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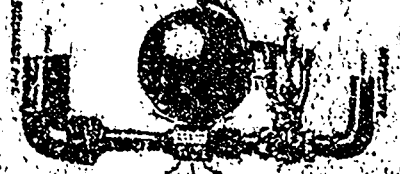
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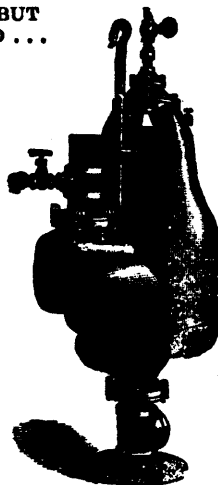
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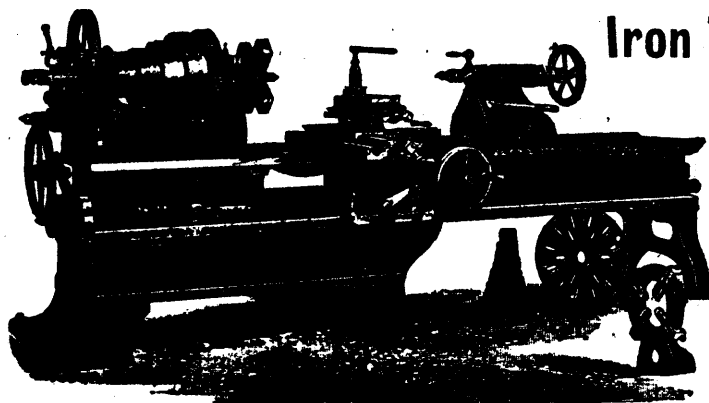
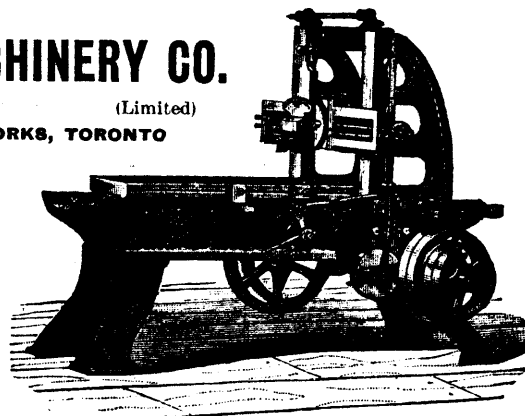


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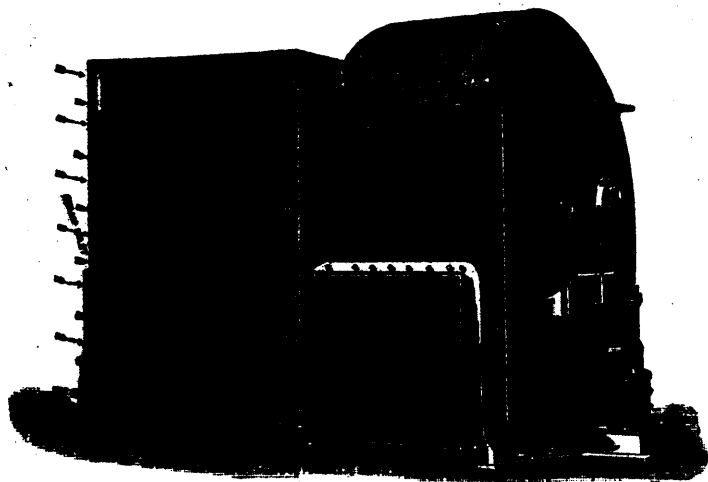
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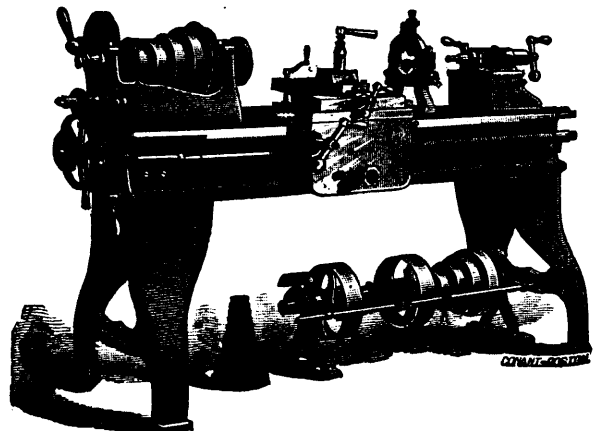
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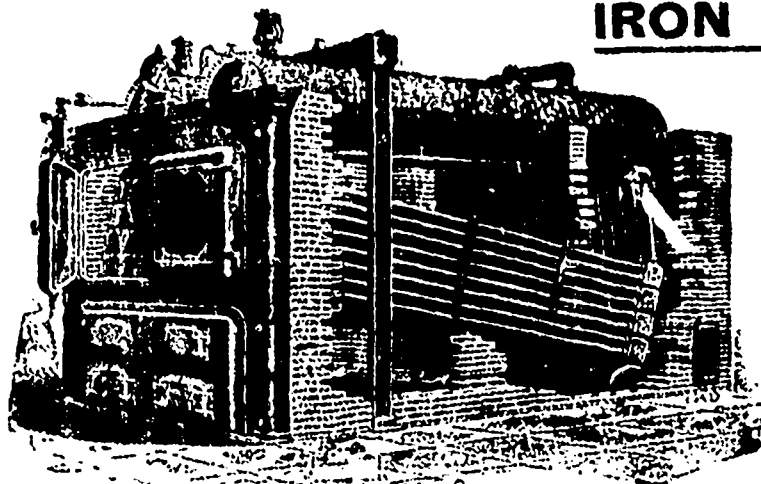
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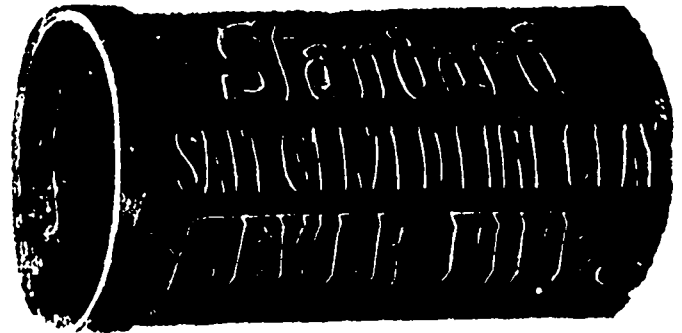
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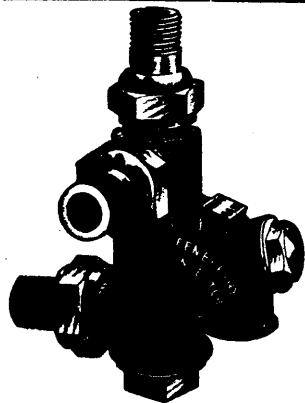
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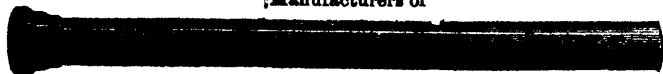
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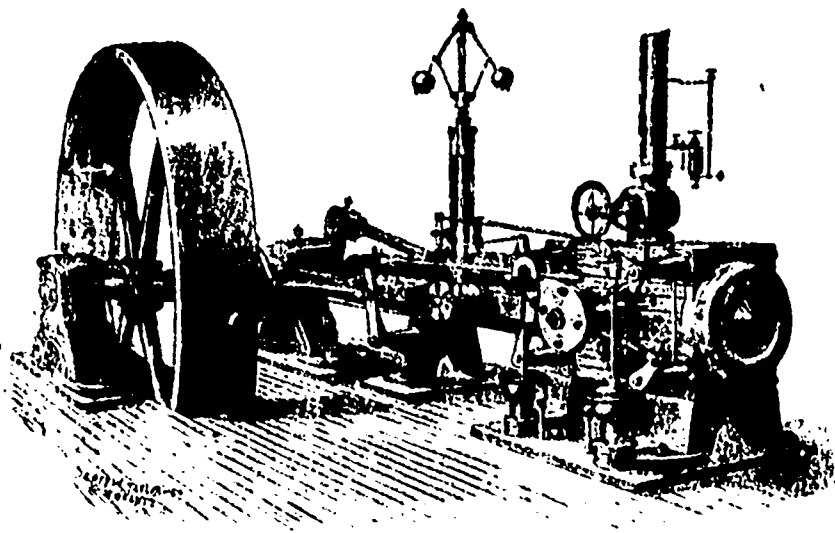
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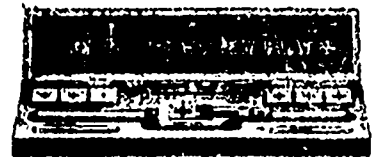
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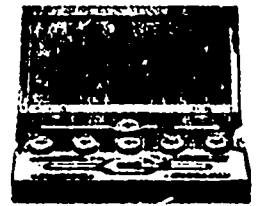
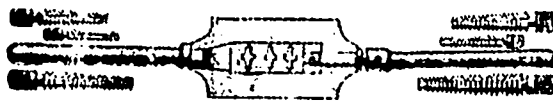


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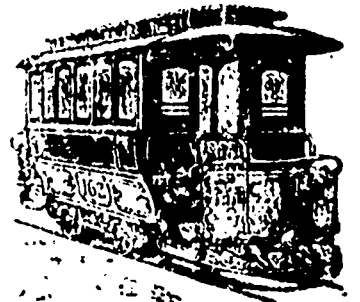
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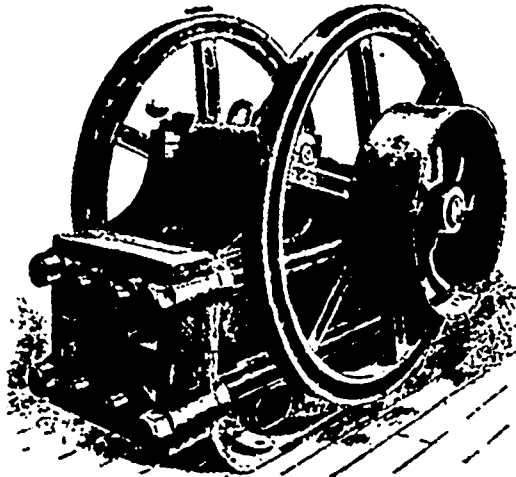
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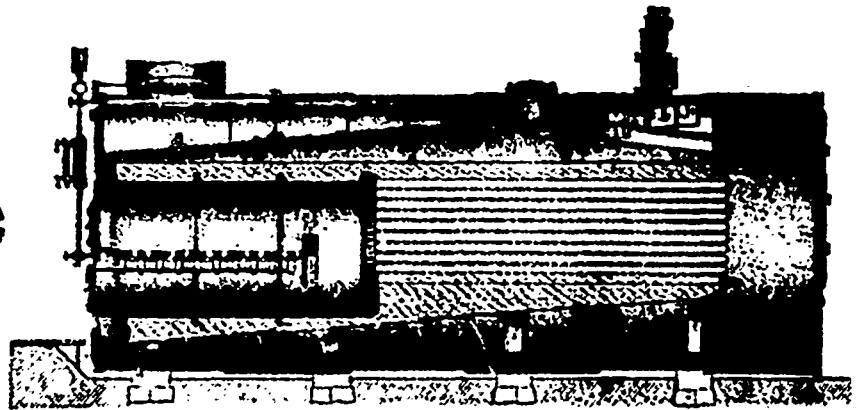
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THE N.P. RESOLUTION.

On March 7th, 1877, Sir John Macdonald, in opposition, moved his famous National Policy Resolution under which this country has prospered since, which was as follows:—

“That this House is of the opinion that the welfare of Canada requires the adoption of a National Policy, which by a judicious readjustment of the tariff will benefit and foster the agricultural, the mining, the manufacturing and other interests of the Dominion; that such a policy will return to Canada thousands of our fellow countrymen now obliged to expatriate themselves in search of employment denied them

at home; will restore prosperity to our struggling industries, now so sadly depressed, will prevent Canada from being made a sacrifice market, will encourage and develop an active inter-provincial trade; and moving (as it ought to do) in the direction of a reciprocity of tariff with our neighbors, so far as the varied interests of Canada may demand, will greatly tend to procure for this country eventually a reciprocity of trade.”

IMPERIAL FEDERATION.

Some of the discussions at the Third Congress of Chambers of Commerce of the British Empire, held in London last month, were of great interest to Canada, the showing of delegates from various Canadian commercial bodies being very large.

Mr. Joseph Chamberlain delivered a welcoming address to the Congress in the course of which he said:

As Secretary of State for the Colonies, I rejoice in every fresh indication of the essential unity of the Empire. I think we may say that the occasion was never more favorable, and I am encouraged to hope from your deliberations that you will make important additions in the direction towards the solution of which all our patriotic aspirations and our mutual interests are steadily tending. The very existence of such a congress as this, the fact that to day the representatives of the commerce of the Dominion of Canada, of the West Indies, of Australasia, of South Africa, and of our great Indian dependencies, should meet in London the delegates of the commerce of the United Kingdom, is evidence that we have to a great extent annihilated space, and that the distances which separate us are no longer any barrier to the free communication and that personal intercourse which are the conditions of national unity. Insensibly the bonds between us are strengthening and multiplying. You have for a long time you gentlemen who come from the Colonies been in our thoughts. You are now actually in our sight. Your claims, your wishes, the resources of your separate Colonies, your political conditions, all these are becoming as familiar to us as if we were all provinces in one great kingdom or states in a true Imperial Federation. I think that further knowledge must tend to complete the agreement between us. I have studied the long and multifarious list of proposals which will be laid before you, and I can assure you that your decisions will be carefully noted by Her Majesty's Government. One thing I observe with great satisfaction, and that is that one and the same note rings throughout the whole of them. Waerhaert propounded by the Colonies or by the home Chamber, all tend in the direction of greater uniformity and of closer union between these Colonies and ourselves.

All these proposals are of great and of pressing importance, but they are I was going to say, dwarfed into insignificance in comparison with other proposals which also will be put before you, and which are intended to secure the commercial union of the Empire. If this question can once be satisfactorily settled, all the others to which I have referred would follow as a matter of course in its train. If we had a commercial union throughout the Empire, of course there would be a Council of the Empire, and that Council would be called upon to watch over the execution of the arrangements which might be made, to consider and to make amendments in them

from time to time, and whenever such a Council is established there will, surely, naturally be remitted to it all those questions of communication, of commercial law, in which the whole of the Empire is mutually interested. Even Imperial defence could not be excluded from its deliberation, for Imperial defence is only another name for the protection of Imperial commerce, and to such a Council as I have imagined to be possible, the details of such defence, the methods of carrying it out, the provision to be made for it would naturally be remitted. Gradually, therefore, by that prudent and experimental process by which all our greatest institutions have slowly been built up, we should in this way, I believe, approach to a result which would be little, if at all, distinguished from a real federation of the Empire. We are absolutely unanimous as to the object which we desire to attain. No one nowadays, in this country or outside of it, denies the enormous benefit which it would be to the British race without the Empire if we could arrange some union which would lead to closer relations, and which would retain within the Empire, and for the benefit of the Empire, the trade and the subjects which are now diverted to foreign lands. But up to the present time we have not been agreed as to the methods by which this object may be reached.

Now, it appears to me that there are only three lines of progress which have been suggested, or which can be suggested, to accomplish this great object. The first of them is a proposal that the Colonies should abandon their own fiscal system and should adopt ours; that they should carry out fully the doctrine of Free Trade; that they should open their markets not only to us but to all the world, and abandon entirely the protective duties upon which they now rest for the revenues they collect. That is a proposal which is supported by the Golden Club, by all orthodox Free Traders, and others. A great deal could be said—I do not deny it—that for all concerned this would be the best solution for the matter. At the same time, I am bound to point out that this would not bring about commercial union in the sense in which we have generally understood the word, because that would bring about a cosmopolitan union, and would offer no particular advantage to the trade of the Empire as such. But what is to my mind a much more fatal objection is the fact that, speaking generally, the Colonies will not adopt this proposal. We must consider it, therefore, as a Council, and if we want to wait until the Colonies generally are converted to our views with regard to the advantages of Free Trade let us recognize the fact that we must postpone the hope of a commercial union to the Greek Kalends. Free Trade in this country has been developed to the great advantage of this country for a period of half a century, but in spite of that, it has made no converts. There is no considerable approach to our system on the part of the Colonies, and no approach on the part of foreign countries. I pass on now to the second proposal, which has been laid before a similar Congress to this, which found expression at the great Congress held at Ottawa a year or two ago. This is a proposal which in justice, I may say, our principal Colonies have advocated with great force and eloquence and has been supported by leading Colonists. This proposal is the very reverse of that which I have been considering. For that was a proposal that the Colonies should abandon their system for ours; but this is a proposal that we should abandon ours in favor of theirs. It is

that, while the Colonies should be left absolutely free to impose what Protective duties they please upon foreign countries and British commerce, they should be required to make a small discrimination in favor of British trade in preference, and that we should impose duties on food and raw material from foreign countries. My own opinion is that there is not the slightest chance that in any reasonable time this country, or the Parliament of this country, would accept such a proposition. The foreign trade of this country is so large, and the foreign trade of the Colonies is comparatively so small, that a small preference given to us upon the foreign trade by the Colonies would make so small a difference—be so small a benefit—that I do not believe the working classes of this country would consent to make such a revolutionary change for such an infinitesimal advantage. Thus, we have only arrived at a deadlock in the question.

If, therefore, we are to make any progress at all we must seek a third course, in which there shall be give and take on both sides, in which neither side will adhere to preconceived conclusions, but one in which to the good of the whole shall be subordinate the separate interests of the parts. If I understand it correctly I find the germs of such a proposal in a resolution which is to be submitted by the Toronto Board of Trade. I understand this to be the creation of a Zollverein or Customs' Union, which would establish at once, practically, Free Trade throughout the British Empire, and would leave contracting parties free to make their own arrangements with regard to duties upon foreign goods, with this as an essential condition of the proposal that Great Britain shall consent to replace moderate duties upon certain articles of large production in the Colonies. The articles upon which such duties should be levied coming from abroad would be grain, meat, wool, sugar, and other articles of enormous consumption in this country, which are largely produced in the Colonies, and which might be wholly produced in the Colonies, and by British labor. On the other hand, the Colonies, while maintaining their duties upon foreign commodities, would agree to a free interchange of commodities with the rest of the Empire, and cease to put a duty upon any product of the British Empire. This is the principle of the German Zollverein and that which prevails in the United States of America, and I do not doubt for a moment that this would be a strong bond of union between the British race throughout the world. Such a proposal might commend itself even to a free trader, because it would extend its operations to more than 300 millions of the human race. On the other hand, it would open up an almost unlimited market for agriculture and other productions. The details would require the most careful examination providing for exceptions to be made to the general principle. These exceptions I do not propose to discuss on the present occasion. If a proposal of this kind came from the Colonies it would not be met by a blank refusal from the people of this country. I hope you will not consider that I have gone beyond my duty in making these remarks. I am actuated solely by the strong desire I entertain that your deliberations should have some practical result in bringing us nearer to that object we all have in view, and which I do not hesitate to say is the greatest object which Great Britain can pursue, and which would, I believe, come at a critical stage of our history.

Sir Albert Rollit having taken the chair,

Mr. Osler (President of the Toronto Board of Trade) rose to move the first resolution on the paper reading thus: "Whereas, in view of recent events, and the attitude of other nations towards Great Britain, and of the fact that there exists within the British Empire resources in men and materials and arable land for its every requirement: whereas, while the trade legislation of other nations is framed to subserve their local interests, all British trade and other legislation should aim to secure within the Empire a union of interest of a federal character, and the policy of each British Community should be designed to retain within the Empire subject, whose labor would otherwise go to foreign lands, whereas Canada has already formed a basis for closer relations with the Mother Country and other Colonies by building a highway across British America, by creating steamship connection between Vancouver, Hong Kong, New Zealand, and Australia, by offering a large subsidy for a fast Atlantic steamship service, as well as by her established precedent of Confederation, making for British unity; and whereas closer commercial relations between the Mother Country, her Colonies and Dependencies, will be hastened by further subsidising fast steamship services and completing postal, wire and cable, communication with the different portions of the Empire, thus making such routes for commerce, food supply, and munitions of war the fastest and most secure from attack: resolved, that in the opinion of this Congress the advantages to be obtained by a closer union between the various portions of the British Empire are so great as to justify an arrangement as nearly as possible of the nature of a Zollverein, based upon principles of the freest exchange of commodities with the Empire, consistent with the tariff requirements incident to the maintenance of the local government of each Kingdom, Dominion, Province or Colony, now forming part of the British family of nations." There were in Canada (Mr. Osler pointed out)—as there were wherever there was life—differences of opinion. They had free traders and protectionists. It had been the policy of the country for years past to have a fair amount of protection for home manufactures, and he thought that this feeling still holds with the great body of the people of Canada. They had, they believed, within their Empire land awaiting emigrants sufficient with reasonable cultivation to supply Great Britain with all the wheat and produce she required, and Canadians were especially anxious that emigration from this country should be directed to the Colonies, and so build up the Empire. Canada had spent money freely in building the Canadian Pacific Railway, and looked forward to the fast Atlantic service as helping in the cause of unity. They in Canada believed that certain concessions must be made if they were to get England to join in a confederation, and they as Canadians were willing to make concessions in the best interests of themselves and the whole Empire.

Lord Londonderry (Belfast) seconded the motion.

Mr. McFee (Montreal) said his instructions made it clear that the Montreal Corn Exchange Association, while supporting the spirit of the Canadian proposal, was strenuously opposed to any arrangement whereunder the tariff discrimination in favor of the Mother Country and the Colonies would be other than a reduction of present tariffs. Following the resolution of the Dominion Parliament on April 26, 1892, they held that any arrangement should involve a substantial reduction of the Colonial tariffs in favor of the Mother Country,

and should not allow any Colony to fulfil the letter of the arrangement, but evade its spirit by placing a prohibitive tariff on imports from Great Britain and the Colonies and a still higher one on imports from foreign countries.

Sir Donald Smith moved in amendment to the Toronto Board of Trade resolution this proposition:—"Whereas the stability and progress of the British Empire can be best assured by drawing continually closer the bonds that unite the Colonies with the Mother Country, and by the continuous growth of a practical sympathy and co-operation in all that pertains to the common welfare, and whereas this co-operation and unity can in no way be more effectually promoted than by the cultivation and extension of the mutual and profitable interchange of their products, therefore resolved—That this Congress records its belief in the advisability and practicability of a Customs arrangement between Great Britain and her Colonies and India on the basis of preferential treatment, and recommends that steps should be taken by Her Majesty's Government to bring about an interchange of opinions on the subject between the Mother Country and the other Governments of the Empire." In the course of his speech Sir Donald Smith said: In moving this amendment I do so in no spirit of opposition to the proposal of the Toronto Board of Trade. I am indeed acting in unison with my friends from Toronto and other Canadian representatives in putting forward the amendment, and the object is to place before this Congress a resolution which represents I hope the views of all the Canadian delegates and will receive their support, and thus render more or less unnecessary the discussion of the other resolutions of a similar nature which are on the paper. We hope also that the terms of the amendment are such as will commend themselves to our friends from Australasia, from South Africa, and the other Colonies, and we are not without hope also that it may commend itself to the representatives of the commercial interests of the United Kingdom who are present to-day. What we are striving for here is not the discussion of the details of a commercial arrangement between the Mother Country and the other Colonies. That must be left to the Government of the different parts of the Empire to formulate and arrange. What we want to do is to secure the acceptance by this Congress of the principle that has been in one way and another so ably advocated. Quite recently it has been referred to by Mr. Chamberlain. It has also been discussed by the Canadian Parliament, by Boards of Trade and Chambers of Commerce in Canada, in South Africa and Australasia, and also in other Colonies. It was also adopted by the delegates of the different Colonies who met together at Ottawa in 1894. Indeed, it will be seen that the two introductory paragraphs of the amendment are precisely the same as the Ottawa resolutions. The only difference is that the third paragraph of the amendment takes us a step further, and that the principle being conceded, Her Majesty's Government are to be requested to approach the other Governments of the Empire with a view to the interchange of opinions on this important subject, which, if I may say so, is very closely connected with the future development of the trade and commerce of this great Empire. If Her Majesty's Government will grasp the matter boldly and invite an expression of opinion from the Governments of the Colonies, we are not without hope that it may lead to the calling together of another great Colonial Conference in

London, where the details of a measure satisfactory to the Colonies and to the United Kingdom might be discussed and arranged. I do not think that this Congress, representing as it does the commercial interests of the British Empire, could discuss a matter more vital and more important than that which is referred to in the amendment I have the honor to propose. The Marquis of Salisbury has said that the closer union between the Mother Country and the Colonies is nothing more or less than the future of the British Empire. Mr. Goschen has said that he thinks it possible that the advantages of the commercial consolidation of the Empire might be so great that in certain circumstances no objection would be raised to it. Lord Rosebery in one of his speeches, said: "It is, as I believe, impossible for you to maintain in the long run your present loose and imperfect relations to your Colonies. I wish to say that on the ground of commercial interests alone the question is worthy of the consideration of our commercial communities." The discussions of the delegates at the Ottawa Conference on the same subject will be fresh in your recollection. All this shows the importance that is attached to the matter both in the Mother Country and the Colonies, and I venture to hope that the amendment I have proposed, and which I trust will be the substantive resolution before the meeting, will be adopted. I do not propose to weary you with figures. Most of you are connected with commerce. You know the extent and importance of the Colonial trade at present, and you must have an idea of the extent to which it is bound to develop in the future. We have immense British territories all over the world, and their progress is only just commencing. I think these facts are an argument in themselves for the formulation of closer and more intimate commercial arrangements between the different parts of the Empire than exists at present. Our honorary president, Mr. Chamberlain, not long ago said that we have a common origin, a common history, a common language, a common literature, a common love of liberty and law, common principles to assert, and common interest to maintain. And, gentlemen, we have all a common love for and loyalty to the British Crown and to the British connection. Why, therefore, cannot we have some arrangement of the nature sketched in outline in the amendment I am now proposing? Why should every part of the Empire in matters of commerce treat every other part of the Empire as they do foreign countries? Gentlemen, union is strength. We have competitors every where, and if we hope to compete with them not only within but without the Empire we must look after what we conceive to be our common interests. I think it will be generally admitted that they look after theirs. I have already said that we do not want to enter into details. We do not wish to get into a discussion on abstract free trade or protection. We have other and higher objects to attain—the closer commercial unity of this great Empire—and those who can may read not only the issues that are at stake at the present time but the very much greater issues that must make themselves apparent in the near future. I do not think there is any thing in a moderate scheme of preferential treatment which need shock any reasonable economic theories, neither is it likely to lead to retaliation. Indeed, I doubt very much whether in the face of a commercial union between the different parts of the Empire our good friends and competitors in other countries would care to initiate any policy of retaliation

We have as much right to treat trade within the Empire on a preferential basis as the various foreign countries with colonies have to give to and receive from their colonies preferential treatment. Germany cannot reasonably object to such a proposition, neither can the United States, because they have adopted it already themselves, and the same remark applies to Norway and Sweden. Therefore, gentlemen, I commend this amendment very heartily and cordially to your acceptance. I am sure its adoption would cause much gratification in the Colonies, and I believe among no inconsiderable part of the population of the United Kingdom. It would also encourage Her Majesty's Government to take steps to secure a modification of those unlucky treaties with Belgium and Germany which, in their present form, block the way to any Inter-Imperial arrangement. After looking into the matter I do not think there would be any great difficulty in bringing about the modification we desire. The terms of the amendment are very elastic in their nature. What we are striving for is some plan which may least upset the fiscal system in force in the United Kingdom and in the Colonies; and I believe that such a scheme could readily be arranged. It would certainly mean great things for the Empire—a closer sentimental and fiscal union than at present, and the retention of the colonial markets for British goods for all time. It would stimulate the development of the Colonies, provide larger markets for British products, and ensure larger supplies of food products from British territories. These are only a few of the consequences that would inevitably follow the closer union of the different parts of the Empire, and they are surely worthy of some sacrifices on both sides.

Mr. J. Castell Hopkins, representing the Canadian Manufacturers' Association, said that Mr. Chamberlain practically asked them to return to a revenue tariff. Yet under the former Canadian revenue tariff the import trade of Canada with Great Britain decreased from 68 to 30 millions of dollars as a result of the want of prosperity in the country and its inability to buy the goods which England had to sell. Under the protective tariff which followed, imports from Great Britain had steadily increased. The tariffs of the world were now directed against England where formerly these tariffs were under England's thumb. They had to face the position that the world was hostile to them and the further fact that whereas the United States buys £2 per head per annum of British goods, Canada buys £8, and Australia £40. The Colonies asked for a preference which would increase their population and enable them to trade with the Mother Land upon that basis of greater purchases of British goods. The one influence permeating Canadian policy was a desire to approximate closer and closer to Great Britain. Did they as business men want to look forward to the time when the whole American continent would be under a McKinley or similar tariff and a Monroe doctrine? The Canadian manufacturers whom he represented looked at this question in no selfish spirit. They were willing to accept and advocate a substantial preference to British and Colonial products entering Canadian ports. Out of the total British imports of 29 million quarters of wheat, 25 millions came from the United States and Russia. They had, therefore, only a margin of 4 million quarters in the case of war against Russia and the United States united. Were they aware that a few months

ag. they were within an inch of war with the United States? Assuredly they were. Canada knew it only too well. (Canadian cries of "Hear, hear")

The Chairman. Order, order. I think that is travelling somewhat beyond what is either correct or expedient.

Mr. Hopkins, continuing, said Great Britain would not be wise if it did not look at the possibility of war. There were in Canada vast numbers of manufactured goods which were now imported from the United States but which Canadians would assuredly import from Great Britain under a preferential arrangement. Was that no inducement, when it was remembered that the population of Canada would be, before long, probably twenty or thirty millions? They in Canada were willing to approach Free Trade by degrees, and they did not desire to tax raw materials for manufactures. Let an Imperial Congress be held to discuss a question which was not one of Free Trade or Protection but of Empire.

MR. CASTELL HOPKINS AND CANADIAN HISTORY.

It will be remembered that Mr. J. Castell Hopkins, long and most favorably known in Toronto and elsewhere in Canada, was appointed a delegate to represent the Canadian Manufacturers' Association at the Third Congress of the Chambers of Commerce of the British Empire, which was held in London last month. Mr. Hopkins was also authorized to act while in Great Britain in behalf of the Canadian Historical Exhibition Committee, under a resolution that read as follows:

That Mr. J. Castell Hopkins be fully authorized by this Committee to associate himself during his visit to Great Britain with Sir Mackenzie Bowell, Sandford Fleming, C. M. G., Principal Grant, D. D., Sir Donald Smith, and other representative Canadians in London, for the purpose of endeavoring to secure from public and private sources loans of such pictures, documents, and objects as are likely to prove interesting and valuable in connection with the contemplated Historical Exhibition to be held in the City of Toronto in 1897; and that Mr. Hopkins be requested to secure, if possible, the co-operation of the Imperial Institute, the Colonial Institute, the Royal Geographical Society, the Corporations of London and Bristol, and the assistance of the Duke of Devonshire, the Marquis of Lorne, the Marquis of Lansdowne, and the Earl of Derby.

Speaking of Mr. Hopkins and his presence in London in connection with the interests he had been commissioned to represent, the Canadian Gazette, of that city, says:—

Mr. J. Castell Hopkins is one of the best known of Canadian writers. For four years he was associate editor of the Toronto Empire—the chosen spokesman of Macdonaldism in Canadian political life, and a keen and yet always sane advocate of Imperialism. He was one of the founders of the Canadian branch of the Imperial Federation League in Canada, and there is hardly a movement of this decade making for closer British unity which has not had the support of his ever busy pen. Two or three years ago Mr. Hopkins freed himself from journalism and the mental fetters which in Canada at least journalism involves, and devoted himself to Canadian literature. His "Life and Work of Sir John Thompson" is said to have reached the widest circulation of any Canadian book. His "Life and Work of Mr. Gladstone" treats of the career and views of that statesman in relation to Imperial and especially Canadian problems, and he hopes

before this year is out to publish a third work in which the life and reign of the Queen shall be regarded from a similar standpoint. "The Queen as an Imperial Factor" is not its title, but it might almost be; and realizing, as all Imperial statesmen do—even statesmen so little given to Imperialistic tendencies as Mr. John Morley—that the Crown has its chief justification and utility as an emblem of Imperial unity, we may welcome the treatment of the theme of the throne from this standpoint.

Mr. Castell Hopkins is now in London as the delegate of the Canadian Manufacturers' Association to the Congress of Chambers of Commerce of the Empire. The combination of Imperialistic literature and cotton yarns may strike the reader as strange, but it should be remembered that the Protective system has made Canadian manufacturers so great a factor in Canadian politics that they must ever have a dominant voice in the settlement of those questions of Imperial unity to which Mr. Hopkins devotes so much of his energies. He comes to the Congress to voice their warm approval of the closer commercial unity of the Empire, and those who watch the currents of Canadian life will know that their approval may, when translated into practical proposals, carry us far on the road. Another object of Mr. Hopkins' visit is to further a unique project—the Canadian Historical Exhibition of 1897. The intention of the enthusiastic executive chairman, Mr. O. A. Howland, M. P. P., and his associates is to mark the four hundredth anniversary of Cabot's discovery of the mainland of North America by an exhibition in the magnificent Parliament Buildings at Toronto, in which these four hundred years of Canadian history shall be made, as it were, to live again. By pictures, portraits, relics and living pageants, such as Lady Aberdeen so successfully carried out at Ottawa not long ago, the story of Canada will be told as it has never been told before—the tale of the discoveries of the Cabots and their French and English successors, who pushed European colonisation to the Pacific; the tale of prehistoric Canada when the Red Man held sway from sea to sea; the French regime with its many dramatic episodes and its picturesque life; the history of the more staid early English rule; and, lastly, the busy Canada of to-day, with its wheat and cattle, its gold and copper, its game and fish, its budding army and navy, and all its bustling national life. Having once gathered together so unique a record of Canada past and present, it will be sought to found a permanent national museum.

This is the undertaking to which Lord and Lady Aberdeen, the Dominion and Provincial Governments, and the institutions representing the learning and historical zeal of Canada have given their cordial approval, and Mr. Hopkins now seeks, with the aid of Lord Dufferin, Lord Lorne and Lord Lansdowne, as ex-Governor-Generals of Canada, of the Colonial Secretary, the High Commissioner, and all friends of Canada here to form a British Committee to assist the project, notably by securing the loan from English collections of pictures, relics, documents and other memorials of Canada's past, so that Toronto may be during the display a veritable Canada in miniature. The exhibition is most fortunate in the time at which it is to be held. The British Association meets at Toronto in August, 1897. The Toronto Industrial Exhibition, which is next year to be made a gathering of exceptional and indeed national importance, opens at the close of the

British Association meetings, and the Historical Exhibition will make the third of the memorable trio of gatherings. The appeal which Mr. Laurier has come to England to make is one which every friend of Canada—and their name is happily legion now in England—will be glad to further.

EDITORIAL NOTES.

"We will not stop until we remove the last vestige of protection."—Mr. Laurier at Winnipeg in 1895.

The Ontario Rolling Mills, Hamilton, Ont., have closed down. Laurier, Mowat and Misery.

The McClary Manufacturing Co., London, Ont., have laid off a large number of their workmen. Laurier, Mowat and Misery.

The value of Canadian cotton mills stock receded from ten to fifteen points when it was known that Mr. Laurier's party had acceded to power. Straws, etc.

One thing that is about as certain as anything can be is that the Canadian tariff will be reformed within the next year by a Liberal Administration. —Montreal Herald.

The Dominion Typograph Co., Windsor, Ont., who have recently become large manufacturers of bicycles, have largely reduced their working force. Laurier, Mowat and Misery.

The London Bolt and Winge Works, London, Ont., have laid off a large number of their workmen because of uncertainty regarding the tariff. Laurier, Mowat and Misery.

In Montreal the day after the election bids for Bank of Montreal stock, one of the largest and best financial institutions in Canada went off two points. Straws show the direction of the wind.

"We have been elected on the platform of tariff reform, and it is on those lines that we intend to work. We shall apply ourselves at once to the revision of the tariff."—Mr. Laurier, at Montreal, June 25, 1896.

"Sir, our policy is freedom of trade such as exists in England, such as is practised in Great Britain. I propose that we should follow England's example and open our ports to the products of the world."—Mr. Laurier at Waterloo in 1894.

According to a report in the Globe Messrs. R. S. Williams & Son, who have a piano and organ factory at Oshawa, Ont., have closed down their works and will not resume for the present owing to uncertainty regarding the tariff. Laurier, Mowat and Misery.

The imports and exports for May show a decided increase over those for May, 1895. In the eleven months of the current fiscal year the exports increased six millions and the imports five and a quarter. The increase in customs revenue is \$2,375,000.

"We shall give you free trade, and although it will be a hard fight, we shall not give in one inch or retrace one step until we have reached the goal, and that goal is the same policy of free trade that exists in England to-day."—Mr. Laurier at Winnipeg in 1895.

The Customs Department have issued instructions to collectors to the effect that entry forms must be so filled out as to show where the merchandise being imported was purchased and whether it was brought direct from the country where produced, or via some other country.

When the news of the Laurier victory reached Chicago a telegram from there was sent to the Toronto Globe, professing to speak in behalf of fifty thousand people of that city conveying congratulations that the political change was made. Their sentiment is Canada for the Yankees.

The London and Petroleum Barrel Co., London, Ont., have laid off half of their workmen and reduced the pay of the others about twenty-five per cent. Laurier, Mowat and Misery. Uncertainty regarding the tariff is fast plunging the industries of the country into ruin.

He could promise them one thing, and he was sure it would be borne out by Sir Richard Cartwright, the next Minister of Finance in the Liberal Administration and that was to reduce the cost of living in the Dominion."—Mr. Laurier, at Ingersoll, October 25, 1895.

Some of the leading citizens of Alexandria, Ont., who were to be shareholders in a proposed joint stock company at that place to build a large boot and shoe factory, declare that since Mr. Laurier has succeeded in carrying the country they will decline to invest in the enterprise. Laurier, Mowat and Misery.

Sir Richard Cartwright, who is to be Finance Minister under the New Laurier regime, stated from his place in the House of Commons in 1893, vide Hansard, page 714:—

Our policy, first to last, has been to destroy this villainous protection system, which has been grinding out the vitals of this country.

According to a report in The Globe Mr. W. E. White, of the proposed Bowmanville (Ont.) Rubber Co., denies that that company will decline to erect rubber works at Bowmanville as promised. Mr. White thinks that the proposed industry would prosper under Laurier, Mowat and Misery. When this concern begin to erect their works we will chronicle the fact.

"They, the Conservatives, want to reform the tariff, and still retain the principle of protection. But I submit to you that the ideal system is the British system of free trade. Let it be well understood that from this moment we have a distinct issue with the party in power. Their ideal is protection; our ideal is free trade."—Hon. Mr. Laurier at the Ottawa Convention, 1893.

"Our policy from first to last has been to destroy this villainous protective system. I do not care in what particular way the reptile is destroyed. I do not care whether it is cut

off by the head or the tail, or in the middle. I do not care whether it is by free trade, positive or absolute, by revenue tariff, or by continental free trade."—Sir Richard Cartwright (Hansard, 1893, p. 714).

"I denounce to you the policy of protection as bondage; yes, bondage; and I refer to bondage in the same manner in which American slavery was bondage. Sir, our policy is freedom of trade as it exists in England, such as is practised in Great Britain. I propose we should follow England's example, and open our ports to the products of the world."—Hon. Wilfrid Laurier, at Waterloo, 1894.

Capt. F. A. Gaalco, director of the Brazilian League, who was sent to Canada by his government to enquire into the resources of this country, with a view to the establishment of a line of steamers between Brazil and the St. Lawrence, arrived in Quebec June 27th. He suggests that Canada can do a large trade in the export to Brazil, of potatoes, butter, cheese, flour, fish, animals, etc.

With reference to the trade policy of Mr. Laurier, Sir Charles Tupper says that if that gentleman will cease coquetting with the National Policy and come out squarely in favor of maintaining an efficient protection for the varied industries of Canada, he would not meet with that obstruction from the Liberal-Conservative party which had always been given to it by the opponents of that policy.

An effect of the elections last week, is the proposed laying off of a large number of workmen employed at the Welland Vale Works at St. Catharines, Ont. They have been notified that when the work now in hand is completed their services will be no longer required. Mr. Laurier's threat to smash protection is having its effect. Straws indicate the direction of the wind. Laurier, Mowat and Misery.

The Matthews Pork Packing Works at Peterborough, Ont., one of the largest establishments of the kind in the country, was destroyed by fire last week. The proprietors have decided not to rebuild or to resume operations for the present owing to the uncertainty regarding the tariff. A large number of people are thus thrown out of employment. Since his accession to power Mr. Laurier has declared that the revision of the tariff will be undertaken immediately. Laurier, Mowat and Misery.

Mr. John Palmer, a Fredericton leather manufacturer, has had a \$3,000 order from Toronto cancelled, the reason given being the uncertainty of the future caused by the Laurier success in the elections. The Matthews Pork Packing establishment at Hull, which was burned down on Wednesday, will not be rebuilt until it is learned what the Liberals will do to the protective pork duties. The Liberal tariff for revenue policy is affecting trade in Canada in exactly the same way as the Democratic tariff for revenue policy affected trade in the United States.—Gazette.

If the policy of Protection is not to be just in its application and national in its scope, based upon broad principle, then the sooner it is relinquished the better. It cannot be sustained, and ought not to be, for one class or interest or

section and denied to others equally within the contemplation of its purpose. The raw materials class have rights which cannot be ignored. Those who think otherwise forget that the advanced product is only the manipulation of the less advanced and the less advanced of the still less finished product, with human labor as the chief factor in all; and Protection upon the one cannot be successfully and permanently maintained without protection of the other.—Hon. Wm. McKinley.

The Conservative party that was so badly wrecked in the Quebec storm of last week went down with flying flags upon which were inscribed as follows:

- The National Policy.
- Preferential trade with the Empire.
- Fast Atlantic service.
- Pacific cable.
- Justice to minorities.
- Development of agriculture.
- National defence.
- Encouragement of immigration.
- Admission of Newfoundland to confederation.
- Maintenance of Canadian credit.

A few days before the election the Cleveland, Ohio, Leader, commenting on the Canadian situation, said:

Everybody who see Canadian newspapers, or is in any manner informed concerning the affairs of the Dominion, must be aware that the vehemence and absorbing interest of the campaign now in progress there far surpass the hottest of our national contests in years of Presidential elections. The reason is plain. The chief issue of the day in Canada is one which, indirectly at least, involves the sovereignty and destinies of that country. The question which underlies surface matters is whether the Dominion shall continue to aim at the building up of a virtually independent nation, though under the flag and nominal sovereignty of Great Britain, or shall henceforth shape its policies with a view to union with the United States as the ultimate destiny of British North America. We do not forget the emphatic protests of the Liberal leaders against the imputation of disloyalty. They speak for the present and it remains true that in the end their path is a straight road to complete absorption in the great nation to the southward.

It has been discovered, by the Iron Age, that "very cheap food has proved to be anything but a boom to the country," because there can be no benefit to the workingman and his family "if the food-producer has no margin left to purchase the workingman's products." This glimmer of good sense amid the darkness with which the press has surrounded the subject, is quite gratifying, says the Manufacturer. The practice of American newspapers, in late years, has been to contend that all workingmen are earning more dollars than ever before, and that each dollar will buy more than ever before. This is exactly equivalent to an assertion that while the power of the dollar to purchase commodities has increased, the power of commodities to purchase dollars has simultaneously increased, which is a manifest absurdity. The journal quoted from above states the fact when it shows that the swift decline of the prices of food, while appearing to benefit the mill-operative, really injures him, because it diminishes the farmers' ability to buy the products of the mill. The mill-hand gains, at first, by low prices, but he gains by the loss of the farmer, and in time he also loses because his customer has been impoverished. In the familiar estimates of the wage-advantages

of workmen the farm hand is always left out. Farm wages are decreasing and necessarily so, because farm profits are vanishing. After a while the non-agricultural people of this country may have the idea lodged in their heads that there can be no healthy and permanent prosperity while the farmers, forty per cent. of the people, grow continuously poorer.

Mr. Laurier, the Premier to be, cannot be considered an enthusiastic admirer of protection. In a speech made by him in Montreal on January 22, 1895, speaking of two of our most important industries, he said:—

But there are two articles which are the raw materials of every manufacturer, and these articles are coal and iron, and are they free? If you have a revenue tariff, the object will be to develop the country, and all raw material should be free under such a tariff.

Mr. Laurier does not seem to have it settled in his mind just what "raw materials" really are, but he seems fully determined to have a whack at our iron industry. The Spectator, alluding to this industry, says:—

During the past three or four years there has been a marked increase in the production of Canadian pig iron. Canada now produces 49.44 per cent., or virtually one-half of the total pig iron consumed by her manufacturers, and the percentage is increasing every month. We consume about 100,000 tons of pig iron a year, of which we make 50,000 tons ourselves. At the present time considerably over 3,000 men find employment in this industry, either at the furnaces or at the mines getting out the ore, or in the forest making charcoal. The production of steel in Canada, made from Canadian pig iron amounted in 1895 to 16,200 tons. For 1896 the output will be considerably larger, as a new steel-producing plant has been in operation in Hamilton since the first of the year. In this department of our industry a large number of men are employed, mostly skilled mechanics, making good wages. The rolling mills of Canada employ 2,557 men at the present time, being an increase of 541 over the number employed in 1891, according to the census of that year. The previous census returns show that in 1881 only 700 men were employed in Canada's rolling mills. To the N.P. must be credited the great development that has taken place in the various industries concerned with iron production in Canada. We ought not to lose sight of the fact that the majority of the men employed in these industries are married and have families. If all the people who are supported by the Canadian iron industries were brought together they would form a city larger than Hamilton. Yet this is the very industry that Mr. Laurier promises to wipe out of existence.

In a special telegram in the Globe from Bowmanville, Ont., it is stated that at a recent meeting there Mr. John W. Alexander, president and general manager of the Dominion Organ and Piano Co., of that place, assented to the publication of his views upon the tariff policy best suited to Canada, which included the following statement: (1) That he would not support any Government adopting a revenue tariff as low as 17½ per cent. (2) That any manufacturing concern which cannot live and prosper under a twenty-five or thirty per cent. tariff over the outside world should be allowed to retire from business. (3) That Mr. McConnel, a member of the company, had waited upon Mr. Laurier and asked him what was his policy upon the business in which they were engaged, and Mr. Laurier replied that organs and pianos, being luxuries, would be highly taxed under any tariff he would frame, whilst the tax upon the raw materials entering into the manufacture

of the instruments would be reduced. (4) That a policy of this kind would be more beneficial to him as a manufacturer than the present tariff. Without doubt a tariff arranged as above outlined would well suit Mr. Alexander and any and all other manufacturers of organs and pianos in Canada. Being luxuries, says Mr. Laurier, they are to be highly taxed, while the duty upon "raw materials" entering into their construction is to be reduced. Raising the duty would give Mr. Alexander the opportunity to correspondingly advance the price of his goods, thereby increasing his profits, and reducing the duty on his raw materials would give him a further opportunity to still further increase his profits. Mr. Alexander knows, if Mr. Laurier does not, that he has no foreign competition in his special lines of products—that there are enough organ and piano factories in Canada to supply the entire demands of the country, and that a concern with which he was at one time associated do a very large export trade in these articles. All of these concerns are earning fair returns upon their investments; and if Mr. Laurier really intends doing what Mr. Alexander says he has promised, their profits will be larger than ever. Mr. Alexander, it will be observed, does not promise increased pay to his skilled workmen when the Laurier regime comes into power.

LITERARY NOTES.

The Methodist Magazine and Review for July enters upon its forty-fourth volume with vigor. Its articles on "Anglo-Saxon Supremacy," and on "The Mennonites of Manitoba," have quite a Dominion Day flavor. Mr. Chant, of Toronto University, contributes a paper on "Michael Faraday," the eminent scientist. There are also finely illustrated articles on "Our Indian Empire," "Dalmatia and Its Memories," "Trades and occupations in Bible Lands," and a address on Arbitration by Lady Henry Somerset.

Scribner's Magazine for July contains a most readable article by Julian Ralph on Coney Island, illustrated by Henry McCarter. Coney Island is unique and peculiarly a New York production. Mr. Ralph calls it "our sun-bath and ice-box combined, our extra lung, our private, gigantic fan." He sketches its development from the early seventies down to its present complex and impressive charms—a resort which eight million people have visited in one year. The illustrations by Henry McCarter reveal what a man with a genius for seeing the picturesque finds in such a glaring mixture of the bright and ugly as exists at Coney Island.

The Ladies' Home Journal for July opens with a sumptuously illustrated article on Joan of Arc and her home, by Emma A. Hopkins, who entertainingly writes of the childhood and religious life of the Maid. Hezekiah Butterworth tells a Brook Farm story, "The Wife of Ben Bow," and Alice W. Rollins humorously romances of "A Town Bicycle." A trio of poems of the field, framed in a drawing by W. H. Gibson, and a musical composition—"The Lyndon Polka," by Mrs. Frances J. Moore, are page features. Ex-President Harrison discusses the Department of State, bringing into review, also, the diplomatic and consular service, and the Great Seal of the United States. In "Feeding a City Like New York" John G. Speed makes some astonishing statements, presents surprising figures, and asserts that New Yorkers could live comfortably for four months in case of a siege cutting off all their food supplies. The Curtis Publishing Company, Philadelphia; one dollar per year, ten cents per copy.

Outing for July is an ideal summer number. It opens with a valuable article on "The Trotting and Pacing Champions of To-Day," by E. B. Abercrombie. This is profusely illustrated with portraits of the equine wonders which promise to this season shave the two-minute mark. The fiction is unusually strong, including "Two Handicaps," a fascinating story of the turf, from the pen of Caroline Shelley; and "My Match With Eileen," by L. O. Robbins, an adventure in Ireland, in which the wheel plays a conspicuous part. Other notable features are "The Twenty-Raters," by R. B. Burchard; "Swimming," by Ed. W. Sandys; "The Cruise of the Snark," by G. A. Warder, and "A Night With White Goats," by Mary Trowbridge Townsend. The numerous portraits of famous horses and yachts in this number are alone worth many times the price of Outing.

THE CAUSES OF OUR FINANCIAL CRISES.

BY W. D. GRIFFIN.

We had a financial crisis in 1837-8, one in 1847-8, one in 1857-8 and one in 1876-7, and we would have had one in 1863-4 had it not been for the extraordinary high prices the United States paid us for our products during their Civil War, and but for our large increase in home manufacturing during the past few years which has largely decreased imports, there would now be a severe financial crisis; the proof of which will be found under the following sub-headings:

THE FIRST FINANCIAL CRISIS.

The British Government in building the Rideau Canal from Kingston to Ottawa which was completed in 1832, expended about \$3,000,000. This influx of gold for the then limited population led the Canadian importers to so increase their purchases that it not only swallowed up all that sum with the receipts for our exports, but besides left us with a heavy debt to Britain, and without gold to pay it. The result was that in the extreme scarcity of money many business men issued "fractional currency," little promises to pay, which circulated as specie in the localities where issued.

It was the hard times thus caused by the importers which led to the Canadian rebellion of 1837-8, for a prosperous people never rebel; political revolutionists have very little influence in good times. It is true there were some grievances, but they were not of such serious importance as to justify so futile and so radical a remedy. Those who suffered the most were among the first to unite to crush the rebellion, and then to push for the reforms they were striving for as they also did in New Brunswick, and secured them without any overt acts like those which caused so much evil to Canada. For example, prior to the rebellion, about 30,000 valuable emigrants annually came to Canada without any expense to the country. There has been no such flow since, of so large and so desirable a class of settlers.

There are those not conversant as the writer is with those times who believe the rebellion secured the reforms desired, but they differ from one of its principal authors, William Lyon Mackenzie, who in his later years, as admitted in the history of his life, said it "was an error of the head," want of judgment, as also it was lack of financial knowledge of the importers, who as related originated the financial crisis which induced aspirants to incite the unwary to rebel.

THE FINANCIAL CRISIS OF 1847-8.

The financial stringency of 1837-8 more or less prevailed until the union of the provinces of Ontario and Quebec in 1841. The government then borrowed \$7,000,000 from Britain for construction of the St. Lawrence canals and other public works. The expenditure again led to "easy times," as borrowed money usually does. But too often the fruit is bitter. For example, we have already paid about \$20,000,000 of interest on the amount and still owe the debt. Again, as during the preceding crisis the importers imported much faster than we exported to pay with, and the borrowed money was insufficient to pay the excess or balance of trade against us. The attempt was then made to remove the oppressive burden of debt thus laid upon us by the importers by borrowing from the loan companies and building societies to which the then hard times gave birth. But as the interest required was always several times more than could be made from the use

of the loans, nearly all those who went aboard of this money lenders' ark soon found themselves submerged, and that their last state was worse than the first. If they had turned over their property to their creditors they could not have been worse off, and their creditors would have lost less. To sum up, the financial crisis 1847-8 was caused by imports largely in excess of our exports, and thereby leaking away the capital and deposits of the banks, and undermining the financial stability of the country.

THE FINANCIAL CRISIS OF 1857-8.

From the time of the financial crisis of 1847-8 unto the commencement of the construction of the Great Western, Grand Trunk and Northern Railways there was a great scarcity of money. The outlay on these roads of borrowed money coupled with the very high prices received for farm products during the Crimean War once more gave us an abundant supply of money. The natural result should have been a large accumulation of gold in the vaults of our banks. In the place thereof as in the two previous crises the importers largely imported in excess of all our exports and of all money brought into the country for the construction of railways. The Government returns show that during the nine years ending with 1858 the excess of the imports over exports was \$79,356,537, and the interium interest accruing thereon brought up the debt to over \$100,000,000. That is an amount far in excess of all that was paid out for railways during that period. It is well here to notice that all the money for these railways was paid for with British goods, which under wise legislation could and would have been manufactured in Canada, and the gold have been kept in our banks free from interest, in place of the interest draining securities of Canadian railways now treasured up in the banks of the British money lenders. And on which the interest already has been more than double the amount spent for the railways mentioned.

In this financial crisis the banks were so completely drained through the excessive imports that they found it impossible to furnish the necessary funds for the purchase of produce, unless it was shipped in time for them to get the returns before the importers could collect their notes and demand gold or exchange for them. The laborers were deprived of work, the builders of every name were deprived of business, a multitude of manufacturers of employment, the mercantile business severely suffered, every national interest suffered even more severely than in the financial crisis of 1876-7. And all because for the previous nine years the importers had been employing an army on an average of 30,000 at \$1 per day for 300 days in the year in foreign countries, doing work Canadians could have done. And that means in excess of what the foreigners took of our products, and therefore outside of a fair exchange, and thus prospering to that extent the farmers, laborers, manufacturers and other business men in foreign lands while ruining our own.

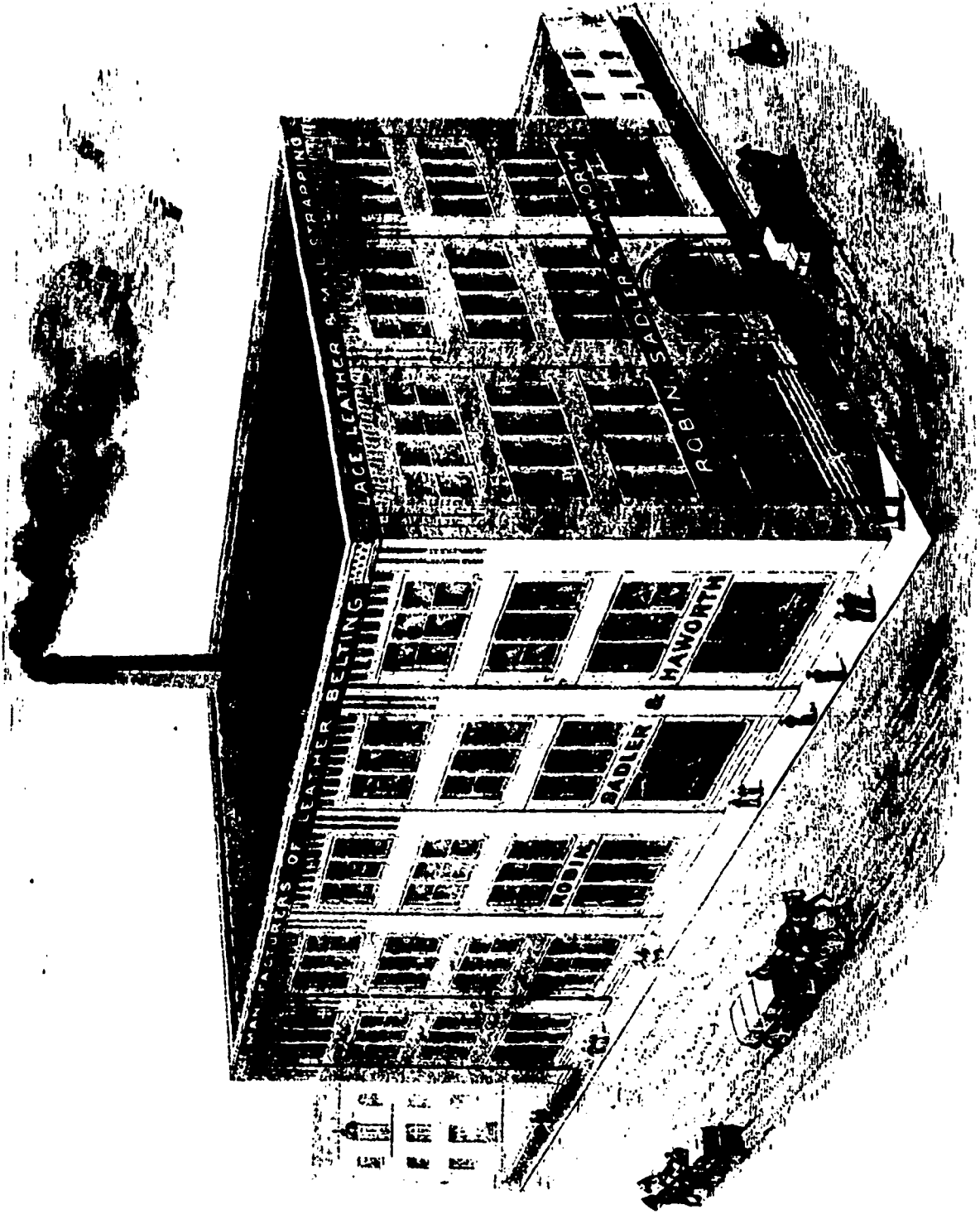
The following fact indicates the disastrous effects upon the farmers. In the vicinity of the little village of Arkona in Lambton county forty farmers had to mortgage their farms to pay the assignees of one bankrupted merchant. This instance largely represents the effect on farmers and business men throughout the country.

This crisis would have been followed as before related by another in 1863-4 had it not been for the unusual high prices paid for Canadian products by the United States during their Civil War. For several years after

the close of that war money became more and more scarce through being drained away for excessive importations and interest thereon, which by wise legislation could have been and should have been prevented.

THE FINANCIAL CRISIS OF 1876-7.

From the close of the Civil War in the United States to the commencement of the construction of the Intercolonial, the Air Line, of the Great Western, the Canada Southern and other railways, the new Welland Canal and other public works, monetary stringency prevailed. The Year Book shows for 1868 and 1869 only a little over \$9,000,000 of bank notes in circulation, with the commencement of the public works referred to they increased to over \$15,000,000 in 1870, and in 1874 to almost \$28,000,000 or more than two hundred per cent. increase in four years. Money is the life current of industry and of national prosperity. If there was sufficient currency in 1869 there was about two hundred per cent. too much in 1874. But the rates of interest did not decrease which proves there was not too much in the latter year. The heavy expenditure of borrowed money as in each previous era led the importers to most unwisely think, if we may judge by the excessive amount they imported, that they could scarcely import too many goods. The result was that in the six years, ending with 1877 they imported in excess of our exports to pay for them to the amount of \$186,553,658. To pay for these and previous over-importations the banks up to 1877 had been drained of over \$125,000,000 of capital and deposits. This capital and deposits accrued during the expenditure on the said public works—that is accumulated while the people had work. And now had to be drawn upon by business men to meet payments that could not be collected of their customers who were deprived of work by the importers. The bank returns furnish proof that while business was decreasing the banks increased their discounts in four years to over \$57,000,000. The natural result was that the banks were drained of every dollar of capital and deposits, except the government deposits. The proof is that in consequence of the great decrease of government revenue, Sir Richard Cartwright in his utter ignorance of the financial condition of the banks and of the country notified the banks he must have the government deposits. They were terror-stricken, for it simply meant, if paid over, that every bank, from the Bank of Montreal down, would have to close their doors, and necessarily a complete collapse of business all over the country. In their distress they secured the services of the Globe and Mail to unite in demanding that the Finance Minister should go to Britain, and borrow not to float the Government, but to float the banks, and through them the business of the country, and which it will be recollected he did with his "two-faced shield," while with open face he asserted in parliament that the severe financial depression was because of the incompetence of the business men, whereas it was the result of the financial blindness of the importers and the dishonesty of too many of them in importing shoddy and other fraudulent and worthless goods, and coupled with the incompetence of the rulers who practically have never lifted a finger to prevent excessive importations, and especially the importation of shoddy and other fraudulent goods; whereby, as clearly shown in a previous letter, the tax payers have been defrauded of \$2,000,000,000—that is one-half for such goods, and the other half the interest already paid thereon, and that is a total sum in excess of the total assessable



Montreal Factory, 511-513-515 William Street

THE LARGEST AND THE BEST EQUIPPED FACTORY FOR THE MANUFACTURE OF LEATHER BELTING
IN CANADA

Toronto Office and Factory, 9 Jordan Street

wealth of the whole Dominion. The proof that the rulers in both political parties were entirely lacking in a knowledge of the real causes of the financial crisis as now presented lies in the fact that not one of either party presented them to the House, although in full in the parliament library as herein given. In their bewilderment they appointed a depression committee to discover the cause of the financial depression. In its blindness this committee practically went hunting over land and sea, while the cause was all on record in the Government returns, as the writer at the time sufficiently furnished them in his Dominion Watchman. But alas, for the country, they were "flies on the hub of the wheel" of ignorance that was directly and indirectly crushing national prosperity in the dust.

A typical proof. In this depression there was wanted about \$40,000 worth of iron work for the addition to the parliament buildings then being erected. An Ottawa firm tendered for the work. Their tender was \$1 a ton higher than that of the United States firm to whom the government gave the contract. At the time in Ottawa thousands were out of work. The tax payers of the city had more or less to feed them. They could have done the work. The saving to the Government treasury was probably a \$100, the loss to the city in feeding those who could have done the work was directly and indirectly thousands of dollars. These toilers went to the Government entreating for working. They were recommended in mid-winter to go up to the rocks of Muskoka without a cent to pay their railway fare or a meal at home. They asked to be assisted to earn their bread—there were tendered stones covered with snow in a wilderness be-

yond their reach. And all this time the Government and importers were employing fully 50,000 workers in other countries doing work that could have been done in Canada. If they had given the work to Canadians it would have saved the twenty-five per cent. of bank capital Sir Frances Hincks, a bank president, reported the banks lost in the financial crisis of 1876-7, and besides a large amount of deposits to the depositors. And would have saved at least \$100,000,000, and more lost by the farmers, merchants, manufacturers and others in Canada through the defective financial knowledge of the Government and the importers.

The previous financial depression threw the Conservative Ministry out of office. The financial crisis of 1876-7, threw the Liberals out of office. And the present depression, which the Monetary Times showed in its issue of April 24, 1896, is already three-fourths as severe as in 1876-7, had great influence with the voters out of work, and with the merchants and manufacturers every week being bankrupted through the over-importations depriving them of business. And who seeing no signs of relief were ready to trust no matter how worthless the promises of new aspirants to the spoils of office all more or less ignorant of these industrial and financial questions. This every year is more or less typified in Toronto and many other municipal elections.

THE MANUFACTURING EXHIBIT OF THE GOVERNMENT.

The Government rightly claims that it has been the comparatively vast increase in home manufacturing that has saved Canada from a financial crisis like that which has been prevailing in the United States. The Year

Book shows that the increased out-put in 1891 over 1881 was \$166,000,000 which would for ten years show an average increase of over \$80,000,000 a year or a total of \$800,000,000 in ten years, with for the same period over \$300,000,000 of earnings of those employed in manufacturing. To which there should be added at least \$200,000,000 for raw material furnished by Canadians. If it had not been for this large increase of home manufactures we would have needed several hundred million of increased imports during the past eighteen years and with no increased exports, if as many to balance the account. The natural effect would have been another financial crisis before this, as severe if not more so than that in the United States.

Notwithstanding this vast increase in home manufacturing our over-importations were enormous. How were they balanced? By the money borrowed for building the C.P.R., and by the Government, and by various provinces, municipalities, loaning societies and other agencies. This ruinous borrowing has warded off the financial crisis that otherwise would have overtaken us before this. But which now, for interest on the borrowing during the past forty-five years, is \$45,000,000 annually as in a former letter proved. Therefore in relation to the home manufacturing the Government exhibit is true.

THE ERRONEOUS DEPOSIT LOGIC OF THE GOVERNMENT.

But when we come to the "deposit logic" the Government furnishes to prove that the country is prosperous, examination proves that their light is darkness. The Government presents to us \$41,000,000 of deposits it has received in the past eighteen years, and the \$118,000,000 increase of deposits in the banks

MICA BOILER and STEAM PIPE COVERING

WHAT IS THOUGHT OF IT!

To whom this may concern.

PENETANGUISHENE, March 12th, 1896.

This is to certify that we have used some of the Mica Pipe Covering on one of our main pipes in the tannery during the present winter and must say that it has given the very best satisfaction, there is no heat that escapes from the outside covering, it hardly being warm, in consequence there is very little condensation in the pipes. We can cheerfully recommend it to any parties wanting pipe coverings.

Yours truly,
(Sgd.) BREITHAAPT BROS. & HALL.

PETROLIA, April 22, 1896.

MESSRS. THE MICA BOILER COVERING CO., Toronto, Ont.
GENTLEMEN:—In regard to the Mica Pipe Covering on which you have asked us to report, we would say that we placed this covering on the steam pipes in our block of stores and offices last winter and at once noticed the largely increased heating capacity of our plant and a great saving in fuel. The covering was put on by our own men without any difficulty whatever.

Yours faithfully,
(Sgd.) VANTUYL & FAIRBANK.

TORONTO, December 3, 1895.

THE MICA BOILER COVERING CO., City.
GENTLEMEN:—We have tested the Mica Covering which you put on the boiler of the Dredge "Atlantic" in September last and find that it has effected a saving of about one-half ton of coal per day, or about twenty-five per cent. We believe it is the most durable covering for marine boilers in

the market, and will stand the wear and tear incidental to such boilers. We consider it a valuable improvement over the cement coverings owing to the convenience of removal and replacing same, for inspection or repairs to boiler.

Yours truly,
TORONTO DREDGING & CONTRACTING CO.
(Sgd.) F. DOTY.

THE TORONTO FERRY COMPANY, (LIMITED),
North of Scotland Chambers,
18 King Street West.

TORONTO, December 12, 1895.

THE MICA BOILER COVERING COMPANY, Toronto.
GENTLEMEN:—I have much pleasure in certifying that the Mica Boiler Covering placed by your company on the boiler of our steamer "Thistle" has proved satisfactory in every respect and has fully proved every claim you made for it. I find that since it has been put on, the consumption of coal has been reduced no less than twenty per cent. My chief engineer's report of the Mica Covering is very favorable, not only for its extraordinary coal saving qualities but also on account of the ease with which any part of it can be removed and replaced without injury. After the season's work I find the covering in perfect condition, and from the flexible nature of it and its inability to crack or crumble I anticipate a very long life for it.

All the steam pipes at our Electric Power Station at Hanlan's Point are covered with the Mica Covering and my engineer there also reports it as a first-class piece of work. From my experience of the above covering during the past season, I have no hesitancy in pronouncing it to be the best that has come under my notice.

Yours truly,
W. A. ESSON, Manager.

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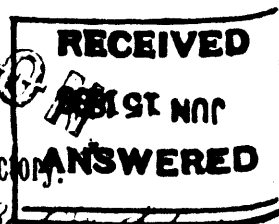
APPARATUS....

Office of

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Brighton, Ont. June 13 1896

To the Royal Electric Company
Montreal Quebec

Dear sirs

A number of people interest-
ed in electric lighting have told me
personally and also written me, that they
are informed that the Electric lighting
plant installed by you for me is not
giving satisfaction and it has not
been accepted by me. The parties making
these statements either know ^{that} to be false or have not
inquired from me or the towns-people within the last
five months, or they would know that the lights and
plant are working splendidly and to my entire satis-
faction, & the plant has been accepted and settled for.
Now for the interest of all concerned, I wish to
confirm the above statement and further to say that
the S.K.C. Dy name (since I took the obstructions out of my
Walter wheels which had collected in the wheels and
not being properly screened before starting) requires
less power than I expected it to do gives a fine steady
light and the regulation with a full load on it is such
that I do not have to touch the wheels more than four or five
times during a night run & I regulate entirely by the
watts wheels having no governors. We ran through
the two late terrific lightning storms and although both
Telegraph & telephone lines were wrecked round us and
the lightning was constantly flashing around the switch-
board we never had a flicker on our lights while

neighboring plants had to shut down & had, trans-
formers burned out. After having had an eight month
run with this plant and knowing the trouble was in
the wheels being clogged with black, and having visited
a large number of other plants to see the various systems
at work I have no hesitation in saying that our plant gives
the steadiest light I have yet seen, runs the coolest,
regulates the best uses less oil (less than one pint in
eight months) is the easiest taking care of and requires
less power for the number of lights than any other system
that I have seen. Visitors from other towns remark the
steadiness of and brilliancy of our lights and we have not
replaced over twenty lamps out of the three hundred
originally installed, eight months ago. Many central
station operators have visited the plant and all express
themselves being pleased with the S.K.C. dynamo -
admiring the simplicity of its mechanical construction
and the ease with which it operates. Any ordinary man
capable of running machinery can be instructed
fully in its operation in fifteen minutes, we have had
no trouble with the dynamo whatever or the transformer
and I am satisfied the regulation of the two phase system
is all right and that a more perfect piece of mechanism
than the dynamo furnished by you would be hard
to produce. I feel it is in justice due to you
to state these facts and that they may be given every
publicity you have my permission to use this
letter as you see fit and I trust it
will serve to completely contradict
the incorrect stories which have been
either maliciously or ignorantly circulated
respecting this plant. With you every
success I remain &c.

J. H. Davidson
Brighton
Ont

ALL USERS
—OF—
S. K. C.
APPARATUS
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TORONTO

as a proof of the rapid increase in the wealth of the people, a total of \$159,000,000. In his balance sheet the Finance Minister forgets the contra account which practically wipes out all this increase of wealth. Let us look.

The \$41,000,000 deposited with the Government has all gone to pay government interest in Britain, and of the \$118,000,000 deposited in the banks there is only about a million left, that is they only report about that much more gold than eighteen years ago.

Where has the money gone? It has been sold to the importers to pay for foreign products that could have been produced in Canada. The importers paid for these deposits with the notes they received from their customers who sold these goods thus imported to those thrown out of work by the importers. These customers for want of work could not pay

the merchants to whom the importers sold. The merchants unable to collect failed. In the eighteen years the failures were \$185,000,000. As shown by the Year Book the assets were about \$67,000,000. And thus showing that every dollar of the \$118,000,000 deposited in the banks by those who saved was consumed by those deprived of work by the importers. And therefore all of that \$159,000,000 of supposed increase of national wealth is an unmistakable delusion.

And the fact is tersely pointed out in the Monetary Times of March 27, 1896. It tells the banks that with a gain in five years of \$30,000,000 of deposits they only have a million of them on hand. And in harmony with my exhibit for their monthly returns only show about a million more gold than they had eighteen years ago. The data presented

certainly proves that we are on the down grade to another financial crisis. And the Monetary Times of April 24, 1896 points out to the banks that at the same rate of failures for the year as during the last three months the sum for the year will be \$23,000,000 or the same amount reported in the Year Book for the "dismal year" of 1878, and the Times plainly tells the banks that they must "call a halt."

In what way will they "call a halt?" It's well to ask will they stop furnishing currency to the Canadian producers, and furnish their gold to the importers to promote the prosperity of those in foreign countries? If they should, suicidal as it is, it would be no new thing in their history. In the crisis of 1876-7 one of the most reliable manufacturing firms in a small town east of Toronto well rated then, and higher rated now, from inability to collect asked for an extra \$1,000. It was refused. He asked why? Because in case of failure we could not realize on your plant, while the importers' assets can be realized on. In preferring the account of the importer the banker sets fire to his capital, to the capital of the importer, and to the capital invested in Canadian industries. And the too often repeated result has been a financial crisis.

(Concluded in next issue.)

GENERATING ELECTRICITY FROM COAL WITHOUT COMBUSTION.

A long sought desideratum, one upon which Edison has probably worked more than upon any other, and one whose economic value would be impossible to overestimate, appears to have been reached by Professor Wm. W. Jacques, the electrician of the American Bell Telephone Company at Boston. It is nothing less than the production of electricity from coal without burning the coal.

The process was thus described by the Boston Transcript, May 11th, and continued experiments since that date are said to be entirely satisfactory and there is every indication that the process will work as well on a large scale as on a small one.

In the simplest form of galvanic battery, two pieces of metal, one copper and the other zinc, are immersed in a receptacle of glass or earthenware partly filled with water, to which a small portion of sulphuric acid has been added. When the two separate pieces of metal are connected by wire a current of electricity at once begins to be generated. This is called a cell. But it has long been the aim of scientists to secure a cell in which carbon, not zinc, shall be oxidized, because the amount of energy contained in zinc is small as compared with that which resides in carbon, because zinc is expensive, and for other reasons which make such a cell as has been described undesirable, unreliable and expensive as a generator of electricity. In beginning his researches, Dr. Jacques realized that the thing desired was a cell in which carbon would be oxidized and consumed, not by combustion, as in fire, but at a low temperature. In every battery, properly so called, constant deterioration of the electrolyte is inevitable. Therefore, Dr. Jacques rejected the battery at the outset. His electrolyte must not suffer decomposition. The only thing consumed must be the carbon. He conceived the idea, and this was his great discovery, that the oxygen of the air might be made to combine with the carbon, not directly, but through the aid of an intervening electrolyte, which should

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Haekney Power Hammers

Are superior in many respects to most in the market. Made by

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THE PARIS ELECTRO-PLATING CO.

Manufacturers of

Stove Trimmings, Organ and Piano Trimmings, also all kinds of Brass and Nickel Plating Done

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WM. BARBER & BROS.

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carry it and present it to the carbon. For such electrolyte, he selected caustic soda.

To carry out his conception he took an iron pot which became in itself one of the "elements" of his cell. Into this he put caustic soda, which, at normal temperatures, is a solid. Applying heat, and raising the mass to the temperature of 300 degrees, it fused. He now had a liquid electrolyte. Into it he plunged a stick of carbon, and then thrust an iron tube down into the molten mass, almost to the bottom, and through this, by means of a pump, he forced air, which came bubbling up to the surface. The electrolyte caught and held a part long enough to present it to the surface of the carbon, which immediately accepted and combined with the oxygen that formed part of the air within its reach. The result fully realized expectations. It was found, the carbon and the pot being connected by wire, that a current of phenomenal volume flowed through it. And it was also found that, within limits, the amount of that current was proportioned to the volume of air supplied. Again, it was found that the ebullition produced in the mass by the passage of the air through it had a most beneficial effect in keeping the surface of the carbon free from particles of ash and other impurities, and that it had other advantages as well.

The experimental cell proves the discovery and illustrates the invention. For its size it yields a phenomenally large volume of current, but its voltage or electrical pressure, is slight. That, however, is a difficulty which electricians overcome easily. Dr. Jacques provided 100 iron pots, each 12 inches deep and 1 1-2 inches in diameter. These were set in 10 rows of 10 each and suspended over a grate, the whole being

bricked in to retain the heat. In each of these a suitable amount of caustic soda was put, and this was fused by fire beneath. Then on each a cylinder of carbon was suspended, and the carbon in each pot was connected by a wire with the rim of the next adjoining pot. Wires leading from the first pot and the last carbon constituted the terminals of the generator. Reaching down into each pot was an air tube, and these were all so connected above as to take air from a force pump. The terminals being connected through a series of incandescent lamps, current was generated which caused them to glow, the pump being driven by a motor actuated by a small portion of the current. Here was a veritable "generator" doing commercial work. The time had come for accurate measurements and tests.

To make these, Professor Charles R. Cross, professor of Physics in the Massachusetts Institute of Technology, and the electrical engineering firm of Stone & Webster of Boston, were called in. What had been obtained in the way of commercial results was thirty sixteen-candle incandescent lamps glowing at full brilliancy. The thing to be ascertained was the amount of carbon consumed and how it compared with the amount required to do the same work by using present methods. It was found that to maintain these lights for 18 3-4 hours required the consumption in the pots, by oxidation, of about eight pounds of coal. It was also found that the average pressure was ninety volts and that the average amount of current was sixteen amperes. Also, that the average horse-power developed was a little more than two-horse power. It was also determined, by careful measurements and calculations based thereon, that the electrical energy actually obtained from

one pound of carbon consumed in the pots was eighty-two per cent of the theoretical. The experts' report says: "It is, perhaps, fair to say that we may expect the carbon electric generator to yield ten times as much electricity per pound of carbon as does a good average steam engine dynamo plant."

It is understood that a syndicate has offered Dr. Jacques \$600,000 for a six-tenths interest in this remarkable discovery, but that he has declined the offer.

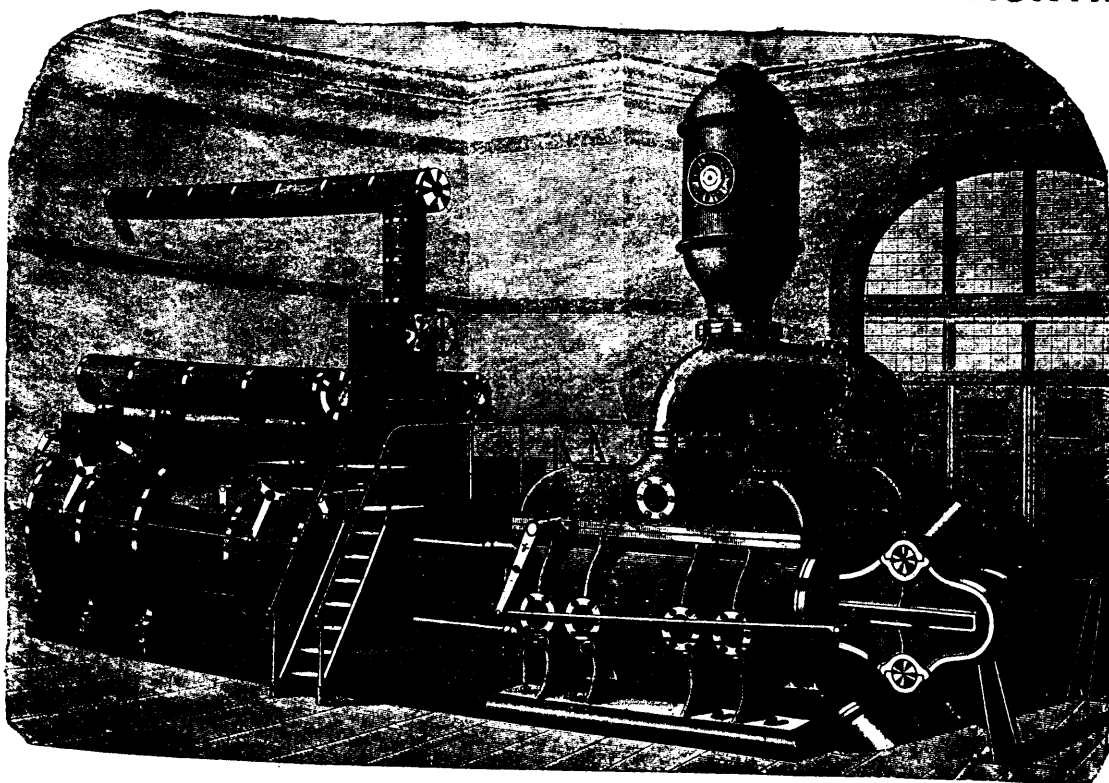
THE CANADIAN COAL INDUSTRY.

There are not wanting evidences that the coal mines of Nova Scotia are likely to participate to the full in what appears like a general expansion of trade. At any rate says the Mining Review, the outlook is better than for some years past and the contracts already concluded ensure a large increase on 1895. Although, owing to local conditions, the Acadia Coal Co. have been having a quiet time lately, their sales for the current year are in excess of last, and as a good portion of their output is consumed by large hardware industries in the Maritime Provinces, and the latter are fully booked for six or eight months ahead, there is no doubt that this enterprise, as well as the Springhill and Drummond mines, will benefit very considerably. We hear on good authority that so bright is the outlook in the iron and steel trades that the Nova Scotia Steel Co. expect for the first time to be able to consume the whole of their make of pig iron for 1896 at the steel works. This will mean a large increase in the consumption of fuel at both works, in which all the local mines participate. The Drummond colliery has had the busiest winter on record, having

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WORTHINGTON PUMPS ARE UNEQUALLED FOR EFFICIENCY AND ECONOMY

shipped over 40,000 tons during the first quarter of the year. This mine has been put in good order for the season's work and the capacity increased. The company were making preparations to start the back slope, but this may not now be necessary, as a contract for 30,000 tons which they took last year has this time passed to a competitor. Thanks, however, to the excellent quality of coal now being sent away and the greatly improved picking and screening appliances, the Intercolonial Coal Co. is more than holding its own in the general market and is likely to finish up the year with an increased haulage. The coal washing and cooking plants continue to work satisfactorily, getting rid of all the surplus slack and turning out 500 tons of large, strong coke per month. Messrs Matheson, of New Glasgow, are making a new picking belt for this mine capable of handling 700 to 800 tons a day. They are also busy with two splendid Lancashire boilers for Old Sydney mines, and have just completed an extensive range of haulage gear for the Dominion Coal Co.

Travelling Cape Breton-wards, we find that at New Campbellton the Messrs. Burchell are busy with their preparations for a good season's work. They have developed the 4 ft. seam to a capacity of 400 or 500 tons a day, and now that the ice has cleared away and traffic through the St. Peters canal is resumed, they anticipate steady work all through the year. They have already loaded several schooners and are chartering others for their regular trade.

The General Mining Association have had a large number of men at work all through the winter, putting the Old Sydney mine in order for a record output in addition to banking upwards of 50,000 tons. Improvements

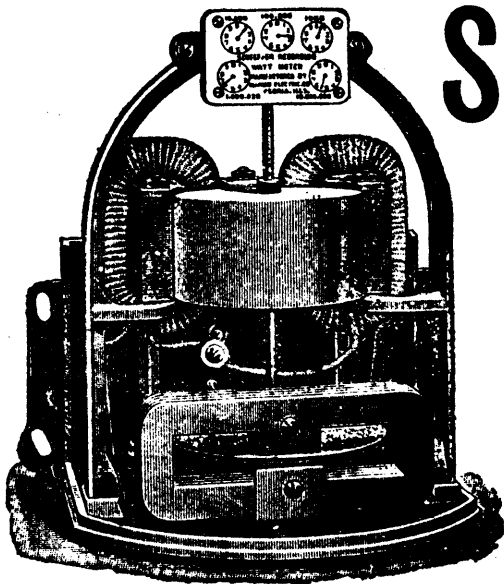
have been made in the pumping appliances by the use of compressed air, and a new battery of boilers is to be put in early in the season. The contracts already concluded in the St. Lawrence, Newfoundland and Nova Scotia markets justify the expectation that a substantial increase on last year's total will be shown, and this dozen of Canadian collieries may ship 250,000 tons and thus maintain its position at the head of all its competitors.

From the Dominion Coal Company great things are expected this year, as with the installation of endless haulage in Caledonia mine and the erection of another tower at International Pier, their equipment is now complete; the former is already in operation and the latter will soon be at work. So far as the capacity of the mines is concerned an output of 1,500,000 tons could readily be given, but there are one or two factors in the case which renders it difficult to forecast with accuracy how high the season's work may total. The unknown quantities are the requirements of the new People's Light and Heat Co., Halifax, and the possibilities of the American market. The former will not be in operation until the autumn, but from then until the end of the year they may probably take 30,000 to 40,000 tons. The 50,000 tons which this company sent last year to the States will be increased to at least 100,000, possibly more. Half of this will be used by the railway companies and half for domestic and other purposes. Should the gigantic scheme which Mr. H. M. Whitney is now seeking to carry through the Massachusetts' Legislature become a fait accompli, a permanent market for a very large quantity of Cape Breton coal would be assured, but in any case this can-

not effect the tonnage for 1896. Sales up the St. Lawrence will be at least 150,000 tons in excess of last year, and as Montreal stocks are by this time almost depleted, shipment will commence earlier than for many years past. We understand that the first cargo for Quebec was shipped from Louisbourg on the "Loughriggholme" as early as April 17th. Altogether it seems probable that this large and enterprising corporation will, during 1896, ship not far short of 1,200,000 tons, and we trust this is only the earnest of still larger shipments and the beginning of more profitable seasons.

It only costs \$13.50 from Detroit, \$15.50 from Toledo, \$18.00 from Cleveland for the round trip to Mackinac, including meals and berths. One thousand miles of lake ride on new modern steamers for above rates. Their new steel passenger steamers are all in commission, making four trips per week between Toledo, Detroit, Mackinac, Soo, Petoskey, Duluth. If you are contemplating a summer outing, send 2c. stamp for illustrated pamphlet. Address A. S. Schantz, G.P.A., Detroit, Mich.

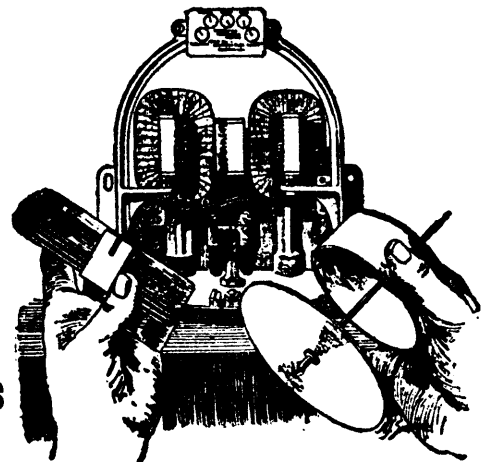
At the commencement exercises of the graduating class of '96 from the Stevens Institute of Technology, Hoboken, N.J., held June 18, 1896, the degree of Doctor of Engineering was conferred by the faculty and trustees of Stevens Institute upon Commodore George W. Melville, Engineer-in-Chief of the United States Navy, in appreciation of the excellent engineering work performed by Commodore Melville for his country and the advancement of the science of steam engineering, well illustrated in the world-wide famed "White Squadron." Only once be-



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Accurate from 4 C.P.
Lamp to full load.

No Commutator
No Brushes
No Contact Points



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We are now manufacturing all our TRANSFORMERS

We guarantee Efficiency, Regulation and Insulation

Incandescent Lamps from 5 C.P. to 500 C.P., 3 to 4 Watts per C.P.

The PACKARD ELECTRIC CO., LTD. ST. CATHARINES, ONTARIO.

AGENT FOR MONTREAL, R. E. T. PRINGLE, IMPERIAL BUILDING.

fore in the twenty-five years' history of the Stevens Institute has the degree of Doctor of Engineering been conferred, and then upon Professor R. H. Thurston of Rhode Island, who formerly occupied the Chair of Mechanical Engineering in Stevens Institute, and is now Director of Sibley College, Cornell University.

In the course of a few days H. A. Lozier & Co., will start a new tube-making plant in Greenville, Pa., for the purpose of keeping his own three bicycle factories and other makers supplied with material. The new company will be organized with a capital stock of \$250,000. The product of the factory will be marketed to the general body of makers by the A. L. Moore Co., of Cleveland. The product of the factory will be bicycle and locomotive brass and copper tubing. The works will be one of the largest and the finest of their kind in the country.

The Brown & Sharpe Mfg. Co., machinery and tools, Providence, R.I., have sent us a handsome pamphlet entitled "Views Within our Works," and say their object in publishing the book is to recall their works to those who have visited them, and to indicate to others the nature and extent of their facilities for satisfactorily manufacturing machine tools and small tools for machinist's use. The book contains fourteen handsome views of the company's works showing many of the different machines in use for the manufacture of sewing machine parts, small parts of universal milling machines, vertical spindle milling machines, tool making machines, etc. This company are now manufacturing sixty different machines and 300 varieties of small tools.

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

The starting of any such concern means a demand for some sort of machines, machinery, or supplies, such as steam engines and boilers, shafting, pulleys, 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, alkalies, etc. It is well worth the while of every reader of the Canadian Manufacturer to closely inspect all items under the head of Captains of Industry.

The Perth (Ont.) car shops have orders for 400 stock cars, and a large number of refrigerator cars.

The Montreal Cotton Company has commenced excavations for a flume at their mills at Valleyfield, Que., to develop 800 horse power. It is intended that part of the power will be used for generating electric power for use throughout the town.

Mr. J. Moses, Vernon, Ont., has his new saw mill, grist mill and cheese box factory finished, and all are running full time.

The Talbot Brussels Carpet Company, Montreal, is being incorporated, capital stock \$200,000.

J. Mundell & Co., Elora, Ont., will rebuild their furniture factory burned recently.

The Sault Ste Marie Pulp and Paper Company, on June 24th, commenced excavations for their new buildings for the manufacture of paper and acetylene gas. The structures will be built of solid stone 90 by 300 feet, two storeys high with basement.

An explosion in the mill of the Kingston Hosiery Company, Kingston, Ont., June 25th, wrecked a portion of the building and machinery.

Mr. Proudfoot, a civil engineer of Port Arthur, Ont., has discovered an exceedingly rich deposit of gold bearing quartz in the Seine river district.

The Winger Woollen and Felt Company, Elmira, Ont., has been incorporated with a capital stock of \$25,000 to manufacture woollen goods.

McEachren's System of Drying, Heating and Ventilating

Under Recent Patents.



In construction and process of drying this Kiln differs widely from all others in use. They have given entire satisfaction where all others Dry Kilns have failed. They will season More Lumber in a Given Time, with a given heating surface and a given quantity of steam than any other Kiln now in the market. Their construction and mode of operating is such as to season lumber without Case Hardening, Checking or Warping. They work equally well on Lumber Right from the Saw and on Air Seasoned Lumber, the only difference being that one takes a little more time than the other. By a Peculiar Arrangement Found Only In Our Dry Kilns we extract the moisture from the heated air, return it through the heater again and thus preserve the heat passing from the Kiln instead of wasting it as is the rule with all other Blast Kilns.

Ventilating Fans, Shaving Fans, Pressure Fans, all sizes.

BLAST HEATING SYSTEM FOR LARGE BUILDINGS

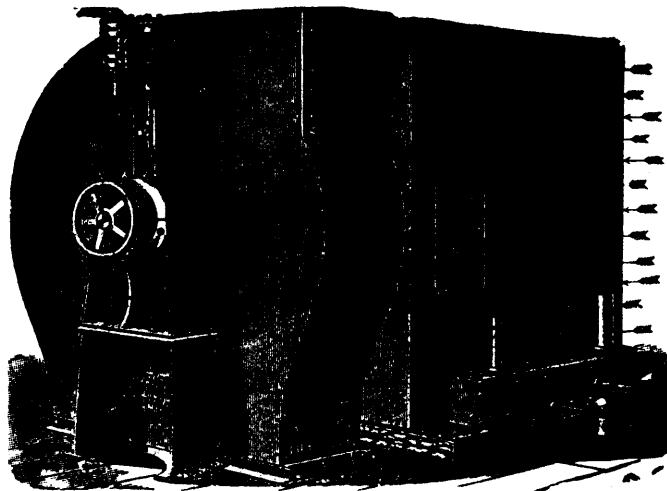
Little Wonder Boiler and new Hot Water Heating System half price of usual hot water system. STEAM BOILER CLEANERS, Feed Water Heaters covered by Patents of recent date in Canada and United States.

Second-hand Heaters and Fans made by the best American Manufacturers, only in use a short time, for sale at great reduction. Send for Illustrated Catalogue and Prices to

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Buffalo Lumber Dry Kilns



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

THE OWNERS ARE ENTHUSIASTIC.

All users of Buffalo Kilns write letters similar to this one:

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

Send for Catalogue.

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

Sold in—Toronto, Ont., by H. W. Petrie.

Brantford, Ont., by Canadian Machinery & Supply Co.

Montreal, Que., by Canadian Machinery Agency.

Chicago Store, 22 and 24 West Randolph Street.

New York Office—26 Cortland Street,

J. O. and H. Mooney's flour mills at Alexandria, Ont., were destroyed by fire June 26th. Loss \$30,000.

Hamilton smelting works were started again with regular staff on June 24th, the furnaces having been cleaned out.

The San Joaquin Gold Mining Company, Victoria, B.C., is being incorporated with capital stock of \$1,000,000.

A stock company is to be formed at Rapid City, Man., to rebuild the woollen mills recently burned at that place.

The London & Rossland Mining Co., Rossland, B.C., capital stock \$750,000 is being incorporated.

The W. R. Gardner Tool Company, Brockville, Ont., has been incorporated with a capital stock of \$100,000 to manufacture edge tools, etc.

The Lake Manitoba Railway and Canal Company will apply to Parliament at its next session for power to extend its road to the River Saskatchewan.

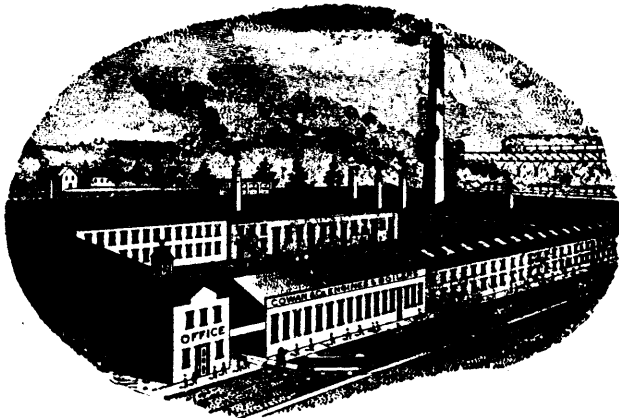
The Toronto Radial Railway Co., is being incorporated to take over and electrify the defunct Belt Line Railway.

The new Gullene Collar Co.'s factory to be built at Granby, Que., will be 150 feet long by thirty-five feet wide. A railway siding will be put in to facilitate shipping.

\$25,000 is being spent on new buildings by the Western Fair Association at London, Ont.

The Pioneer Development and Exploration Company, London, England, a British Columbia mining company issued its prospectus on 23rd June. Capital stock £150,000.

COWAN & CO., GALT, ONTARIO
Manufacturers of
Woodworking Machinery

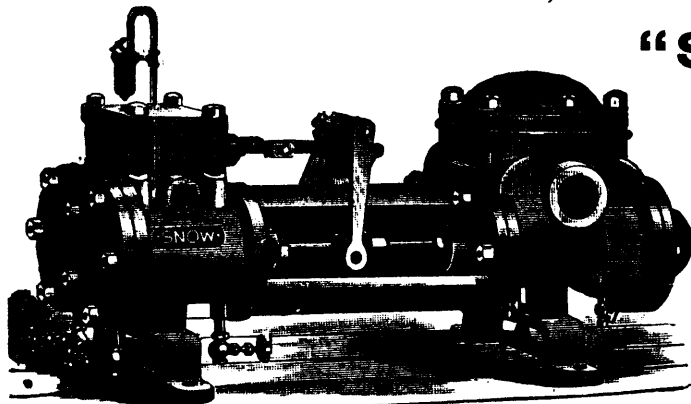


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Corliss and
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ENGINES.
BOILERS.
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MOFFAT'S
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Old Wood Tools, Engines and Boilers, taken as part pay on new. We have on hand a number of . . . **Rebuilt Wood Tools** which we offer at low prices and most favorable terms. . . **Engines and Boilers** **WRITE FOR** Terms, Prices and Catalogue.

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321 ST. JAMES STREET, MONTREAL



"SNOW"
DUPLEX
STEAM
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EVERY SERVICE

Iron Tools, Wood-Working Machinery

STEAM ENGINES, BOILERS OF EVERY TYPE, SAW MILL MACHINERY, ETC.

CANADA MACHINERY AGENCY, W. H. NOLAN, Manager
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ECO MAGNETO
Watchman's
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Clock

WITHOUT BATTERIES.

Write for descriptive circular to

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Agents for Province of Quebec

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John Starr, Son & Co., (Ltd.)

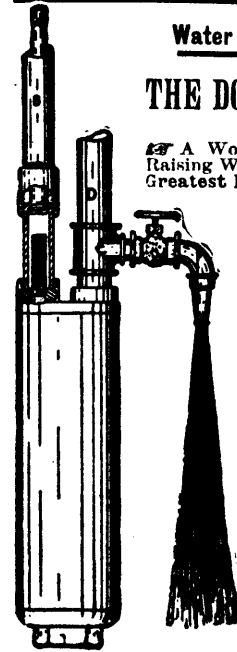
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Water for Country Use

THE DOMESTIC PUMP

A Wonderful Invention for Raising Water. The Windmill's Greatest Rival.



Used with our New Water Supply System for Country Homes, Hotels, Summer Resorts, also for Irrigation, Railroad Tanks, Stock Yards and Factories. THIS SYSTEM Supplies the Conveniences, Comforts and Luxuries of the City for every Country Home.

General Agents wanted for every State Send for Descriptive Circular.

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CONSULTING
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Electric Railways and Electric Light Construction Superintended.

18 IMPERIAL LOAN BUILDING
TORONTO

F. H. MASON, F.C.S., Consulting Chemist and Metallurgist
Analytical Chemist and Assayer, may be consulted on all matters pertaining to Chemical Technology and Metallurgy. Analyses of Alloys, Metals and Pigments. Mineral Water, Waters for economic and boiler purposes, and all kinds of chemical products and by-products Assays of all kinds of ores. The treatment of refractory gold ores and concentrates a specialty. Laboratory, Queen's Building, HOLLIS STREET, HALIFAX, N.S.

The Little Liscomb Gold Mining Company, Stellarton, N.S., is being incorporated with capital of \$12,000.

The Lake Harold Gold Mines Company, Port Arthur, Ont., has been incorporated with a capital stock of \$150,000.

A fire in W. Howry & Son's lumber yard, Fenelon Falls, on June 19th destroyed twelve million feet of lumber.

The planing mill and sash and door factory of A. Tessier, at Penetanguishene, Ont., was destroyed by fire June 25th.

The Chanteloup Brass and Iron Works, Montreal, were damaged by fire June 25th, to the extent of \$25,000.

Messrs. Morley Bros., of Detroit, Mich., are operating in an iron pyrites vein near Schreiber, Ont., the product of the mine to be taken to the United States for the manufacture of sulphuric acid.

The sales of Babcock & Wilcox Water Tube Boilers during May last aggregated for the United States 10,146 h.p., foreign 12,011 h.p.; grand total, 22,157 h.p. Number of Babcock & Wilcox Automatic Chain Grate Stokers sold during the month 15.

MACHINERY AND SUPPLIES WANTED.

If any subscriber to THE CANADIAN MANUFACTURER who may desire to purchase any machinery or supplies whatever, and so informs us, we will publish the fact in a conspicuous manner, and will make no charge therefor. These wants will be stated similar to the following:—

WANTED.

SITUATION as foreman or leading dyer by a Scotsman. 25 years' practice. Dress goods, tweeds, flannels, hosiery, ribbons, laces and garments. Dyeing and cleaning the latter preferred. Address SCOT, care of The Canadian Manufacturer.

A WOOD Pulp Mill Site for Sale. One of the most eligibly located in Canada. Easily accessible by both railway and water. Virgin spruce timber limits. Unlimited water power. Saw mill of 60,000 feet daily capacity in operation. Doubtless the Government that will be returned to power next week will place an export duty on pulp wood. Splendid chance for a profitable investment. For further particulars write W. R. H., care of Canadian Manufacturer.

WANTED—Address of parties who make machinery for the manufacture of horse shoes. Address G. P. T., care Canadian Manufacturer.

MACHINE LATHE, 18 in. swing, 3 foot bed; also a No. 2 or No. 3 Stile's Power Press or one of equal size. Toronto Electrical Works 37 Adelaide St. West, Toronto.

Wm. KENNEDY & SONS, OWEN SOUND, ONT.

MANUFACTURERS OF HIGH-CLASS

WATER WHEELS,
Electric Water Wheel Regulators,

Machine-dressed Heavy Gearing,
Shafting, Etc.

.... PROPELLER WHEELS AND MARINE REPAIRS A SPECIALTY....

TURBINE AND CASCADE WATER WHEEL

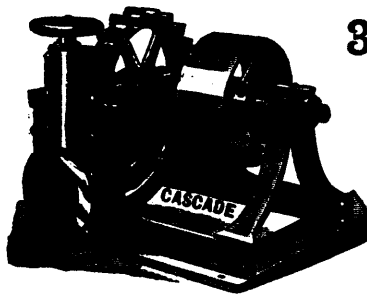
Adapted to all Heads from

3 Feet to 2000 Feet.

Our experience of 33 YEARS building Water Wheels enables us to suit every requirement of Water Power Plants. We guarantee satisfaction.

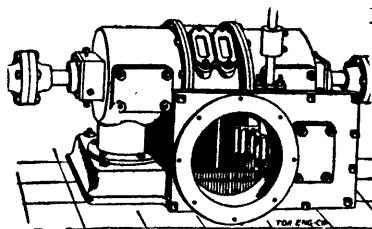
Send for a Pamphlet of either Wheel and write full particulars.

JAMES LEFFEL & CO.
SPRINGFIELD, OHIO, U. S. A.



Burnham's NEW IMPROVED STANDARD TURBINE
BURNHAM BROS., York, Pa.

"LITTLE GIANT" TURBINE



One Type of Horizontal.

Built in 17 Standard Sizes and 27 Special Sizes, making a range of 44 different wheels in vertical and horizontal cases.

We solicit correspondence from those interested in developing or improving water power.

.... ADDRESS....

J. C. WILSON & CO., Glenora, Ont.

The contract for covering the steam pipes at the Radial Railway Power House and the Niagara Falls Electric Light and Power Station has been given to the Clappison Pipe and Boiler Covering Company, of Hamilton, Ont., by the Goldie & McCullough Company, of Galt.

Rhodes, Curry & Co. Amherst, N.-S. have installed another engine at the car works for the sole purpose of running the electric lights in the different departments. The machine shops are running extra time and cannot do all the work; several jobs have been sent to Sackville and St. John to be finished. In a few days they will start on an order of fifty box cars for the I.C.R. The balance of an order of fifty hoppers for the I.C. Mining Co. are all set up and will be completed in a few days. As soon as these are completed they will start on an order of cars for the General Mining Association of North Sydney, Cape Breton.

Messrs Carson & Co., St. Catharines, Ont., have been awarded the contract for the construction of the Petrolia waterworks. Their bid was \$131,945.

The B.C. Iron Works Co., Vancouver, B.C., some time ago asked for exemption from taxation on extentions. The council have asked for further particulars and have received the reply that \$100,000 would be spent on a marine railway, \$125,000 on the extension of the present works for the manufacture of mining machinery, and \$100,000 addition to working capital. Two hundred hands will be employed. The finance committee are considering this application and an application in similar terms from J. Findlay & Co., a firm who announce that they are going to establish a plant for the manufacture of mining machinery in B.C.

The Rainy River District seems likely to rival British Columbia in its demands for British capital. The Seine river gold mines, promoted by the Ontario Exploration Company, London, Eng., issued June 22nd, its capital of £100,000.

Sixty men are employed in the granite quarries of Messrs Tayte, Meating & Co., St. George, N.B., from which the red granite is obtained for the American Museum of Natural History on Manhattan Square, New

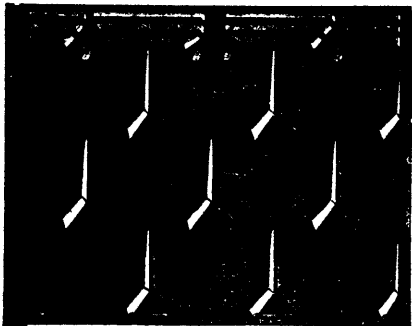
York. A large quantity has already been shipped and on the introduction of extra machinery, which is to be done at once the output will be greatly increased. Further orders are looked for from the American market.

Conferences have recently been held between the C.P.R. authorities and the St. John, N.B., city council with regard to harbor improvements to be carried out. The cost of the work is estimated at \$110,000, of which sum the C.P.R. will contribute \$40,000, and the city \$70,000.

St. John's, Que., has granted a bonus of \$20,000 to "La Societe Anonyme des Fainciers du Canada," of France. The company will take over the St. John's Stone China-ware Company's potteries and operate them on a large scale.

The Helen Gold Mining Company and the Rochester Gold Mining Company, both of Spokane, Washington, U.S.A., have been registered in British Columbia, the former with a capital stock of \$600,000, and the latter with a capital stock of \$500,000.

Eastlake Steel Shingles



Beware of Worthless Imitations.

METALLIC ROOFING CO., Ltd

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Welland Vale Manufacturing Co.

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**AXES, SCYTHES, FORKS, HOES
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Fine Gloves and Mitts

in Every Variety and Style.

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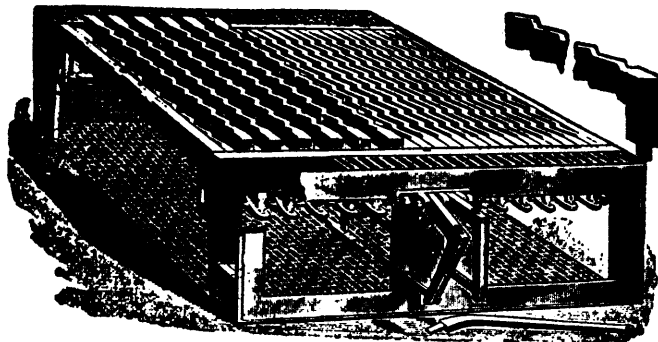
Ripans Tabules cure bad breath.
Ripans Tabules cure biliousness.
Ripans Tabules: one gives relief.
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Volcanic Patent Shaking Grate

MANUFACTURED BY

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Tests of Volcanic Patent Shaking Grates under Boilers
of Hamilton Street Railway



February 27, 1896.

EVAPORATION TEST.

Hamilton Street Railway Co.'s Power House.

Using Eight Sets of Grates. Volcanic Grate Bars, size 16 square feet. Test fourteen hours. Fuel consumed 4,005 lbs.

Water consumed 32,209.1 lbs.

Water evaporated, per one pound coal, equal 7.865 lbs.

Common Grate Bars, Size 16 square feet. Test 14 hours.

Fuel consumed 3,900 lbs.

Water consumed 26,352.9 lbs.

Water evaporated, per one pound coal, equal 6.737 lbs.

Saving in favor of Volcanic Grate Bars equal 1.108 lbs.; equal 16.4 per cent. increase in

evaporation; equal 14 p. c. saving in coal. Temperature of Feed Water 131 degrees. Water measured by an Empire Hot Water Meter. Coal used, one-half each hard and soft coal screenings. Both Grates fired by own fireman.

THOMAS BUCHANAN, Chief Engineer Hamilton Street Railway.

THE GURNEY FOUNDRY CO., Limited, TORONTO

WM. T. BONNER

415 Board of Trade Building, Montreal, Quebec

GENERAL AGENTS FOR CANADA FOR

Goubert Feed Water Heaters

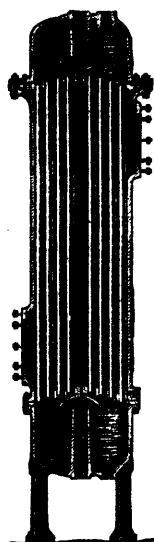
Heats Feedwater to nearly the boiling point by exhaust steam.

ECONOMICAL, EFFICIENT, DURABLE
AND SIMPLE.

All Sizes—50 to 5,000 h.p.

Stratton Separators

Separates entrained water from steam and ensures delivery of DRY STEAM to Engine. Doing away with that fruitful cause of accidents—
WATER IN THE CYLINDER.



The Thompson Electric Company's works Waterford, Ont., were destroyed by fire on June 19th. Loss \$30,000.

Charles Warwick's saw mill, a nearby chopping mill and engine room at Shedden, Ont., were destroyed by fire June 18th. Loss \$4,500.

Mr. John McLaren, Renfrew, Ont., is building a new flour mill at Mile End, at the Junction of the C.P.R. and C.A.R. near Montreal.

Matthew's new pork-packing factory near Hull, Que., was damaged by fire June 25th. Loss \$5,000, principally on machinery.

The Beaverdale Mills Euphrasia, Ont., have been burned. Loss \$4,000.

Barrie, Ont. has voted \$15,000 to improve its streets and for machinery.

The Ontario Gold Mining Co., Spokane, Wash., capital stock \$1,000,000 has been registered in British Columbia.

The Talbot Brussels Carpet Co., Montreal, is being incorporated with a capital stock of \$200,000.

The Wrought Iron Range Co., Toronto, is being incorporated with a capital stock of \$100,000.

540,000 feet of lumber was cut in the saw-mills at Arnprior, Ont., on Thursday, the 18th, when the mills were being tested.

The lumber trade at Bear River, N.S., this year is brisk. The total export will be in the vicinity of 5,000,000 feet, about 2,000,000 having been shipped.

Hamilton, Ont., will spend \$85,000 on sewage interception works.

The Lozier Mfg. Co., will, it is said, build a new \$75,000 plant at Westfield, Mass.

Shipments from River Hebert, N.S., to the United States during May were 2,284,500 feet scantling lumber, etc., 1,060,000 spruce laths, 3,890 sticks piling and seventy cords of wood.

J. R. Warner & Co., of St. John, N.B., have contracted to supply five cargoes of lumber for South America.

The Laurentide Pulp Company of Grand Mere, Que., shipped seven carloads of pulp to Liverpool, per Dominion liner Ottoman.

One million four hundred thousand feet of deals were destroyed by fire at River Hebert, N.S., last week.

The Schofield Woolen Co., Oshawa, Ont., is being incorporated with a capital stock of \$40,000.

The new chair factory in Warton, will be running in a few weeks. The machinery is being placed in position.

The chairman of the Board of Control will receive proposals until July 15th for the privilege of constructing and maintaining a telephone service for the citizens of Toronto for a term of five years or longer.

The flow of oil is so great at the new wells a couple of miles west of Bothwell, Ont., that teams are required constantly to haul the oil to the cars, there not being sufficient tankage at the wells to hold the oil for any length of time.

The following towns are considering the construction of waterworks; Arnprior, Campbellton, Cardinal, Cardwell, Creemore, Deseronto, Grimsby, Paisley, Perth, Simcoe, Smith's Falls, Thessalon, Thorold and Wallaceburg, Ontario.

The Tilbury Town Council propose to expend \$25,000 to secure a domestic water supply from St. Clair.

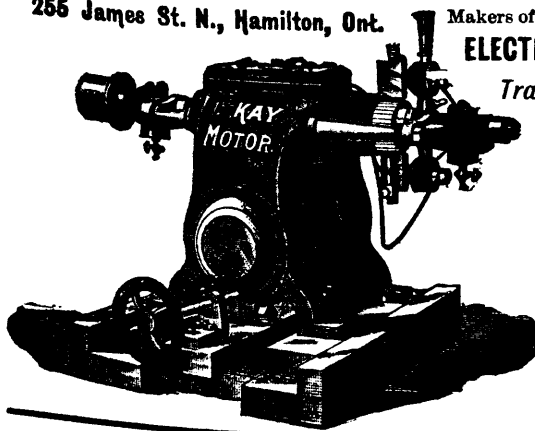
HAMILTON, CAN. Catalogue on Application.

THE B. GREENING WIRE CO. LTD.

Kay Electric Manufacturing Co.

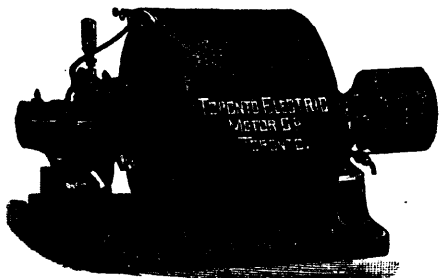
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Please let us know your requirements. Write for latest prices and testimonials.



OUR NEW 4-Pole Motor

In sizes down to 6 h.p. and speed down to 125 revolutions per minute.

At this speed it is especially adapted for direct connection. We have over 300 motors running in Toronto.

Our sales in Toronto for the past three years exceed the combined sales of all others.

TORONTO ELECTRIC MOTOR CO.

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RICE LEWIS & SON

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Corner King and Victoria Streets,
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ESTABLISHED 20 YEARS.

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ANILINES, DYESTUFFS, AND CHEMICALS

Of every variety, of the best quality and at the lowest prices. Delivery made at New York, Montreal or Hamilton

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Communicate with

JAMES MORE, Town Clerk
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Liberal Inducements--Good Location
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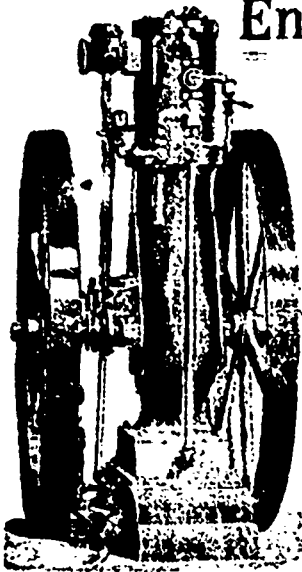
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40 WELLINGTON ST. WEST, TORONTO

THE ELECTRICAL GAS OR GASOLINE...

Engine



WRITE FOR PRICES AND TESTIMONIALS

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The most modern Hotel in the City.
RATES \$1.50 and \$2 Per DAY

Special Features

Steam Heated, Elevators,
Bath Rooms on Every Floor,
Speaking Tubes from Every Room,
Street Cars Pass the Door,
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Corner of Front and Simcoe Streets.

Opposite Entrance to Union Station
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CHARLES A. CAMPBELL, Proprietor

WRITE TO THE

PATON MANUFACTURING COMPANY

of SHERBROOKE, QUE.

-- FOR --

WORSTED KNITTING

-- AND --

FINGERING YARN.

Montreal Office:--409 Board of Trade Building.

Toronto Office:--33 Melinda Street.

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HESPELER, ONT.

IRON FOUNDER and MACHINIST

MANUFACTURER OF

**WOOLEN . . .
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FULLING MILLS;
CLOTH WASHERS,

WOOL & WASTE DUSTERS

DRUM SPOOL WINDERS.

REELS,

Spooling & Doubling Machines,

Ring Twisters, Card Creels,

Rag Dusters.

Lord Spindle Spooler

(See W. C. of Dresser Spools,

Patent Double-Acting Gigs,

Dyeing Machines.

Firstbrook Bros.

Dovetail and Packing Boxes

Top Post Sash Backs and Cross Arms, Wood

Painters, Etc.

Clear Boxes, Shipping Cases.

TORONTO, ONTARIO.

Write for Prices

The Sherbrooke, Que., Yarn Mills having sent a lot of yarn to a large firm in Quebec early last week, and the firm were so well pleased with the yarn that they immediately sent in a repeat order.

The Hamilton Stamp and Stencil works has received an order from the Grand Trunk railway for 30,000 baggage checks

Fire in the Komp Mfg. Co's. factory, Toronto, June 27th, did damage amounting to \$500.

An excelsior and wooden-ware factory has been started in Brampton, Ont., by H. A. Rider & Co.

W. C. Crawford of the Tilbury, Ont., Lumber factory will ship a car load of ladders to England next week.

W. D. Mace's roller mill at Tamworth, Ont., was badly damaged by the collapse of a bin on the second floor, June 24th.

H. M. McLean's roller mill and grain elevator at Quyon, Que., were destroyed by fire June 27th.

Four hundred tons of pulp is shipped to England from the Sault mills per week, and the quality and price of the pulp is such as to lead to the expectation that in a very short time the Sault Company will hold the lion's share of the English pulp trade. And yet, we permit the free exportation of 100,000,000 feet of pulp wood annually to the United States!—Algoma Pioneer.

There is a mining boom in full swing on the Pacific slope that has been little heard of in the east so far. Yet it bids fair, ere long, to eclipse the recent South African rush. The boom extends throughout British Columbia and the neighboring states of Oregon and Washington. It has wholly been stimulated by the gold finds on this side of the line and now the capital which is so badly needed there for development is beginning to flow in. There is no doubt whatever that there is ten times more gold waiting to be mined in our own Pacific province than South Africa ever heard of. Dozens of small companies are already making handsome profits and if British capital could be brought into British Columbia as freely as it went to South Africa that province's future is assured. Heretofore the only people who showed any faith in our Pacific mines were American Investors. Now that English capitalists are interesting themselves in our mineral resources the "slope" soon ought to become the Mecca of the speculative world.

The largest establishment at Strait Shore of the Portland Rolling Mills Company, St. John, N.B., who now carry on the business formerly conducted by J. Harris & Co., are very busy at the present time; in fact, they have been so for some weeks. There has been an increasing demand for bar iron of late, and a part of the plant is being operated night and day. The number of men engaged there is as follows: Plate and bore mills, one foreman and eighty-four men; nail factory, one foreman and forty-four men. In addition to the 130 men above mentioned, thirteen others find employment about the works. All the wrought iron used in the construction of cars at the Amherst works, including the iron axles, is manufactured by the Portland mills. The nail factory has only been running in its present location since February. The rolling mills, as well as the nail factory, are equipped with the very best machinery and their output ranks with the very best products of the kind. — Maritime Merchant.

The Keewatin Milling Company of Manitoba have just contracted with the Canadian-Australian Steamship Company to carry 900 tons of flour and wheat each trip for the next three boats to Australia and Suva. The reports of this trade show a steady and marked increase in the demand for the Canadian product, and so great are the exports that it is almost impossible to get freight space on the steamers without booking it several trips ahead. The Canadian flour made from the famous hard wheat of Manitoba, is steadily gaining favor in the markets of the southern colonies. One of the chief reasons of this is that flour made from hard wheat is very much stronger than that which has heretofore been used in Australia and Suva, and can be sold in the market even at seventy-five cents to \$1 a barrel higher price than soft wheat flour. At the increased price it is found more profitable and economical, and hence its popularity is growing. -Colonist

wing dam which runs out for more than a thousand feet into the St. Lawrence River. A fall of water is secured by means of this dam sufficient to develop at the low water season 15,000 horse power. This water power is to be transformed into electricity. Upon the dam a power house will be built which will run its entire length and show an unbroken interior of 1,000 feet long. The basement of this will be occupied by the water wheels. The main floor will contain the dynamos, of which there will be twelve, each of 1,000 horse power or 12,000 horse power in all. They will be of the Canadian General Electric Company's latest multi-phase type, and will generate current for transmission to Montreal for use there in lighting the city, operating the street railroads, and in any and all other lighting and power purposes. Apart from the fact that this plant will exceed in interest any yet installed, the contract for this electrical installation is the largest ever placed at one time for electrical dynamos. It is also worthy of note that, although it was competed for by every prominent electrical manufacturer in the world, the superiority of the apparatus

chosen kept the order with home manufacturers.

According to returns received at the Department of Railways and Canals, the total number of vessels locked through the St. Mary's canal from May 7th to June 19th, both days inclusive, was 1,293. One lockage admirably demonstrated the wonderful capacity of this grand work: The steamer "City of Grand Rapids," 135 feet long; the steamer Spokane, 311 feet long, and the schooner Iron King, 265 feet; the schooner Iron Queen, 275 feet, and the tug Stanwood, of 65 feet, a total length of 1,051 feet, passed through at the one time. The total tonnage of these vessels was 4,918.

The Manitoba government has issued its first official bulletin as to crops for this year. It gives the wheat acreage at 1,081,960, oats 442,445, barley 127,885 and flax 20,325. It is stated that the present has been the wettest season for fifteen years for seeding purposes, and the area under crop has been lessened compared with last year though 100 acres greater than in 1894. Rain has retarded the crops, but assures a bountiful harvest.

The Lachine Rapids of the St. Lawrence are at last to be utilized. For some time past work has been carried on by the Lachine Rapids Hydraulic Company upon a large

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 Manufactured by **DOMINION LEATHER BOARD CO., MONTREAL**
 Proprietors Sault Au Reçollet Paper Mills.
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**FINE TWEEDS, CASSIMERES, AND FANCY
 WORSTED SUITINGS AND TROUSERINGS.**

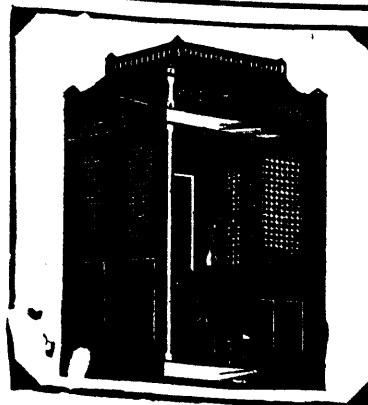
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**BRASS, BRONZE, PHOSPHOR BRONZE, ALUMINUM
 BRONZE, COPPER, ZINC and ALUMINUM
 CASTINGS TO ORDER. Large or Small.**
 Write for Prices **DEAN BROS., 184 Richmond St. West, Toronto**



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 WORKS
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**ELECTRIC HYDRAULIC
 STEAM & HAND-POWER
 PASSENGER & GOODS
 ELEVATORS. DUMB WAITERS**

CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office, from April 14th, to April 28th, 1896.

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

Fetherstonhaugh & Co., Bank of Commerce Building, Toronto.

Ridout & Maybee, 103 Bay Street, Toronto.

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

A. Harvey, Central Chambers, Ottawa.

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

- 51,971 Construction of bicycle and vehicle wood rims, John H. Kydd and John B. Mitchell, Bowmanville, Ont.
- 51,972 Support for incandescent mantles, John W. McKnight, Philadelphia, Penn.
- 51,973 Ice velocipede, Chas. Cecil Casselman, Orillia, Ont.
- 51,974 Carriage axle, Hedley A. Patton, Oxford, N.S.
- 51,975 Truck, Wilbert Richman, and Harry Jones Richman, Selom, William H. Stehle and Somers L. Doughty, Atlantic City, N.J.
- 51,976 Filaments and carbons for electric lamps, John H. D. Wilan, 16 St. Helens-Place, London, Eng.

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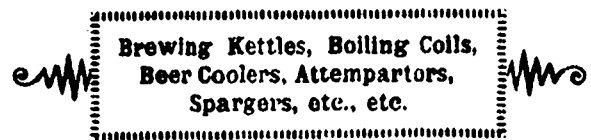
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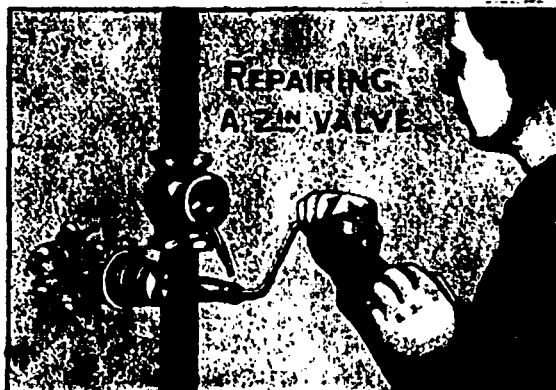
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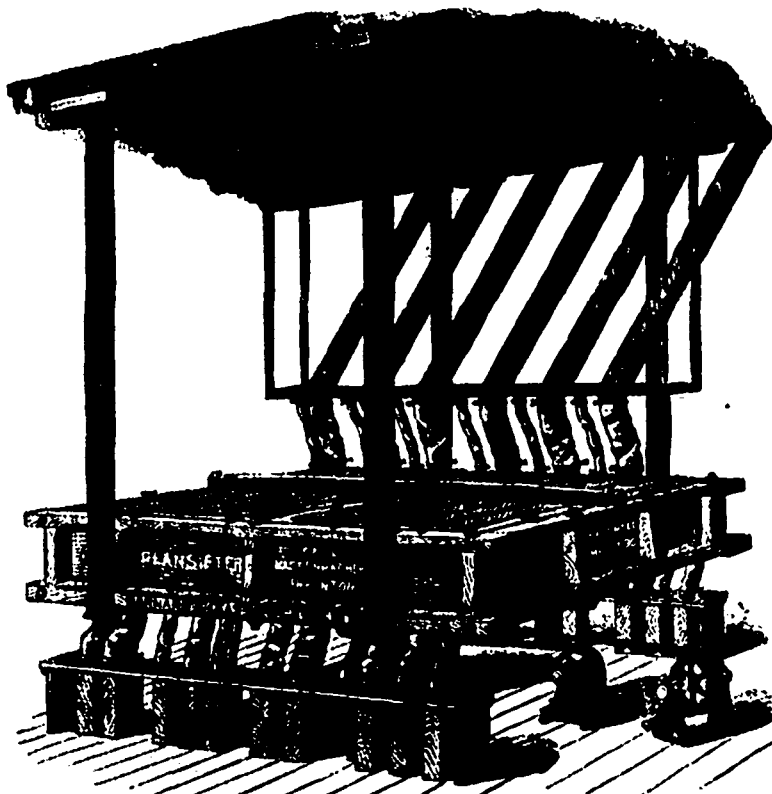
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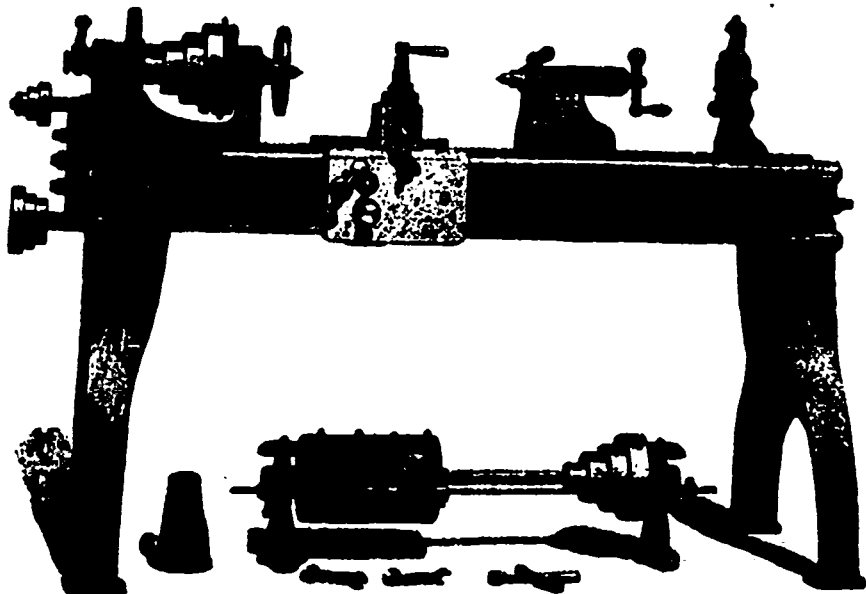
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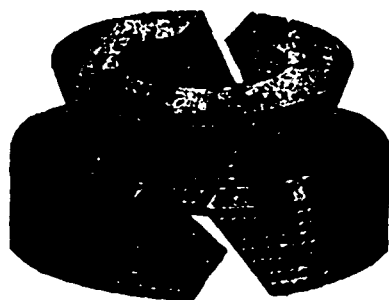
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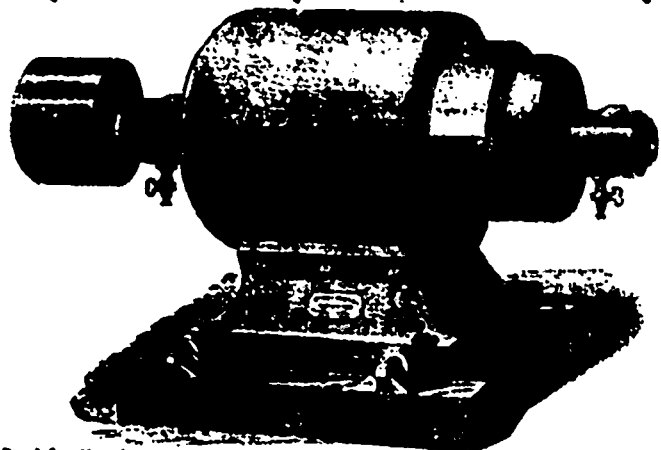
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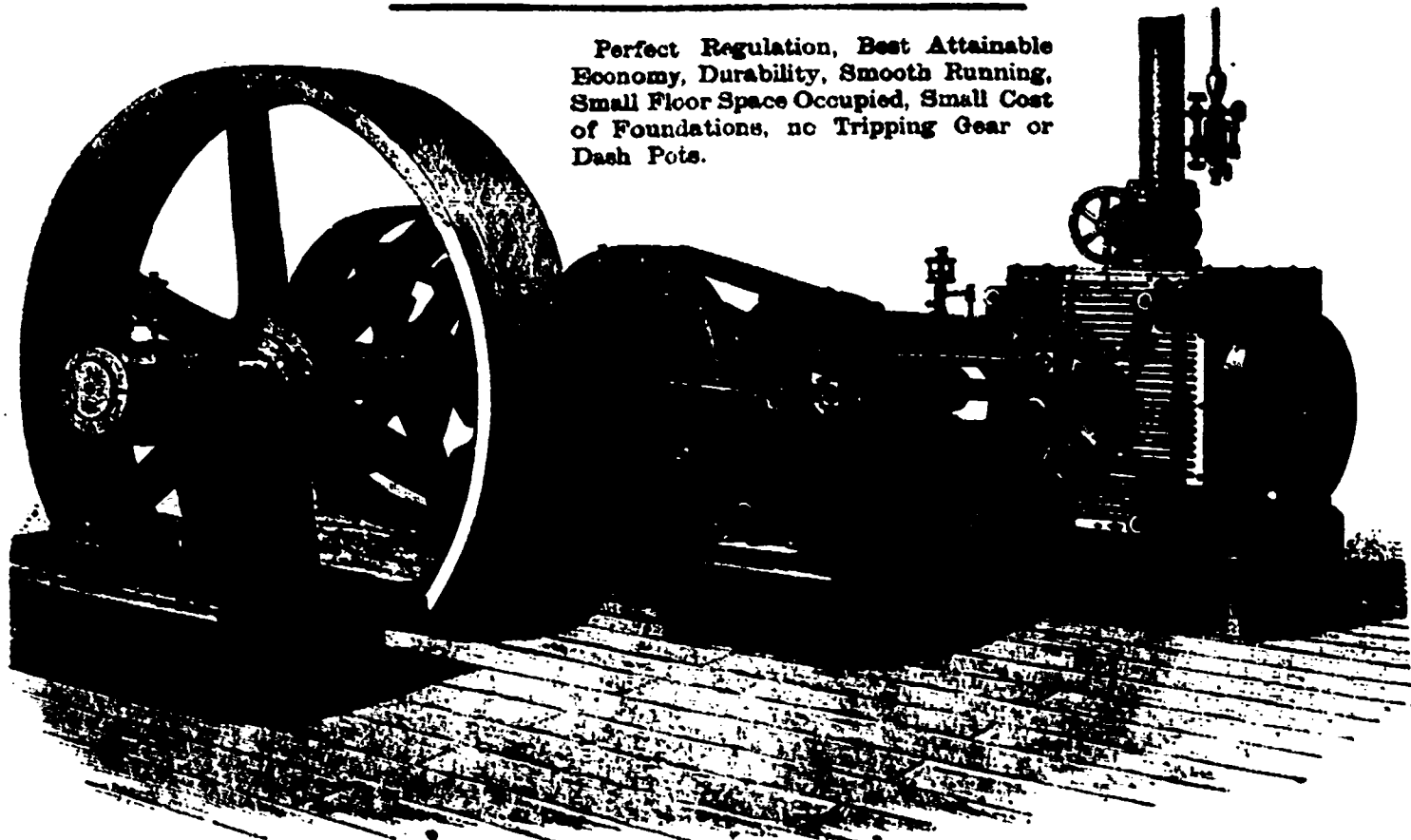
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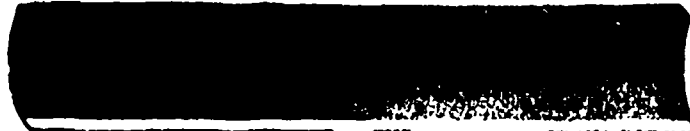
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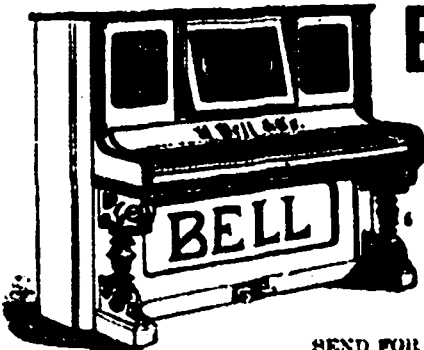
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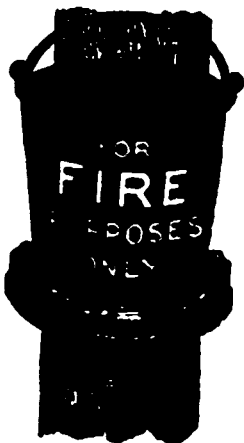
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