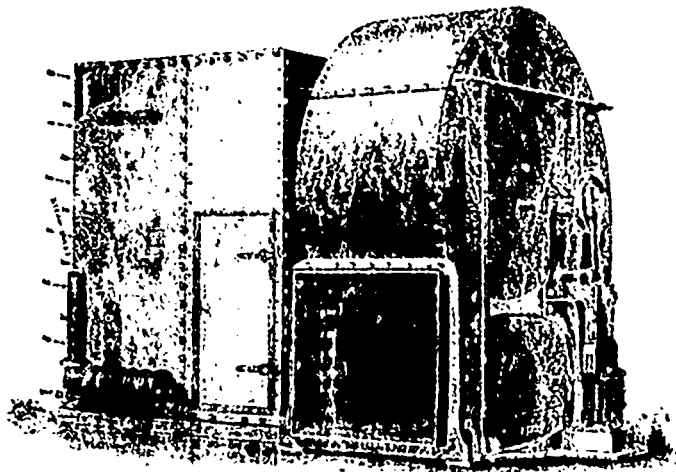
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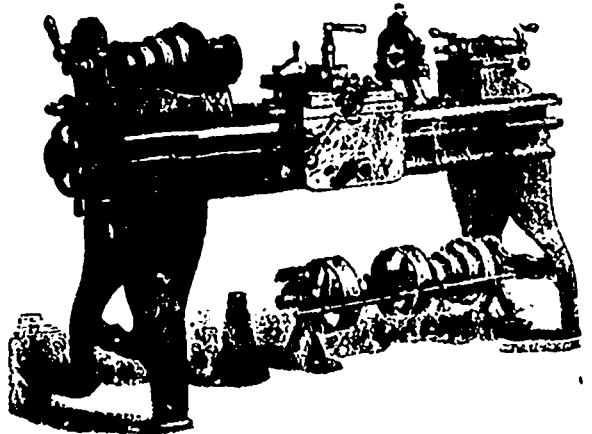
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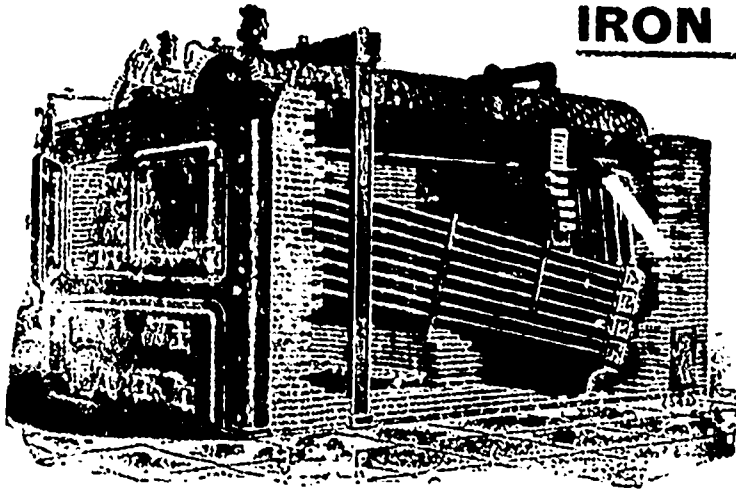
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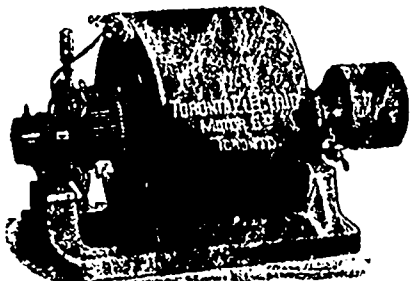
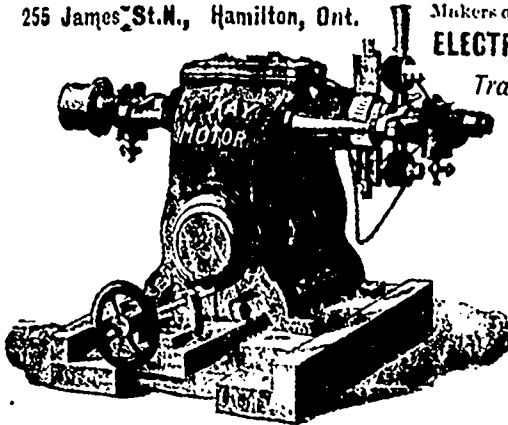
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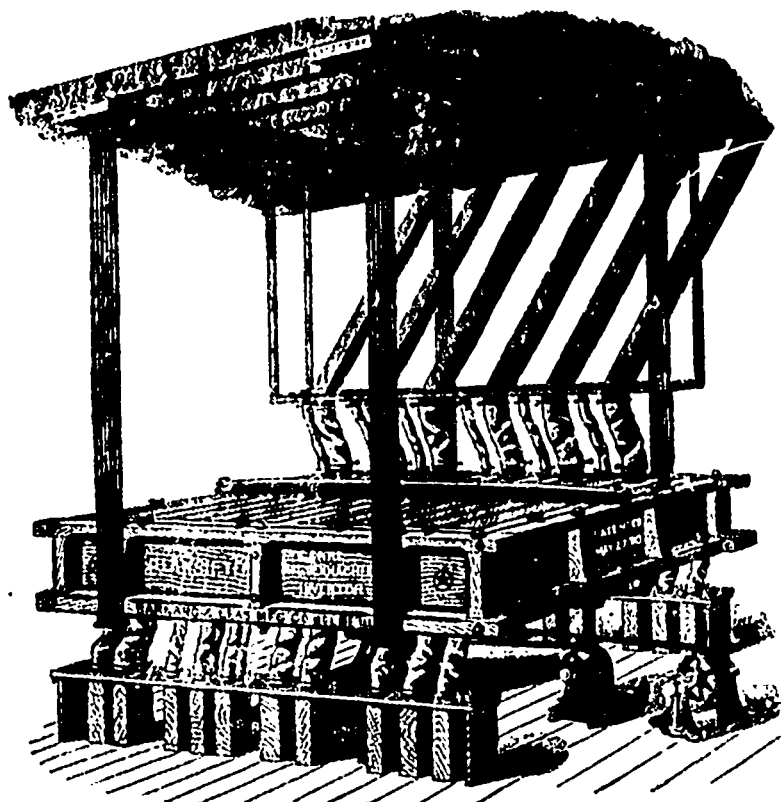
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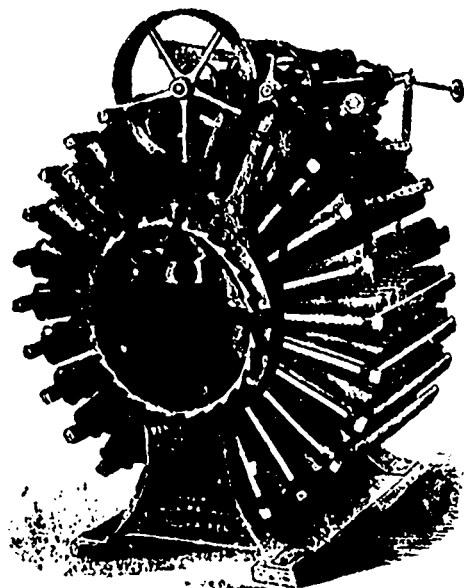
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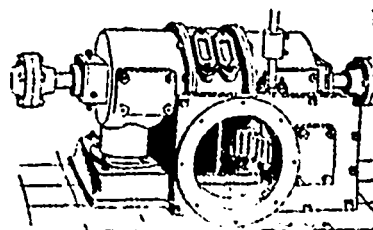
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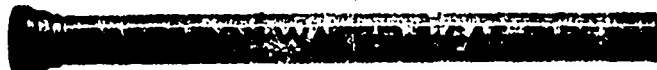
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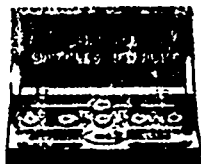
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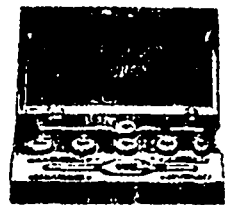
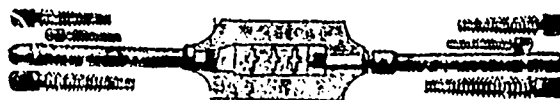
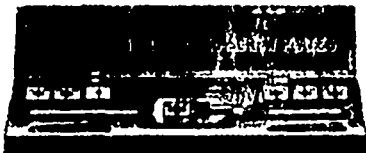


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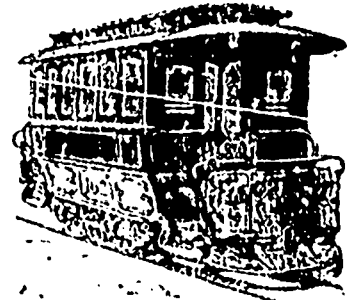
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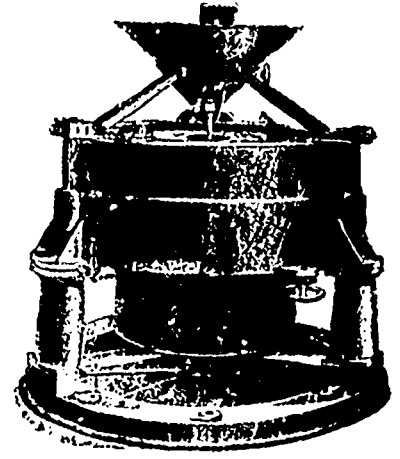
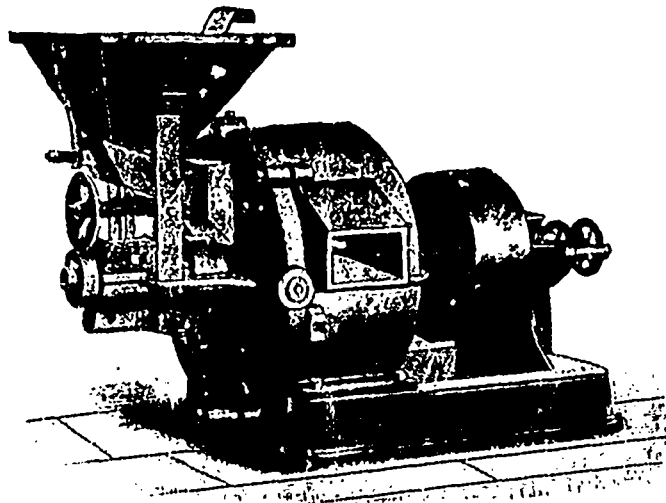
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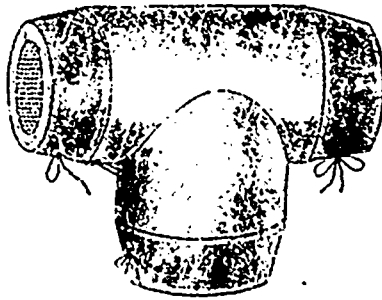
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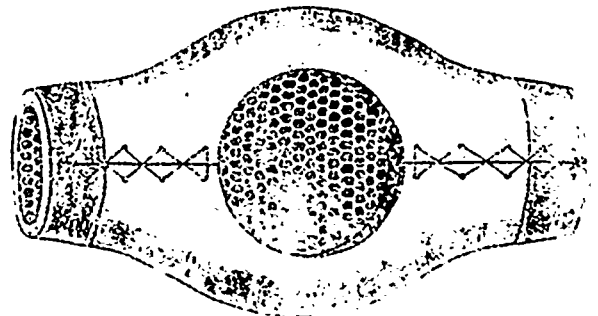
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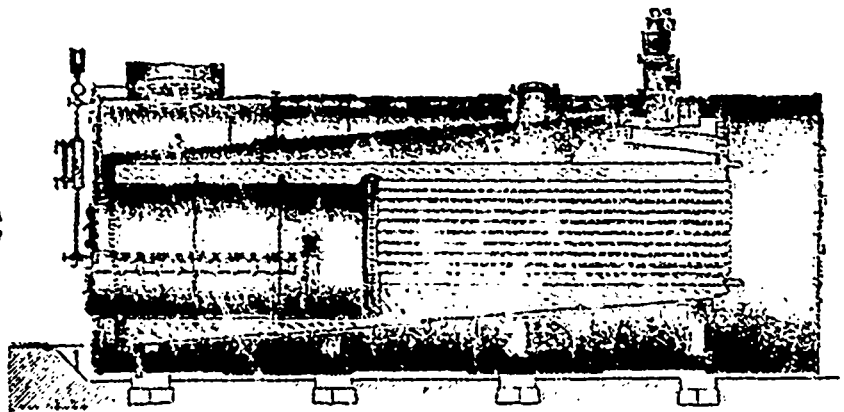
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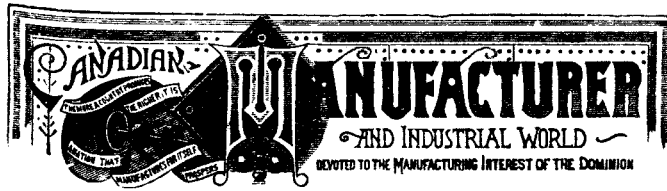


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MUST MAINTAIN PROTECTION.

The enforcement of tariff protection renders Canada largely independent of the depressing effects of the commercial distress of other countries through this being made a slaughter market for their surplus products.

Tariff protection not only encourages the investment of Canadian capital, and the employment of Canadian labor in industrial enterprises, but also attracts foreign capital, and inaugurates industries by inducing those who desire to

participate in the benefits of our market to manufacture their products here, giving employment to Canadian labor.

Protection, as exemplified in a tariff adjusted to meet, as nearly as practicable, the conditions prevailing in the different sections of the country, secures to the farmer the home market for his products, and a due proportion of over \$100,000,000 expended in wages annually in Canada, stimulates inter-provincial trade, and cements the provinces into a united and prosperous Dominion.

Tariff protection secures to Canadians their home market, which justly belongs to them, and also encourages in them a feeling of security and national pride, and a commercial and industrial independence highly conducive to the welfare of the whole people.

The principle of tariff protection, discriminating against the foreign and in favor of the home product, has been in successful operation in Canada for eighteen years, during which time, and through which influence millions of dollars have been invested in industrial enterprises giving remunerative employment to many thousands of our people.

A tariff for revenue only has no other object in view than to supply the requirements of the federal treasury, and does not encourage the establishment of home enterprises or the employment of Canadian labor.

A protective tariff, while providing for the fiscal requirements of the country, always operates in the interest of the wage-earner by placing maximum duties upon those foreign products that will most encourage domestic production and rest most lightly upon the mass of Canadian consumers.

Nothing imperils the security of capital or paralyzes the industrial and commercial enterprises of a country more surely than uncertainty and instability in its trade policy.

Therefore we are opposed to any change being made in the principle of tariff protection, with the alternative of free trade, or a tariff for revenue only, believing that such a change would be disastrous alike to the agricultural, industrial, mercantile and manufacturing interests of the Dominion.

ORGANIZATION.

The Hamilton Spectator calls attention to the fact that one of the outcomes of the recently begun reorganization of the Liberal Conservative party in Ontario is likely to be the establishment of the permanent headquarters for the party in Hamilton, and it tells us that hitherto the rule has been to call the party together when an election was in view, to make a plunge at once into campaign work. It says, too, that there has been nothing to keep the Conservatives together during the years between elections; and it now sees the mistake made in this direction, and informs us that the party in that city proposes to have a permanent headquarters there, open year after year and all the year round, where Conservatives may meet in the interests of their party, and to keep the pot boiling continually that the party may be ready at all times to do what may seem for its advantage.

The trouble with the Conservative party in Ontario has always been its inability to perceive that the principles involved in Ontario politics are very different from those involved in Dominion politics; and that a very large and most influential element that has always been an active factor in Dominion politics has never been enlisted in behalf of that

party in Ontario politics. We are not prepared to point out at this time upon just what questions the two leading political parties in Ontario are divided; nor to show that the struggle is of any greater importance than efforts of the opposition to get into power, and of the party in power to remain there; and for many long years the voters of the province have emphasized the fact by their votes that they were fairly well satisfied with the ruling party and their representatives in the management of provincial affairs.

On the other hand it has been equally observant that there was a very large element in Ontario who were devoted to the cause of tariff protection to our industrial interests, and that that element always cast its vote and gave its influence to sustain the National Policy and those who advocated that policy in Dominion politics.

This situation may be explained by showing that in Dominion politics in Ontario, as indeed in the other provinces also, the Conservative party might very properly be divided into two classes one class representing those who were thick and thin Conservatives, who would vote for the nominees of their party under any and all considerations, whether the election were provincial or general; the other representing those who voted with the party only in Dominion politics because it advocated the principles of the National Policy. If it had been apparent that the National Policy was an integral element in provincial politics there can be no doubt that both these elements would always have voted in provincial elections the same as they voted in Dominion elections; and if they had thus voted there can be no doubt that the party that has in this province always been reclining in the cold shades of opposition would have been basking in the warmth and comfort of power.

The great trouble with the Conservative party in provincial politics has been that they never comprehended this condition of affairs, nor were ever able to intelligently grasp the situation; and our esteemed contemporary, *The Spectator*, has always been numbered among the blindest of the blind in this respect. For the better exemplification of our argument we will denominate those who are thick and thin Conservatives as Mossbacks, and those who are Conservatives in as far as that party are supporters of the National Policy goes, as Protectionists. It is certain, then, that in Dominion political contests, where the cause of protection was involved, the Protectionists were sure to go with the Mossbacks in voting the Conservative ticket; and it is equally certain that in provincial politics, where the cause of protection was not involved, while the Mossbacks undoubtedly voted for the nominees of the Conservative party, the Protectionists were not necessarily under any obligation to do so, and do, many of them, vote the other way.

Sir Oliver Mowat, while Premier of Ontario, comprehended this condition when he received a large and influential deputation from the Canadian Manufacturers' Association who interviewed him to ask that some substantial assistance might be given towards the establishment of the iron industry in this province; and he was quick to respond to the wishes of the Association when he promised a provincial bounty of one dollar per ton upon all pig iron made in the province from ores mined in the province. As a result of that interview, and the subsequent action of Sir Oliver, we now have a plant in operation in Hamilton with capacity to manufacture one

hundred and fifty tons of pig iron per day. Perhaps if Mr. Marter had been premier, and the Conservative party in power, the same thing would have occurred, but the province has cause for thankfulness that, in this respect at least, Sir Oliver Mowat showed himself to be capable of viewing the situation from the same standpoint that even Sir John Macdonald or Sir Charles Tupper would have done.

The collapse of the Conservative party in the Dominion elections of last June was in no manner attributable to lack of enthusiasm on the part of those whom we here denominate as Protectionists, for it is certain that about every voter in Canada who was a supporter and admirer of the National Policy did all that he could to keep in power those who championed that policy, and to keep out of power those who had declared that they would destroy it. With the Protectionists it is a matter of the most sincere regret that the managers and influential men of the Conservative party, especially those of them who were in power at Ottawa, allowed themselves to become involved in a question in which they never should have become involved, and which had no connection whatever with the policy of tariff protection, the previous advocacy of which had placed them in power. These leaders knew, or might have known, that not only in Ontario, but, perhaps, in all the other provinces of the Dominion, if the Protectionists had not voted with the Conservative party that party would not have been in power, and it showed no great amount of wisdom on their part to take up and advocate a question that was most assuredly distasteful to a very large portion of their adherents, and particularly so to their Protectionist friends, seeing that the advocacy of it could not but endanger the cause of protection.

We can assure *The Spectator*, and also the Conservative party and its leaders, that that party can never accede to power in Ontario, nor regain power in the Dominion, without the active aid of the Protectionists; and we can also truthfully say that whichever political party most honestly and sincerely advocates and upholds the cause of tariff protection, will undoubtedly have the voting support of the Protectionists of Canada.

The Spectator speaks of mistakes made by its party, particularly the mistake of not maintaining its organization year after year and all the year round; and undoubtedly this lack of organization was one of the potent causes that led to the defeat of the Conservative party in June last. But this cannot be said of another important organization created especially to uphold the cause of protection, and which has been kept up and in good working order during all the more than twenty years of its existence, and which has been such a valuable auxiliary in placing in power and in keeping there those who were staunch advocates of the National Policy. Will the leaders of the Conservative party say that they have not, by their political course for a year or two past, done much to alienate the allegiance of these Protectionists? These leaders would do well to consider that possibly some other political party might be willing to make tariff protection a prominent plank in its platform.

The Protectionists are protectionist from principle, first, last and all the time, but they are not necessarily adherents of the Conservative party, particularly if that party allows itself to make the cause of protection second to any other.

A BRITISH VIEW OF RECIPROCIITY

In a recent issue of this journal was an editorial in which it was argued that general commercial reciprocity between Canada and the United States could not prove of much advantage to this country, while preferential trade with Great Britain, or within the Empire, would be of much benefit to us. Discussing that editorial the *Manchester, Eng., Textile Mercury*, says:—

It is extremely important that a careful watch be kept upon the doings of the new Canadian Government. In the middle of last week it was telegraphed from Ottawa that Mr. Laurier had just announced in the House of Commons that the Dominion Government intended to send Commissioners to Washington to endeavor to negotiate a reciprocity treaty with the United States, but the time would not be opportune until after the Presidential election. Now we all know the sort of reciprocity the United States desires to give. As we have often, and recently very often, explained, it is the reciprocity invented by the late J. G. Blaine, which has been endorsed by the manufacturing interests of the United States, and which constitutes a plank in Mr. McKinley's platform. In substance it is the extension of the McKinley tariff to foreign countries for the benefit of the manufacturers of the States. It means the negotiation of treaties that will give a lighter tariff in the States to all countries that will discriminate heavily against other countries and in favor of the States. In Canada it would mean that the Canadian tariff should be reduced forty or fifty per cent. on the productions of the States, while it should be maintained at full rates or increased against those of this country. It was for endeavoring to do this, and for endeavoring further to entangle the country in political alliances with the States preliminary to an attempt to carry it over for bodily incorporation, that the Liberal Party in Canada was so thoroughly routed a few years ago. It is to be hoped that its recent success has not arisen from any change of the country's conviction upon the point. If no such change has occurred it will be doubly important to guard against the party's attaining by guile and deceit those ends which it could not accomplish by open advocacy. We thoroughly distrust the men now in office in Canada, and hope that every Canadian who desires to maintain the connection with this country, should not only carefully watch the officials, but should never rest until they have forced an avowal from them that they have not only no such intention, but will resist any such scheme from whatever quarter it may come. We have often expressed our belief that the United States is maintaining paid agents in Canada to work for this end, and such agents are never deterred by any temporary failure—as it is not success, but their retention, which is their first consideration. The policy of reciprocity of J. G. Blaine was invented for the purpose of embroiling Canada with the mother country on the discrimination in its contemplated tariff, in order that during the angry discussions that would probably arise the United States could give Canadians an invitation to throw themselves into its arms. This was the policy of the Republican party when last in office, and it is the same that it will endeavor to put into force again immediately it gets into power.

Our contemporary declares that there can be no mistake in making its point regarding Mr. Blaine, and in corroboration alludes to a recent speech of Mr. McKinley in which he said:

The splendid results of the reciprocity arrangements that were made under authority of the tariff law of 1890 are striking and suggestive. The brief period they were in force, in most cases only three years, was not long enough to thoroughly test the great value, but sufficient was shown by the trial to conclusively demonstrate the importance and the wisdom of their adoption. In 1892 the export trade of the United States attained the highest point in our history. The

aggregate of our exports that year reached the immense sum of \$1,030,278,148, a sum greater by \$100,000,000 than the exports of any previous year. In 1893, owing to the threat of unfriendly tariff legislation, the total dropped to \$817,665,194. Our exports of domestic merchandise decreased \$189,000,000, but reciprocity still secured us a large trade in Central and South America, and a larger trade with the West Indies than we had ever before enjoyed.

The conclusion of the *Textile Mercury* is as follows:—

Need we say anything more to prove that the policy of the Republican party in the States is unchanged, and that very probably that of the Liberal party in Canada has not been altered upon this important point, notwithstanding the guarded declarations of Mr. Laurier to that effect before the recent election which placed him in office? One fact alone is sufficient to demonstrate the immoral nature of the reciprocity policy of the United States, namely, that it does not intend under any circumstances to lower its tariff against the manufactures of this country, to which American productions have free admission.

FREE IMPORTS INJURIOUS TO BRITAIN.

As many of our readers are aware, a very spirited and insouciant discussion has been in progress for some time, in Great Britain as to whether the free trade theory that went into effect there fifty years ago should be abandoned in favor of "fair trade," which means preferential trade within the Empire as against the rest of the world. The Cobden Club are the special champions of free trade, and Lord Masham is one of a noble army of advocates of the policy of tariff protection. Recently the Cobden Club addressed an open letter to Lord Masham on this subject, to which his Lordship replied as follows:

The Cobden Club are vastly amusing, as, nothing daunted, they proclaim in their most grandiloquent style "that the United Kingdom reigns supreme in manufactures, trade and navigation." Now, it is by this sort of wild and misleading assertion, and also by hiding the truth, that England has so long been deceived and led astray. But what are the facts? Agriculture, which should be and is the mainstay of every country, is in a state of collapse! The iron industry, which, next to land, has always been considered one of the best and safest of British industries, is in a state of rapid decay. In 1882 we were supreme, the iron masters of the world, our production of pig iron was 5,586,680 tons, but in 1894 it was 7,427,342 tons! And now America is supreme, they have gone far ahead of us, and this all with protection, mark. Then again, in cutlery, in 1894 "made in Germany" exported £3,701,100. In the same year made in the United Kingdom £1,831,481. We are not supreme there. We were in 1882. We then exported £4,107,125! It is perfectly distressing to read such figures. There we see in a very marked manner how Germany under protection has gained, and how England has lost under free imports; and it is very much the same with every industry. I cannot too often repeat and enforce, that the productive power of the United Kingdom is being destroyed by free imports. It is true that for the moment the iron trade is fairly busy, chiefly owing to war shipbuilding. And now we come to cotton; there we are supreme. But neither protection nor anything else can save Lancashire from a great collapse at no distant day. Even now the figures are not satisfactory, as in 1874 we exported of yarn and cloth £74,247,625, and in 1894 only £66,564,529. Coming events

cast their shadows before them, if I mistake not. Then as to wool manufacturers, for the present Yorkshire is busy, chiefly owing to the change in the American tariff; but here again the figures show distinctly how very seriously we are being beaten both in the home and also in the foreign market. In 1874 we exported wool manufactures of cloth and yarn £28,359,512, and in 1894 £18,728,946; and we imported in 1894, what looks almost impossible, no less than £11,000,000 from foreign countries. All this is very deplorable, and unless we change our fiscal system it means nothing but ruin. But then to cheer us the Cobden Club tells us triumphantly that "the United Kingdom reigns supreme in manufactures, trade and navigation." What a supreme delusion! And linen is just as bad, as in 1874 we exported £8,832,533, and in 1894 only £5,443,860. Such figures should cause the nation to go into mourning. Then as to silk, it is about as usual, as rickety as it well can be, just alive, and that's all. We have the very pleasant figures to look at, that we import upwards of twelve millions, and only export about a million and a half! I might also point to the ruinous state of many other industries, such as tin-plate workers, the sugar refiners the corn millers, and any number of other industries, all in a state of collapse; but I think that I have proved my case, that "free imports have been, and are, injurious to the country," although the Cobden Club say that we are supreme we are going faster down the hill than any nation ever did in history.

EDITORIAL NOTES.

THE CANADIAN MANUFACTURER can most truthfully say that whichever political party in Canada most honestly and sincerely advocates and upholds the cause of tariff protection, will undoubtedly have the voting support of the protectionists of Canada.

This is McKinley's idea of a reciprocity treaty with Canada: Uncle Sam to take all the sawlogs, spruce, timber, nickel ore and fish Canada can send to him, free of duty; Uncle Sam's manufacturers to have free access to the Canadian market.—Hamilton Spectator.

The Toronto Globe will kindly observe that tariff protection is far from being a dead duck in Yankee politics. It will also kindly notice the difficulty, nay, impossibility, Mr. Laurier faces in any proposition he may contemplate, to make any material changes in the Canadian tariff.

Re the re-organization of the Conservative party, this journal would respectfully suggest to the consideration of the leaders of that party that possibly some other political party might be willing to make tariff protection a prominent plank in its platform. Protectionists are such from principle, first, last and all the time.

Dear Mr. Laurier,—Please kindly observe that our neighbors to the south of us have just placed Mr. McKinley on the top of their tariff pile, and that Mr. McKinley is decidedly not in favor of giving any tariff favors to Canada unless it be upon conditions that the Canadian market shall be opened free to the products of American manufacturers, and a most decided discrimination against British products declared in

our tariff. Mr. Bryan would probably have listened to your requests for reciprocity, but Mr. McKinley, never.

The Toronto Globe, just previous to the presidential election, said of Mr. McKinley:

He is the apostle of unreasonable protection, but the experience of the people with one escapade in "McKinleyism" will effectually preclude the possibility of another.

As a prophet we laugh The Globe to scorn. It speaks of McKinleyism, meaning high tariff protection, as an "escapade," and intimates that protection is a novelty in American politics. It should read history. Protection was a fundamental principle, underlying its fiscal policy at the very beginning of the American Government, and has continued to be such, with a few exceptions, ever since. Tariff protection is an established policy not only in the United States but also in Canada, which we do not think even Mr. Laurier will attempt to set aside.

The newly elected president (Mr. McKinley) is, with the inconsistency peculiar to protectionists, a believer in reciprocity, and his victory may facilitate a commercial arrangement advantageous to both Canada and the United States.—Toronto Globe.

We have no knowledge that Mr. McKinley ever was a strong advocate of reciprocity with any country—never, certainly, with Canada. Reciprocity with some of the West India Islands and the Central and South American Republic was the pet scheme of Mr. Blaine, whom, we all know, was no friend to Canada, and it was engrafted upon the so called McKinley tariff simply because it was impossible to pass that tariff bill without it. But even then there was no possibility of Canada coming within the scope of Mr. Blaine's reciprocity scheme except by our giving free admission to the manufacturers of the United States, and adopting the McKinley tariff against Great Britain. If Mr. McKinley was not enthusiastically in favor of Mr. Blaine's reciprocity scheme of eight years ago, we have no knowledge that he has become converted to it since then. How foolish, then, is it for The Globe to suggest that the election of Mr. McKinley may facilitate a commercial arrangement advantageous to Canada. Mr. McKinley would be quite willing, no doubt, to give free access of our raw materials to the United States—our pine logs, spruce pulp wood, nickel ore and such things that we have and which he cannot do without; but to obtain this wonderful concession we must consent to strangle our manufacturing industries by giving free access to Canada of American manufactures. Declined with thanks. Without doubt the greatest obstacle Mr. Laurier will have to encounter in his promised reciprocity arrangement with the United States will be the McKinley policy that is to prevail there for at least four years to come.

There are no "moderate" Conservatives now. Every member of the party will vote Conservative in local elections just the same as in Dominion elections.—Hamilton Spectator.

The Spectator should exhibit a diagram showing that voters who are Conservatives in local elections will probably vote that way in local elections, and that there are a large number of Conservatives in Dominion politics who may not, in the future as in the past, vote that way in local elections. There are thousands of National Policy men in Ontario who vote for Conservatives for the Dominion House of Commons

simply because they desire to uphold the cause of tariff protection, but who do not vote the Conservative ticket in local elections simply because the local Government have no voice in framing the fiscal policy of the Dominion Government.

Mr. Archibald Blue, Director of the Ontario Bureau of Mines, has issued his fifth annual report. In his general introduction, Mr. Blue says that the nickel and copper mines are producing steadily the demand for these metals being well maintained. As to the gold industry, the outlook is encouraging "Already," says the report, "there are large investments of British and American capital, as well as some Canadian capital in properties on Lake of the Woods and along the Seine River, and in a few months enough work will probably have been done to make or mar the fortune of the district as a gold field." The production of gold in the province for the year is given as only \$50,000 of value; but the explanation is that the year ended October 31, 1895, and it is in the subsequent months that the development has taken place in the Rainy River District, which has given rise to the great interest which is now taken in the gold ores of that part of the province. The value of the nickel produced was \$404,861, and that of the copper \$160,913, as against \$612,724 and \$195,750 respectively in the previous year.

Our Canadian friends attach a great deal of importance to the conference that is now in progress, between manufacturers of pulp across the border and United States customs officials, as to the valuation of Canadian pulp for customs purposes. They are very anxious that \$10 per ton shall be accepted as a level value, and are beginning to hint that favorable action in this respect on the part of the United States may have some effect in defeating the movement in Canada to place an export tax on pulp wood. They might do well to go further in the matter than to make a hint. It is a fair matter upon which to exchange considerations. Doubtless an agreement that no export tax shall be placed on pulp wood would be considered as fair compensation for an agreement that pulp shall be appraised at \$10 at the ports of entry. We suggest the idea in the abstract; not in detail.—The Paper Mill.

The suggestion does not go far enough. Seeing that the United States is so largely dependent upon Canada for pulp wood, would it not be about the correct thing for that country to admit Canadian pulp free of duty in consideration of Canada's refraining from imposing an export duty on pulp wood.

In a recent issue of the New York Tribune, speaking of the new Russian telephone for long-distance work, the following comments are made in which the Electrical Review, and it heartily agrees that, if this telephone is successful in sending messages across the ocean, from continent to continent, it will be, indeed, a "tremendous event:"

A Moscow electrician, M. Kildischewski, thinks he has discovered a process by means of which telephonic messages may be sent over any wires to any distances with no diminution of their audibility. His home experiments have been extremely successful, and he has talked across the ordinary wires from Moscow to Rostoff, on the Don, a distance of nearly a thousand miles, the message and response being as clearly heard as if they were uttered across a table. M. Kildischewski has gone to London to try to communicate with New York across the cable, and if he succeeds it will place his name in the front rank of electricians, beside those of Edison and Tesla. We are likely to talk direct with London, Paris, St. Petersburg, and even Peking, some day, and it may be that that wonder-

ful consummation is not long to be delayed. M. Kildischewski's experiments will be waited here and everywhere with the utmost interest. We can at present talk 1,000 miles and more over the wire without the least difficulty, and it does not appear that he has so far much exceeded this achievement. But if he gets an audible message through the cable it will be a tremendous event.

The Toronto Globe has on several occasions recently pointed to the fact that a number of iron works in the United States were resuming work notwithstanding the cry of hard times and small demand for iron. The Iron Age thus alludes to the situation:

One after another the idle iron and steel works are staggering into line and endeavoring to put on an appearance of activity. The resumption during the past week has been particularly marked. It is exceedingly cheering to note the dispatches in the daily papers from various points, giving news of this character, and stating the number of men who are again being given employment. The increasing confidence in the defeat of the unlimited coinage of silver, the continuous influx of gold from abroad, and the better feeling in financial circles are all having their effect on general business, and specifications are at last being received by manufacturers on contracts previously placed. Few of them are starting up under pressure, however, but if the truth were known it would be found that practically all of them are re-lighting their fires with but little work actually secured. They know, however, that confidence is contagious, and hope that the fact that they are again running may induce more of their customers to place orders as usual. Under the circumstances it is not well to be too jubilant over the apparent revival in trade. Two or three weeks hence we can form a more reliable opinion of the permanence of the movement than at present. The re-opening of these works, however, answers one very good purpose in disposing of the canard that the manufacturers have systematically shut down their works to coerce their employees into voting against free silver, and that they have threatened to keep them closed after the election if free silver should win. No manufacturer willingly suspends operations. He is only too glad to keep his works going, and will often make costly sacrifices for that purpose.

Nine iron plants at Youngstown paid out in wages in one year under the McKinley tariff, \$3,770,000; in one year under the Wilson-Gorman act the wages paid by the same establishments amounted to but \$1,550,000. In the difference of \$2,220,000 a year, the iron workers of the Mahoning Valley have paid a dear price for the country's blind search for something that would be an improvement upon prosperity.—Iron Trade Review.

At the luncheon on the Canada, Mr. Fielding went to the root of the steamship question when he said that one of the first essentials of success in the case of the Canadian fleets was that they should carry return cargoes from European ports to Canada. It will be the part of the Liberal Government so to adjust the tariff as to bring about that desirable end.—Montreal Herald.

It depends very much upon the character of the return cargoes from European ports to Canada whether "the first essential of success" in the enterprise to Canada would be realized. If the hitherward cargoes consisted chiefly of raw materials for the manufacture of finished products in Canada, and of merchandise that could not to advantage be produced here, then the essential of success will be realized. But if the incoming freight consists of foreign manufactured products that would displace our home manufactured products, then

the so-called essential of success would prove a disaster. Canada does not desire to support a foreign trade that would destroy its home industries.

There are said to be twenty million tons of peat on the Welland moors, capable of producing as much heat as a similar quantity of anthracite coal. There is a market for half a million tons a year in Toronto if the price is right. Even if the price is not right we would rather support Canadian peat producers than Pennsylvania coal barons.—Toronto Globe.

We most heartily congratulate The Globe upon the alacrity with which it comes into line upon the National Policy platform. It tells us that even if the price at which the Welland fuel is higher in price than Pennsylvania fuel, the preference should be given the home product. The National Policy schedule would give the Welland fuel the benefit of some sixty cents per ton as duty imposed upon foreign coal.

The Rossland (B.C.) Miner reports that contracts have been let to the E. P. Allis Company, of Milwaukee, Wis., the well-known American builders of mining machinery, for two large concentrating plants for two wealthy mining companies in that province; and it tells us that these two plants, and another, are each capable of handling 120 tons of ore daily. By reference to our advertising pages it will be seen that the Wm. Hamilton Manufacturing Company, of Peterborough, Ont., are the manufacturers in Canada of the Allis mining machinery. This is another feather in the National Policy cap, for if it were not for the duty the Allis Company would not have arranged to have their machinery built in Canada.

Dr. Barnhardt, an old time Tory of Owen Sound, is at the Walker House. He states that Hon. William Paterson is so elated over his election in North Grey that he is putting three extra caraway seeds into every biscuit he manufactures.—Toronto World.

Mr. Paterson may be exceedingly tickled at being, after his defeat in Brantford, his home, elected in another constituency, and may therefore be inclined to put a very few extra caraway seeds into his cookies, but he will probably regard the transaction as love's labor lost when his proposed reduction of the tariff knocks all the profits off his bakery business. Perhaps, though, it is not contemplated to reduce the duty upon biscuit.

Alderman John Hallam, of Toronto, as all his friends know, is a most cordial entertainer of ultra-free trade views, that is, he is a free trader on general principles, but he is not always thus, particularly when his individual interests look contrawise. When Mr. Laurier's Government acceded to power in July Mr. Hallam was among the first to go to Ottawa to advise the Premier what should be done regarding the woolen industry, in which he is so largely interested, and his advice sounded exceedingly much like that of any other good National Policy man. He cautioned Mr. Laurier against making any tariff changes that would disturb the manufacture of woolen goods, such as tweeds, yarns, etc. The fear of a change of policy has already had a particularly unsettling effect in this branch of business. As an extensive dealer in wool, Mr. Hallam has had an opportunity of judging how the manufacturers would fare from a reduction of

the tariff. He accordingly hastened to advise his leader to let well enough alone. We are told that Mr. Laurier listened very respectfully to the suggestions, and expressed himself as quite satisfied that his Finance Minister, Mr. Fielding, would have a thorough knowledge of the business before taking action. He told Mr. Hallam that nothing would be done suddenly or without due consideration. It is said that the new Premier has already had many representations of a similar nature, and has replied in such a way as to endeavor to allay alarm.

An action at law which was begun in Montreal a few days ago possesses considerable interest to manufacturers and others, Mr. F. M. Cowperthwaite, the former manager of the Canadian Fibre Chamois Company, of that city, was served with writs in two actions for damages, the amount claimed being \$10,000 in each case. The plaintiffs are the International Fibre Chamois Company, of London, Eng., and the Canadian Fibre Chamois Company, of Montreal. The London company alleges that Mr. Cowperthwaite signed a contract with it in June last, binding himself not to directly or indirectly enter into competition with it in the English market in the fibre chamois business; that the defendant has since entered into negotiations with Mr. Charles Riordon, the well-known paper manufacturer of St. Catharines, Ont., and others, to promote a rival concern, and has become interested in the Standard Fibre Lining Company of St. Catharines, which, it is alleged, are making interlining resembling fibre chamois, and placing it on the English market in competition with the London company. It is claimed that Mr. Cowperthwaite's connection with Charles Riordon and the Standard Company is in violation of his written contract with the London Company. Hence the claim for damages, and it is stated an injunction will be applied for. The action by the Canadian Fibre Chamois Company of Montreal also arises out of Mr. Cowperthwaite's alleged connection with the Standard Company of St. Catharines, and his management of some business for the plaintiff in London. It is also alleged that Mr. Cowperthwaite, while the manager and director of the Canadian company, entered into arrangements with Mr. Riordon for the purpose of starting the rival factory, and used knowledge and information which he acquired from his position as director in the Montreal company, to promote the Standard Fibre Lining Company. It is alleged that his duties and responsibilities as a director are inconsistent with his alleged connection with the Standard Company, and that he is liable in damages for any injury which the Montreal company may have sustained from such connection. The case promises to be interesting, as it involves an important question as to the responsibilities of directors of companies.

The party of commercial explorers which was sent out under the auspices of the National Association of Manufacturers, and which spent three months of the past summer in investigating commercial affairs in Argentina, Uruguay and Brazil, has returned to New York. The substance of the report the members make is that England has such a strong hold upon the trade of Argentina, and is so well equipped with transportation facilities and financial agencies on the spot, that it will be up-hill work for Americans to secure any considerable portion of the trade of that country. As to Brazil the outlook is more promising, the feeling being that a valu-

able trade with that country can be built up without great difficulty. Transportation facilities are sadly needed, however.—The Paper Mill.

The first consignments of sealskins reached London, now the greatest market and distributing center of the world's yearly crop of fur, a few weeks since, but the sales are not likely to be held before December. Although the skins from British Columbia and the Behring Sea, as well as from the Prybilov and Copper Islands, are much smaller than those of last year, it is quite possible that prices will not be raised in proportion to the depreciated catch. This is largely due to the fact that what is called "electric seal" has found its way into common use to such an extent that the value of true sealskin has become lessened in the eyes of the furriers' fair customers. Electric seal is nothing more than the skin of the ordinary French tame rabbit scientifically treated. The skins are first dressed to obtain pliability and softness, the coat afterward passing under a machine of extraordinary delicacy, which shears down the stronger and coarser hairs, giving at the same time a softness and "flow" to what is left. The dyeing is skillfully managed to give artful gradations of golden brown under the surface, while the final stage of manipulation is assisted by electricity, really marvelous machinery removing any undesirably stiff hairs that may have been left by the first machine. It is curious that only the skin of the domestic rabbit can be so treated.

Mr. Edgar Tripp, Canadian Government Agent at Trinidad, West Indies, reports as follows to the Minister of Trade and Commerce:—"With regard to steam communication, so far as perfect regularity in adhering to the time-table is concerned, the West India Steamship Company of Pickford & Black is highly to be commended. But until a faster service between Halifax and St. John and the more important of these islands can be arranged, I fear that the objects for which Canada grants so liberal a subsidy will not be realized. To emphasize this statement, it is only necessary to remark that the Donaldson Line from New York does the voyage in eight days, against eighteen days from Halifax and twenty-five days from St. John. While these conditions exist trade with Canada must remain unduly handicapped. As an instance, I may mention that 1,000 barrels of potatoes per Taymouth Castle, from Halifax, which arrived here on the 28th ult., over 300 barrels were spoiled and had to be thrown away. The S. S. Grenada arrived at the same time from New York with a quantity of potatoes on board in perfect condition."

In a recent issue of *The American Manufacturer* reference was made to the shipments of pig iron from Southern furnaces to Europe then being made. More recently that journal, alluding to the subject, says:

We then stated that the main reason for these shipments might be found in the depressed conditions of trade in this country, rather than in the ability of American pig iron producers to enter the European market. Proof of this fact is seen in the recently increased shipments of American pig iron to Canada. It is announced that the depression in iron values in the United States has led to free offers of American pig iron during the past month in the Eastern Canadian market. The figures of pig iron imports at the port of Montreal show that

more American pig has been coming there this year than last. From the 1st of May to July 1st the imports of American pig at Montreal were 863 tons, against 615 tons for the same period in 1895, or an increase of 250 tons. In the same time the imports of British pig were 671 tons against 1,153 tons in 1895, a decrease of 482 tons. Some observers inclined to take a more superficial view may conclude from the foregoing that American pig iron is pushing the British product out of the Canadian market, but such is not the case. The very low prices which have been reached in the American pig iron trade during the past six months have let our product into Canada to some extent, but such a trade is really built on sacrifice sales.

Our esteemed contemporary, *The Paper Mill*, sizing up the situation, says:

"The Canadians who are urging their Government to impose an export duty upon pulp wood have determined upon a new course of procedure. They look for the election of McKinley as President of the United States; following that, in a revision of the American tariff, they look for the restoration of the duty upon Canadian lumber. Then the Canadian lumberman will call for the restoration of the export duty on saw logs, and the wool pulp men will then join forces with the lumbermen. It is a very well planned campaign; moreover, it may be effective. Now is a good time to look out for any available timber limits on this side of the line, that may be in the market."

The question of commercial union does not resolve itself into a mere revival of the old controversy of free trade versus protection. There is nothing inconsistent with the principle of free trade in the principle of an Imperial Zollverein, which would provide free trade within the Empire; and in order to establish free trade within the Empire it would be perfectly justifiable to impose moderate duties on such products of foreign countries as our colonies and dependencies could supply as cheaply as the foreigners.—*Glasgow Herald*.

A deputation of influential citizens of Port Hope, Ont., waited upon the Ontario Government last week to make certain representations regarding the binder twine industry in that city, the binder twine factory there having been closed on account of the competition of the Ontario Government in maintaining a factory in Central Prison, Toronto, and of the Dominion Government in maintaining a like industry in the Kingston Penitentiary, both operated by convict labor. The deputation was received by the Ontario Ministers, Sir Oliver Mowat, of the Dominion Government being present. They asked that for the present season the Government institutions would cease to manufacture twine, on account of the surplus stocks at present in the country. The members of the Ontario Cabinet did not think that they could entirely cease manufacturing, but promised to consider the possibility of running half-time, if by so-doing they could give work to the employes of the company at Port Hope and of other factories throughout the province. Sir Oliver Mowat said that the matter had not previously been brought to his attention, but intimated that he would give it his earnest attention. If the free trade idea is to prevail, the Port Hope people are without hope. The theory is that the convicts in our prisons must be kept at work even if honest free labor has to starve.

Why should not Canada, which sends abroad every year in ever-increasing volume the products of her farms, her forests and her factories, use to the utmost the advertising advant-

ages that would result from the adoption of a distinctive mark of origin? "Made in Canada" or "Grown in Canada" would, if plainly marked upon every package of Canadian product exported, be worth vastly more in bringing Canada continually before the world's notice than tons of misdirected literature from an immigration bureau. Canadian cheese, Canadian flour, Canadian apples, Canadian butter, Canadian poultry, Canadian deals and lumber, Canadian fish, should be branded as Canadian and sold as Canadian to the consumer. As things stand, the importer and wholesale merchant in the old land know something about Canada and Canadian products, but the consumer does not know whether he is getting butter and cheese from Oxford in old England or Oxford in Ontario. The product of our factories is perhaps more frequently credited to Canada, but there is still need for reform in this respect. Canadian harvesting machinery is used in every great agricultural country from Hungary to Argentina, Canadian bicycles are popular in Australia, Canadian woodenware reaches many foreign markets, Canadian organs have a large sale in Europe. The manufacturers of these things would do their country good by stamping them plainly "Made in Canada" instead of Ont. or Que. or N.S. or B.C., abbreviations which, however well known in the Dominion, carry no meaning to the average Englishman and are utterly cabalistic to the foreign customer.—Toronto Globe.

The Globe is entirely right in its suggestions that every package and article manufactured in Canada when exported should bear conspicuously the legend "Made in Canada," and by the same argument every package and article of merchandise imported into Canada should bear the legend indicating the country of production.

The exportations of copper from the United States during 1896 have been unprecedented in the history of American copper production. While the United Kingdom, France and Germany are the greatest buyers of American copper, the other countries of Europe have taken a third of the total exports this year. Consumption of copper throughout Europe has been unprecedented. The exports of fine copper from the United States during the first nine months of 1896 have been 199,812,480 pounds, as against 109,421,870 pounds during the same period in 1895. Notwithstanding these enormous exports the visible supply in England and France and afloat thereto, from Chile and Australia is over 18,000 tons less than a year ago. An idea of the extent of the copper movement can be obtained from the statement that the average monthly exports from the United States from January to September amount to 22,201,386 pounds of copper, or more than the average monthly output of the Anaconda, Calumet and Hecla, Tamarack and five other leading copper mining companies.

It will be difficult for those who have the direction of affairs in England effectively to resist, for very long, the swelling inclination of many classes in favor of some measure of protection to the home industries. These are sharply beset, now, by the competition of countries on the Continent, especially Germany, and the inflow of goods "made in Germany" has caused an irritation in the circles of British opinion which is rather droll, when one considers how long it has been the orthodox rule of English economists to "buy in the cheapest markets," no matter whether this were at home or abroad, and to accept the lowest tender, whoever might make it, countryman or foreigner. As a matter of fact this doctrine had its greatest vigor when England felt confident of her ability to beat the world in cheapness of production, and found it convenient to

preach to the nations whose industries she was over-crowding that they must surely find it in the long run highly profitable to be thus ruined. Now that goods are pouring into England from the Continent, at lower prices than her own, there are few who stand out so stiffly as Lord Farrer, whose expression is quoted in our London letter, condemning the proposal to exclude even convict-made goods, as long as they are cheap. England, in fact, has done a good deal for her working people, in comparison with what has been done in most of the Continental countries. Her wages are higher than those of Germany, and her hours per day's work are shorter. She is, therefore, when compared with Germany, like the United States when compared with England—at a disadvantage in race for mere cheapness—and unless she shall adopt some measures of protection she will find it hard to keep her people fully employed, as soon as this country resumes a reasonable possession of its own markets. Protection in England is substantially sure to be an increasing movement—Manufacturer.

The Canadians are now feeling the effects of an administration which is none too favorable to native industries. The party now in power is expected to make some changes but just what those changes will be, or to what extent they will effect home industries is not known. Consequently Canadian manufacturing interests are just now in much the same situation as were those on this side when the Wilson bill was being concocted. One of our Canadian exchanges, has the following on this subject:

What is retarding trade is the uncertainty which surrounds the tariff. We all know the tariff is to be revised, but none of us know to what extent it will be revised. Hence, the uncertainty. As a consequence manufacturers, in a great many lines, are turning out goods but sparingly. Wholesalers and retailers are also moving like men treading in the dark with stone walls or pit falls surrounding them.

"The uncertainty of the tariff," and its effect has been seen in the United States and we can realize how our Canadian neighbors find trade hampered. However, there is one situation worse than uncertainty and that is seen when the tariff is settled the wrong way. The records have shown that under a protective system Canadian industry has made great progress, but evidently some change is to be made under the present government. The Canadian people like some in our own country a very few years ago, wanted a change, and they may get it.—American Manufacturer.

Some years ago the citizens of Port Hope granted a large bonus to a company, now amalgamated with the Consumers' Cordage Co., to start a binder twine factory. According to the agreement the company has been employing a large number of hands, but in July last were forced to shut down. The sales for the year up to that time had amounted to only one-half the output, consequently there remained almost a sufficient supply of twine on hand for next year's market. A public meeting was held some days ago, at which the making of twine by prison labor was condemned, and a delegation appointed to ask the Provincial Government to at least restrict the output from the Central Prison factory. Messrs. T. D. Craig, M.P., Mayor J. W. Quinlan, Dr. Powers and Thomas Long were deputed, and waited upon the Cabinet recently. Sir Oliver Mowat was present in an ex-officio capacity, representing the Dominion Government, which, by reason of the running of another twine factory at Kingston Penitentiary, is also concerned. The Premier promised his serious consideration. In the meantime, however, eighty employes anxiously await the outcome, for if no action is taken by the Government along the lines indicated it means no work for them for at least a year.—Toronto World.

The air of Ottawa is conducive to longevity. Within a week four persons died there, aged respectively ninety-two, ninety-four, ninety-six and 111 years. With good habits the Laurier Government may live in Ottawa to a ripe old age.—Toronto Globe.

With the exception of a short and unhappy interregnum ever since Ottawa became the capital of Canada it has prospered under the benign influences of a government the cornerstone of which was the National Policy. Under that policy the people were happy and contented, and lived to good old age. But now, under a change of government, these old people can see nothing ahead but disastrous changes, and therefore they lay them down and die. Too bad, too bad. Certainly The Globe does not expect, or even hope that the Laurier Government may live in Ottawa to a ripe old age when almost the first effect of its presence there is to kill off the old people at the rate indicated.

The gas buoys placed by the Dominion Government in the Pelee Passage, Lake Erie, are reported as burning steady and bright and are therefore a success. Shipmasters running on the route were asked to watch how the new lights acted. Being an American patent the Canadian officials were perhaps a trifle dubious about their staying and lighting qualities as well as of all the good words said about them, they are now satisfactory in every way so that it is more than likely that additional gas buoys will be placed on the lakes as occasion demands. In making a report of the buoys, the Canadian officials were informed "that they were visible when the boats were from twenty-seven to twenty-nine minutes off on clear nights and which is equal to seven miles." This is a novel and almost original way of stating distance, position, speed and state of weather on various trips.—Marine Record.

It is not quite clear that Canadian vessels will suffer the imposition of a fine for steaming over a seven mile gait, in the "Soo" River. Vessels owned in the United States are clearly subject to the rules, but American laws cannot be made for our neighbors—the Canadians, without entering into a mutual agreement. The Canadians will be using the old channel and their own "Soo" canal if anything like unjust discrimination is evidenced, or even any appearance of such. The present contention should never have been allowed to arise nor could it have ever arisen if the Canadian owners of vessel property had been fully advised of the general benefits of the enforcement of rules and their sanction obtained to live up to the American code when steaming through the "Soo" River. Harmony and good feeling may be maintained between both countries if foresight and patience is exhibited on either side, friction even in details should be strenuously avoided.—Marine Record.

According to a report received at the Fisheries Department, Inspector McNab, in charge of the British Columbia fisheries, estimates the total salmon pack in the province this year at over 600,000 cases, of which 249,850 cases were put up on northern rivers, Skeena, Naas, etc., and the balance on the Fraser River. The inspector confesses that he was very much surprised at the big catch this year, owing to its being an historical off-year. There has, it is true, been a decline in the Fraser catch since 1893 but nothing like the sliding scale

of previous off-years. The total pack for four years previous to 1893 was 76,000 cases, and four years previous to that 68,000. The great improvement is undoubtedly due to the Government hatchery. There are now thirty-five canneries on the Fraser and twenty up north, a total of fifty-five. Mr. McNab says not so many sturgeon are caught now as three years ago, but the present season was far better than the last. The sturgeon industry only commenced three years ago, and as there were no restrictions, an American company were having things all their own way in New Westminster and would have fished out the river if they had not been prevented.

Some interesting particulars of the electric lighting plant on the steamer Fram, which conveyed Nansen and his party on the recent Arctic expedition, are given in a foreign contemporary. It is stated that the electric light gave great satisfaction, and general regret was expressed when, in May, 1895, Lieut. Sverdrup and Mr. Nordahl decided that it must be dispensed with, owing partly to the wearing out of the gearing of the cogwheel in the windmill, which worked the dynamo, after the vessel had entered the ice, and partly to the fact that portions of the apparatus were required for making snow-shoes and runners. Mr. Nordahl took advantage of every puff of wind to charge the accumulators, and until May last year the electric light was always available. In the severe cold the accumulators froze right through, but the acid-blended ice, it is stated, proved an excellent electrolyte, and the frost did not interfere with the working of the accumulators. Electricity was also used for other purposes besides lighting, the mining shots which set the Fram free from the grip of the ice being fired by means of a cable attached to six Leclanché cells. In a recent issue of this journal attention was directed to the inexpensive manner in which the force of the winds might be utilized in storage batteries for a great variety of uses by the use of wind engines.

The Toronto Globe publishes the following:—

The Windsor Record catalogues the movements in business and enterprise since the elections, and concludes that the prophecies which were freely indulged in prior thereto of commercial stagnation and disaster were not well founded. Here is its list, and of course it does not pretend to be complete, but just includes the facts that have come under the attention of one observer:—Increase of the Boas knitting factory at St. Hyacinthe, capital, \$1,000,000; capitalization of the asbestos industry at Danville, Quebec, at \$2,000,000. A four storey-high manufactory, 200 by 70 feet, is about to be established at St. Jerome, Que., for the purpose of manufacturing rubber goods. The McMillan & Haynes Company, St. Catharines, has been incorporated, with a capital stock of \$30,000, to manufacture saws, axes, scythes, etc. A. R. Burrows of Guelph proposes to establish a factory in Galt to manufacture carpet, chenille, etc. The CANADIAN MANUFACTURER says that the Granby, Que., last works are making an addition to their buildings and adding two machines to their plants, having secured a considerable United States contract which makes the additions necessary. The new pulp mill of the Sault Ste Marie Pulp & Paper Company is expected to be running by about the beginning of the new year; then the company will have two mills in operation, capable of turning out daily 200 tons, dry weight. Harvie & Co., box manufacturers, Toronto, will rebuild on the Esplanade. Their new factory will be much larger than that which was burned down. James King & Co., Sarnia, have rebuilt their flouring

mill recently burned down. The new structure is of brick and stone, four storeys high. Midland is soon to have a large pulp mill. So is Sturgeon Falls. The Ottawa Specialty Manufacturing Company, Ottawa, has been incorporated, with a capital stock of \$15,000, to manufacture wooden and metal ware, etc. Harlow & Kempton, Milton, have added to their planing factory. The Waterous Company will put up a factory for wire drawing and cooperage. James Hay, jun., is erecting a large new factory at Woodstock. To the list may be added the Kemp Manufacturing Company of this city, who have made extensive additions to their premises since election day.

The Globe does well to study the facts included in the Captains of Industry department of THE CANADIAN MANUFACTURER, and we suggest to it, now that it is coming out so strongly in favor of the National Policy of tariff protection, to make constant and liberal use of the industrial facts which are to be found in these pages. If the new Government can build up two factories in Canada where but one existed before, it will be doing a grand and commendable work. But will it?

Reference to our advertising pages shows that THE CANADIAN MANUFACTURER possesses the confidence of our manufacturers and business men, and that they have a strong and abiding faith in the future prosperity of Canada. They comprehend the fact that in proclaiming their readiness and ability to meet the demands of trade, not only present but prospective, they have a great advantage over those whose doubt and timidity restrains them from keeping themselves unknown to the purchasing public.

It has become fashionable for the wealthy establishments of the United States, especially those directly or indirectly receiving public help, to close their establishments on the eve of every election for the purpose of intimidating the electors and securing a continuation of public assistance. This time the part has been played in the interest of sound money. If the cause of sound money loses it will be on account of the methods and past records of its advocates.—Toronto Globe.

This is a gratuitous slander upon American manufacturers, for it is this class to whom The Globe alludes. If The Globe's item has any meaning it means that because the American manufacturers are in favor of tariff protection to their industries, and use their best endeavors to influence the legislation of that country in that direction, therefore, seeing that they are in favor of sound money, if that cause fails now it is to be attributed to the manufacturers.

The Government has been notified that it is the intention of Mr. James Huddart to place a third steamship upon the direct route between Canada and Australia. The vessel chartered for this purpose is the R.M.S. "Aorangi," built by the Fairfield Ship Building Company, constructors of nearly the whole of the Cunard Company's Atlantic fleet. The Aorangi is registered in the highest class at Lloyd's, is 389 feet long, 46 feet beam and 39.9 depth, with a registered tonnage of 4,196 tons. She is to be fitted with new machinery and boilers to give her a capacity of 5,000 horse power, with a guaranteed speed of sixteen knots, but it is expected that this speed will be considerably exceeded. There will be a first-class saloon accommodation for 100 passengers, second-class accommodation for sixty passengers, and third-class for 100. There will be complete electric light installa-

tion throughout, and the steamship will be specially ventilated for tropical voyages. The Aorangi is considerably larger than the Warimoo or the Miowera, which have proved so well adapted for the present traffic on the Pacific. It is expected she will leave England about February next, and on her arrival in Australia a new time-table will be inaugurated, which will include calling at a port in New Zealand, but it is not yet settled whether this port will be Auckland or Wellington. Mr. Huddart has just closed a contract with the New Zealand Government for the carriage of the mails by the Canadian line, and this contract is now before the New Zealand Parliament for ratification. Many arguments have been advanced in favor of making Wellington the port of call in New Zealand instead of Auckland. The distance between Wellington and Suva, Fiji, is about 330 miles more than that between Auckland and Suva, so that on the voyage from Sydney to Vancouver the total extra mileage by reason of calling at Wellington would be about 290 miles, necessitating the allowance of one extra day for the voyage if Wellington is made the port of call. As a matter of fact, however, for the collection and distribution of New Zealand mails for America and Europe a day would be saved, as under the present system all the mails of the South Island and the centre of New Zealand have to be carried by local steamers to Auckland.

LITERARY NOTES.

One of the strongest articles in the Methodist Magazine and Review for November, is that by the Hon. S. H. Blake, Q.C., on "Needed Prison Reforms." Rev. Professor Antliff has a striking illustrated article on "The Story of the English Bible," and the Editor one beautifully illustrated on "The Wonders of the Yellowstone," and another, also illustrated, on those strange people, "The Mound-Builders and the Cliff-Dwellers." "Among the Maories" is a graphic account of the aboriginals of New Zealand, and the success of missions in Christianizing them.

In the November Scribner's Magazine the opening article, by Capt. C. J. Melliss, of the Ninth Bombay Infantry, "Panther shooting in Central India," gives not only a vivid impression of the habitat of these great cats, but it is also a stirring narrative of adventure in their pursuit, drawn from personal experience. A most interesting article, full of exciting and novel adventure, is about the new goldfields of Alaska, and the great difficulties and dangers of a trip to them, graphically described by Frederick Funston in "Over the Chilkoot Pass to the Yukon." The illustrations from photographs give a panoramic view of the entire journey. The year 1896 marks the centenary of the discovery of lithography. This is dwelt upon and illustrated by examples of the works of famous artists in M. H. Spielmann's paper on "The Renaissance of Lithography." Miss Mary Gay Humphreys, whose article on "The Woman Bachelor in London" and "The New York Working-girl" have already attracted much attention, contributes a further paper on "Women Bachelors in New York," telling of the way in which so many women engaged in literary and artistic and other callings live in the great city.

Marriage is exhaustively discussed in the November Ladies' Home Journal—by Mrs. A. D. T. Whitney, who tells her girl friends "The Truth About Marriage," and Dr. Parkhurst, who writes of "The Young Man and Marriage." Both papers, as may be inferred, are able and lucid presentations of the marriage question. The initial article of "Great Personal Events" series—in which the conspicuous occurrences of the past half century will be told by eyewitnesses—is also given. In it, Hon. A. Oakey Hall recalls "When Jenny Lind Sang in Castle Garden" (New York, in 1850), and tells of the unparalleled furore created by the "Swedish Nightingale." Of special interest is a page illustrated by W. L. Taylor, portraying "Thanksgiving-Time in the Colonies," and the cover by R. A. Bell, typifying the season of Thanksgiving. A group of Kate Greenaway's children, illustrating Laura E. Richards' poem, "The Picnic Tea," is another striking pictorial page feature. The Thanksgiving Journal is a magazine that appeals to every home. The Curtis Publishing Company, Philadelphia; one dollar per year; ten cents per copy.

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 in 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 telephonic, 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, belting, 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, alkalis, 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.

Drayton, Ont., is agitating for an electric light system.

The Owen Sound Dredge and Construction Company, Owen Sound, Ont., is being incorporated with a capital stock of \$50,000.

The Yellow Jacket Gold Mining Company of Seine River, Toronto, is being incorporated with a capital stock of \$200,000.

The Imperial Mining and Development Company, Rat Portage, Ont., is being incorporated with a capital stock of \$500,000.

The Great Northern Mining and Development Corporation, Toronto, is being incorporated with a capital stock of \$475,000.

The Lake Harold Gold Mines Company, Port Arthur, Ont., is being incorporated with a capital stock of \$1,000,000.

The Weeks-Eldred Company, Toronto, is being incorporated with a capital stock of \$21,000, to manufacture mechanical stokers, engines, boilers, furnaces, etc.

The Benjamin Manufacturing Company, Yarker, Ont., has been incorporated with a capital stock of \$20,000, to manufacture vehicle wheels and carriage materials.

The Paxton-Tate Company, Port Perry, Ont., have been incorporated with a capital stock of \$93,000, to manufacture saw mill and shingle machinery, turbines, agricultural implements, etc.

The Toronto Hygie Ventilated Shoe Company, Toronto, has been incorporated with a capital stock of \$50,000.

The Cloore Canning and Cold Storage Company, Vancouver, B.C., is being incorporated with a capital stock of \$250,000.

The Mac Machine Company, Belleville, Ont., is being incorporated with a capital stock of \$100,000.

The Renfrew Electric Light and Power Company, Renfrew, Ont., is being incorporated with a capital stock of \$90,000.

Work has commenced on the foundations of the million bushel elevator at Prescott, Ont. It is expected the building will be completed by spring.

The Original Sweds Boys Prospecting Company, of Rainy River District, Fort Frances, Ont., is being incorporated with a capital stock of \$90,000.

English buyers have taken up all the season's cut of the Chaudiere, Ottawa, and Hawkesbury Mills. The amount paid is said to have been something like \$2,000,000.

Messrs. Scott & Bowne, proprietors of Scott's Emulsion, whose factory in Belleville, Ont., was destroyed by fire recently, have started up again with new machinery in the same town.

The Canada Gold Fields Company, whose mines are at Deloro and Marmora, in Hastings County, Ont., are putting up extensive buildings and putting in machinery, and it is expected they will soon begin treating ore.

The Sanford Manufacturing Company, Hamilton, Ont., purpose adding a mantle and ladies costumes department to their business.

The Gutta Percha and Rubber Manufacturing Company, Toronto, are building a factory for the manufacture of rubber shoes.

Messrs. Carrier, Laine & Co., Montreal, have been awarded the contract for the iron superstructure of the bridge over the St. Charles River, Quebec.

At a recent meeting of the Winnipeg city council, by-laws were introduced to enable the council to incur a debt of \$650,000 for a water works system, and \$375,000 for a gas and electric light service.

Messrs. William C. Wilson & Co., oil merchants, Toronto, have opened a warehouse in Lindsay, Ont., where they will keep a large supply of lubricating oils, grease, engine packings, etc.

The Bennett Furnishing Company, London, Ont., are building a large addition to their factory, and are adding quite a number of new machines, which are being made by Jackson & Cochrane, of Berlin.

The Scribner Organ Company, London, Ont., finding it necessary to secure larger quarters have secured the building lately occupied by the Dominion Baby Carriage Company, that city.

The Elkin Coal Company, Hampton, N.B., is being incorporated with a capital stock of \$10,000.

Robt. Douglas, who represents the A. R. Williams' Manufacturing Co., of Toronto, in the west, is filling some good orders for his goods in the large range of machinery manufactured and handled by his company. The Commercial office has been supplied with one of the Williams' Co.'s electric dynamos, and it gives every satisfaction.—Winnipeg Commercial.

Lalonde and Girard's sash factory at Montreal was almost totally destroyed by fire Oct. 26th. Loss about \$15,000.

The Goldie & McCulloch Company are supplying the outfit of machinery for H. S. Dowd's flour mill at Quyon, Quebec, which is being rebuilt and which was burned some months ago.

The Montreal Park and Island Railway extension to Lachine will probably be finished by Dec. 1st. An arrangement will be made with the Montreal Street Railway Company for a through service to Lachine from the centre of the city.

The Northern elevator at Douglas, Man., was burned a short time ago with 15,000 bushels of wheat.

The shipment of cheese from Montreal from the opening of navigation to October 12th this year amounts to 1,279,020 boxes, against 1,171,050 for the same period last year.

Messrs. Pusey and Hutchinson of the Iron-dale, Bancroft and Ottawa Railway are forming plans to build a fifty-ton charcoal furnace at some convenient point on their line.

Messrs. Parke and Parke, soap manufacturers, Hamilton, Ont., propose manufacturing special lines of toilet soaps.

J. R. Donnell's planing mill, G. W. Green's pump and windmill factory, and property owned by the Dixon Company, Peterborough, Ont., were destroyed by fire Oct. 25th. Loss about \$25,000.

Fire destroyed the foundry and workshops of Mr. Beaulieu's Commercial and Industrial Company at Levis, Que., Oct. 25th. Loss about \$16,000.

A syndicate formed at Peterborough, Ont., consisting of Messrs. Meldrum, Caruagio and Koudry, have developed the water power at the old Meldrum Mills, and are putting in a plant to transmit power about a mile and a half into the city of Peterborough, where they are furnishing power for manufacturing purposes to the different concerns there. The first order for power was given them by the Canadian General Electric Company, and is for the delivery of 200 h. p. at their works as they require it. This is, no doubt, the largest order for power the syndicate will deliver to any one firm in Peterborough. They have placed their order for a 250 k. w. generator with the Canadian General Electric Company, where their largest amount of power will be delivered.

The following foreign mining companies have been registered in British Columbia: Seattle Mining and Smelting Company, Spokane, Washington, capital stock, \$5,000,000; Kohinoor Gold Mining Company, Spokane, Washington, capital stock, \$1,000,000; Celtic Queen Gold Mining Company, Spokane, Washington, capital stock, \$750,000; Big Three Gold Mining Company, Spokane, Washington, capital stock, \$3,500,000; British Columbia Smelting and Refining Company, Jersey City, N.J., capital stock, \$2,500,000; Blue Bird Mining Company, Spokane, Washington, capital stock, \$300,000; The Cottonwood River Alluvial Gold Mining Company, with head office in England, capital stock, £65,000; The English Canadian Gold Mining Company, Spokane, Washington, capital stock, \$1,000,000; The Gibson Mining and Milling Company, Spokane, Washington, capital stock, \$650,000; The London and British Columbia Goldfields, head office in England, capital stock, £200,000; Slocan Queen Mining and Milling Company, Spokane, Washington, capital stock, \$1,000,000.

The Mac Machine Co., Belleville, Ont., recently shipped a car load of machinery to their new shops at Trail, B.C.

Mr. John Dolan's flour mills at Shawville, Que., were destroyed by fire Oct. 24th. Loss about \$9,000.

W. H. Hanson's saw mill at Spruce Lake, N.B., was burned a few days ago.

Mr. Wm. Ross, Sarnia, Ont., has invented a wooden bicycle upon which he has secured a patent. He proposes forming a company for its manufacture.

The Grand Trunk Railway Company has given the Westinghouse Air Brake Company, recently established at Hamilton, Ont., an order for the equipment of 10,000 cars and 400 engines.

The Cornwall Electric Supply Company, Cornwall, Ont., are about to begin operations in that town and will supply electric novelties of all kinds.

Wellington Boulter & Sons, fruit canners, Picton, Ont., have discontinued their Toronto branch.

Samuel May & Co., billiard table manufacturers, Toronto, have recently put in two new tables into the Wolland House, St. Catharines, Ont.

John Fox's elevator at Lucan, Ont., was burned a few days ago. Loss about \$4,000.

It is reported that the Cataract Power Company has closed a contract with the Hamilton Electric Light Works for a supply of electric power sufficient for all needs of the establishment.

The Stratford (Ont.) Shoe Company organized six months ago with a capital of \$30,000 will increase its capital to \$50,000. The company have been employing forty hands but that number will be doubled.

The London Advertiser says that there is no decrease in interest in the Bothwell oil fields. Twenty-five drilling rigs are already on the field and more coming daily.

Cowan & Co., Galt, Ont., are at work on a big engine for the St. Thomas Gas Co., and a couple of engines and boilers for Quebec. A few days ago they shipped one 100 h.p. boiler, a large saw mill, and an assortment of wood-working machinery to British Columbia.

The Rosamond Woollen Co., Almonte, Ont., have recently installed a supplementary steam plant in their factory and have added a large amount of machinery.

The Polley shoe factory at Quebec, P.Q., recently purchased by Messrs. Harvey and Van Norman of Toronto was burned Oct. 19th. Loss about \$15,000.

The T. H. Taylor Company, Chatham, Ont., are lighting their large mills by electricity, and have placed their order for a 200 light dynamo with the Royal Electric Company. They are also having installed by the same firm 150 lamps throughout their mills and store house.

The Ontario Government has paid to the Ontario, Belmont, and Northern Railway Company the bonus granted last session, amounting to upwards of \$19,000, being at the rate of \$2,000 per mile of the newly-constructed road into the Belmont iron mine. The Dominion Government engineer has inspected the road with a view to the payment of the bonus of \$32,000 granted by the Canadian Government for the same line. As the starting of this railway to work means

the beginning of an important iron-ore industry in Ontario, which will employ some hundreds of men, the facts are interesting—Mail and Empire.

The Gardner Tool Works, Brockville, Ont., are being removed to Sherbrooke, Que.

A sample of what is said to be a superior quality of asbestos has been received at the Bureau of Mines, Toronto. It came from along the line of the Kingston & Pembroke Railway Company in Renfrew County, Ont.

The McClary Manufacturing Company, London, Ont., has secured contracts to supply the heating apparatus for Knox Church, Dundas, and to reconstruct the heating and ventilating apparatus of the Aged People's Home and the Colborne Street Methodist Church that city.

The Canadian School and Office Furniture Company, Preston, Ont., recently sent a car load of school furniture to Australia as a trial order for the Australian Government.

Messrs. William C. Wilson & Co., oil merchants, Toronto, have just received from Scotland a large consignment of solidified oil which they claim is unequalled as a lubricant for heavy journals and high speed machinery. They say that by an actual test this oil was found to be a saving of ninety per cent on liquid oil. It is now being used throughout the world by the largest ocean vessel owners, railway companies, miners, paper and saw mill owners, iron works, etc. They are in a position to fill orders for any quantity and will send to anyone on application a sample and testimonials from the largest consumers in the world.

The following mining companies are being incorporated in British Columbia: Kootenay and Algoma Gold Mining Company, Rossland, capital stock \$1,000,000; Star Mining and Milling Company, Sandon, capital \$1,000,000; The Silver Band Mining Company, Vancouver, capital stock, \$250,000; The Canadian Gold Mining Company, Rossland, capital stock, \$1,000,000; Cambridge Gold Mining Company, Rossland, capital stock \$1,000,000; The Golden Era Company, Golden, capital stock \$1,200; Roderick Dhu Gold Mining Company, Rossland, capital stock \$1,000,000; The International Gold and Copper Mining Company, Rossland, capital stock \$1,000,000; Boundary Falls Mining Company, Vancouver, capital stock \$500,000; The Orphan Boy Gold Mining Company, Revelstoke, capital stock \$700,000; The Agnes Hydraulic Mining and Milling Company, North Bend, capital stock \$200,000; The Texada Island Mining and Land Company, Nanaimo, capital stock \$80,000; Anglo-American Gold Mining and Milling Company, Rossland, capital stock, \$1,000,000; Boundary Creek Mining and Milling Company, Greenwood City, capital stock \$1,500,000.

The Sudbury Journal, speaking of the alleged discovery of coal near Chelmsford, says:—"The vein has been uncovered up the mountain side for over thirty yards, and has been traced for some hundreds of yards further. In width it runs from eight to twelve feet. In an ordinary blacksmith's forge it burns well after being fairly started, throwing out a good strong heat, and continues to burn for a long time without any draught. It has been tested in coal stoves in Chelmsford with most satisfactory results. It may not be, as the Mining Bureau says, anthracite coal, but there is no doubt that it answers the same purpose in many respects,

and if it can't be called coal it will do just as well under some other name."

The logs and timber taken from the Ottawa district on the Quebec side during the season of 1895-96 was as follows: Logs, 2,800,000; flat timber, 14,000 pieces; square timber, 13,000; railway ties, 75,000 pieces long cedar, 9,000 pieces; dimension timber, 75,000 pieces; 12,000 cords of pulp wood. The logs represent 300,000,000 feet.

The Golden Gate Mining Company, Toronto, is being incorporated with a capital stock of \$300,000 to operate in the district of the Lake of the Woods and elsewhere in Algoma.

Messrs. W. B. Strang, Jr., & Co., New York and Philadelphia, have been awarded the contract for the construction of the Manulain and North Shore Railway which is to connect Little Current, Ont., with the C.P.R. The length of the road will be forty-two miles.

The Royal Electric Company, are installing a lighting and power plant for the Brookfield Mining Association at North Brookfield, N.S.

A. E. Horsley's cheese factory, near Brighton, Ont., was burned Oct. 17th. Loss about \$1,200.

It is said that the Granite Woollen Mills at St. Hyacinthe, P.Q., are to be enlarged to more than double their present capacity. Nine hundred hands are now employed. It is also reported that the asbestos mine at Danville, P.Q., is to be transferred to a company having a capital stock of \$2,000,000. Both these properties are at present owned by Messrs. F. Bonn, St. Hyacinthe, Que. and J. N. Greenshields, Q.C., Montreal.

The Royal Electric Company have just completed the installation of an incandescent lighting plant in the large woollen mills of A. W. Brodie, Hespeler, Ont.

C. Barnes' cotton batting factory at Georgetown, Ont., was destroyed by fire Oct. 17th. The factory was leased by Messrs. Smith & Company, Toronto, who lose \$700 on contents. Loss on factory \$1,000.

George White & Sons, London, Ont., manufacturers of engines and boilers, are building an extension to their works.

J. C. McLaren Belting Company, Montreal, owing to the increase in their western trade have moved their Toronto office from 22 Front Street East to larger premises at 69 Bay Street, where they will carry a stock of their belting, etc.

The McClary Manufacturing Company, London, Ont., manufacturers of stoves, etc., are shipping large quantities of their goods to the mining districts of British Columbia.

The McGregor, Gourlay Company, Galt, Ont., will supply a large part of the machinery for Harvie & Company's new box factory and planing mill at Toronto, to replace the one recently burned.

The Bennett Furnishing Company, London, Ont., manufacturers of school and church furniture are making extensive additions to their factory. The company recently sent a large consignment of school seats to South Africa, and are constantly shipping their manufactures to Great Britain.

Nanaimo, B.C., will expend \$3,000 for a new electric fire alarm system.

The Printers' Litho.-Engraving Company, Winnipeg, Man., is being incorporated.

The Welland town council have decided to improve the town's fire alarm system. The improvements are to consist of an electric alarm, two chemical extinguishers, a new fire hall and an automatic alarm striker.

The North Shore Power Company of Three Rivers, Que., have secured a franchise from the city of Three Rivers to supply incandescent and arc lamps as well as to pump the city water.

A cement is on foot in Hamilton toward starting up the McPherson shoe factory. The idea is to form a company making the employees shareholders in the concern.

Messrs. M. C. Dixon and J. E. Riley of Omaha, Neb., recently visited Hamilton and Toronto in search of a suitable location at which to establish an agricultural implement manufactory.

The Capital Cash Register Company, Ottawa, has been incorporated with a capital stock of \$15,000.

Messrs. J. T. Huber & Co., Doon, Ont., have bought the shoddy mill and plant of the Doon Woolstock Company of that place.

Fred. Browster, Albert, N.S., is starting a carriage factory in Hillsboro.

Mr. G. A. Adams, Adamsville, P.Q., has recently installed a lighting plant for illuminating his mill and residence. The apparatus was supplied by the Royal Electric Company.

The London Gold Mining and Development Company, London, Ont., is being incorporated with a capital stock of \$500,000 to do mining business in the Rainy River and Thunder Bay Districts, Ont.

Mr. C. T. Grantham, Yarmouth, N.S., will probably establish a factory in Ottawa for the manufacture of duck.

The Haldimand Milling Company, Hagersville, Ont., is being incorporated with a capital stock of \$20,000.

The North American Boat Chair Company, Owen Sound, Ont., are building extensive additions to their factory.

The Westinghouse Air Brake Company, of Pittsburgh, Pa., will establish a branch factory at Hamilton, Ont.

E. H. Thomas & Co., Norwich, Ont., are lighting their factory by electric light. The Royal Electric Co. are furnishing and installing the apparatus.

The Toronto Brass Company, Toronto, has been incorporated with a capital stock of \$25,000.

The Rat Portage Mining Exchange has been incorporated with a capital stock of \$3,000.

The Welland Vale Manufacturing Company, St. Catharines, Ont., have completed the large addition to their factory which is being lighted throughout with electricity. There will be about 500 lamps. The plant is being furnished and installed by The Royal Electric Company.

The Royal Electric Company are installing for the Sussex Water and Electric Company, Sussex, N.B., one of their forty K.W. "S.K.C." two phase generators with 350 sixteen c.p. lights capacity in transformers, and are arc wiring the town. The Sussex Company supply ing both arc and incandescent lighting, as well as motors from the

same dynamo and circuits. With the continued improvement in alternating arc lamps, it is now quite feasible to do this. A number of plants are now in operation furnishing arc and incandescent light, as well as motors, from the same dynamo and circuits, and excellent results are reported. The use of motors makes it possible to run the plant the full twenty-four hours increased capacity.

The British-American Brewing Company, Windsor, Ont., purpose adding to their premises a three storey fire-proof building, and a thirty-five ton ice machine.

The Owen Sound Electric Manufacturing and Illuminating Company, have decided to furnish incandescent lights and power, as well as arc lighting to the town of Owen Sound. Their water power is situated three miles from the business centre of the city. This they have very lately improved, and now have a steady power of 200 or more horse power the whole year round. The Royal Electric Company have secured the contract to furnish the Owen Sound Co. with "S.K.C." two phase dynamos and apparatus, in order that they may be able to supply power as well as incandescent light, thus enabling them to use their water power the entire twenty-four hours of the day, during the daytime furnishing power to different manufacturers, and at night furnishing the arc and incandescent lights. This was one of the first companies in the electric lighting business in Canada. They have always been very conservative, and have been successful from the start.

Heard & Company, St. Thomas, Ont., have built an addition to their carriage wood work factory, and put in additional machinery.

THE BEST BELTING DOES THE MOST WORK!

IT RUNS THE STRAIGHTEST

STRETCHES THE LEAST, AND LASTS THE LONGEST

THIS IS THE KIND WE MANUFACTURE

ROBIN, SADLER & HAWORTH

TANNERS AND BELT MAKERS

ORDERS SENT TO OUR TORONTO OR MONTREAL FACTORY WILL HAVE PROMPT CARE

MORE FACTS REGARDING S.K.C. APPARATUS.

RECEIVED.

Glen Williams Electric Light Co.
Georgetown

OCT 21 1896
ANSWERED
Oct 20/96

Royal Electric Co.
Toronto Ont

THE R. E. CO.
OCT 22 1896
SECY. & TREAS.

Gentlemen

We have now been running our "S.K.C." Plant installed by you for us for nearly a year and must say that we are entirely satisfied with the working of the Dynamo as well as the working of the Transformer. The Dynamo takes less power than we expected it to do for the number of lights burning on it. You know our dynamo is driven by a water wheel and that we regulate it by hand we have been able to do this very easily and have had no trouble with the regulation and must say that the whole plant comes well within the guarantee given by you. Besides the machine gives no trouble only to wipe the dust of once & while I have not oiled it since April and the bearings never heat. It is really the best machine on the market. We think it is in due justice that we should write this letter.

Yours truly
Glen Williams Mgr. Light Co.
Per J. Hutchinson
Manager

The Dudgeon Wood Split Pulley Company, of Toronto, reports business as good. The manager tells us they have not had an idle working day for nearly two years, nor have they laid off a hand during that time, but on the contrary have recently had to strengthen their force. The firm's general business throughout the Dominion in pulleys of all kinds, friction clutch pulleys, cut off couplings, hangers of all kinds, shafting, couplings, self-oiling bearings, rope driving, etc., is still growing, also their export trade in wood split pulleys is assuming proportions unthought of. In answer to our enquiry as to what they attributed this continued good run of trade, the manager merely replied: "An honest made article at a fair price, guaranteed what we say it is, or your money back."

The North Shore Power Company is being incorporated as an electric power and light company, with headquarters at Three Rivers, Que., for the purpose of supplying electricity for light, heat and power to operate the tramways.

The Pope Manufacturing Company, of Hartford, Conn., manufacturers of the Columbia bicycle, are arranging to open a branch factory in Canada.

Rhodes, Curry & Company, Amherst, N.S., have received an order for ten box cars for the Canada Atlantic Railway, and for a conductor's van for the General Mining Association.

A. Northey and W. J. Ryan, two Hamilton machinists, have invented an automate apparatus intended to give warning to engineers of washouts and misplaced rails.

The president and two officers of the Glen Falls Paper Company, New York, have recently been up the line of the Lako St. John Railway, Quebec, examining sites for the erection of two great pulp mills.

Francis, Frost & Company, paint manufacturers, Toronto, have established a branch plant at Niagara Falls. They will begin operations there about Nov. 10th, using electricity from the Niagara Falls Street Railway for power.

The Rosland (B.C.) Miner says:—The success of the lead-silver properties at Sandon and Cody has been assured by the recent contracts for two large concentrating mills let to the Edward P. Allis Company, of Milwaukee, Wis., the contracting parties being the Recco Mining and Milling Company, and the Noble Five Consolidated Mining and Milling Company. These two new mills, each of 120 tons daily capacity, together with the mill of the Slucan Star or Byron N. White Company, which was also built by the Allis Company, will give Sandon a milling capacity of nearly 400 tons per day. Mr. Robert J. Cory, the general western manager of the E. P. Allis Company, with headquarters at Butte, Montana, who secured these contracts is at present at Rosland. We were pleased to note that this great manufacturing company which make specialties of all that relates to machinery for mining purposes, has established relations with the Wm. Hamilton Manufacturing Company at Peterborough, Ont., for the manufacture of the Allis machinery, so that in the near future mining companies in Canada can take advantage of this fact and equip their mines with really first-class machinery without paying the excessive duties now prevailing on

American made machinery. Mr. Cory thinks it probable that an agency may be established in Rosland for the new Milwaukee-Peterborough Company, thus putting us in close touch with the largest mining machinery company in the world.

Messrs. Sarasin and Senecal will erect a large brewery in Maisonneuve, Que. The Maisonneuve council will grant \$10,000 to the enterprise and exemption from taxes for twenty years.

The British and Canadian Gold and Silver Mines Company, Toronto, has been incorporated, with a capital stock of \$15,000.

The Canadian Mining Trust Company, Toronto, is being incorporated with a capital stock of \$100,000.

The Imperial Mining and Development Company of Ontario, Rat Portage, Ont., is being incorporated with a capital stock of \$500,000.

The Armitage Manufacturing Company of Toronto, is being incorporated with a capital stock of \$10,000, to manufacture oil cloths, book-binders cloth, etc.

The Westinghouse Manufacturing Co., Hamilton, Ont., is being incorporated.

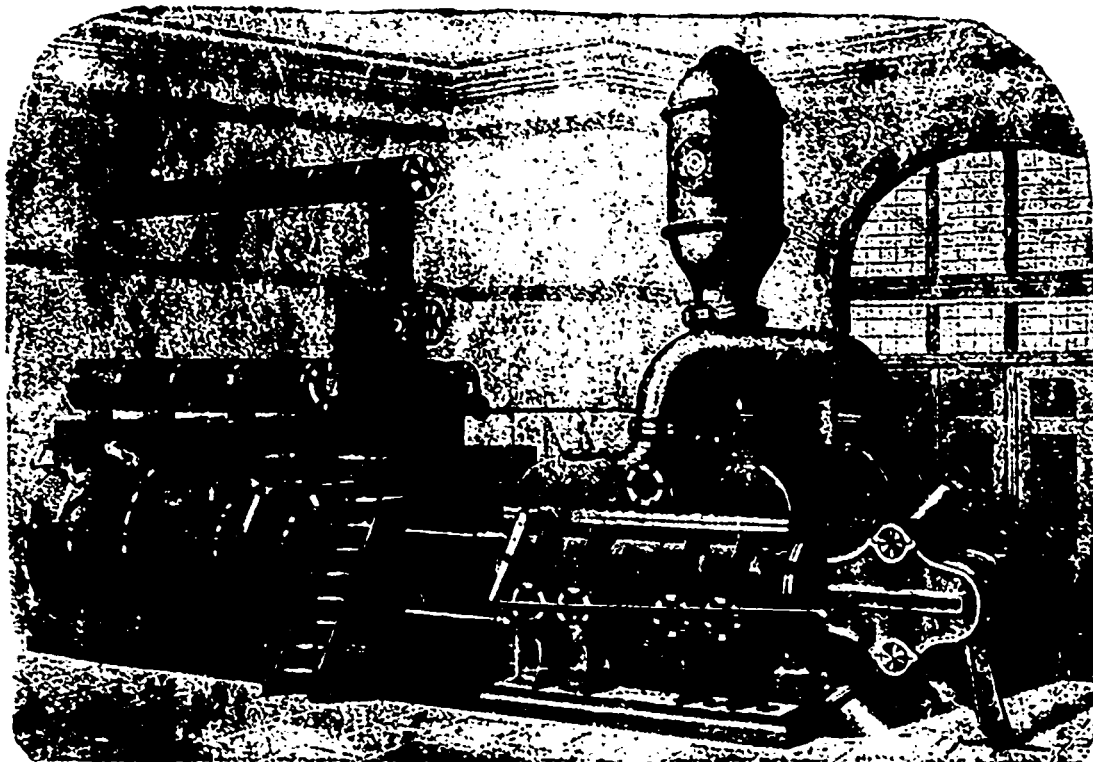
The Wortman & Ward Manufacturing Company, London, Ont., has been incorporated with a capital stock of \$80,000, to carry on a general manufacturing and foundry business.

St. Jerome, Que., has voted in favor of granting a bonus of \$50,000 to the Boston Rubber Company as an inducement to establish their works there, and also freedom of taxes for twenty years and free water power.

JOHN McDOUGALL

CALEDONIAN IRON WORKS,

MONTREAL, QUEBEC



General Agents
in Canada for
THE FAMOUS

**Worthington
Pumps**

**Hydraulic
Machinery**

Condensers

AND

**Water Works
Supplies**

WORTHINGTON PUMPS ARE UNEQUALLED FOR EFFICIENCY AND ECONOMY

The corporation of the town of Three Rivers, Que., have installed a municipal lighting plant, but have turned the whole over to the North Shore Power Co., who are going to operate it with power generated on the Batiscan River at Batiscan Chute, and convey the same to Three Rivers, a distance of sixteen miles. This is the longest power transmission line yet projected in Canada. This company have purchased from the Royal Electric Co. two of their S.K.C., two phase generators with a capacity of 240 K.W. each. It is the intention to generate the current at their water power, using step-up transformers bringing the pressure up to 11,000 volts, and at Three Rivers step-down transformers will be used to reduce the pressure to a working pressure of about 1,000 volts, where it will be connected to the present lighting circuits that were turned over to the North Shore Power Company by the corporation of Three Rivers. The flexibility of the system being put in by the North Shore Company is being well demonstrated by the fact that the step-down transformers are located in the old lighting station at Three Rivers, and that the present circuits for incandescent lighting will be directly connected to the step-down transformers, and that the expense in making the change in the Three Rivers station is practically nil. The transformers in use for about 3,000 light already installed are of the Royal type of 16,000 alternations, and as this is also the periodicity of the two phase generators being installed, no change on their lines or transformers is necessary. The corporation of Three Rivers had in operation one arc dynamo of fifty lights, and one with thirty lights capacity. It is intended to drive these two arc machines with one of their single

phase alternators which have been in use a number of years there, and which will be coupled in one side of the two phase circuit and driven as a Synchronous Motor.

A special telegram to The Globe from Sudbury, Ont., says: For some time past negotiations have been going on for the purchase of a number of the finest nickel properties in this district, and it is now reported that the great locations known as the "Levac group" have been sold for the substantial price of \$350,000. This is one of the largest mining deals that has ever taken place in Canada. The highest price offered for the same properties when things were booming here six years ago was \$220,000. Two other nickel properties down the range are also said to have been bonded lately, the one at \$90,000 and the other at \$30,000. A waiting camp is sure to get there in the end. Then, the present slow, wasteful and expensive method of treating our nickel ores is likely to be superseded before long by a new and better process that has recently been invented here. As was fitting, the patentee is a young Canadian who has had considerable experience in smelting all kinds of ores in Montana, Idaho and other western mining states. His name is John A. McDonald, which in itself is not a bad guarantee of constructive genius. Three things are claimed for the new process, simplicity, economy and the production of higher grade matter. It will do away with open-air roasting and all its foulness and destruction of plant life for miles around the works, and utilize the sulphur in the ore for smelting purposes, thus saving the greater part of the present cost of fuel. As soon as arrangements can be made a smelting plant is going

to be built to test this new process on a practical scale. It promises to revolutionize the nickel mining industry here.

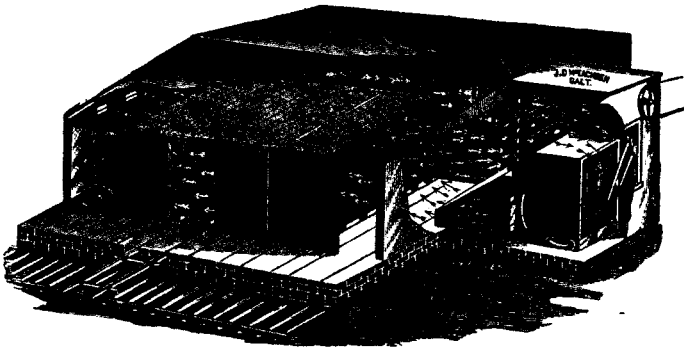
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Modern ideas and methods in building have brought into prominence many notable and admirable equipments and accessories for the promotion of the comfort and convenience of mankind. Not the least important of these developments are the ever ready, swiftly running elevators that make transit and traffic—we might almost say existence itself—possible in the lofty stores and office buildings, hotels, factories and warehouses that characterize the architecture of the period. The perfected modern elevator is a triumph of engineering ability and mechanical skill, and represents the embodiment of concentrated power and serviceability, simplicity and efficiency in the line of machinery and mechanical engineering. Compared with the crude hoisting machine of fifty years ago, with its creaking ball wheels, dangling cables, bulky counterweights and slow, uncertain movements the elevator of to-day is a marvel of speed and beauty. They are actuated advantageously by all the power agencies known to modern mechanical science.

Their construction and finish are wonders of mechanical skill and cunning, and their operation and efficiency are veritable triumphs of engineering and mechanical science and art. There is, apparently, no limit to their capacity of burden, nor the attractiveness and beauty of their equipment and fittings. The perfection of modern elevator construction is conceded to the

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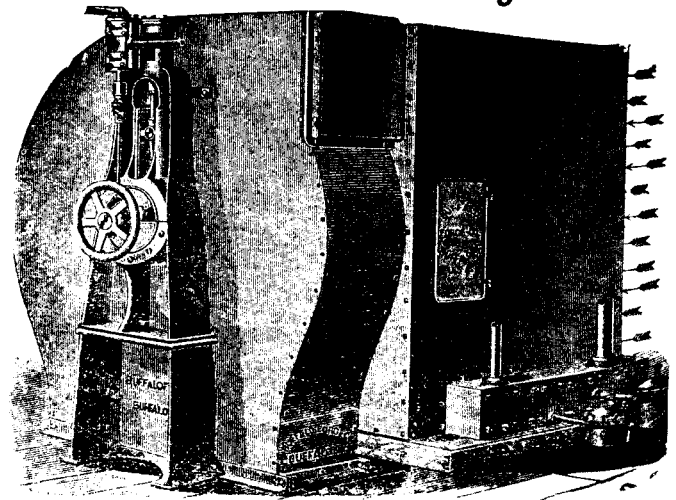
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Fensom Elevators, manufactured by the Fensom Elevator Works, of Toronto. These elevators are constructed for passenger and freight transit, and are adapted to the requirements of stores, office buildings, factories, warehouses, hotels, residences, public buildings—in short, anywhere and everywhere that persons or goods are to be moved from one level to another.

The Fensom elevators are in use in all parts of Canada, and are considered as representative of the most modern type of hoisting machinery adapted to building equipment. They are constructed in connection with steam power, either gear or belt power, hydraulic and electric power, and also to be worked by hand power when so required.

The Fensom Elevator Works are to be congratulated upon the great success they have met with in the manufacture of these elevators, which combine simplicity, durability and economy power with the highest capacity and efficiency. They are also the smoothest starting running, easiest stopping, handling and controlling, least care and attention required to operate and keep in order, least

liable to get out of order and the most speedy and noiseless. These are vital points in the use and service of elevators and cover all the essential requirements in this feature of the equipment of a building.

Some of the buildings equipped with Fensom Elevators may be mentioned: Parliament Buildings, Ottawa, 5; Parliament Buildings, Quebec, 2; Union Station, Toronto, 2; Rice, Lewis & Son, Toronto, 4; Nordheimer & Co., Toronto, 5; McKinnon Building, Toronto, 2; R. Simpson Co., Ltd., Building, Toronto, 6; T. Eaton Co., Ltd., Toronto, 9; Hudson Bay Co., Ltd., Winnipeg, 2; Vancouver, 2.

These are only mentioned as a few out of a list which might be extended almost indefinitely.

Architects, engineers, builders, contractors and property owners should not overlook the claims and merits of the Fensom Elevators. The Fensom Elevator Works are prepared to furnish estimates of cost, plans and sketches, and to enter into contract for the construction of elevator equipments according to the latest and most improved ideas and developments in buildings of all

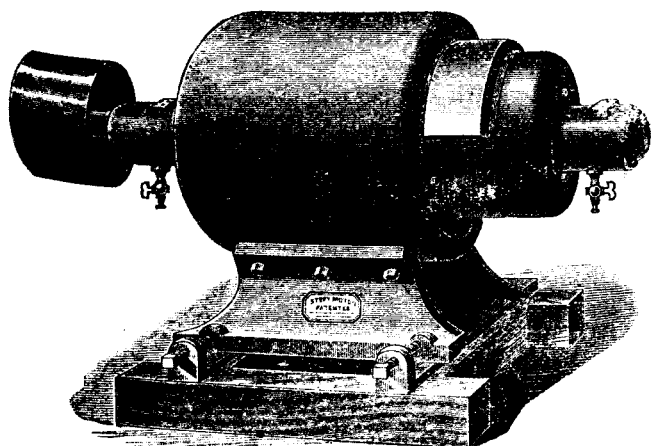
classes requiring freight or passenger elevators.

The plant is located at 52, 54 and 56 Duke street, Toronto, and besides making elevators they also manufacture on an extensive scale all kinds of ornamental iron work, electric motors, electric pumps, and are sole manufacturers for Canada of the celebrated Bostwick Steel Folding Gates and Guards.

A NEW ENTERPRISE.

The Toronto Junction Foundry Company, is the name of an industrial enterprise recently established in Toronto Junction on the Weston Road. Their chief business at present is the manufacture of malleable iron in various forms, such as carriage hardware, castings for street railway equipment and general electrical purposes, agricultural implements, sewing machines, harness fittings, etc. They also make gray castings of extra quality confining their attention in this department to castings requiring a high degree of skill and care in moulding. They have for some time, especially since the incorporation of the company in January last, been

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engaged in experimenting in the production of a high grade crucible steel, and are now engaged in the manufacture of a superior quality of bicycle parts, steel brackets, lugs, sprockets, etc., also of different varieties of tool steel. Their bicycle steel has been found to possess the peculiar property of not hardening after being treated in brazing but of retaining its toughness and elasticity unimpaired. The value of this peculiarity will be apparent to bicycle manufacturers. The company expect shortly to place on the market a full line of planer and moulding (sticker) knife blades, machine-lathe tools, etc. One peculiarity about their sticker knife manufacture is, they claim, the fact that they can supply the knives for any variety of moulding required ready shaped, needing only sharpening to fit it for use, at less than the cost of the ordinary blank. The company feel confident that their steel will be found suitable for a great variety of purposes and expect to find a wide field for the development of their enterprise.

PEAT FUEL.

A new and important industry in Ontario is that of the Canadian Peat Fuel Company, at Welland, upon the line of the Welland Canal. The company's property consists of about 5,000 acres of land, estimated to contain about 20,000,000 tons of peat moss. According to the Toronto Globe the whole of this 5,000 acres is overlaid with the moss to a depth averaging from three to five feet. This moss is commercially known as moss litter and is extensively used in Europe and the United States for bedding horses and cattle. The value of this deposit of moss will be appreciated when it is known that about three or four years ago the Friends

even Moss Litter Company was organized in London and Amsterdam, and that for a smaller acreage in Holland, situated not in one block but in various localities, and with the right to cut for short terms varying from five to ten years, and subject to considerable payments to the commune, the company paid \$1,750,000, upon which capital it made the first year, according to its first annual report, eighteen per cent. The magnitude of the trade may be judged from the fact that the supply to London alone amounts to 900 tons daily. It is not at all unlikely that before long they will be compelled to import it from Canada. Competent experts in the trade who have examined both properties declare that the Welland moss is, in color and as an absorbent, superior to the Holland moss.

The Welland Company has already made a five-year contract with a strong firm, by which it agrees to deliver at the works an average of 22,000 tons per annum. The Holland moss is dried in the open air, and is packed by hand, or, rather, by foot labor, in large bundles, and requires for sea carriage to be wrapped in burlap—a coarse cloth made of hemp. The Welland moss is handled, dried and packed by machinery, and presumably at a much smaller cost. Moreover, the cost of rail carriage to the seaboard, the cost of burlap, of transportation by sea and of storage at the port of landing will, it is assumed, make competition on this continent with the Canadian company impossible.

The moss at the Welland works is first cut with long knives into sixteen inch squares or cubes, and is carried on trams and tracks from the field to long sheds contiguous to the works, where it is stored and partially dried. From the sheds it is

afterwards carried on trams to a powerful picker which tears it apart and delivers it automatically into the mouth of the drier—a square tube, 100 feet long and eight feet in diameter, filled with moving carriers ingeniously arranged one above the other, which carry it through the drier against a strong blast of hot air blown adversely through it. When the moss emerges from the other end of the drier it is carried automatically to the packer, which is a very ingenious and beautiful device invented by Mr. Dickson, the president of the company, an ordinary box press being first tried, but found unsuitable and practically useless. Mr. Dickson's press consists of four carriages or presses on wheels, all of similar construction, strongly made of heavy oak and iron, and which run around a circular railway fourteen feet in diameter. These cars, being in fact one solid structure, move together, and all stop for a few moments, and at the same time at each quarter section of the circle.

No. 1 is filled with moss from the drier which pours into a hopper situated on an upper floor, where a trained workman handles and works a powerful iron rod or piston, which packs the moss into the mould. The carriage then moves on, in obedience to a lever movement, to the next quarter section and stops as before for an adjustment of slats which are required for the wiring of the bales. It then moves on to another quarter section and stops for the wiring, and then to the last quarter section, where the bales, weighing about 225 pounds each, are taken out ready for shipment. All the work at each stopping place is, of course, done simultaneously, so that every moment of time is economized. These are the only works of the kind in the world.

The shipping facilities of the company are

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remarkably good, the Canada Southern Company having built a siding three miles long from its main line to the works. This includes a steel drawbridge over the Wolland feeder. Inasmuch as the Canada Southern has built this siding jointly with the company, it is very good evidence of the opinion of that company as to the traffic prospects of the business. The company is now engaged in putting up extensive sheds both for the raw and manufactured moss, and when this is done the works will be fully completed. The properties of moss litter are well

known amongst horse and cattle men. It costs less per ton than straw and will, if properly taken care of, last four or five times as long. It absorbs all the moisture and makes the stall and stable quite odorless, and when the litter becomes unfit for bedding it becomes a most valuable manure. It has also remarkable antiseptic qualities, and it is said that foot and mouth diseases of horses are unknown where it is used. The dust of this moss is now largely used in Holland for sanitary purposes, and is now, in fact, being substituted for water closets under municipal regulations.

There is every reason to believe that this branch of the company's business will be very profitable.

The peat fuel branch of the business has been delayed until the success of the moss litter branch has been practically established and may then be proceeded with - probably next spring or summer. The process of preparing the crude peat for fuel is also Mr. Dickson's invention, and has already been fairly and satisfactorily tested. The crude peat is torn apart and partially pulverized by being passed through a picker, and is deposited automatically in a hopper which feeds a steel tube about two inches in diameter and twelve or fifteen inches long. The pulverized peat is rammed through this tube by a driving rod, and after the tube is full each descent of the rod drives out a smooth, polished, compressed piece of peat about three inches long, and weighing about half a pound. The friction of the drive through the tube is so enormous that the peat is compressed to the density of anthracite coal.

The writer had the privilege of seeing a certificate of Mr. Abell of Toronto, showing, by actual test in his works lasting six hours, that the steam-producing power of this fuel is equal to that of the same weight of anthracite.

The company has a separate building for

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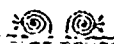
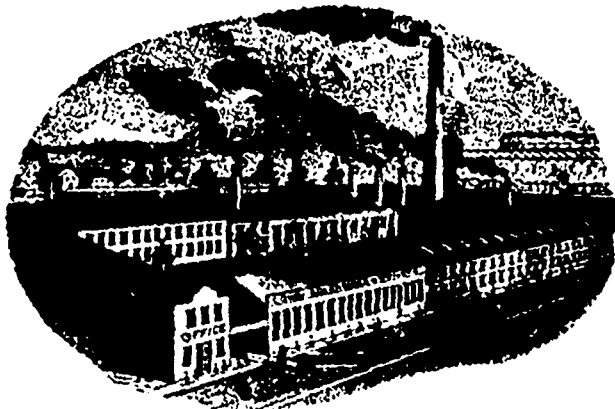
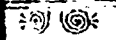


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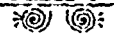


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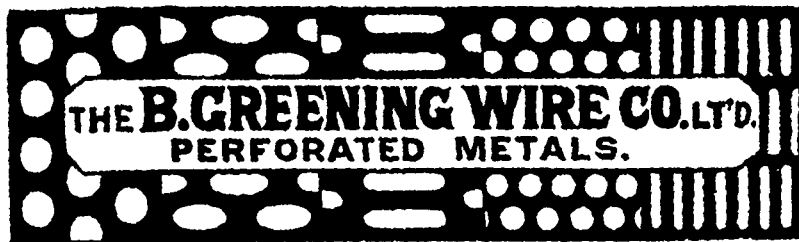
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the peat fuel branch of the business, and as this is already supplied with its own engine, shafting, etc., and as the peat machine is on the ground, further practical tests can be made in the presence of experts at small expense. This the company proposes to do when the proper time arrives, and the further prosecution of this branch will of course depend upon the result, but the experiment already made seems to leave very little to prove except, perhaps, the cost of manufacture.

The moss litter and peat disposes of two strata of this remarkable property, but under the peat lies a bed of clay which will probably be turned to good account by-and-by. This clay seems to be of the finest quality and is absolutely devoid of grit, having several colors besides pure white. Samples of crockery made from it may be seen at the company's offices, Bank of Commerce building, Toronto, and also of building brick similar to that made by Taylor Bros., and also vitrified brick of the hardest and apparently of the best quality, so hard that it will scratch glass like a flint. As the company has convenient facilities for shipping by water via the Welland Canal to Toronto and Buffalo this industry may become important.

A GROWING CANADIAN INDUSTRY.

The great development during the past year or two of mining, both in British Columbia and Ontario has already given a great stimulus to another industry, that of the manufacture of mining machinery. It will be remembered that a few years ago there was a good deal of agitation in favor of the abolition of the duty on machinery of this character on the ground that it was not manufactured in Canada and that the additional cost of such machinery, through it being subject to a duty, was a serious burden on the development of the mining industry. The Government thereupon amended the tariff by allowing all mining machinery, not manufactured in Canada, to be imported free of duty for a certain number of years. It believed that if the mining industry increased, as there was every reason to expect it would, that before the expiration of the period named during which such remission of duties would be in effect, the manufacture of this class of machinery would be carried on in Canada so as to render us independent of foreign sources.

This expectation is now being realized and several firms in eastern Canada are engaging largely in the manufacture of nearly all descriptions of mining machinery. There appears to be no difficulty in Canadian manufacturers competing successfully—both as regards price and quality—with their rivals in the United States. In cases where there are patents, either whole or partially, on any particular machine or appliance, licenses have been obtained from the American patentees, under which the article can be made in Canada. The large business which is already being done by Canadian manufacturers is shown by the reports frequently appearing in our mining news of large quantities of plant and machinery having been received at the different mines in the Kootenay District from eastern Canada. Within a comparatively short time we may anticipate that nearly all the mining machinery required in the province will be the product of Canadian shops and factories.

This is only another instance of the rapidity of the growth of inter-provincial trade

and of the opportunities which the progress of the country will afford for its development to an extent which would have appeared impossible a few years ago. With the extension and improvement of our railway system and the consequent lowering of the cost of transportation between eastern Canada and this province, a further impetus to the market for machinery will be given, since every reduction in its price tends to increase the demand by the possibility thus afforded of working profitably lower grades of ore.—Vancouver News-Advertiser.

Wenger Bros., Aytou, Ont., are lighting up their mills and a portion of the town by

electricity; they expect to install about 200 lamps. The dynamo, etc., is being furnished by the Royal Electric Company.

Many people are fond of using perfumed fumigating papers in their rooms. The paper which is thus burned is scented by first being immersed in cold saturated solution of potassium nitrate, and then being dried by means of hanging over a string. Unsized or ordinary fine paper is generally used. It is then perfumed by dipping into any strong essence and again dried—musk, otto of roses, myrrh, powdered orris root, or strong spirits of wine, according to the perfume required. Many other curious aromatic combinations can be made in this way.

Wm. KENNEDY & SONS, OWEN SOUND, ONT.

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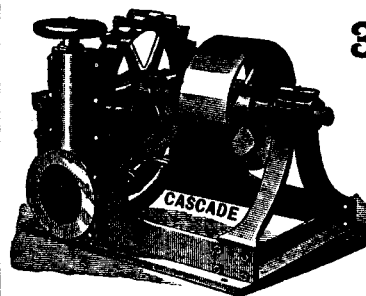
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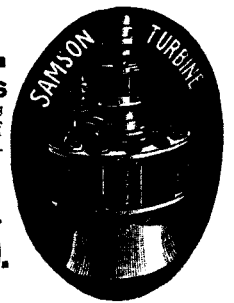
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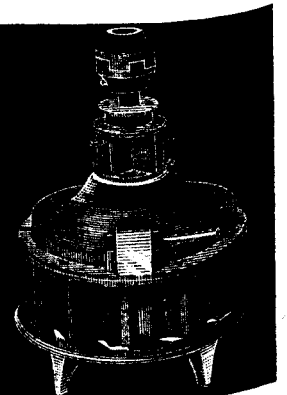
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INDIGO SHADE ON COTTON CLOTH.

Dyed with diaminogene blue BB, diazotized and developed; W. J. Matheson & Co., Ltd., 178 Front St., New York.

(For 100 lbs. of cotton pieces.) Dye bath is made up as follows: five per cent. diaminogene blue BB., thirty per cent. Glauber's salt (calcined sodium sulphate), one-half per cent. sal soda (crystalized sodium carbonate).

Enter the cloth (previously wet out) at 160° F., raise the temperature of the dye bath to the boiling point, and continue boiling for one hour. Then wash and work in a cold bath of three per cent. sodium nitrite, ten per cent. muriatic acid (hydrochloric acid).

Run the cloth for twenty minutes in this bath, then wash and work in a bath of one per cent. developer No. 1 (beta naphthol); one per cent. caustic soda (sodium hydrate). Work cold for twenty minutes. Wash and dry.

This dyestuff comes in the form of a dark blue powder, which dissolves readily in boiling water, giving a blue solution. The dye bath is not exhausted, and for economy and practical use must be kept standing, subsequent lots requiring less dyestuff to produce the same shade. The amount given here is that required to start the kettle for the first lot; in a running kettle two per cent. of

dyestuff will give a full shade. The use of the second bath is what is known as diazotizing, and should take place in as small an amount of water as is possible, otherwise it would be necessary to use larger amounts of sodium nitrite and muriatic acid. A very good way is to have the diazotizing bath sufficiently strong that the odor of nitrous fumes is perceptible. The developing bath contains beta naphthol in alkaline solution with caustic soda. Excess of caustic soda should be avoided. The cloth should pass from the diazotizing to the developer bath without even partial drying.

The amount of water used in all of these baths was about twenty-five times the weight of the cloth.

THE KEEWATIN POWER COMPANY.

It will be gratifying to our readers to learn that the Keewatin Power Company will shortly resume the work of completing their water-power here, even if it is to transmit the power to Winnipeg by electricity. It will be a great advantage to that city to get it, and it will materially help their industries, which require electric power. The completion and operation of the works here will help Rat Portage in the employment of labor and will afford an opportunity for the establishment of new industries. The following despatch from Ottawa explains the

intentions of the company:—"The Keewatin Power Company is preparing to utilize the immense water-power secured through the dam at Keewatin by making a contract for the transmission of at least 5,000 horse-power over an electric wire to Winnipeg. The company has for some time been investigating the possibility of making this transmission over the 120 miles between their Keewatin plant and that city. This has resulted in a decision favorable to the scheme, and the company is now prepared to enter into a contract with a construction company. The right of way has already been secured through that portion of the route within the bounds of Ontario, and no difficulty is anticipated in obtaining similar concession through Manitoba. Practically the only thing remaining to be done before letting a contract is to obtain definite information as to the amount of power that will be leased by Winnipeg industries. The rate per horse-power per annum is not yet announced, but it is confidently anticipated that the great reduction to be offered over the present cost of operating steam plants, owing to the price of fuel, will bring nearly every concern into relationship with the new company. Steps will be taken at an early date towards approaching the different concerns in Winnipeg using any form of power in order to come to some agreement."—Rat Portage, Ont., Record.

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

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- 53,206 Vegetable pulverizer, C. H. Wright and T. E. Redyard, Vancouver, B.C.
- 53,207 Mechanical movement for bicycles, H. Tuttle, Cedar Rapids, Iowa.
- 53,208 Camp stool, L. G. Wade, Holly, Mich.
- 53,209 Hame, M. Johnson, Harrisburg, Ill.
- 53,210 Method of preserving milk and cream, E. P. Hals, New York.
- 53,211 Thill coupling, W. K. Scribner, Oshkosh, Wis.
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- 53,231 Mop wringer, J. G. Maendler, P. Maendler and Mary Miller, St. Paul, Minn.
- 53,232 Electro magnetic induction system of propulsion, the Shuttleworth Electric Co., Camden, N.J.
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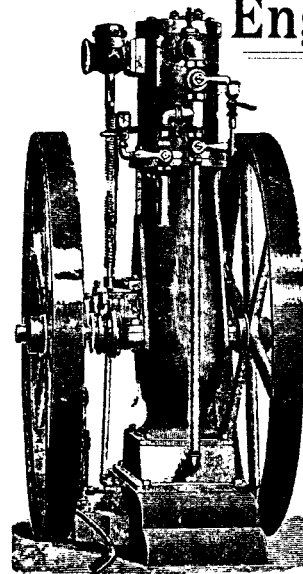
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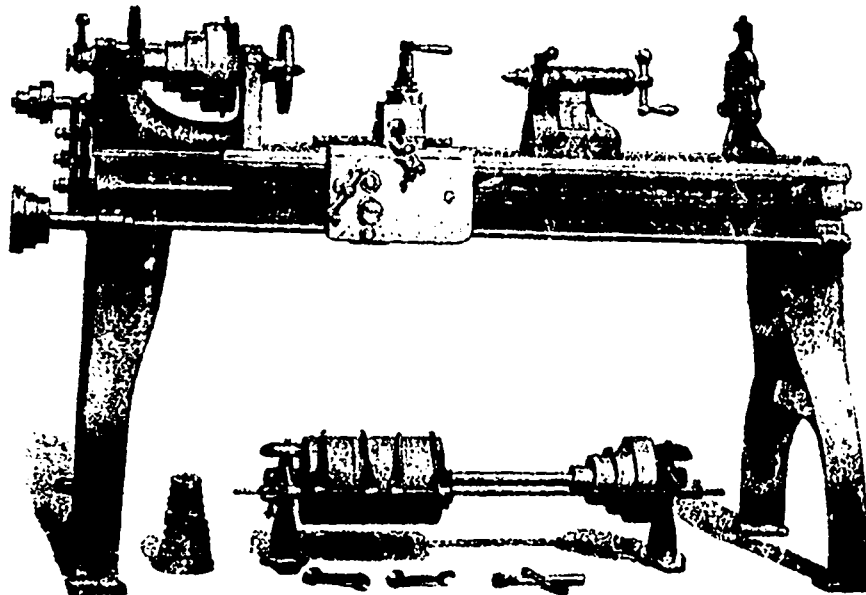
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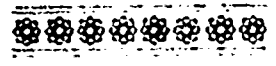
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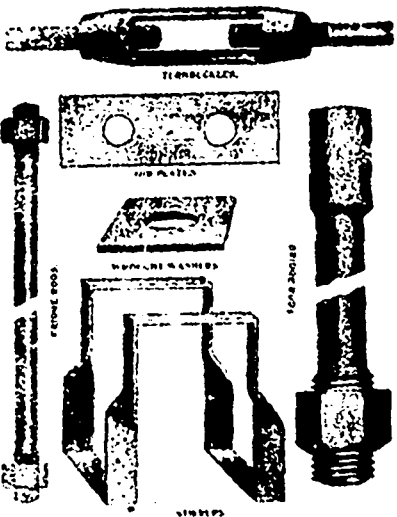
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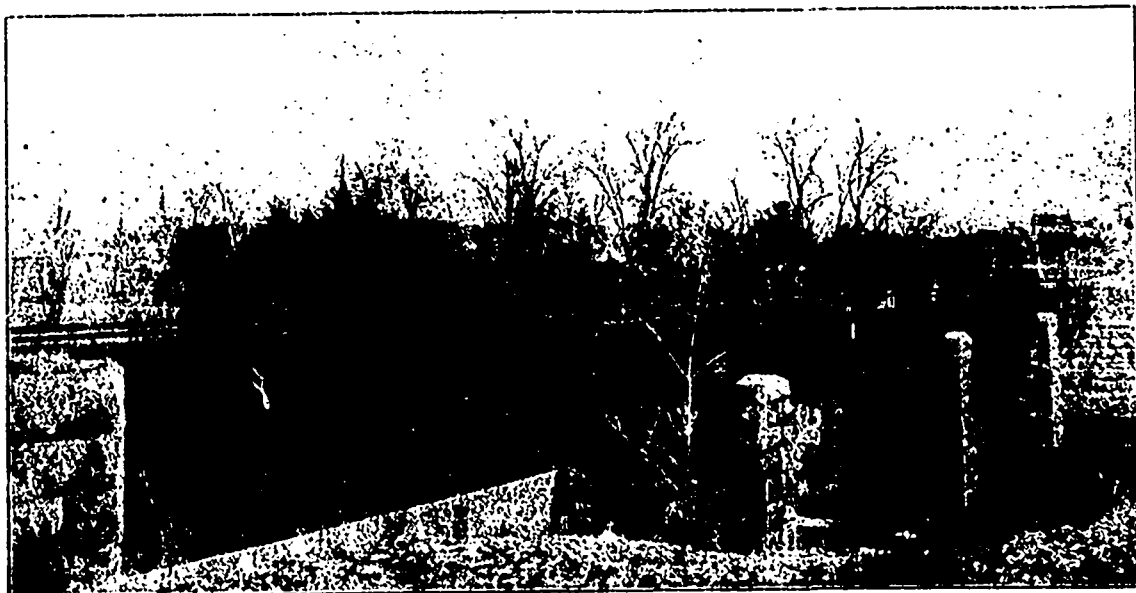
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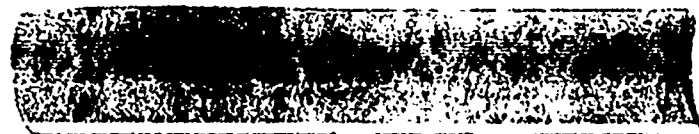


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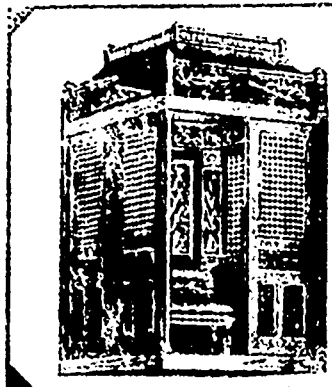
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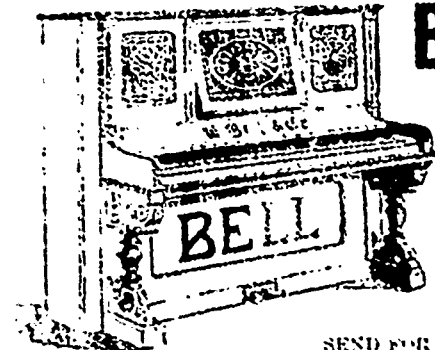
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