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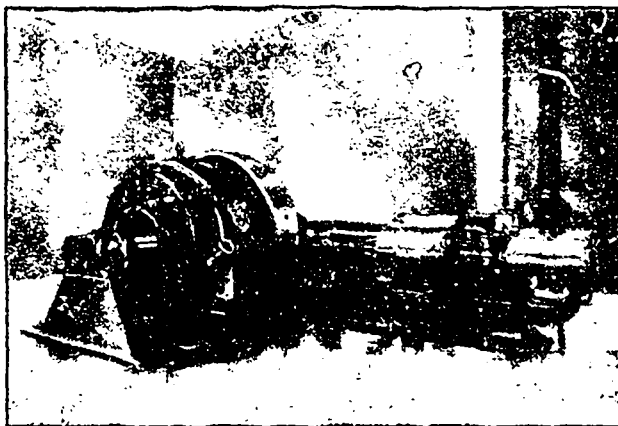
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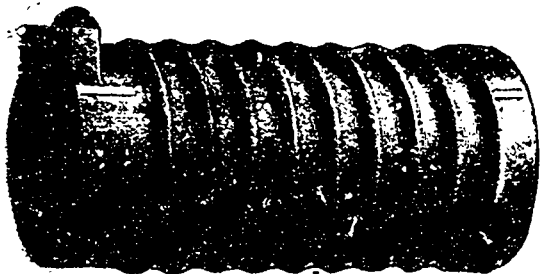
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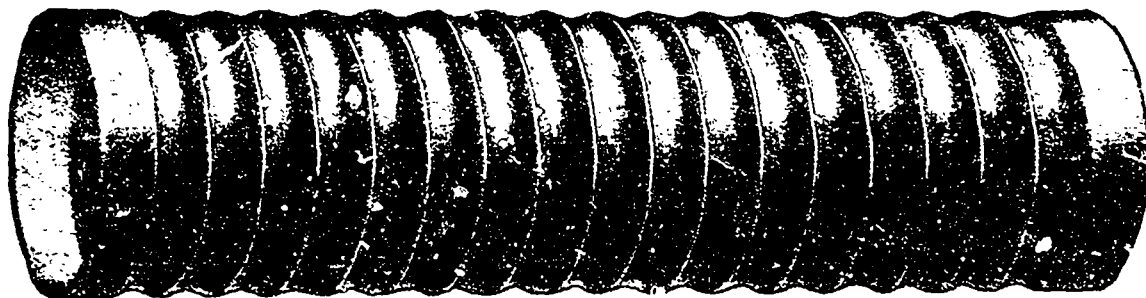
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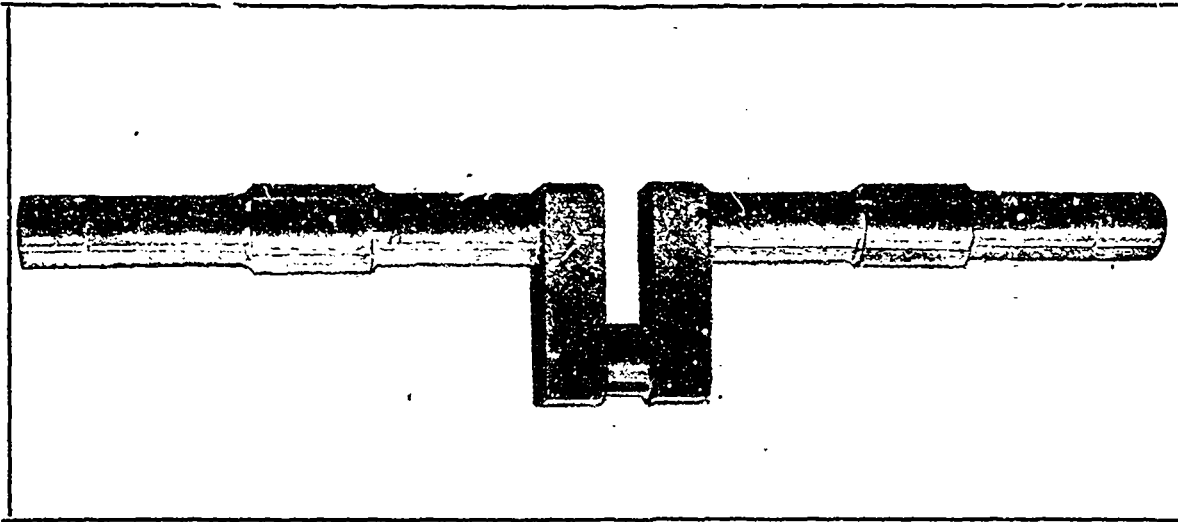
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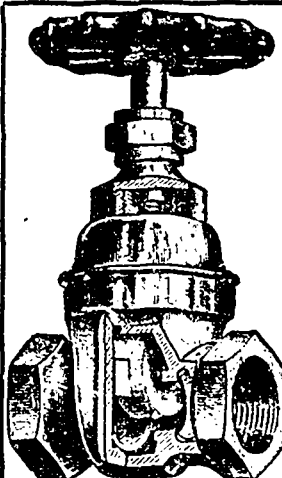
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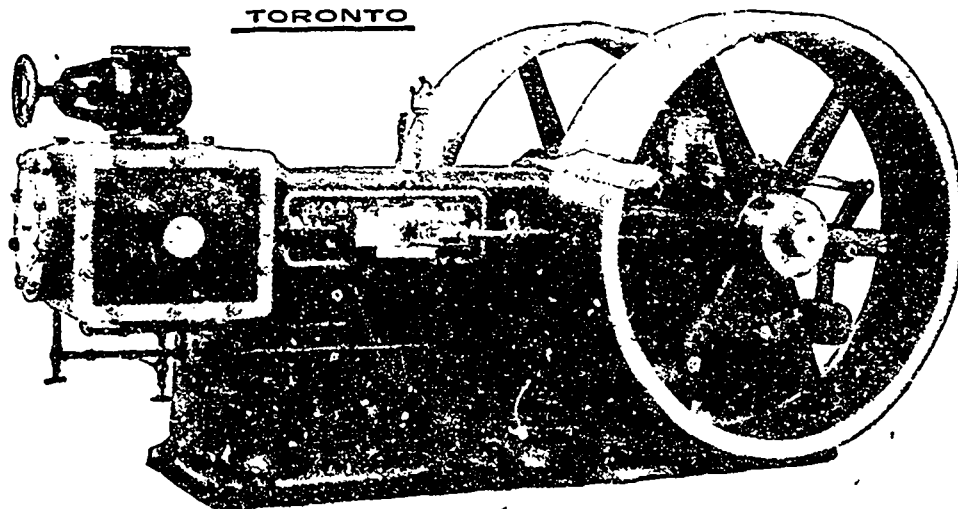
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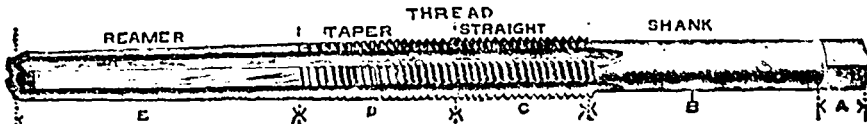


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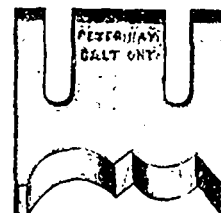
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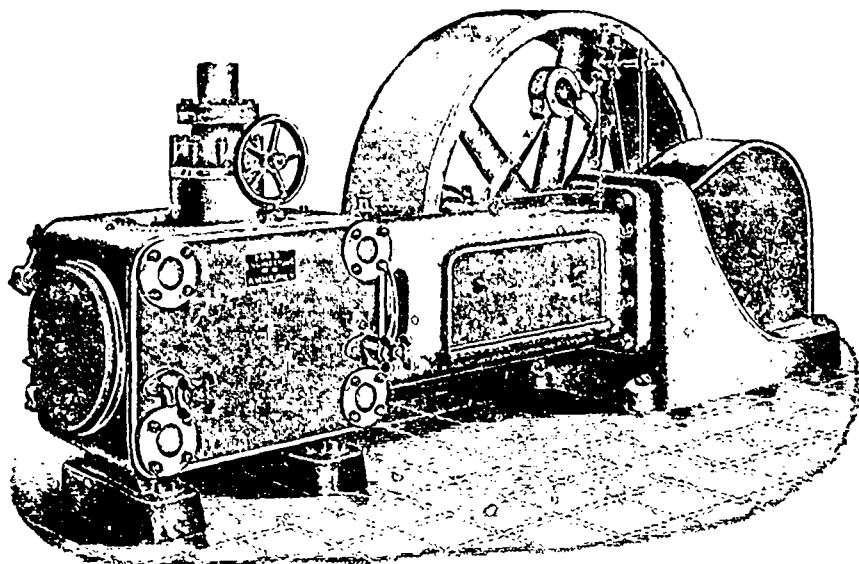
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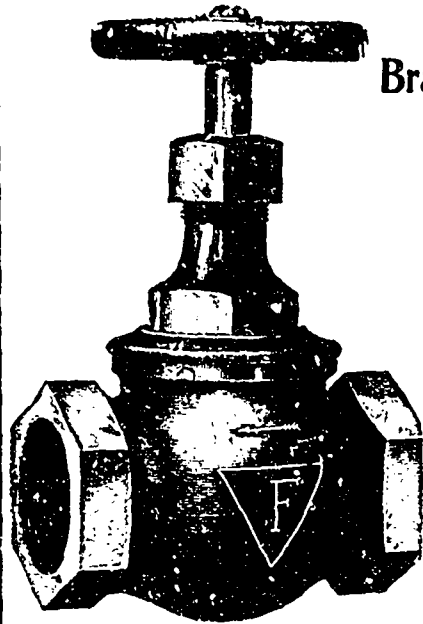
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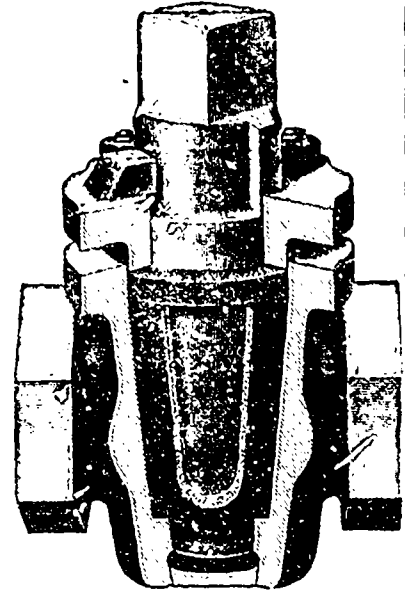
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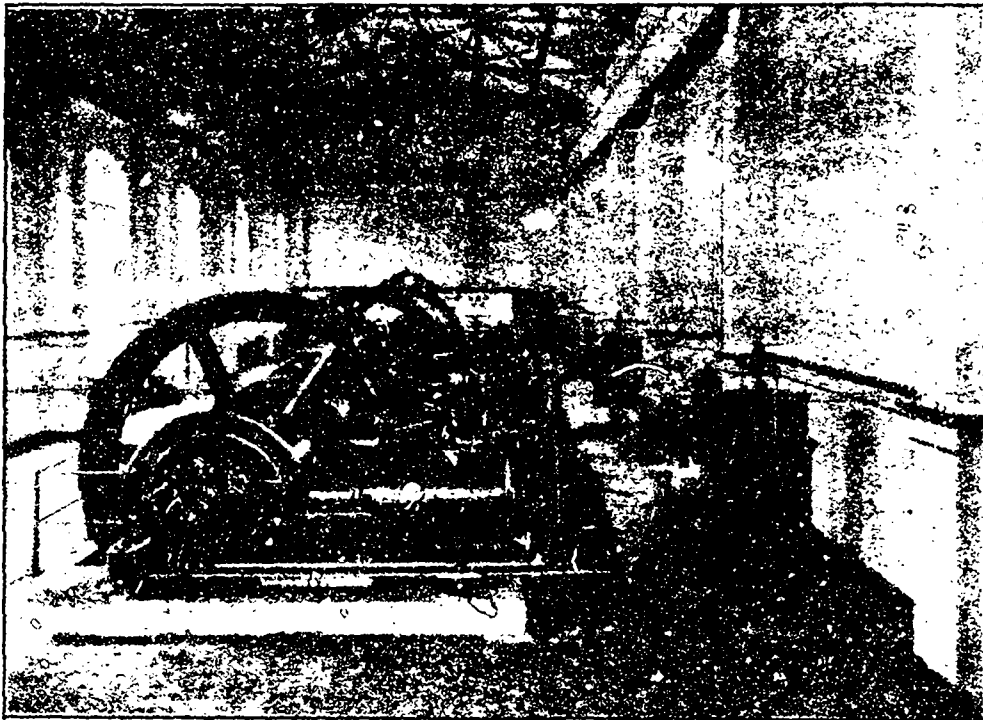
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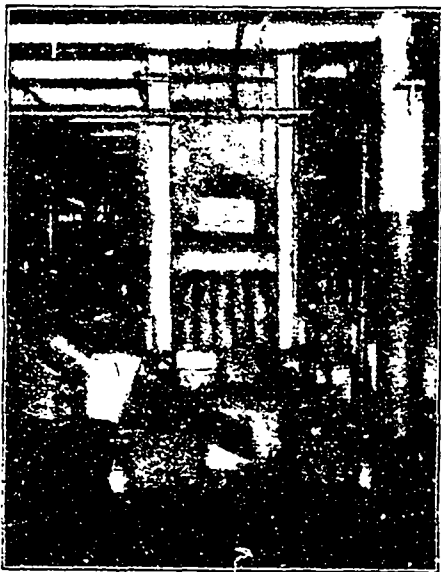
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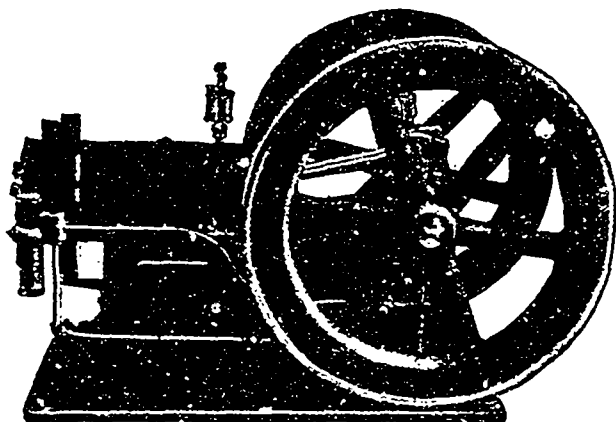
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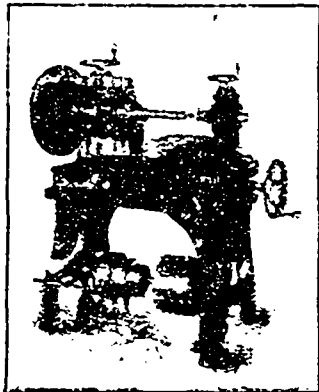
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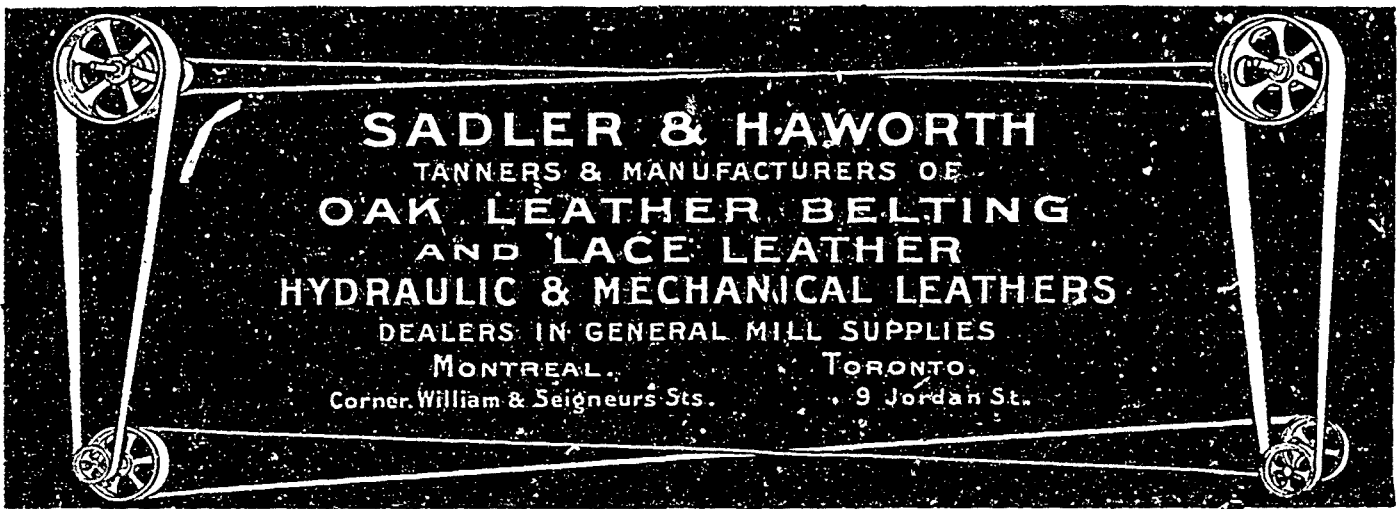
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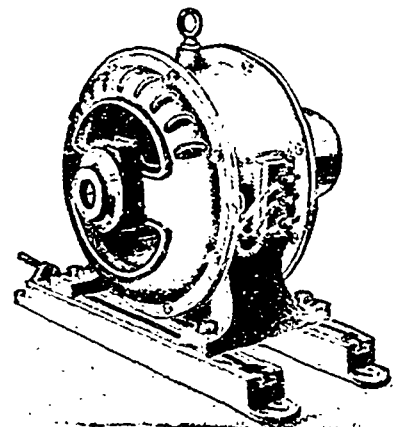
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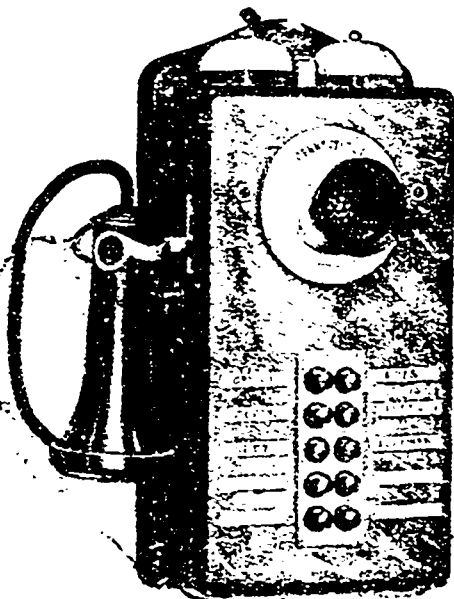
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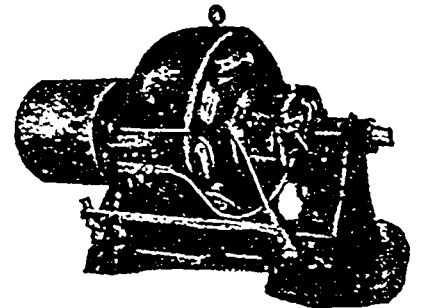
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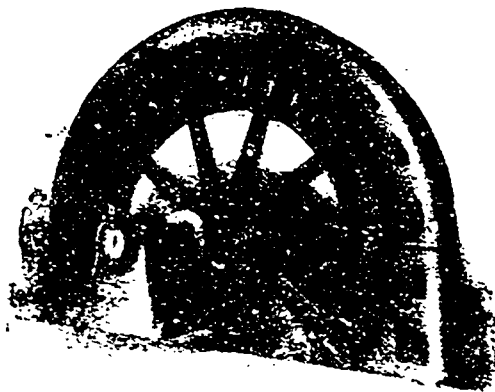
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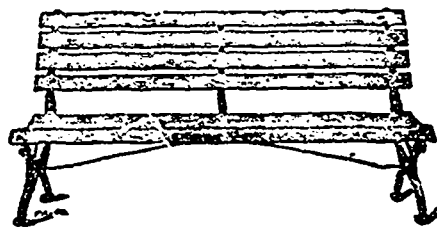
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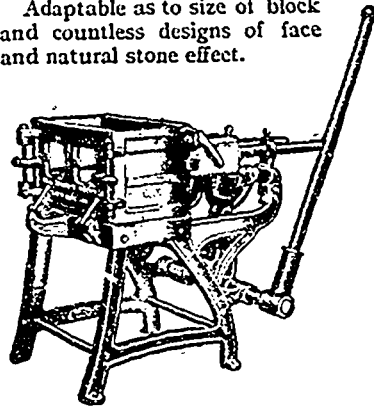
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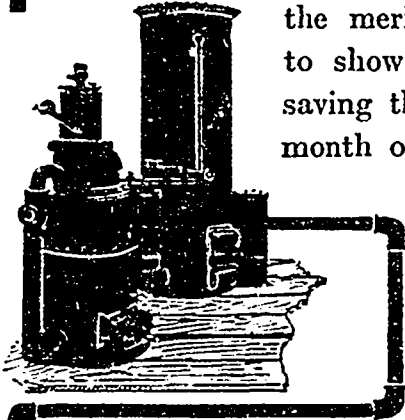
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D. O. MCKINNON, - - - Business Manager.

Montreal:—E. J. Chavo, 436 Grosvenor St.

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Classified Index .....Page 42  
Index to Advertisers .....Page 49

TARIFF PROTECTION IN DANGER.

The first ministry of the Dominion of Canada, of which Sir John A. Macdonald was premier, assumed power in July, 1867, but was not characterized by any strong advocacy of a policy of tariff protection of Canadian manufacturing industries, and it went out of power in November, 1873, not on any issue in which the question of protection or of free trade was concerned. At that time Canada was in an embryotic condition, and the few manufacturing enterprises that then existed were most woefully handicapped by a tariff made for revenue only, and in which no vestige of protection could be found: and that was the condition when the Alexander Mackenzie administration acceded to power in 1873. Canadian manufacturers felt the necessity of a protective tariff, and were more than anxious to find a man possessing the genius and the generalship to lead the country from the slavery of free trade into the less arduous paths of protection and prosperity. Sir John Macdonald was quick to see his opportunity to regain his prestige and power, and the manufacturers were equally quick too to accept his services as a leader. Sir John organized his party under the leadership of such eminent assistants and lieutenants as Sir Leonard Tilley, Sir Charles Tupper, A. W. McLelan, Sir Hector Langevin, Sir Mackenzie Bowell, Mr. G. E. Foster and others of similar character and influence; and the manufacturers formed an association which rendered most valuable service in putting Sir John again in power, and in formulating what became a national policy of tariff protection of Canadian manufacturing industries. The most potent aid and encouragement that Sir John had during his incumbency of the premiership of Canada was that rendered him by the Old Guard of the Manufacturers' Association, and as long as he lived and had the counten-

ance and support of those leaders and supporters of the association, the National Policy was safe from the assaults of its enemies.

Sir John Macdonald died in June, 1891, from which date began the decadence of government interest in the policy that had done so much for Canada. Bickerings within and foes without, and the introduction of issues that should never have received any consideration distracted the attention of the country, and resulted in an entire change of government in 1896.

Sir Wilfrid Laurier and his finance minister, Mr. Fielding, were never considered ardent friends of protection, and his party came into power under a promise to, as far as possible, divest the tariff of its protective features. It was an easy promise to make but more difficult in performance, but such changes and revisions that have been made have been effected not by the friends and admirers of protection. Under the old regime much care was taken to educate public opinion regarding the merits and advantages of protection, and not only the manufacturers, but every other industrial interest in Canada became generous and enthusiastic supporters of protection.

Co-incident with the governmental abandonment of protection as a fundamental policy, a new set of hands came into the control of the Manufacturers' Association, with whom tariff protection lost its interest. Manufacturers generally had not lost their old-time interest in it, but self-seeking swell-headism in the new management took the place of enthusiastic support of that which had done so much for them, and now if anything is said by these in behalf of protection, it is said in a half-hearted, perfunctory manner that bodes no good for the perpetuation of the most important policy that ever gave interest to Canadian politics.

The Association now-a-days is constantly felicitating itself and its members that the tariff has ceased to be a feature in Canadian politics, and therefore very little or no concern need be felt with regard to it, but that idea is a most unfortunate and disastrous one, and why it is entertained and promulgated is one of the things that no fellow can find out. Under the regime of the Old Guard, it was taught that eternal vigilance was the price of protection, and that teaching is of as much force and importance to-day as ever. Under the Old Guard the rostrums and speaking places of Canada resounded with the eloquent appeals of such silver tongued orators as Thomas Cowan and W. H. Storey, to sustain and maintain the principles of protection, and scores of other gifted men devoted their time and energies in that direction. But we hear of no such doings these days. The Old Guard have passed away, and, alas, there are none to take their places. The country, although so prosperous, is full of unrest, the younger men remembering that in past days the masses of the people had such important questions as that of the tariff expounded to them, but no such teaching is promulgated nowadays. True we now have Canadian clubs and Imperial clubs, and municipal clubs, and free trade debating clubs, and farmer's clubs without number, but no manufacturers' clubs except for convivial purposes—certainly none for

teaching the necessity of perpetuating the principle of tariff protection to our manufacturing interests.

What are the manufacturers going to do in the matter? New leaders and new blood are wanted.

#### MANUFACTURERS PLEASE NOTICE.

In another editorial attention is directed to the fact that tariff protection, as a leading and important feature of our government, is in danger because of the indifference of manufacturers generally whose most vital interests are imperiled, and of the indifference of the Manufacturers' Association to which so many manufacturers presume, as a matter of course, that this most important question would be accorded proper attention and action. The greatest need of manufacturers at this time is to continue the efforts of the Old Guard of the Association to educate the people of the country to the importance of tariff protection.

Bearing on this subject we here reproduce an editorial published in The Toronto Globe regarding "the making of public opinion," which we trust manufacturers and the Association will study and apply. The Globe says:

Yesterday there was reported the organization in Toronto of a Municipal Club, with the declared object of promoting the first hand study and free discussion of questions of public interest affecting the welfare of the city. The same day brought the report of an organization in the township of Oro having for its purpose the public discussion in various parts of the township of such questions of life and citizenship as may from time to time be of interest to the people and upon which Canadians should have definite and informed opinions.

These two items in one day's news are instances of what is being done in many places of Canada. It is being felt more and more keenly by intelligent Canadians, and especially by young men, that there is needed an awakening of interest and an informing and organizing of opinion on a whole series of questions touching public life and public movements. It is also being made apparent that this need is not being met either by our public men, who are devoting themselves to public affairs, or by the ordinary political clubs and associations, whose function the discussion of such questions might be supposed to be. To meet this need the Canadian Club has been organized in many cities and has justified its organization. But in some instances the Canadian Club has grown away from its original purpose, and has become more pretentious, and clubs allowing for more conference and franker discussion, and requiring more first hand study on the part of their members, are finding their opportunity. The Toronto Municipal Club and the Oro Township Lecture Committee are examples of how such needs in city and country are being met.

Such organizations are entirely worthy of encouragement and support. At this moment one of the greatest dangers threatening public life in Canada is the decay of public opinion. That decay is brought about by ignorance of the facts of the public situation, self-absorption in personal affairs on the part of the people, and persistent pressure of selfish interests by private corporations and professional politicians. To make and to keep public life wholesome there must be an informed, active, high-purposed public opinion. Without that there can be no salvation for public interests in a democratic country. And clubs, such as those referred to, no matter how organized, despite the faddists and bores that may

plague them, may be extremely useful as educators of public opinion and organs of public life.

In many centres the oldtime political clubs, irrespective of their party names, have found their occupation gone and they have lost their grip on the new generation young men, very largely because they became sensitively concerned about the probable or possible harm that may come to "the party" or to "the Government" through their frank and open discussion of questions of political controversy. The utter absurdity of this notion is apparent to any close student of political affairs. A quite incontrovertible fact is that any political party in a democratic country that does not encourage a public discussion of political questions among its members is stultifying its own life, and the political party that suppresses such discussion within its own ranks is already dead and ought to be defeated.

The evolution of party organization both in the United States and in Canada, and especially the development of the secret party caucus as the one place of out-of-door debate for party men, have tended to destroy the fulness and to impair the dignity of the various Legislative Assemblies as organs of public opinion. A party caucus is not public and is in no sense an organ of public opinion, and unless there is intelligence, progressiveness, and vitality outside of both caucus and Parliament, the democracy will be defenceless when it comes to fight for its life against plutocracy on the one hand or anarchism on the other.

#### PIE FOR MANUFACTURERS.

At the recent meeting in Montreal of the Canadian Railway Ticket Agents' Association, Mr. H. J. Pettypiece read a paper in which was shown the extent of steam railroads now being constructed in Canada.

In 1850 there were only 55 miles of railway in operation in all of British North America, the cost of which did not probably exceed \$2,000,000. During the year 1906 some 3,313 miles of new road were under construction and the total cost of such construction and equipment will be thirty or forty times that expended up to 1850.

Information obtained by Mr. Pettypiece from the management of the chief railways (the figures being approximate in all cases) shows that \$52,000,000 has either been spent in 1906, or are in the appropriation of 1906 for the construction and equipment of new roads and for rolling stock to meet their requirements. J. J. Hill, for the Great Northern and allied lines, has 419 miles of road under contract, most of which are in an advanced condition. As much of this work is being done in the mountains of British Columbia, it is reasonable to say that Mr. Hill's operations, and those of the smaller steam roads, will add \$10,000,000 to the total estimated by the big eastern roads. Electric railway extensions are not included in these figures.

The Grand Trunk System now comprises 4,177 miles of railway, of which 921 miles on the main line are double tracked. This does not include the Central Vermont and Canada-Atlantic lines, which, with a joint mileage of nearly 1,000, are under Grand Trunk control. The system includes also three great viaducts and the Clair tunnel. The viaducts are the Victoria Bridge at Montreal, completed in 1860 and rebuilt in 1898, the Niagara Falls bridge completed in 1897 to replace

Suspension Bridge built forty years before, and the International Bridge, near Buffalo, opened for traffic in 1873 and rebuilt in 1901. The Sarnia tunnel was finished in 1890. During 1905 the system carried over eleven million passengers and nearly fifteen million tons of freight. The Grand Trunk was chartered in 1852.

The Grand Trunk Pacific Company was incorporated in 1903 to build a railway from Winnipeg to the Pacific Ocean, and to operate this along with a Dominion Government line from Winnipeg to Moncton as the "National Transcontinental Railway," with a total mileage on its main line of about 3,300. The surveys of this line, and of some of its branches have been almost completed and a considerable number of miles are under construction.

The Canadian Pacific Railway charter dates from 1881, and during the quarter of a century that has since elapsed it has acquired the ownership of control of a grand total of 11,321 miles of completed road, exclusive of all the branch lines put under construction in 1906. The company owns its own telegraph lines and express service, besides sleeping, parlor and dining cars, and has under its management several large hotels. The main line, taken up by the company in 1881, was completed in 1885, and since the latter date the mileage of its system has been constantly increasing.

The Canadian Northern system is made up of a number of widely separated short lines, mostly in Manitoba, Saskatchewan, and Alberta, though a new section has just been completed between Toronto and Parry Sound. Construction work was begun by the company in 1896 and in 1905 the completed mileage was 2,557. The main line extends from Port Arthur on Lake Superior to a point fifty miles beyond Edmonton. The Canadian Northern owns or controls several railways in the Eastern Provinces, which increase the total to 3,350 miles.

The Intercolonial Railway and the Prince Edward Island Railway are owned and operated by the Dominion Government. The former extends from Montreal to Halifax, with several branches, the most important being extensions to St. John in New Brunswick and Sydney in Cape Breton. The total mileage of the Intercolonial and its branches is 1,446.

The total mileage of steam railways in Canada is probably at the close of 1906 not less than 22,000, and the construction will go on with increasing rapidity for several years. The number of operatives, exclusive of those engaged in construction, is about 75,000, and the New York Mining Engineer predicts that for the next seven years 20,000 people will be occupied in the building of new tracks.

The Grand Trunk Railway has been doing some double track work in Ontario, and adding largely to its rolling stock, which includes 83 locomotives and 1,163 cars, all of which will cost the company some \$5,000,000. About 990 miles are under construction in the West for the Grand Trunk Pacific, and part of the line has been built. The contract requires that it shall all be completed in 1907. This is made up of 790 miles from Winnipeg to Edmonton and 200 miles from Fort William to Lake Superior Junction.

The expenditure during the present year on this work will perhaps reach \$6,000,000. The Dominion Government is also building 24.5 miles from Winnipeg to Lake Superior Junction, and 150 miles from Quebec to Latoque, all of which has to be completed next year. This year's cost may reach \$1,000,000. Considerable track has been built for the T. & N. O. R. Commission, which with rolling stock expenditures may come up to \$2,000,000.

Owing to the urgent transportation needs of Alberta, Saskatchewan and Manitoba, the operations of the Canadian Pacific Railway have been largely confined to those provinces until last year, when marked activity was displayed in Ontario. In the West branches to feed this big trunk line have been pushed with surprising energy. The extensive areas suitable for wheat growing have been penetrated and short stretches of road linked up. Ontario sees the result of a progressive policy in the building of the Toronto-Sudbury line (of which that part from Bolton to Parry Sound is practically finished), in the Guelph & Goderich road and in the extensions from Walkerton. The ramifications of the company are becoming so numerous in fact that it is difficult to follow them all.

When present plans are completed, the C.P.R. will have added to its system about 750 miles of new track at a cost of \$15,000,000, and will have completed about 100 miles of its double track between Fort William and Winnipeg. It will also have added to its rolling stock equipment over 100 locomotives, 268 passenger cars and 5,000 freight cars, at a cost of \$8,000,000. Following it closely is the Canadian Northern Railway, which has 680 miles of new road under construction, the cost of which this year will be over \$10,000,000. On equipment \$5,000,000 are being paid out.

To grasp the relation which all these additional lines bear to the business of Canada is to understand how some of the Dominion's transportation problems are being solved. A glance at conditions as they now exist and are likely to remain for many years, satisfies an observer that traffic flows its largest volume east and west. The markets of Europe invite Canadian products; the thickly populated Orient is developing an appetite for cereals grown in North America, and the people of Eastern and Western Canada are exchanging commodities with a spirit of nationalism as well as of trade.

The completion of transcontinental railways means the establishment of direct routes alike for overland and overseas traffic. The many branch and subsidiary roads are like great arms reaching out after the fruits of fertile lands. They also open up vast areas of lake, island and stream, such as the Muskokas; rich mineral regions like northern Ontario, the Rockies and Nova Scotia, and verdant pastures, heavy forests and productive farm lands everywhere. Rapid communication is secured between one industrial centre and another so that the factory may produce and the consumer may buy with the advantages of competition and general demand. Dwellers on the Pacific slope can better feel the throb of life on the indented tract along the Atlantic and a thousand communities are encouraged towards industrial enterprises.

Such extensive undertakings as the construction of this mileage and the expenditure of such enormous sums of money as required for them, means that Canada is bringing before the eyes of the public men whose constructive ability and initiative makes them worthy to be called young nation builders. The men who are carrying through these big enterprises rank high among the railway forces of America. Under them are being trained an army of junior officials who will in the future be conspicuous figures in the business and financial world.

#### SHIPBUILDING ANOMALIES.

A hundred years ago it was the proud and truthful boast of our kith and kin on the other side of the Atlantic that

The winds and seas are Britain's wide domain  
And not a sail but by permission spreads.

At that time and since, Canada stood high in the list of maritime countries, and some of the finest ships that ever floated on salt water were built in the provinces of Quebec, Nova Scotia and New Brunswick. Since that time ships constructed of iron and steel, and propelled by steam, have almost entirely superseded wooden ships driven by canvas; and although Great Britain boasts of a larger tonnage than any other nation, yet there are several other nations that have become largely interested in shipbuilding and ship owning. But Canada and the United States, unfortunately, are not included in these.

The conditions in these two countries, however, are not similar, a conspicuous feature of the situation being that the coasting laws of the United States do not permit a foreign ship to carry any mercantile cargo from one port to another port in that country. Foreign ships bring in nearly all the merchandise imported into the country, but they cannot carry any merchandise whatever from one American port to another American port, nor to engage in the coastwise trade in any manner. A foreign ship may take a cargo say from Liverpool to New York, but if it is desired to take a return cargo from say Savannah to Liverpool, the ship must go empty or in ballast from New York to Savannah. This preserves the coastwise and internal trade of the United States to American vessels exclusively. Under this law the domestic water borne trade of the United States has attained great proportions, and without doubt the passenger and freight steamers employed in this extensive American trade are perhaps the largest, finest, fastest and most elegantly fitted and appointed of any ships afloat employed in the trade of only one country. Unfortunately the United States does not boast of a half dozen first class steamers employed in trans-Atlantic trade.

Canada, like the United States, does not possess any considerable fleet of trans-Atlantic steamers, most of those employed in that trade being owned in Great Britain, and operated from that country. Canada unlike the United States, however, does not have such coasting laws as have given that country such large and valuable fleets as characterize that internal and coast-

wise commerce. Canada to a certain extent has a valuable coastwise trade, but few Canadian vessels are engaged in it, for the reason that foreign vessels are not debarred from participation in it, as is the case in the United States. If such were the case, a sufficient number of large and commodious Canadian vessels would do the inter provincial trade between the maritime provinces and Quebec ports. So, too, because there is free trade in British ships, a very, very large portion of Canadian trade on the Great Lakes is carried in British, not Canadian vessels.

It is interesting to observe the large number of large first-class American vessels that ply on the lakes. Canada possesses greater facilities at this time for building fine and large ships as the United States possessed only a few years ago. At this time Canadian trade does not require as many carriers as American trade does, but the call is for as large and as speedy vessels, and those which have been built in Canada are the equal in every respect with their American competitors, and superior in the uses to which they are put to those of British build. It is of frequent occurrence that permission is granted by the government to American vessels to carry grain from one Canadian port to another, but no such concession is ever granted in the United States. As good harbors exist on the Canadian side of the lakes as on the American side, and undoubtedly all the capital necessary to establish as many ship building works as might be required would be forthcoming in short order if the industry were protected by such coasting laws as exist in the United States. With every facility as possible and as convenient in Canada as in the United States, there is no reason why Canadian shipbuilding on the lakes should not be as profitable as on the American shores. With similar coasting and inter-provincial laws, shutting out all outside competition, that time would soon arrive.

#### NO GAIN BY THE PREFERENCE.

The Westminster Gazette says that the British preference has paid Canada, and that Canada should not call upon Britain to make an additional payment for something in itself advantageous. That is an eminent sound view. We gain by the preference. It is a reduction of our taxation, and was effected by making a practical use of patriotic sentiments. The protection interests could have successfully resisted the extension of similar relief to all our trade.—The Toronto Globe

It would be interesting to learn wherein our preferential tariff in favor of Great Britain has been of advantage to Canada. It has resulted in a large increase of imports of woollen goods from Great Britain, it is true, but to the injury and detriment of the Canadian woollen industry. Britain did not ask us to give the favor, and Sir Wilfrid Laurier said that it was a free gift, cheerfully given. We agree with the idea that Canada should not demand any return favor. If Britain wants to remove the embargo on Canadian cattle, let her do so, but we don't demand it. The Globe says that we gained by the preference in that it is a reduction of our taxation and was effected by making a practical use of patriotic sentiments. This is where we become very tired of

and hypocrisy "Patriotic sentiments" so-called are not usually swallowed easily by sensible people. If Canada owes anything to the Mother Country let the debt be paid at once and in full—she is able and willing to do it. It should be paid out of the Dominion treasury, but certainly not by the Canadian manufacturers of woolen goods. The Globe contends that the tariff is a tax, and that the preference lessens the taxation. The tariff should be no higher on French or German or American goods than upon British, except it be used as a lever to better our trade with another country. Being a strictly business transaction, if we make concessions to Britain it should be because Britain makes concessions of equal value to us. If Germany treats us unfairly we can, retaliate by the imposition of a surtax. On plain business principles, if, without valuable considerations, we can afford to reduce our duty on British goods, it might safely be concluded, in view of the necessities of the country, that the lower duties are high enough in all cases. If the higher duties are the correct thing impose them upon all nations alike, except where retaliation by way of surtax is called for. What Canada requires is a uniform tariff, only one handle to the jug, and not several as Mr. Fielding now provides for. The United States is getting along remarkably well under that method.

#### NATIONAL UNREST.

In these days of national unrest and socialistic propositions it is interesting to Canadians as well as to the people of the United States to learn some of the sentiments of President Roosevelt as delivered in his annual message to the Congress in December, and we here make a few quotations therefrom. He said:

"The present Congress has taken long strides in the direction of securing proper supervision and control by the National Government over corporations engaged in interstate business—and the enormous majority of corporations of any size are engaged in interstate business. The passage of the railway rate bill, and only to a less degree the passage of the pure food bill, and the provision for increasing and rendering more effective national control over the beef-packing industry, mark an important advance in the proper direction.

"In the short session it will perhaps be difficult to do much further along this line; and it may be best to wait until the laws have been in operation for a number of months before endeavoring to increase their scope, because only operation will show with exactness their merits and their shortcomings and thus give opportunity to define what further remedial legislation is needed. Yet in my judgment it will in the end be advisable in connection with the packing house inspection law to provide for putting a date on the label and for charging the cost of inspection to the packers.

"It must not be supposed, however, that with the passage of these laws it will be possible to stop progress along the line of increasing the power of the National Government over the use of capital in interstate commerce. For example, there will ultimately be need of enlarging the powers of the Interstate Commerce Commission along several different lines, so as to give it a larger and more efficient control over the railroads.

"It can not too often be repeated that experience has conclusively shown the impossibility of securing by the actions of nearly half a hundred different State

Legislatures anything but ineffective chaos in the way of dealing with the great corporations which do not operate exclusively within the limits of any one State. In some method, whether by a national license law or in other fashion, we must exercise, and that at an early date, a far more complete control than at present over these great corporations—a control that will among other things prevent the evils of excessive overcapitalization, and that will compel the disclosure by each big corporation of its stockholders and of its properties and business whether owned directly or through subsidiary or affiliated corporations. This will tend to put a stop to the securing of inordinate profits by favored individuals at the expense, whether of the general public, the stockholders, or the wageworkers.

"Our effort should be not so much to prevent consolidation as such, but so to supervise and control it as to see that it results in no harm to the people. The reactionary or ultra-conservative apologists for the misuse of wealth assail the effort to secure such control as a step toward socialism. As a matter of fact it is these reactionaries and ultra-conservatives who are themselves most potent in increasing socialistic feeling.

"One of the most efficient methods of averting the consequences of a dangerous agitation, which is 80 per cent. wrong, is to remedy the 20 per cent. of evil as to which the agitation is well founded. The best way to avert the very undesirable move for the governmental ownership of railways is to secure by the Government on behalf of the people as a whole such adequate control and regulation of the great interstate common carriers as will do away with the evils which give rise to the agitation against them.

"Some persons speak as if the exercise of such governmental control would do away with the freedom of individual initiative and dwarf individual effort. This is not a fact. It would be a veritable calamity to fail to put a premium upon individual initiative, individual capacity, and effort; upon the energy, character, and foresight which it is so important to encourage in the individual. But as a matter of fact the deadening and degrading effect of pure socialism, and especially of its extreme form, communism, and the destruction of individual character which they would bring about, are in part achieved by the wholly unregulated competition which results in a single individual or corporation rising at the expense of all others until his or its rise effectually checks all competition and reduces former competitors to a position of utter inferiority and subordination.

"We hold that the Government should not conduct the business of the nation, but that it should exercise such supervision as will insure its being conducted in the interest of the nation. Our aim is, so far as may be, to secure, for all decent, hard-working men, equality of opportunity and equality of burden. . . . Combination of capital, like combination of labor, is a necessary element of our present industrial system. It is not possible completely to prevent it, and if it were possible such complete prevention would do damage to the body politic. What we need is not vainly to try to prevent all combination but to secure such rigorous and adequate control and supervision of the combinations as to prevent their injuring the public, or existing in such form as inevitably to threaten injury—for the mere fact that a combination has secured practically complete control of a necessary of life would under any circumstances show that such combination was to be presumed to be adverse to the public interest.

"The National Government has long derived its chief revenue from a tariff on imports and from an internal or excise tax. In addition to these there is every reason why, when next our system of taxation is revised, the

National Government should impose a graduated inheritance tax, and, if possible, a graduated income tax. The man of great wealth owes a peculiar obligation to the State, because he derives special advantages from the mere existence of government. Not only should he recognize this obligation in the way he leads his daily life and in the way he earns and spends his money but it should also be recognized by the way in which he pays for the protection the State gives him. . . . Whenever we, as a people, undertake to remodel our taxation system along the lines suggested we must make it clear beyond peradventure that our aim is to distribute the burden of supporting the Government more equitably than at present. . . . I feel that in the near future our national legislators should enact a law providing for a graduated inheritance tax by which a steadily increasing rate of duty should be put upon all moneys or other valuables coming by gift, bequest, or devise to any individual or corporation. It may be well to make the tax heavy in proportion as the individual benefited is remote of kin. In any event, in my judgment, the pro rata of the tax should increase very heavily with the increase of the amount left to any one individual after a certain point has been reached. . . . The prime object should be to put a constantly increasing burden on the inheritance of those swollen fortunes which it is certainly of no benefit to this country to perpetuate. . . .

There can be no question of the ethical propriety of the Government thus determining the conditions upon which any gift or inheritance should be received. Exactly how far the inheritance tax would, as an incident, have the effect of limiting the transmission by devise or gift of the enormous fortunes in question it is not necessary at present to discuss. It is wise that progress in this direction should be gradual. At first a permanent national inheritance tax, while it might be more substantial than any such tax has hitherto been, need not approximate, either in amount or in the extent of the increase by graduation, to what such a tax should ultimately be. This species of tax has again and again been imposed, although only temporarily, by the National Government. . . . In its incidents, and apart from the main purpose of raising revenue, an income tax stands on an entirely different footing from an inheritance tax, because it involves no question of the perpetuation of fortunes swollen to an unhealthy size. The question is in its essence a question of the proper adjustment of burdens to benefits.

Every effort should be made in dealing with this subject, as with the subject of the proper control by the National Government over the use of corporate wealth in interstate business, to devise legislation which without such action shall attain the desired end, but if this fails there will ultimately be no alternative to a constitutional amendment."

**EDITORIAL NOTES.**

Mr. R. L. Borden, leader of the Conservative party, has given notice to his party that it should be put in readiness for the next general Dominion election. According to the leaders of the Canadian Manufacturers' Association the tariff is no longer a political question, and therefore, if this is the case, we are not especially interested in either party. In behalf of Canadian manufacturers generally, however, we would say that if

tariff protection is not worth fighting for it is not worth having. How is it that every free trade adverse interest in Canada is active in efforts to destroy protection, and nothing whatever is being done to keep alive the activities of the manufacturers who were the fathers and founders of the Association, and whose influence went so far in establishing the principle of a adequate tariff protection for Canadian manufacturing industries? Again we ask that if tariff protection is worth having it is worth fighting for. Is there to be any organized fight?

It is gratifying to note that the renewal of the British preference, proposed in the pending tariff resolution, is likely to attract to Canada the attention of large engineering firms in England. It is reported that they will now make a serious attempt to obtain a foothold in the Canadian market.—Toronto Globe.

The British preference has been in force for 10, or many years, and up to date large engineering firms in that country have failed or neglected to make any serious or other attempt to obtain a foothold in the Canadian market. Notwithstanding the large tariff difference in favor of British goods, the Canadian market is being chiefly supplied from American sources. The manufacturers not only have made serious attempts to capture the Canadian markets, but have succeeded in doing so.

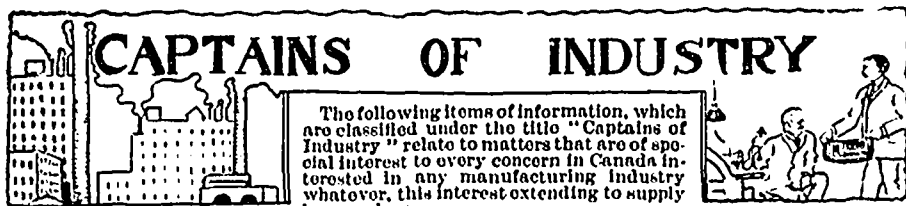
There are now under construction in American shipyards along the great lakes, to be ready for service next year, 71 vessels, 45 of which are large freighters and 26 are first-class passenger steamers. Fifteen of these vessels are to be built in Detroit yards. One of them is an immense passenger steamer for the Detroit and Cleveland line which is, it is claimed, the largest side wheel steamer in the world, has already been launched, and, when completed, will have cost \$1,250,000. The total cost of the 71 vessels will aggregate about \$20,000,000. What impetus it would give to Canada were there a probability that \$20,000,000 worth of vessels would be constructed in Canadian shipyards in the next few years.

A press dispatch from Montreal says:

The Grey nuns of Montreal have refused a million a quarter for their property on Dorchester Street. They own the block bounded by St. Catherine, Guy, Dorchester and St. Matthew Streets, which they bought thirty-five years ago for \$55,000. The present offer comes from Mr. U. H. Dandurand, who wished to build a large hotel and apartment house on the property.

It is like a milestone tied to the neck of any community to confront such a condition. What gave the value more than \$1,250,000 to a block of land that cost \$55,000 a few years ago? The growth of the city is the course. It has never paid a dollar of taxes for more than thirty-five years, although it has enjoyed a much of the advantages of the city as any adjoining land. It should be imposed on the land according to its full value. It might be according to socialistic doctrine, but no church or other social establishment should be expected to be supported in that way by the public. There are millions of dollars worth of church property in Toronto also upon which no taxes are paid. Too bad.





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



Slater-Sherwood, Limited, Ottawa, have been incorporated with a capital of \$49,000, to construct offices, shops, warehouses, etc. The provisional directors include R. N. Slater, A. P. Sherwood and N. J. Slater, Ottawa.

John Garvey, London, Ont., has purchased a site and will erect a five story warehouse 198x98 feet.

Messrs. R. G. Cluff & Co., Toronto, will shortly commence the erection of three new factories on St. Helen's Avenue, at a cost of about \$150,000.

A new canning factory will be erected at Consecon, Ont., at a cost of about \$30,000. R. Smith and J. Johnson, Consecon, are interested.

The ratepayers of Collingwood, Ont., will vote on a by-law to raise \$18,000 for the erection of a fire hall.

W. F. Babcock, Brantford, Ont., will establish a carpet cleaning works at Peterborough, Ont.

Public Works Department, Ottawa, invite tenders up to January 21 for dredging the St. Mary's River at Sault Ste. Marie, Ont.

A home for incurable consumptives will be erected at Hamilton, Ont.

A bridge may be erected across the Kaministiquia river at Fort William, Ont.

The Canada Steel Goods Co., Hamilton, Ont., have placed an order for a duplex boiler feed pump with the Smart-Turner Machine Co., Hamilton, Ont.

The Temiskaming & Northern Ontario Railway Commission will shortly call for tenders for the extension of their line so as to join the Grand Trunk Pacific north of Lake Abitibi. The extension will be about forty-five miles.

The Western Assurance Co., Toronto, will take over the business of the Keystone Fire and Insurance Co., St. John, N.B.

The Canada Tin Plate & Sheet Steel Co., Toronto, have decided to open their works at Thurston, Ont., about January 23, and to make the occasion a great event in view of the fact that the works are the first of the kind to be opened in Canada.

L. E. N. Lafontaine, Guelph, Ont., will erect a factory for the manufacture of fur and value garments.

The Imperial Steel & Wire Co., Collingwood, Ont., will establish a branch at Port Arthur, Ont. The new factory will have double the capacity of the one at Collingwood.

Mr. Ham, Hamilton, Ont., is considering the establishment of a plant at Ottawa for the manufacture of refrigerators, spring chucks, etc.

When completed the new automobile garage of Messrs. Hyslop Bros., Toronto, will cost \$100,000.

E. R. Bollert & Co., Guelph, Ont., will extensively improve their premises.

A new east end fire station will be erected at Hamilton, Ont., at a cost of about \$30,000.

The Board of Control, Toronto, invite tenders up to February 19, for the construction of a hydraulic dredge complete.

A new wing will be erected to the General Hospital, Stratford, Ont.

A new school building will be erected at Gold Rock, Ont.

The Smart-Turner Machine Co., Hamilton, Ont., are supplying the Hamilton Steel & Iron Co. with a duplex outside packed plunger pump with pot valves for their new furnace.

The Bucke Silver & Cobalt Mining Co., Ottawa, have been incorporated with a capital of \$300,000, to carry on a mining, milling and reduction business. The provisional directors include E. L. Horwood, T. A. Beament and J. A. McLaren, Ottawa.

The Youngstown-Cobalt Silver Mining Co., Cobalt, Ont., have been incorporated with a capital of \$1,000,000, to carry on a mining, milling and reduction business. The provisional directors include D. H. Glanville, W. A. Sadler, Cobalt, Ont., and A. P. Dalbey, Youngstown, Ohio.

The London-Cobalt Mining Co., Toronto, have been incorporated with a capital of \$2,000,000, to carry on a mining, milling and reduction business. The provisional directors include G. Stevenson, F. H. Potts, and J. W. McDonald, Toronto.

The sewerage system, Napance, Ont., will be extended and improved.

The waterworks system, Southampton, Ont., will be extended at a cost of about \$5,000.

The sewerage system, Woodstock, Ont., will be extended at a cost of about \$20,000.

John A. Reeb, Port Colborne, Ont., and W. J. Somerville, Welland, Ont., have established an industry in Welland for the manufacture of wood fibre wall plaster and cement tile.

The Hamilton Cotton Co. have ordered a side suction centrifugal pump from the Smart-Turner Machine Co., Hamilton, Ont.

The Cobalt & Larder Lake Gold Mining Co., New Liskeard, Ont., have been incorporated with a capital of \$300,000, to carry on a mining, milling and reduction business. The provisional directors include G. C. Legge, N. B. Strong and H. D. Graham, Haileybury, Ont.

The Temiskaming & Northern Ontario Railway Commission invite tenders for the construction of general offices at North Bay, Ont.

The Department of Indian Affairs, Ottawa, invite tenders up to February 1 for the delivery of Indian supplies during the fiscal year ending March 31, 1908, at various points in Manitoba, Saskatchewan and Alberta.

Among the purchasers of Smart-Turner duplex pumps during the last few days are

The Nova Scotia Fertilizer Co., Halifax, N.S.; T. W. Sims, Little Current, Ont.; Metropolitan Oils & Soaps, Limited, Toronto; E. F. Stevens, Halifax; The McLaughlin Carriage Co., Oshawa, Ont.

The premises of the Hotel Quinte, Belleville, Ont., were destroyed by fire January 4. Loss about \$100,000.

The Kerr Lake Lawson Mining Co., Cobalt, Ont., have been incorporated with a capital of \$1,500,000, to carry on a mining, milling and reduction business. The provisional directors include W. Lawson, Eganville, Ont., W. F. Powell and R. T. Shillington, Ottawa.

The Cobalt Lake Mining Co., Toronto, have been incorporated with a capital of \$5,000,000, to carry on a mining, milling and reduction business. The provisional directors include Sir Henry M. Pellatt, N. Macrae and B. Oler, Toronto.

The Vancouver Portland Cement Co., Toronto, have been incorporated with a capital of \$1,500,000, to manufacture Portland cement, slate, stone, granite, gas petroleum, oil, etc. The provisional directors include E. W. McNeill, W. F. Ralph, and H. Chambers, Toronto.

The Collingwood Shipbuilding Co., Collingwood, Ont., have ordered a duplex steam auxiliary feed pump from the Smart-Turner Machine Co., Limited, Hamilton.

The Van Allen Co., Hamilton, Ont., have been incorporated with a capital of \$500,000, to manufacture cotton, woolen, flax, hemp, wearing apparel, etc. The provisional directors include G. Kerr, J. Montgomery, and J. G. Strong, Toronto.

Dominion Mines & Metals, Limited, Sault Ste. Marie, Ont., have been incorporated with a capital of \$1,000,000, to carry on a mining, milling and reduction business. The provisional directors include J. H. More, Sault Ste. Marie, Mich., A. J. Saunders, Sault Ste. Marie, Ont., and E. J. Daly, Ottawa.

The new factory of the Chapman Double Ball Bearing Co. on Sorauren Avenue is now ready for occupation and the machinery is to be moved to it from the Pearl Street factory during the next week or so. The arrangement of this factory makes it one of the most modern in Canada.

The Blanchite Process Paint Co., Limited, have opened a factory at 785 King Street West, Toronto, where they will manufacture Blanchite process paints and enamels. One of the features of these products is their value as a preservative, and especially in preventing rust on any metallic surface to which it has been applied. It has been tested by many of the leading engineers of the United States and other countries. Some of these tests resulted in large contracts, one of which was the paint for the New York Subway. Naturally this paint will be in considerable demand for bridges, structural steel and all classes of preservative work. The factory is now fully equipped with the most modern machinery, with a capacity of 1,000 gallons a day. Their paint will be sold through the trade in the usual way.

The Canadian General Electric Co. are erecting another large addition to their factory in Peterborough, Ont.

The Canada Screw Co., and the Ontario Tack Co., Hamilton, Ont., have amalgamated and will be known as the Canada Screw Co. About \$2,000,000 is involved in the deal and

it is probable a large factory will be erected. The directors include C. A. Birge, C. Alexander, F. H. Whitton and F. W. Coote, Hamilton, Ont.

The factory of the Taylor-Forbes Co., Guelph, Ont., was damaged by fire recently. Loss about \$5,000.

The planing mills of the George Wilson Building & Contracting Co., St. Catharines, Ont., were destroyed by fire January 12. Loss about \$20,000.

The Lands, Forests & Mines Department, Ottawa, estimate that the timber cut in Ontario during the present season will be as follows:—Pine, board measure, 1,000,000,000 feet; hemlock, 70,000,000 feet; spruce, 1,500,000 feet; squared timber, 1,250,000 cubic feet; railway ties, 4,500,000; pulpwood, 100,000 cords. The estimates are all larger than the actual cut of last year, but it is expected they will be all realized owing to the great demand for timber of all kinds.

Department of Public Works, Ottawa, invite tenders up to February 1 for the construction of a drill hall at Peterborough, Ont.

A return has been tabled containing a comparison of the duties paid on agricultural machinery and stoves in 1906 with the duties on the same quantity of similar articles payable under the new schedules. The items are.

	Paid in 1906 under old tariff.	Payable under new tariff.
Mowing machines, harvesters, binders and reapers.	\$26,882	\$23,521
Cultivators, ploughs, harrows, horse rakes, seed drills, manure spreaders, weeders and windmills.	173,891	171,793
Thrashing machine outfit.	89,996	71,997
Hay loaders, potato diggers, horse-powers, separators, n.o.p.; wind stacker, fodder or feed cutters, fanning mills, hay tedders, rolls and other agricultural implements.....	28,763	28,685
Axes, scythes, sickles or reaping hooks, hay or straw knives, hoes, rakes, n.o.p.; pronged forks	13,099	11,789
Shovels and spades, shovel and spade blanks, iron or steel cut to shape for same, stoves of all kinds.	118,326	118,594

The Diamond-Caulk Horse-shoe Co., Toronto, have been incorporated with a capital of \$100,000, to manufacture horse shoes, etc. The provisional directors include T. M. Higgins, W. Douglas and B. Place, Toronto.

The Prince Rupert's Timber & Lumber Co., Ottawa, have been incorporated with a capital of \$450,000, to manufacture lumber, timber, posts, furniture, sashes, doors, pulp wood, paper, etc. The provisional directors include E. H. Moore, W. Anderson and G. H. Rochester, Ottawa.

The premises of the Smith-Patterson Co., the Gorham Co., the Cheesborough Co., the Dodge Mfg. Co., the Standard Cloth Co., and several smaller firms, Montreal, were damaged by fire January 3. Loss about \$500,000.

Geo. W. Reed & Co., Montreal, have been incorporated with a capital of \$150,000, to

manufacture concrete, cement, sheet metal, asphalt, etc. The charter members include C. T. Williams, F. H. Barwick and K. D. Church, Montreal.

J. E. Costin & Co., Montreal, have been incorporated with a capital of \$75,000, to manufacture wines, liquors, tobacco, spices, etc. The charter members include J. E. Costin, J. E. Lamothe and V. Giroux, Montreal.

The Montreal Exploration & Development Co., Montreal, have been incorporated with a capital of \$50,000, to carry on a mining, exploration and developing business. The charter members include B. Burkard, L. J. Cartier and L. A. Derome, Montreal.

Male Attire, Limited, Montreal, have been incorporated with a capital of \$200,000, to manufacture boots, shoes, hats, clothing, etc. The charter members include F. C. Shorey, J. E. Coulin and R. Farrell, Montreal.

Messrs. Landau & Cormack, Montreal, have been incorporated with a capital of \$25,000, to manufacture tobacco, cigars, etc. The charter members include C. Landau, J. Cormack and F. H. Markey, Montreal.

The Sherbrooke Novelty Mfg. Co., Sherbrooke, Que., have been incorporated with a capital of \$20,000, to manufacture household utensils, small wares, etc. The charter members include R. A. Wright, A. T. Boydell and J. A. Swan, Sherbrooke, Que.

Geo. E. Amyot, Limited, Quebec City, have been incorporated with a capital of \$300,000, to produce electricity for the purposes of heat, light and power, and to manufacture liquors, bottles, etc. The charter members include G. E. Amyot, L. B. Bastien and A. E. Francœur, Quebec City.

The Consolidated Chemical Co., Three Rivers, Que., have been incorporated with a capital of \$250,000, to manufacture drugs, chemicals, etc. The charter members include A. W. Carmichael, W. P. J. Lee and T. J. O'Connor, Toronto.

The Lake Champlain & St. Lawrence Ship Canal Co., have been formed for the purpose of constructing a canal between St. Johns, Que., and Montreal. Samuel H. Ewing, Montreal, is president and Thomas Craig, secretary-treasurer. It is said that within three miles from Longueuil, which is on the opposite side of the St. Lawrence River from Montreal, near the Little Montreal River, there is a fall of 74 feet. With the assistance of this the engineers say that it is possible to obtain, for manufacturing purposes, 100,000 h.p., which would enable manufacturers to place their plant along-side the canal. If this canal project goes through, then the waterway between St. Johns and Montreal will be reduced to 21 miles instead of 91, as at present vessels have to go down the St. Lawrence 45 miles to Sorel, the entrance of the Richelieu River, which connects with Lake Champlain. The company figure that they can complete the work in two years, at a probable cost of \$12,000,000.

Public Works Department, Ottawa, invite tenders up to January 21 for the construction of a hot water heating system for the post office at Nicolet, Que., also for the post office at Montmagny, Que.

There was erected in Montreal during 1906, 1,484 new buildings, valued at \$7,745,023; as compared with 1,145, valued at \$4,770,350

for the previous year. Ten structures exceeded in estimated cost \$100,000 each.

The "Rapids King," the new steamer of the Richelieu & Ontario Navigation Co., Montreal, was launched a few days ago from the yards of the Canadian Shipbuilding Co., Toronto. The Rapids King is a passenger steamer 240 feet long and has a beam of 41 feet. Two triple expansion engines and Scotch boilers will be installed.

The Miller & Lockwell Co., Quebec, Que., have been incorporated with a capital of \$100,000, to manufacture cigars, tobacco, etc. The charter members include C. J. Lockwell, J. Douville and J. N. Fleury, Quebec, Que.

The St. Lawrence Saw & Steel Co., Sorel, Que., have been incorporated with a capital of \$40,000, to manufacture saws, hammers, axes, shovels, engines, boilers, etc. The charter members include C. D. Pontbriand, J. Pontbriand, and T. D. Pontbriand, Sorel, Que.

The Canadian Boomer & Boschert Press Co., Montreal, have been incorporated with a capital of \$20,000, to manufacture iron steel machinery, hydraulic presses, etc. The charter members include A. E. G. Madley, W. S. Johnson and F. Callahan, Montreal.

The Federal Lumber Co., Montreal, have been incorporated with a capital of \$49,000, to manufacture lumber, timber, etc. The charter members include J. Mercure, J. A. Ranger and E. Biron, Montreal.

Jenkins Bros., New York, are installing in their new factory at Montreal a Smart-Turner duplex and outside packed plunger pump.

Messrs. S. T. Greenleese & Sons, Montreal, have been incorporated with a capital of \$50,000, to manufacture furs, hats, caps, clothing, etc. The charter members include S. T. Greenleese, W. E. Greenleese and H. Lapointe, Montreal.

The Quebec Cartage & Transfer Co., Quebec, Que., have been incorporated with a capital of \$150,000, to carry on a cartage and transfer business. The charter members include R. Forget, Montreal, J. Hone and N. Belleau, Quebec City.

M. Gauvin, late of Messrs. Amyot & Gauvin, Quebec city, will erect a large modern brewery shortly.

It is stated that the Grand Trunk Railway Co. will erect a large hotel in Quebec, Que.

The Richelieu & Ontario Navigation Co., Montreal, will build a new steamer for the Montreal, Toronto and Hamilton route.

It is stated that Messrs. Mackenzie & Man will build car shops and locomotive works near Montreal for their entire system.

The North American Trading Co., Montreal, will erect a cotton factory at Shawinigan, Que., at a cost of about \$2,000,000.

The Prince of Wales Regiment Fusilier Montreal, will erect a new armory at a cost of about \$100,000.

F. A. Nason, Fredericton, N.B., is rebuilding the Troy laundry for use as a carriage factory.

A large starch factory may be erected at Woodstock, N.B. B. F. Smith, Woodstock is promoting the enterprise.

The government will erect a cold storage plant at St. John, N.B.

A telephone system will be installed at Moncton, N.B. Messrs. Bresson & Goss gave an estimate of brick \$50,000.

Mr. Graham, Belleville, Ont., has secured a site in Halifax, N.S., and will erect a cold storage plant at a cost of about \$100,000.

The Department of Railways & Canals, Ottawa, have awarded a contract to Rhodes, Curry & Co., Amherst, N.S., for the building of three motor cars for suburban and short branch railways on the government line.

The city council, Halifax, N.S., unanimously adopted a draft agreement under which the corporation will float a 30 year four per cent. debenture sufficient to pay the Selliker Car Works Co. \$125,000. The loan will be effected at four per cent., but the company will pay five per cent. the difference to be added to the sinking fund. They will receive tax exemption for ten years, and for a further period of ten years the assessment shall not exceed \$50,000. They are prohibited from operating company stores. The capital will be \$250,000 besides the \$125,000 from the city.

Commercial Agent E. D. Arnaud, St. John's, Nfld., reports that the Standard Mfg. Co., of St. John's, Nfld., have decided to start manufacturing paint and are in the market for the necessary machinery.

R. Taylor, Halifax, N.S., and L. Garneau, Quebec city, will erect an hotel at St. John's, Nfld., at a cost of about \$100,000.

The Woods Building Co., Winnipeg, Man., have been incorporated with a capital of \$100,000, to carry on a general building and constructing business. The provisional directors include G. N. Jackson, W. Woods and C. R. Gibson, Winnipeg, Man.

The Red River Metal Co., Winnipeg, Man., will erect a warehouse at a cost of about \$12,000.

The Cowan Construction Co., Winnipeg, Man., have been incorporated with a capital of \$150,000, to construct railways, wharves, ports, factories, furnaces, etc., and to manufacture tile, brick, sewer pipes, lumber, timber etc. The provisional directors include W. J. Cowan, D. R. Campbell and C. G. Cowan, Winnipeg, Man.

The Vopni-Sigurdson, Limited, Winnipeg, Man., have been incorporated with a capital of \$25,000, to manufacture goods, wares, merchandise, etc. The provisional directors include J. J. Vopni, S. Sigurdson and H. J. Vopni, Winnipeg, Man.

The Winnipeg Foundry, Limited, Winnipeg, Man., have been incorporated with a capital of \$20,000, to manufacture iron, brass, tools, wire, tubes, boilers, machinery, etc. The provisional directors include J. T. Hill, H. B. Eland and W. Irish, Winnipeg, Man.

The Pine Ridge Sand Co., Winnipeg, Man., have been incorporated with a capital of \$20,000, to manufacture brick, tile, sewer pipe, machinery, etc. The provisional directors include P. D. Hicks, R. Watson and J. S. Hough, Winnipeg, Man.

The Well Machine & Windmill Co., Winnipeg, Man., have been incorporated with a capital of \$20,000, to manufacture drilling and mining machinery, windmills, etc. The provisional directors include C. S. Tyrrell, J. W. B. Orr and H. W. Hutchinson, Winnipeg, Man.

The Peterson & McKinley block, Singa-

Man., was destroyed by fire recently. Loss about \$45,000.

F. C. Files, of the Northern Electric & Mfg. Co., Montreal, is establishing a branch in Winnipeg, Man.

Eaton & Spring, of the International Lighting & Heating Co., Beatrice, Nebraska, have secured a 30 year contract to supply gas to Brandon, Man., and will erect a plant at a cost of about \$100,000.

Andrew Carnegie has offered to erect a library building at Neepawa, Man., if the town will contribute 10 per cent. of the cost annually towards maintenance.

The congregation of the Congregational church, Fort Rouge, Winnipeg, Man., will erect a new church building.

A waterworks and sewerage system will be installed at Boissevain, Man., at a cost of about \$175,000.

The Manitoba Printing & Mfg. Co., Winnipeg, Man., have been incorporated with a capital of \$100,000, to manufacture jewelry cases, paper, cardboard boxes, leather, etc. The provisional directors include J. McLean, A. E. Rowland and J. D. Parker, Winnipeg, Man.

The Canadian Pacific Railway Co. will erect a new station at Wetaskiwin, Alta., at a cost of about \$20,000.

The Williamson planing mill, Manor, Sask., was destroyed by fire recently. Loss about \$1,500.

The sash and door factory of R. B. Bissett, Strathcona, Alta., was destroyed by fire. Loss about \$12,000.

The plant of the Capital Publishing Co., Saskatoon, Sask., was destroyed by fire recently.

A waterworks system will be installed at Okotoks, Alta.

The congregation of the Presbyterian church, Lacouche, Alta., will erect a new edifice.

The Pacific Coast Pipe Co., Vancouver, B.C., have just completed a large contract in supplying the Canadian Pacific Railway Co., with ten miles and a half of 8 inch high pressure wood pipe.

J. H. Good, Nanaimo, B.C., will erect a fire proof warehouse, 75x35 feet.

J. A. Moore, Seattle, Wash., has decided to establish an iron smelter at Quatsino Sound, B.C.

B. Starks, Vancouver, B.C., will erect a coeprage on Lulu Island.

The Canadian Pacific Railway Co. will build a line from New Westminster to Eburne, B.C.

Vancouver, B.C., will expend \$34,500 on new fire halls and equipment.

The building permits issued in Vancouver, B.C., for 1906 totaled \$4,084,840, which is more than double those of two years ago.

When Metropolitan Oils & Soaps, Limited, Atlantic Avenue, Toronto, took over the business of the Metropolitan Soap Co., they added several new lines. One of these, which is winning wide-spread recognition, is a lubricant of high viscosity and low fire test, which will flow at zero. The firm have also enlarged their works and are constantly adding to their line of soaps for laundry work and for the textile trades as well as of toilet soaps.

Further extensions to plant have been made necessary and its capacity will be doubled this year.

**FINANCIAL.**

The Bank of Ottawa will shortly open a branch at Tisdale, Sask.

The Bank of New Brunswick have opened new offices in Summerside, P.E.I.

The premises of the Bank of British North America, Duck Lake, Sask., was destroyed by fire recently.

St. John, N.B. bank clearings for the year ending December 31, 1906, were \$60,024,760; for 1905 the amount was \$52,836,233, showing a gain of \$7,188,427.

The Bank of British North America will erect a new bank building at Toronto Junction, Ont., at a cost of about \$40,000.

The United Empire Bank will open branches at Galt and Preston, Ont.

A branch of the Bank of Montreal will be opened at Medicine Hat, Alta.

The Farmers Bank have opened branches at Milton, Norval and Burgessville, Ont.

A branch is being opened in Victoria, B.C., by the Merchants Bank of Canada.

The Home Bank of Canada have opened a branch at Cannington, Ont.

The Bank of Montreal will erect a new bank building in Brantford, Ont.

A two story bank building will be erected by the Canadian Bank of Commerce at Sydney, N.S.

G. W. Yarker, Toronto, presents the following figures showing the business at the Toronto Clearing House:

For month of December, 1906..	\$115,750,975
Last year .....	96,479,590
Increase, 1906.....	\$19,271,385
Clearings for year, 1906 .....	1,219,125,359
Clearings for year, 1905 .....	1,047,490,701

Increase.....	\$171,634,658
Average daily clearings, 1906 .....	3,284,069
Average daily clearings, 1905.....	3,457,065

Increase, daily, 1906.....	\$527,004
Average monthly, 1905.....	\$7,290,822

Increase monthly, 1906..... \$14,302,890

The United Empire Bank, Toronto, will erect a three story bank building on Yonge Street, at a cost of about \$14,350.

**"CONQUEROR" TOOL STEEL.**

Alexander Gibb, 13 St. John Street, Montreal, is having much success in introducing "Conqueror" tool steel in Canada. Several of the largest buyers of high speed steel and drills have given the "Conqueror" a thorough test and are regular users. In fact it is Mr. Gibb's boast that he has not failed to get it accepted wherever it has been tested. J. B. Beardshaw & Son, Limited, Baltic Steel Works, Sheffield, England, were established in 1719 and their tool steels have always enjoyed a good reputation. They make the high speed steel in prolific sections which require no forging, the tool only having to be ground into shape. This type of section saves considerable weight over the average section. Full description of this steel and of these sections will be sent on request.

MAGILL, UNIVERSITY LIBRARY

## PUBLICATIONS.

The publishers of The Canadian Manufacturer solicit in advance, if possible, catalogues, circulars, and other industrial publications issued by manufacturers. We wish to review such literature, and bring the principal points to the attention of our readers.

**The Webster System.** A 30 page booklet giving information regarding the Webster system of low pressure steam circulation for heating purposes. In addition to a full description of this system, views of the Alexandra Hotel and station at Winnipeg, Man., are given; also testimonials from leading Canadian manufacturers who have found this system entirely successful in their plants. Darling Bros., Limited, Montreal.

**Great Burnham Pumps.** A 48 page catalogue, pocket size, giving cuts, descriptions, etc., of Burnham steam and power pumps for all duties. Darling Bros., Limited, Montreal.

**Union Drawn Steel Calendar.** The calendar sent out by the Union Drawn Steel Co., Hamilton, Ont., is an excellent map of the Dominion of Canada, showing railways, rivers, towns and villages, according to the latest survey.

**Higher Accounting.** A 16 page booklet dealing with a special course in higher accounting as prescribed by the Institute of Chartered Accountants conducted by the Shaw Correspondence School, Toronto.

**Ideal Concrete Machines.** A 170 page catalogue describing the cement brick machine, also samples of fancy stone made by this machine. On page 6 of this catalogue is a statement to the effect that a suit for infringement against parties from making or selling machines along similar lines as that of the "Ideal," claiming that they own and control the basic principles on the combination face-down horizontal core block machine. Since the arrival of this catalogue we have received a letter to the effect that this suit had been won by the Ideal Concrete Machinery Co. As this catalogue has been a very expensive one to prepare and as it is full of much information for the builder, each reader desiring to secure one of these catalogues can have same on request by the payment of twenty-five cents. The Ideal Concrete Machinery Co., South Bend, Ind.

### PRODUCER GAS PLANTS FREE.

The Producer Gas Co., 11 Front Street East, Toronto, have aroused the interest of many power users by the advertisement which appears on page 18 of this issue. This advertisement appeared for the first time last issue and already several inquiries have been received.

Mr. G. P. Wallington, manager of the Producer Gas Co., has unbounded confidence in producer gas for power purposes. He maintains it is a cheaper power than would be electricity generated from Niagara power and distributed to municipalities under the favorable term suggested by the Hydro-Electric Commission.

Such is Mr. Wallington's faith in producer gas that he has the utmost confidence that the installation of five plants, free will be a good investment for his firm, as the proportion of saving effected which they will be entitled to will be good interest on the investment.

Readers of THE CANADIAN MANUFACTURER interested in this proposal should not delay in sending in the form which accompanies the advertisement.

### BUILDING IN TORONTO.

The City Architect has published a detailed list of the building permits issued the past year. Dwellings account for over \$8,000,000 of the total. Among the noteworthy items are 33 new factories, 21 warehouses, 12 banks, 19 churches, and 2 synagogues, 12 schools, 1 science building (McMaster), 1 public library, 3 fire halls, 1 theatre, 1 Custom house, 13 hotels.

The list is as follows:  
2,090 brick dwellings, \$6,268,640  
109 brick dwellings, alterations and additions, \$112,098.

421 roughcast dwellings, \$396,400.  
301 roughcast dwellings, alterations and additions, \$87,782.

682 roughcast dwellings, brick fronts, \$1,000,775.

82 brick veneer dwellings, \$142,375.

192 frame dwellings, \$224,250.

32 frame dwellings, alterations and additions, \$10,230.

2 cement block dwellings, \$4,400

1 stone dwelling, \$1,500.

218 stores and offices, \$839,455.

136 stores and offices, alterations and additions, \$169,385.75.

12 banks, \$180,000.

3 banks alterations and additions, \$8,660.  
13 hotels, \$196,000

6 hotels, alterations and additions, \$56,000.

24 warehouses, \$240,625.

3 warehouses alterations and additions, \$3,300.

30 stor-houses, \$51,675.

39 workshops, \$86,583.

7 work-hops, alterations and additions, \$3,450.

153 stables, \$157,472.

15 stables, alterations and additions, \$7,348.

102 sheds, \$215,047.25.

1 shed, alterations and additions, \$960.

33 factories, \$344,330.

14 factories, alterations and additions, \$97,200.

2 hospitals, alterations and additions, \$7,500.

177 verandas, \$31,572.

1 Custom house, \$40,000.

3 fire-halls, \$110,800.

2 fire-halls, alterations and additions, \$6,800.

1 art gallery, \$32,350.

1 shop pen, \$10,000.

1 drill hall, alterations and additions, \$17,000.

19 churches, \$359,000.

3 churches, alterations and additions, \$17,500.

6 Sunday schools, \$51,600

12 Schools, Board of Education, \$835,500.

1 theatre (Royal Alexandra), \$150,000.

2 theatres, alterations and additions, \$16,000.

2 dairy buildings, \$34,500

4 boiler houses, \$2,000.

1 boiler house, alterations and additions, \$10,000.

8 clubs, \$162,950.

2 clubs, alterations and additions, \$700.

1 press building, \$81,000.

2 Hebrew synagogues, \$40,400.

1 Ladies' College, \$40,000

10 greenhouses, \$6,065.

1 boathouse, \$850.

1 pumping station, \$30,000.

1 Conservatory of Music, alterations and additions, \$3,500.

1 lecture hall, \$20,000.

3 mills, \$15,000.

1 assembly hall, \$1,000.

1 amusement hall, \$700.

1 Armories, \$250,000.

5 homes, \$118,000.

1 home, alterations and additions, \$6,700

3 dry kilns, \$3,200.

3 rinks, \$10,900.

2 telephone exchanges, \$38,000.

2 gymnasiums, \$39,500.

1 roller-boiler coaster, \$16,000.

1 laundry, \$300.

1 Convocation Hall, seating, \$9,000.

1 McMaster Science Building, \$50,000

1 garage, \$25,000.

1 Public Library, \$26,000.

1 freight shed, No. 1, \$26,000.

1 main pumping station, \$11,000.

1 press building, \$10,000.

Total, \$13,160,398.

### INDUSTRIES FOR BRITISH COLUMBIA

H. F. Bullen, Victoria, B.C., left a few days ago for England on a mission of the greatest moment to British Columbia, particularly to the coast and the cities Vancouver and Victoria. Negotiations have been in progress for over a year, and the option which expressed the plan expired short time ago, but it is understood that has been extended for two months. It is financed by Fowler, Perks & Co., one of the biggest firms of brokers in London. The brokers are interesting some of the biggest shipbuilding firms in Newcastle and on the Clyde, and if successful, a portion of the plant and a large force of workmen will be transported to British Columbia.

The plan is to consolidate the British Columbia Marine Railway, the Vancouver Engineering Works, the New Westminster Foundry and the big holdings of iron and steel lands on the west coast, into one concern. This will also include a floating dry dock at Vancouver, estimates for which were passed by the Dominion Government some time ago but which has hung fire. The ultimate intention is to build steel vessels at Esquimalt, B.C.

### DUBOIS IRON WORKS EXTENDING

The DuBois Iron Works, DuBois, Pa. have taken over the business of the Lat Engine Mfg. Co., Buffalo, N.Y. This enables the company to use the patents of Lazier concern. The improvement in construction and design of the engine make possible their operation on natural illuminating or coke oven gas, gas, alcohol, distillate, crude oil and kerosene. Engines will be made from 5 h.p. to 300 h.p.

The company's officers are: John DuBois, president; E. A. Radger, secretary; I. N. Hamilton, general manager; C. E. Stuart, sales manager. The company have secured Peter Eyermann, one of the most gas engine designers and engineers in Germany as chief of the engineering department of the company. The company's office will be Du Bois, Pa.

## Fairbanks Sales Force in Conference.

No better proof of the wide-reaching strength of the Canadian Fairbanks Co., Limited, could be given than the conference of the company's sales force in Toronto from Monday to Friday last week.

Among those in attendance were:

Montreal—H. J. Fuller, T. E. Ryder, D.

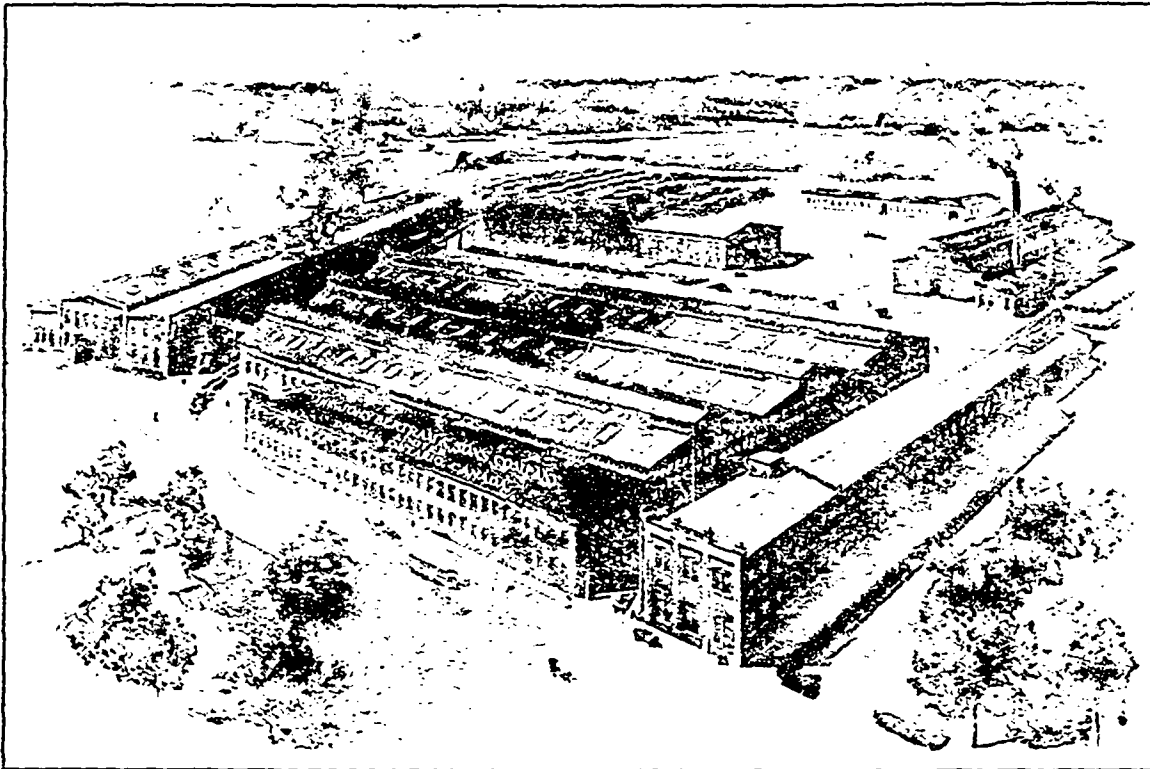
Robson, W. J. Sanderson, S. B. Tramer, Geo. Fisher, E. D. Hamilton, P. C. Brooks, J. S. Sanson.

Winnipeg—J. H. Cane, G. K. Tower, P. D. McLaren, A. H. Johnston, S. Jolliff.

Vancouver—G. H. Howard, R. M. Kalberg, F. W. Fisher.

sive, full of loyalty and of desire for greater information regarding the various lines handled by the company and particularly those made at one of the company's factories, also wider knowledge of selling methods.

The development of such an organization in the eight years since Mr. Fuller entered Canada as the representative of the Fairbanks Co., scale manufacturers, St. Johnsbury, Vt., is a remarkable tribute to the foresight and aggressiveness of Mr. Fuller and his



WORKS OF JOHN BETHAM & SONS, DUNDAS, ONT.

Guttridge, Gerald Robinson, E. B. Green, J. Falis, R. Miquelon, B. J. Curry, J. S. Bowar, W. S. Howe, J. McLeod, F. J. Holland, G. Drinkwater, M. P. Shea, H. L. De Wolfe.

Toronto—C. J. Brittain, C. S. Hook, F. M. Wen, F. J. Campbell, J. G. Robinson, Geo.

St. John—G. E. Choinier.

Halifax—K. N. Forbes.

New Glasgow—F. A. Lytle.

Chicago—Mr. Jensen.

More notable than numbers, however, was the appearance of the men. From President Fuller down, every man seemed alert, aggress-

ive. Further expansion may be expected in the next eight years as there is no more consistent advocate of the "Made in Canada" principle, as expressed in the establishment of Canadian factories to make lines hitherto imported than the president of the Canadian Fairbanks Co.



WORKS OF FAIRBANKS MORSE CANADIAN MFG. CO., TORONTO

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER

Accompanying this report are views of the John Bertram & Sons machine tool works at Dundas and of the Fairbanks-Morse Canadian Co.'s gas engine plant at Toronto, visited by the sales force during the conference. Great extensions are now under way at the Bertram works, the extensions being the result of an arrangement by which Niles-Bent-Pond tools are made at the Bertram works and the product of the enlarged plant is sold through the Canadian Fairbanks Co.

Across the street from the Bertram works is the plant of Pratt & Whitney, manufacturers of reamers, drills, etc., whose product is now almost ready for the market. As the Canadian Fairbanks Co. have represented this firm in Canada for years it can be safely conjectured what influence resulted in the decision to establish Canadian works.

It will also be seen from the accompanying view that the works of the Fairbanks-Morse Canadian Co. are capable of a production which would keep most selling forces "on the jump." Faith in expansion of Canada led to the building of large, up-to-date gas engine, producer gas plant and pump works. It is now "up to" the selling force to keep ahead of the production and according to the opinions expressed by representatives of the various branches this will be done.

Another Canadian branch plant will make Fairbanks scales at Beebe Plains, Que., instead of in Vermont as at present.

At the same time the Canadian Fairbanks Co. have contracted with the R. McDougall Co., of Galt, Ont., to take over the entire product of their smaller machine tools, the contract extending for a period of five years. The Dart Union Co., of Providence, R.I., also intend to establish a new factory in Canada, probably at Toronto.

Naturally a review of this rapid progress did much to enthrall each salesman in the house. The big feature of the conference, however, was education.

Monday was devoted to a discussion of the merits and best selling methods of scales, gas engines, steam specialties, and railway supplies. On Tuesday gas engines and transmission materials were taken up, a visit to the Canadian Fairbanks-Morse factory being also included. On Wednesday the delegation visited Hamilton and Dundas, to make an inspection of the methods of manufacture in operation in the John Bertram Works at Dundas; the Pratt & Whitney factory at Dundas, and the Union Drawn Steel Co.'s works at Hamilton. Thursday was devoted to valves and steam specialties, a theatre party being given in the evening; and on Friday another trip was made to the Fairbanks-Morse factory and a general recapitulation made of the results of the week's studies.

#### THE SOUTHERN CALIFORNIA NEW TRAIN.—BEST ROUTE.

The Los Angeles Limited, electric lighted, new from the Pullman shops, with all latest innovations for travel comfort, leaves Chicago 10.05 p.m. daily, arrives Los Angeles 4.45 p.m. third day via Chicago, Union Pacific & North-Western Line and the Salt Lake Route. Pullman drawing room and tourist sleeping cars, composite observation car, dining cars, a la carte service. For rates, sleeping car reservations and full particulars, apply to your nearest agent or address B. H. Bennett, 2 East King St., Toronto.

#### INDUSTRIAL PIE PLENTIFUL IN ONTARIO.

On January 7 instant in a large number of cities and towns, and other municipalities in Ontario by-laws were voted upon to raise money for various improvements, a majority of which were carried. Some of them were as follows:

Windsor, an industrial by-law to enable the council to arrange with manufacturers seeking locations.

Whitby, a by-law to assist the Ontario Car Works.

Wingham will loan the Wingham Carriage Co. \$5,000.

Deseronto, granting the Deseronto Furniture Co. a loan of \$10,000.

Welland, granting fixed assessment and other concessions to the Robertson Machinery Co.

Goderich, to aid the Rogers Mfg. Co., the Furniture Co., and the Carriage Co.

Orangeville ratified a loan of \$15,000 to the Hurndall Novelty Furniture Co.

Cayuga, to give the Window Glass Mfg. Co. 14 acres of land and tax exemption.

Southampton, to raise \$5,000 to extend the waterworks system.

Tweed will have granolithic sidewalks.

Napanee, by-laws to improve the town's sewerage.

Waterloo, a by-law for a \$23,000 loan for sewer farm improvements.

St. Catharines voted favorably for extension of the waterworks system.

Lastowel, to raise \$14,500 to construct new bridges.

Brantford carried sewer extension by-law.

Almonte decided to appoint an electric light commission.

Kincardine carried the Grand Trunk station, Coleman and Park by-law.

Woodstock endorsed by-laws to establish a parks commission and to raise \$20,000 for sewer extensions.

Guelph voted in favor of commissions to manage its waterworks and gas and electric light plants, and to loan \$25,000 to enable Morlock Bros. to extend their factory.

Renfrew, to raise \$6,000 for sewer extensions, and the county system of good roads.

Bowmanville decided to have its waterworks managed by a commission.

Bolton will raise \$2,500 for cement walks.

Harriston voted to raise money for school purposes.

Thorold carried waterworks by-law.

Mount Forest defeated a by-law to abolish the Water and Light Commission.

Voting took place at Picton on a by-law to do away with electric light and waterworks commissioners, and put it back into the control of the town council. The by-law was defeated.

Peterborough carried a by-law to provide \$21,000 additional to the \$40,000 already in the hands of the Board of Education to erect a new Collegiate Institute, costing \$61,000.

#### THE TRANSCONTINENTAL RAILWAY EXTENSION.

The Canada Gazette contains notice that tenders have been called for the construction of five additional sections of the National Transcontinental Railway. The notice states that tenders will be received until February

14, for the following sections of the Transcontinental Railway:

1. District "A."—From a point designated on the plans of the Commissioners at or near the City of Moncton, in the Province of New Brunswick, westerly for a distance of about 50 miles.

2. District "A."—From a point designated on the plans of the Commissioners at or near the town of Grand Falls, in the Province of New Brunswick, westerly to the boundary between the Provinces of New Brunswick and Quebec, a distance of about 62 miles.

3. District "B."—From a point designated on the plans of the Commissioners, at or near the Quebec Bridge, easterly for a distance of about 150 miles.

4. District "B."—From a point designated on the plans of the Commissioners, about 10 miles west of the Quebec Bridge, westerly to a point known as Weymontachene, a distance of about 45 miles.

5. Districts "C" and "D."—From a point designated on the plans of the Commissioners, about eight miles west of the Abitibi River crossing easterly for a distance of about 100 miles.

Attention is called to the following clause in the form of contract.

"All mechanics, laborers or other persons who perform labor for the purposes of the construction of the works hereby contracted for shall be paid such wages as are generally accepted as current for competent work in the district in which the work is being performed, and if there is no current rate in the district, then a fair and reasonable rate, and in the event of a dispute arising as to what is the current or a fair and reasonable rate, it shall be determined by the Commissioners, whose decision shall be final."

"This agreement is subject to the regulations now in force, or which may at any time hereafter be in force during the construction of the works hereby contracted for, made under the authority of the Department of Lands and which are or shall be applicable to such works." The schedule of minimum wages determined upon by said Department is a form part of the contract.

"The contractor shall, in connection with the whole of the said work, as far as practicable, use only material, machinery, supplies and rolling stock manufactured or produced in Canada, provided the same can be obtained as cheaply and upon as favorable terms in Canada as elsewhere, having regard to quality and price."

For some years past an impression has been prevailing that coal existed somewhere on the Hudson Bay slope. Recently extensive anthracite beds have been found in the neighborhood of Albany River, a stream which forms the dividing line between Ontario and Keewatin. The full significance of these discoveries can only be realized if they are considered in conjunction with the vast deposits of iron ore throughout the western part of Ontario. It is claimed that coal mines convenient to the iron ore are not in time rival the great manufacturing centers of Pennsylvania. As a further step of opening up New Ontario it has been practically decided to continue the Cobalt road to James Bay, which constitutes the southern waters of Hudson Bay.

# OFFICE METHODS AND APPLIANCES.

A Review of the Latest Suggestions in Office Systems and Supplies for Manufacturers.

## Following up Statements and Drafts.

BY ERNEST H. DALE.

Some business houses, instead of sending out statements at the end of each month render them on or about the dates the bills become due, with notice thereon to the effect that draft will follow on a certain date usually three to six days later—if the account be not paid in the meantime.

It is the purpose of this article to set forth a method of handling collections made in this manner, with a minimum of labor.

Some card systems involve so much writing and duplication of work as to render their use burdensome. The elimination of that objectionable feature was the purpose held in mind in originating this system.

For every account on which collection is to be followed up, a card similar to Form I is filled out and used for all collections on that account until the card is full. Then it is transferred to a section of the file provided for obsolete cards, and a new one takes its place.

The file is divided into four main sections by guide cards as follows: "Statements," "Drafts," "Honored," and "Obsolete." The sections "Statements" and "Drafts" are subdivided by date cards.

In the column on Form I, headed "Invoice," should be entered the date of each charge against which draft is to be made; and in the column marked "Statement" the date the statements leave the office. The column headed "Draft" would show the date draft is to be made. This date is copied from the statement and is merely checked when on the proper day the draft has been deposited or mailed to some bank for collection.

After the card has been written up to correspond with the statement it is filed in front

of the guide "Statements." In order to ascertain quickly what drafts are to be issued from day to day these account cards are further arranged in chronological order by the use of guides numbering from one to thirty-one. Thus, if statement were sent showing that draft would be made on March 15, the card would be placed in front of guide "15."

### A REMINDER OF THE DATE WHEN ANSWER IS EXPECTED.

As drafts are rendered from day to day and the dates checked, the cards are then placed in the section marked "Drafts" under guides showing the dates when returns are due. If a debtor does not respond on or before the date anticipated, or if the draft should be returned by the bank, the matter is in order for immediate attention in the customary manner—by letter or by telegram in extreme cases.

If the draft be returned, such fact, together with the date, is noted in red ink in the column headed "Action," and if a letter is written that day the date of writing also appears. The card is then moved up to the date when a reply is again expected. In case it is decided to wait a few days before taking further action on the account, the card is returned to the section "Statements" under the date contemplated. Thus delinquents are constantly kept before the operator of this system.

If the draft be honored or remittance made direct, such action is noted in the space provided and the card placed in front of the guide labeled "Honored," where it remains in alphabetical order until another portion of the account becomes due, at which time

the card repeats its journey through the file. The system is self-indexing. The account cards have protruding index tabs wide enough to accommodate the first three or four letters of the debtor's last name, and by using a card about five inches long the first diagonal row through the file would show the letters A to M and the second row N to Z. Thus all the cards of one letter would also be found one directly back of the other. This enables any desired card to be found almost instantly.

A tracer card may be used different in color from the account cards. Its purpose is to show that more than one collection is being traced on any one account. It is used in case the account card is diverted from its regular course through the file, by reason of two or more statements of drafts being out for different portions of the same account, as the account card always occupies a position in the file appropriate to the latest statement or draft.

It is merely a reminder, and contains at all times a synopsis of all unpaid drafts when two or more drafts on any one account are being followed; and the last date opposite each name suggests the approximate position of that particular account card, on which all notations are made.

### HOW CREDIT IS GIVEN ON THE TRACER FOR PAYMENT.

This tracer or reminder follows the chronology of the file and always the current date—being moved up from day to day. When any draft, the date of which appears on this card is paid, the date is merely crossed off.

The last name and ledger folio of the drawee is all that is necessary to connect this card with the account card and facilitate the location of the latter card.

Collections attempted by other means than draft can also be followed up by this system with a few modifications, whether made as bills become due or otherwise.

To enable the accountant in charge of this work to know on what accounts bills are coming due from day to day, and to see that statements should be issued accordingly, a sheet is kept (or as many such sheets as sales ledgers in use), on which are entered every ten or fifteen days the ledger folios on which unpaid bills appear.

These would be entered under the dates such bills fall due.

Of course, these folios could be copied from the sales book at the end of each month, but where bills are subject to a cash discount it would probably require more time to ascertain what bills have not been paid at the end of the credit period.

In rendering statements under this system, it is customary where several bills fall due on consecutive dates, and remain unpaid, to send one statement for all the charges and draft accordingly.

The Imperial Coal Co., operating at Beersville, N.B., is considering the establishment of a brick making plant with a capacity of 20,000 per day.

NAMES		L. F.	DATES OF UNPAID DRAFTS			
L. F.						
711						
Thomas Jones						
27 George St. Toronto						
INVOICE	STATEMENT	DRAFT	AMOUNT	BANK	ACTION AND REMARKS	

(front card). Record of bills due, filed under the name of the debtor, and showing the date of due. Form II (back card): Tracer card which assembles all the amounts due from one man.

# Necessary Expenses of a Salesman

BY FRED. BRADFORD ELLSWORTH, IN THE IRON AGE.

There are some firms whose knowledge of handling a salesman is so vague and lacking in good sound business judgment that it is beyond my comprehension how they can possibly be successful at all. The only plausible excuse to offer is that these people have unfortunately never had experience selling goods on the road and do not understand the life of a salesman.

For the benefit of such who are unable to bring within the range of their vision the necessary expenses of a salesman I shall attempt to enumerate them and also make suggestions that will be of benefit.

## RAILROAD FARES.

The first item of expense is railroad fare. The majority of firms allow their salesman full fare. If the salesman invests in mileage books, and many have half a dozen or more, necessitating an outlay of several hundred dollars of their own money, they reap the benefit of rebates. On the other hand, many firms emphasize the fact that mileage books are to be purchased and used whenever possible from an economical standpoint and all rebates returned to the company. In the course of a year these rebates amount to considerable money.

Where a salesman covers the entire country, or starts from the East and travels through to the Pacific Coast, it is impossible to use mileage books economically. Round trip tickets can be procured, good for several months, for much less money.

## HOTELS.

Hotels throughout the country differ but slightly in rates, for almost every city of importance has within the last few years built new hotels, and one is about as good as another.

Good, comfortable rooms in any modern up-to-date hotel cost from \$2 per day up, and with bath from 50 cents to \$1 extra. With few exceptions, hotels are run on the European plan, and meals will average \$1 apiece. Breakfast and luncheon may not always cost \$1 each, but no dinner at night can be had for that price, and \$3 per day for a man with a normal appetite is indeed economical living. Occasionally accommodations can be procured for less money than here cited. At the same time there are some cities where these figures are inadequate.

## ENTERTAINING.

The treatment of customers is a question I have often heard discussed by employers and salesmen. The average salesman who is well known in his territory when he starts out in the morning generally fills his pockets with good cigars. Most everybody smokes nowadays and talking business while the fragrant aroma of a choice Havana permeates the atmosphere at times causes a feeling of good fellowship and often from a business standpoint has a beneficial effect.

The unredempting part of it is shown more often than not by the new and inexperienced salesman, who gives away cigars indiscriminately, with the impression that it will help to ingratiate him into the good graces of those with whom he comes in contact. Frequently

it has a detrimental effect and does not give a good impression at all.

It is customary for a salesman to invite a buyer to lunch with him occasionally, provided he knows him well enough, or to dine with him at night and spend the evening at the theater, or in amusement that is congenial to his guest. A salesman should never do this because he anticipates an order, but because when he enjoys the patronage of a house he is, as a rule, on friendly terms with the buyer. This is a pleasant and courteous manner of showing his appreciation of their pleasant business relations.

## INCIDENTAL EXPENSES.

Bus and baggage, laundry, pressing clothes, telegrams, postage, typewriting and car fare are other incidental expenses. They are apparently of minor importance, still they amount to considerable money in a short time and are all necessities to a salesman.

## TIPPING PRACTICE.

The next item of expense, and an increasing one, is that of tipping. This practice originated in Europe, became the vogue in this country, and then practically an unwritten law. It is now carried to such an extent that it is a disgrace to those who allow it. Railroads, hotels and cafes expect patrons to pay their employees' wages. For a salesman above all others to ignore this practice would result in his being subjected to such annoyance, discomfort, insult and humiliation that he simply could not endure it.

## EXPENSE BOOKS.

Compelling a salesman to keep an itemized expense account is a question that has been discussed over hundreds of times by employers and salesmen. Its advisability or inadvisability is, I think, a matter of opinion. There are many firms who do not believe in asking their men to render an itemized account. They are furnished so much money when they start on a trip and the difference between that and what they return is their expense. Any man who pretends to know anything about business should know pretty nearly what it costs to travel on the road. The majority have had that experience. If they have not and employ salesmen, it would be an economy in the end to hire an experienced manager.

## RED TAPE.

I know of a firm recently who lost one of the best salesmen in the country, all on account of an expense book and red tape. The man was a high priced salesman whose services they had solicited. He agreed to cover a certain territory, and if to his liking was to sign a three-year contract. When he was ready to start the cashier handed him an expense book, with every conceivable item of expense enumerated, with instructions that at the end of each week upon receipt of his book a check for the next week's expenses would be forthcoming. Then they handed him a form sheet upon which he was to give the name of each person called on daily, and if he did not sell why not, and a lot of other unnecessary red tape.

The salesman was nonplussed and at the same time insulted, and going to the head of the house said: "Gentlemen, you hired

me to sell goods. That is my profession and I have been doing it successfully for years. I am not a bookkeeper or accountant or I should have applied for that position. If you have no confidence in my integrity why did you seek my services? I shall be pleased to look after your interests to the best of my ability, communicating such information as is of importance, but as for rendering an itemized expense account and a receipt, such as your cashier insists upon I shall not do it." The firm was obdurate, and the day the man signed a contract with annual concern at \$5,000 a year, with the provision of extending the contract to five years and an increase of salary.

## EXPENSE ACCOUNT ADVISABLE.

Personally speaking I am in favor of a salesman keeping an expense account. I think from a business standpoint it is the best interests of a firm. I do not say to cast any reflection on the honesty of a salesman. Most of them are honest and reliable. There may be some who are dishonest perhaps through caution and perhaps because well paid. Occasionally there are salesmen whose eyesight is so poor that they are unable to discriminate between their own name and that of the firm. This class is invariably poorly paid and has to make both ends meet some way or other.

An expense book is a good reference for a firm to have. It shows just what the cost of covering different territories. It is handy in making out a route list and pretty nearly the time taken to cover it. It also shows the money spent on the territory which at times according to conditions it may be expedient to increase or economize depending on the nature of the business.

## NEW FACTORY FOR BUSINESS SYSTEMS.

Business Systems, Limited, Toronto, has bought the McMahon property, 52 Spadina Avenue, where they intend erecting a five story factory for the manufacture of their loose leaf systems, also of their lines of office fixtures which they intend to start manufacturing.

This firm have made exceptional progress since they started in business about six months ago, and now find it necessary to erect premises specially constructed for the manufacture of their lines and large orders to make possible further expansion. Plans call for a brick building, mill construction, modern in every way. The work will be done during the coming spring and summer and it is hoped the building will be ready for occupation by August.

The Toronto Globe declares that Parliament should remove the duty on coal, which would largely stimulate manufacturing. The Globe says that in the fiscal year of 1906-7 \$2,206,283 was paid in duty on coal. If coal is free, so that this duty on bituminous coal fell largely on the manufacturing industries, The Dominion Coal Co. and the Scotia Co. and other coal mining companies in the maritime provinces, all of which produce soft coal, are very much opposed to change in the duty on coal. They claim even with the present duty, they are able to hold the Dominion market any place west than Montreal, as the item of duty prevents their competition with Atlantic coal west of that point.



When your salesman goes out for orders he must talk to the man who decides, the man who buys.

When you advertise you must do the same—talk to the man who decides, the man who buys.

If you want to talk to the men who decide, who do the buying for the manufacturing firms throughout Canada you **MUST** use **THE CANADIAN MANUFACTURER.**

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## A Criticism of Penny Saving.

The following criticism by a writer in the New York Sun of the oft-heard expression that wealth comes through the saving of pennies is well worthy of attention by manufacturers. It is true that what seems to be extravagance is in reality a good investment.

"Save your pennies and dimes, young gentlemen," the lecturer, a college professor, advised his audience. "Never spend a dollar if you can help it; forego the luxuries; live plainly, be economical and you will be successful."

"That was not very intelligent advice," remarked a bank president as he left the hall. "Without qualifying his directions, he was pointing those young men to a life of drudgery. Big affairs are not managed in that way nowadays."

"But on a college professor's salary they have to be."

"Probably; but business is another thing. For instance, when I bought an automobile my friends said I was indulging in wild extravagance. They foresaw that I would land in the poor-house and pitied my family. My family did not worry about it greatly, for the swift rides in the park did every member good, and I did not say much about the cost of the machine.

"One day, there came to town the representative of the biggest contracting firm in the East, desirous of looking over the city with a view of placing investments. A dozen of us met him at the cafe, and talked through a six-course dinner. Then plans were discussed for the guest's entertainment the following day.

"Harris has an auto," someone said, and, of course, it was arranged that I should take the visitor for a ride.

"I did so, spent the most of the day with him; we became well acquainted; he seemed to like me and before he started home he offered me the Western management of his company's financial affairs. I had no better chance than the others save for the automobile. That brought me the opportunity.

"I am \$200,000 ahead already through the connection, with more to come. I could have got along probably without a machine, but it was an investment that paid the largest return of any I ever made."

One rainy evening a newspaper-man walked along the line of railway coaches in a noisy union station. His ride home would take half the night. He debated with himself whether or not he should take a Pullman.

The fare in the Pullman was 75 cents. He could save that amount by riding in the ordinary car, but the ordinary car was crowded and he dreaded the crowd and the weary companions with whom he would associate in the coach. Still, 75 cents was not to be despised, and he pondered the problem for several minutes. At last the attractions of the Pullman in rest and preparation for the following day's work won; he gave his grip to the porter, and sat back in the section assigned him in solid satisfaction.

After dinner in the dining car he went to the smoking-room and found there the only other man on the sleeper, the agent for a manufacturing firm of the busy Northwest.

"Have a light?" was the opening of their acquaintance.

Then came the inevitable Western salutation, when the emblem in the coat lapel is observed. "Where do you belong? Both were members of the same lodge.

Following that came a friendly talk, and the manufacturer told the newspaper-man many interesting experiences, not noticing that the latter kept a very eager questioning in operation. The conductor of the train stopped to take part in the conversation, and finally the superintendent of the division, who was aboard, dropped in, and the peculiarities of modern machinery making methods was thoroughly gone over.

It was nearly midnight when the newspaper-man reached home, but he sat down to his typewriter and rattled the keys for an hour before tumbling into bed. He simply put into readable form some of the things that had been told him that evening, and a check for \$75 was the payment that his story brought him.

He always rides in the Pullman car now when he travels, and says that he shall continue so to do until the \$75 gives out. He has never made so good a speculation as on the occasion mentioned, but he has mingled with people who have helped him in many ways, and will continue to help him for many years to come.

Here was a case where the expenditure of a few cents brought a rich return. It might not always prove possible, and the lesson might fail to come true in many instances. But the fact remains that the man who is trying to get on in the world must meet the people who do things if he expects to accomplish his ends. It is good policy, as well as good comfort, to rub against the leaders in business affairs.

There was a young man of Kansas City who had the business intelligence necessary to success, but he had little opportunity to exercise it. He hesitated one evening whether he should take dinner at a cheap restaurant or should eat at one of the cafes patronized by the best people of the city. He chose the latter, and this is what happened:

"Come over to our table," was the invitation that came from a friend, and he accepted.

He was introduced to a widow who owned a piece of ground lying close to the business part of the city, but which had never been utilized for building purposes. He found in his conversation with her that she needed a steady income, and finally told her he would take a lease on the ground for 99 years at \$125 a month, and she made the bargain.

On this lease he borrowed \$25,000 and built an office building that rents to-day for enough to pay the interest and give him a profit of \$750 a month. He has nothing to do but collect his money, and the rental value of his property increases daily, as the city is growing fast in that section.

The dinner in the first-class cafe was the start; but, of course, it took business acumen and ability to carry on the enterprise after he had it started. The man dull of apprehension might eat in the cafe for months and make no headway financially.

The young man who seeks to get ahead must have something more than opportunity.

He ought to see the best way to do things well.

Sometimes the chance of the young man depends quite as much on others as on himself and he has reason to thank the fates who throw him on his own resources. He finds that he must meet the conditions and does so, testing the fiber of his nature, and proving the stuff of which he is made.

A son of a New York lawyer became so worthless that the father to separate him from the girl he wanted to marry sent him West with only money enough to pay his fare and expenses, but armed with authority to draw on a Western bank up to \$5000.

The young man drew \$2,000, landed at Eastern Colorado and sought work among the sheep ranches of the irrigated land. In a week he sent for more money, and later for all that he could have. Then a few months after came a message.

"Will be in city on Saturday with ten cars of sheep. Meet me."

"Ten cars of sheep! What lunacy is the young man up to now?" exclaimed the father.

But the youth came, and he had ten cars of young sheep that had been fattened on alfalfa, and cottonseed meal, ready at the top price in the market. He sold the bunch and showed a draft for \$12,000.

"I made some money out there and the rest is out of the sheep. I don't owe anything. Take out \$5,000, dad; I am going to call on Carrie."

He did and married the girl. They are now managing a big sheep ranch in New Mexico, with prospects of becoming far wealthier than the father.

Likewise little things give an index to the character of the young man. For instance, the editor of a country newspaper was called to the telephone and heard a message from a real-estate man in a neighboring town.

"What will it cost to put an advertisement in red on the middle of your front page?"

Now the editor did not print a yellow journal and it meant a great deal of work to run the paper through the press twice; he named a price that he thought would be prohibitive.

"All right," was the response.

"But do you understand?" asked the editor, thinking the dealer did not get the right figures.

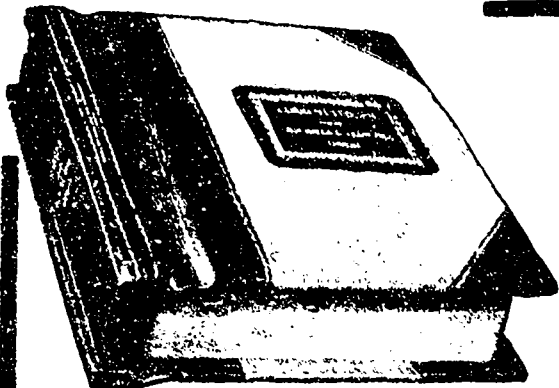
"Of course; do as I tell you." So the advertisement was placed in red and the bill was paid.

The farm advertised was sold; no one could help seeing the announcement. The young real-estate man is now president of an oil and gas company that pays dividends on over \$1,000,000 of stock and his wealth is estimated at \$100,000. This is not great as it tumbles go; but it is a great deal in the West where money comes in more slowly.

Likewise it is a good thing to build up a reputation that can be sustained.

"I have to be careful," said the bank president already quoted, discussing the various estimates of the young man in the town, "because I began that way."

"I know one wealthy banker who never wears clothes that cost more than \$50 a suit; who is careless of his personal appearance, never pays his store debts, and is forced to do it and is reckless in his activities. Yet he makes money."



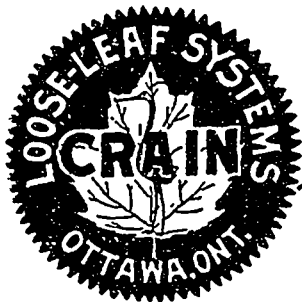
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SYSTEMS**  
LIMITED  
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TORONTO. CANADA

"If I were to fail to pay my bills on the first of the month, or should I take to wearing old clothes, or should be seen in fast company, there would be a run on the bank the next day. People would think something was wrong."

"If the other banker should suddenly take to good dressing, his bank would be under suspicion. People around us are educated by our actions and learn what to expect of us. When we vary from our usual course they suspect danger."

"I never loan freely to a young man who is educating the community to expect a poor performance from him. It may be that he will succeed, but the chances are against him, because he is nearer to the bottom than the man who has a proper pride in himself and in his own standing."

That is not, perhaps, a very profound philosophy, but it is laden with truth. The chance for the young man is largely his own making.

"But there are not so many chances, and money goes faster than it used to in the old days," complains the youth.

To quote the bank president again:

"I wish I were young once more. There are more chances for clean, bright young men who know how to use wisely what they earn than ever before in this country."

He was a poor boy himself and has been through it all.

#### THE ART OF HANDLING MEN.

Business men often fail because they do not know how to handle men. They can do their own work all right, but they are failures when it comes to directing others. They lack tact and diplomacy.

Many men antagonize others; they lack patience, lose their temper, and fly to pieces over little things. No man is a good leader who can not control himself.

A great many business men seem to think that it takes a deal of driving, scolding and fault-finding, to get the best out of others. It is, however, just the opposite. Employees never give up their best in response to forcing methods.

I know a young man who promises to be a leader in his line, who is as quiet and courteous in his methods as a modest woman. He never raises his voice, never gets angry. When an employee needs correcting, instead of scolding or nagging, he sits right down and shows him or her just how to do the thing. He tries to help his employees out of their difficulties, not to confuse them. He does not need to scold, because everybody respects him, admires him, and knows that he is always trying to do the fair thing, to give a square deal, that he wants only what is just right, and that there is nothing arbitrary in his methods. The result is that he has perfect discipline in the establishment. No one would think of taking advantage of him or trying to deceive him, because he is so kind, square and true.

I know another man in business nearby him who adopts just the opposite method. He storms and swears, scolds, nags, goes through his establishment like a bull through a china shop, making everybody feel mean and disagreeable. Nobody respects him. He rules by brute force, keeping his employees cowed and afraid of him. They obey him and let him impose upon them in order to

avoid a scene, or for fear they will lose their positions. If an office boy or stenographer makes a little mistake he will go all to pieces, fly in a rage, and make it very uncomfortable for everybody about him.

People waiting in the outer office often hear loud talking and most abusive language in his private office. He is not nearly as successful as his quiet, unobtrusive neighbor.

He never thinks of recognizing one of his employees on the street.

The other man always lifts his hat to the humblest girl in his employ, and has a pleasant smile for everybody, because he feels an interest in everybody and they all love him.

#### WHEN A MAN THINKS HE HAS THE FIELD

When a man says to himself, "Now I can breathe easy, I can let up a little, I have the field, I am head and shoulders ahead of my competitors and I can afford to take things easy," he is in danger.

It is a dangerous point in any man's career when he feels sure of his position or his fame. Over confidence is the first sign of a decline, the first system of deterioration. We do our best work when we are struggling for our position, when we are trying with all our might to gain our ambition, to attain that which the heart longs for.

It is astonishing how quickly things reverse themselves. A man at the head of a great enterprise sees that he is making a great deal of money, that he has no dangerous competitors, and goes to Europe for a few months or a year. When he returns, he is amazed to find how his competitors have crept up toward him, or even past him, and he sometimes finds men that he never dreamed would come anywhere near him, way beyond him, because they did not feel that their positions were assured, and so struggled to attain, not as if they had already reached the goal. They kept up with the times. They pushed their business with all the vigor of a man with a definite purpose to excel.

Business and professional methods to-day are like the scientific and medical books, which are often out of date in a few years, in many respects even in one year, so rapid are progress and discovery. The new is everywhere crowding out the old, and the man who would keep up with the times must keep his eyes open, must be alert for new ideas and for every up-to-date device that will facilitate business.

The same is true of the teacher, the preacher, and the specialist in every line. If they do not keep up with the times, if they do not keep in the very van of progress, always on the lookout for the new and the progressive, they quickly become back numbers. The new, the up-to-date, everywhere is crowding out the old fog.

It may be that you do not think it is worth while to keep up this rapid pace. You may be satisfied with less, be willing to take a second place in your speciality; but if you think you can keep the lead without perpetually pushing, without keeping an eagle eye on progress, you will pay a fatal price for your mistake.

Everywhere we see institutions deteriorating because the great characters who have built them up have left them in less progressive hands. There never was a time when eternal vigilance in business or profession was so imperative to leadership as to-day.

The man who thinks that he can take it easy that he can let up in his efforts, is very quickly left behind.

This is true in every line of endeavor. Among the newspapers and periodicals are many striking illustrations of paralysis, deterioration, decline, because the editors and proprietors thought that their positions were assured. Of some of these publications, little more than the name remains to-day to remind us of their former greatness. They are by shadows compared with their former power and influence, just because of the dropped standard, the deterioration of the founder's head.

This is why some of our great business houses, which had attained enviable reputations, have drifted so rapidly to the rear. The men who built them up tried to take things easy, to run on the reputation of the house, and, behold! modern methods had almost crowded them out of business before they realized their deterioration. Some of them have found out too late to retrieve their rapid decline. Dry rot has set in so extensively that they were unable to save the business from ruin even by heroic treatment. Others had lost their customers before they realized that they were standing still in comparison with the rapid progress of some of their competitors. The story of how young men without capital, and with very small houses, have passed by those which have been great names, for half a century or more would read like romance.

It is a dangerous thing to try to run on reputation. No matter how big a house is if it stands still, it will very quickly be overtaken, for there are too many bright minds, too many young men pushing for supremacy in the same line to allow of a cessation of effort.

Under the commercial treaty concluded between Canada and Japan the latter country becomes entitled to "the most-favored nation treatment." That is to say, any tax reductions granted by Canada to any foreign country must also be accorded to Japan. Canada has a special treaty with France under which sparkling and non-sparkling wines containing 26 per cent. or less of alcohol, prunes, nuts, and castile soap are admitted at lower rates of duty than under the general tariff. The reduced duties will not apply on similar goods of Japanese origin, but the importations from that country are as yet inconsiderable. The instructions to Canadian customs collectors on the subject read as follows: "Under the recent treaty with Japan, ratified July 12, 1906 it is provided in effect that higher duties shall be imposed on goods of Japanese origin than on similar goods of French origin. You are advised that the customs duties, if any, collected on goods of Japanese origin entered in Canada since July 12, 1906, in excess of the duty payable in respect of such goods under the French treaty, will be refunded, pending further legislation on the subject." The general tariff imposes a specific duty and 50 per cent. ad valorem on wines, but the latter is not collectible under the French treaty. The reduced rates applicable to the other goods are: Prunes, 3 cents per pound; castile soap, one cent per pound; shelled nuts, 3 1/2 cents per pound; unshelled nuts, two cents per pound.

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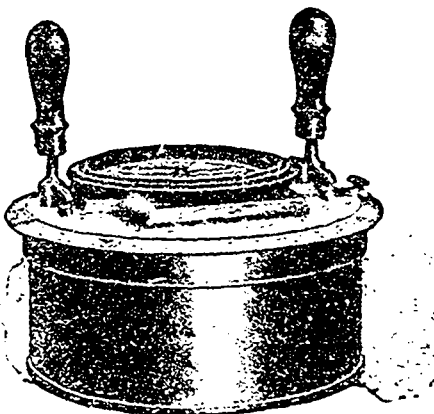
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## YOUR FACTORY COST SYSTEM.

### What Is Its Basis?



**THE CALCULAGRAPH**  
DOES NOT GUESS  
DOES NOT ESTIMATE  
DOES NOT FORGET  
DOES NOT MAKE CLERICAL ERRORS

As the stability of a building depends on the soundness of its foundation, so a factory cost system depends on the accuracy of the records on which it is based.

If you depend on your workmen for these records they must be full of errors—not necessarily intentional.

## THE CALCULAGRAPH

is a machine which makes original records of working time with absolute mechanical accuracy.

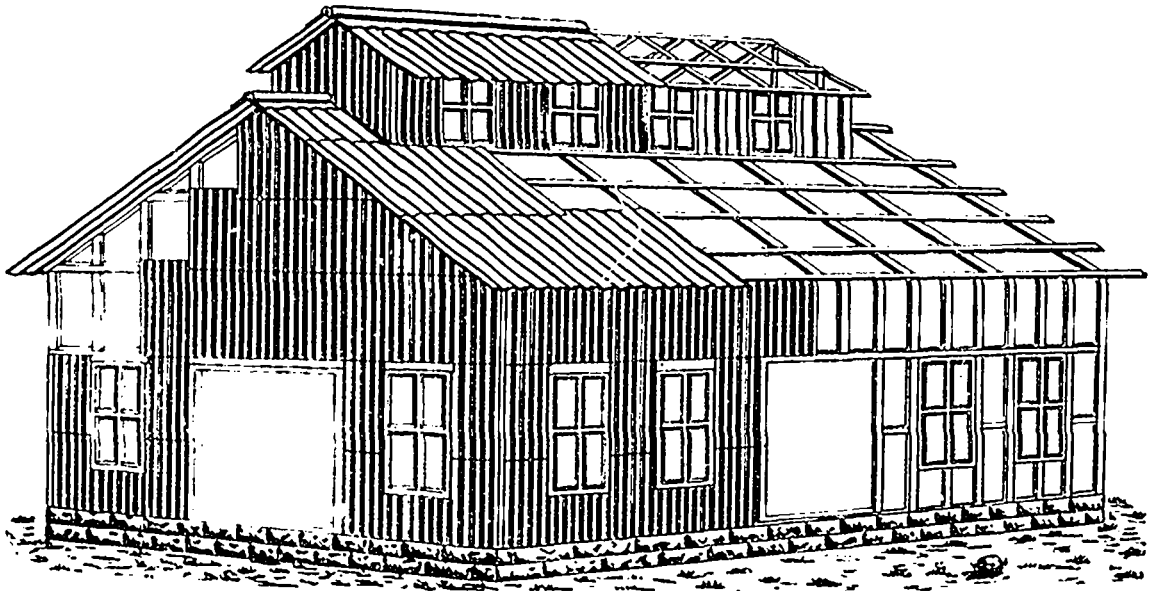
Such records make a reliable foundation for, and are adaptable for use in connection with, any system of finding costs of factory products.

The **CALCULAGRAPH** is the only machine in the world which mechanically subtracts the time of day a workman begins from the time of day he stops and prints his actual working time.

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We carry a 600 ton stock in Oshawa, Montreal, Ottawa, Toronto and London and can ship ordinary requirements the same day order is received.

Made in 1", 2", or 2½" corrugations in sheets any length up to 10 feet in 28, 26, 24, 22, 20, 18 gauge, both painted and galvanized.

This class of material is most suitable for fireproofing, Factory, Mill, Barns and Warehouse Buildings and is water and wind proof.

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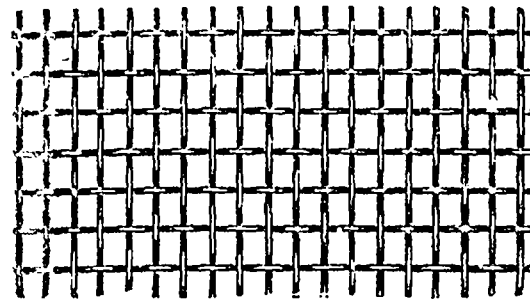
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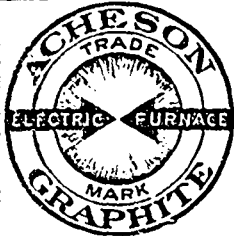
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Used Wherever Portland Cement Is Made

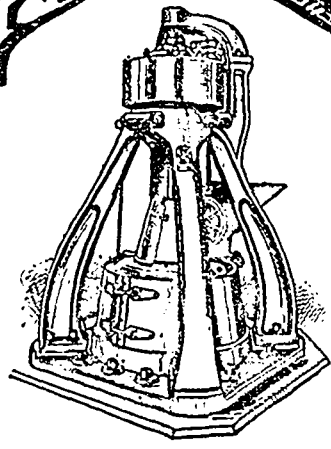
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Portland Cement Clinker reduced from 1/2 inch to required fineness in one operation, with no auxiliary apparatus. No other machine made will do this.

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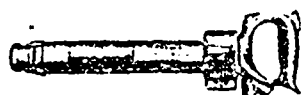


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M A D E I N C A N A D A

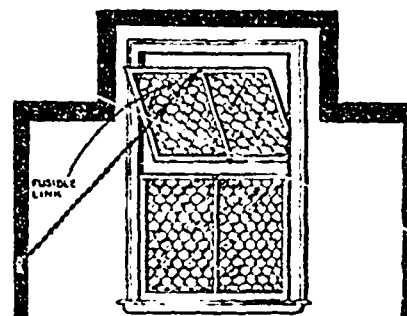


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They give absolute security—resisting intense fire heat, as well as the action of water.

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This "wired glass" admits the light as freely as plain glass—is rather ornamental in effect, and greatly lessens insurance rates.

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IS THE GREAT SAVER OF STEAM AND FUEL

First—It uses only just enough of the exhaust to bring the feed-water to the highest point.

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**168 BAY ST - TORONTO**

# Classified Index for Lines Sold by Advertiser

All advertisers are invited to send in full list of lines sold by them. We desire to keep this index thoroughly up-to-date, but this will be impossible unless each advertiser sees to it that he is represented under each heading he is entitled to.

<p><b>Abrasives</b> Williams, A. R. Machinery Co., Toronto.</p>	<p><b>Annealing Muffles and Furnaces (Wire)</b> Leslie, A. C. &amp; Co., Montreal. Turner, Vaughn &amp; Taylor Co., Cuyahoga Falls, Ohio.</p>	<p><b>Belt Fasteners</b> Bristol Co., Waterbury, Conn. McLaren, D. K., Montreal and Toronto. Petrie, H. W., Toronto. Sadler &amp; Haworth, Montreal and Toronto Williams, A. R. Machinery Co., Toronto</p>
<p><b>Accountants</b> Neff &amp; Postlethwaite, Toronto. Viau, Henri, Montreal.</p>	<p><b>Antimony</b> Syracuse Smelting Works, Montreal.</p>	<p><b>Beltling (Cotton)</b> Dominion Belting Co., Hamilton, Ont. McLaren, D. K., Montreal and Toronto. Petrie, H. W., Toronto. Sadler &amp; Haworth, Montreal and Toronto</p>
<p><b>Acids</b> Canada Chemical Co., London, Ont. Nichols Chemical Co. of Canada, Montreal.</p>	<p><b>Anvils and Vises</b> Leslie, A. C. &amp; Co., Montreal.</p>	<p><b>Beltling (Leather)</b> McLaren, D. K., Montreal and Toronto. Petrie, H. W., Toronto. Sadler &amp; Haworth, Montreal and Toronto Williams, A. R. Machinery Co., Toronto.</p>
<p><b>Air Compressors</b> Allis-Chalmers-Bullock, Limited, Montreal. Canada Foundry Co., Toronto. Canadian Hand Drill Co., Sherbrooke, Que. Darling Bros., Montreal. Smart-Turner Machine Co., Hamilton, Ont.</p>	<p><b>Architects</b> Parke, R. J., Toronto.</p>	<p><b>Beltling (Rubber)</b> Gutta Percha &amp; Rubber Mfg. Co., Toronto. McLaren, D. K., Montreal and Toronto. Petrie, H. W., Toronto. Sadler &amp; Haworth, Montreal and Toronto.</p>
<p><b>Alum</b> Nichols Chemical Co. of Canada, Montreal.</p>	<p><b>Automatic Gear Cutting Machines</b> Booker-Brainard Milling Machine Co., Hyde Park, Mass.</p>	<p><b>Beltling and Supplies</b> Bristol Co., Waterbury, Conn. Dominion Belting Co., Hamilton, Ont. Gutta Percha &amp; Rubber Mfg. Co., Toronto. Jeffrey Mfg. Co., Columbus, Ohio. McLaren, D. K., Montreal and Toronto. Petrie, H. W., Toronto. Williams, A. R. Machinery Co., Toronto.</p>
<p><b>Aluminum</b> Northern Aluminum Co., Pittsburg, Pa. Syracuse Smelting Works, Montreal.</p>	<p><b>Axles</b> Nova Scotia Steel &amp; Coal Co., New Glasgow, N.S.</p>	<p><b>Blast Furnace Brick</b> Dunbar Fire Brick Co., Pittsburgh, Pa. Elk Fire Brick Co., St. Mary's, Pa. Hamilton Facing Mill Co., Hamilton, Ont. Harbison-Walker Refractories Co., Pittsburgh. Pennsylvania Fire Brick Co., Beech Creek, Pa. Queen's Run Fire Brick Co., Lock Haven, Pa. Stowe-Fuller Co., Cleveland, Ohio.</p>
<p><b>Angles, Beams and Girders</b> Bourne-Fuller Co., Cleveland, Ohio. Canada Foundry Co., Toronto. Nova Scotia Steel &amp; Coal Co., New Glasgow, N.S.</p>	<p><b>Babbitt Metal</b> Petrie, H. W., Toronto. Syracuse Smelting Works, Montreal.</p>	<p><b>Banks</b> Bank of Hamilton, Hamilton, Ont.</p>
<p><b>Aniline Colors and Dyewood Extracts</b> Benson, W. T. &amp; Co., Montreal. Brunner, Mond &amp; Co., Norwich, England. Canada Chemical Mfg. Co., London, Ont. Cassella Color Co., New York City. McArthur, Corneille &amp; Co., Montreal. Nichols Chemical Co. of Canada, Montreal. Winn &amp; Holland, Montreal.</p>	<p><b>Bar Iron and Steel</b> Bourne-Fuller Co., Cleveland, Ohio. Leslie, A. C. &amp; Co., Montreal. London Rolling Mills, London, Ont. Union Drawn Steel Co., Hamilton, Ont.</p>	<p><b>Belt Dressing</b> Petrie, H. W., Toronto Sadler &amp; Haworth, Montreal and Toronto Williams, A. R. Machinery Co., Toronto.</p>

# CONTRACTORS

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# CLASSIFIED INDEX.

(CONTINUED).

## Blowers

Hamilton Facing Mill Co., Hamilton, Ont.  
Sheltons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## Boiler Compounds

Canada Chemical Mfg. Co., London, Ont.  
Hamilton Facing Mill Co., Hamilton, Ont.

## Boiler Inspection

Boiler Inspection & Insurance Co., Toronto.  
Canadian Casualty & Boiler Insurance Co., Toronto.

## BOILERS (See Engines and Boilers)

### Bolts and Nuts

London Rolling Mills, London, Ont.  
Morrow, John, Screw, Limited, Ingersoll, Ont.

### Building and Paving Brick

Dunbar Fire Brick Co., Pittsburgh, Pa.  
Hamilton Facing Mill Co., Hamilton, Ont.  
Harbison-Walker Refractories Co., Pittsburgh, Pa.  
Pennsylvania Fire Brick Co., Beech Creek, Pa.  
Queen's Run Fire Brick Co., Lock Haven, Pa.  
Stowe-Fuller Co., Cleveland, Ohio.

### Building Iron and Steel

Bourne-Fuller Co., Cleveland, Ohio.  
Canada Foundry Co., Toronto.  
Expanded Metal & Fireproofing Co., Toronto.  
Metallic Roofing Co., Toronto.  
Pedlar People, Oshawa, Ont.

### Bulldozers' Materials

Albert Mfg. Co., Hillsboro, Ont.  
Canada Foundry Co., Toronto.  
Dunbar's Company, Limited, Toronto.  
Expanded Metal & Fireproofing Co., Toronto.  
Harbison, John J., Toronto.  
Metallic Roofing Co., Toronto.  
Pedlar People, Oshawa, Ont.  
Sheldons, Limited, Galt, Ont.

### Burlap (Decorative)

Union Oil Cloth Co., Montreal.

### Business Methodizers

Jan. Henri, Montreal.

### Cables

Greening, B. Wire Co., Hamilton, Ont.  
Hillpe Eugene F. Electrical Works, Montreal.

### Canada Plates

Leslie, A. C. & Co., Montreal.  
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

### Caps

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

### Card Clothing

Lazar, D. K., Montreal and Toronto.

### Cast Iron Pipe

Canada Foundry Co., Toronto.  
Metallic Pipe Foundry Co., Montreal.  
Dougall, John, Caledonian Iron Works Co., Montreal.

### Castings (Grey Iron, Malleable Iron and Brass)

Canada Foundry Co., Toronto.  
Greening, B. Wire Co., Hamilton, Ont.  
Phillips, Eugene F. Electrical Works, Montreal.  
Syracuse Smelting Works, Montreal.  
Smart-Turner Machine Co., Hamilton, Ont.  
Williams A. R. Machinery Co., Toronto.

### Cement Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
Culverier Co., Boston, Mass.  
Dougall, John, Caledonian Iron Works Co., Montreal.

### Centrifugal Pumping Machinery

Canada Foundry Co., Toronto.  
Smart-Turner Machine Co., Hamilton, Ont.

## Chain Making Machinery (Welded Coil Chain)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.

## Channels

Bourne-Fuller Co., Cleveland, Ohio.  
Canada Foundry Co., Toronto.  
Leslie, A. C. & Co., Montreal.  
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

## Charcoal Pig Iron

Canada Iron Furnace Co., Montreal.  
McDougall, John, Caledonian Iron Works Co., Montreal.

## Chemicals

Canada Chemical Co., London, Ont.  
Nichols Chemical Co. of Canada, Montreal.

## Chemists

Heys, Thomas & Son, Toronto.

## Clay Working Machinery

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.

## Coal, Coke and Charcoal.

Bourne-Fuller Co., Cleveland, Ohio.  
Hamilton Facing Mill Co., Hamilton, Ont.

## Coal Cutting Machines

Allis-Chalmers-Bullock, Limited, Montreal.  
Canadian Hand Drill Co., Sherbrooke, Que.  
Jeffrey Mfg. Co., Columbus, Ohio.

## Coal Tipples

Jeffrey Mfg. Co., Columbus, Ohio.  
Jenckes Machine Co., Sherbrooke, Que.

## Coil Chains

Greening, B. Wire Co., Hamilton, Ont.  
Leslie, A. C. & Co., Montreal.

## Coke Oven Brick

Dunbar Fire Brick Co., Pittsburgh, Pa.  
Stowe-Fuller Co., Cleveland, Ohio.

## Collection Agency

Petrie, H. D., Hamilton, Ont.

## Collectors (Pneumatic)

Sturtevant, B. F. Co., Hyde Park, Mass.

## Condensers

Smart-Turner Machine Co., Hamilton, Ont.

## Conduits (Interior)

Conduits Company, Limited, Toronto.

## Contractors' Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
Gartshore, John J., Toronto.  
Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Smart-Turner Machine Co., Hamilton, Ont.

## Contractors' Plants

Allis-Chalmers-Bullock, Limited, Montreal.  
Jenckes Machine Co., Sherbrooke, Que.  
Petrie, H. W., Toronto.  
Smart-Turner Machine Co., Hamilton, Ont.  
Williams A. R. Machinery Co., Toronto.

## Conveying Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
Babcock & Wilcox, Limited, Montreal.  
Canada Foundry Co., Toronto.  
Jeffrey Mfg. Co., Columbus, Ohio.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Perrin, William R. & Co., Limited, Toronto.  
Smart-Turner Machine Co., Hamilton, Ont.

## Copper Materials

Greening, B. Wire Co., Hamilton, Ont.  
Phillips, Eugene F. Electrical Works, Montreal.  
Syracuse Smelting Works, Montreal.

## Corrugated Iron

Metallic Roofing Co., Toronto.  
Pedlar People, Oshawa, Ont.

## Covers

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Cranes (Electric and Hand Power)

Smart-Turner Machine Co., Hamilton, Ont.

## Crankshafts

Canada Foundry Co., Toronto, Ont.

## Crayons

Lowell Crayon Co., Lowell, Mass.

## Crucibles

Dixon, Joseph, Crucible Co., Jersey City, N.J.  
Hamilton Facing Mill Co., Hamilton, Ont.  
McCullough-Dalzell Crucible Co., Pittsburg, Pa.  
Syracuse Smelting Works, Montreal.

## Crucible Caps

Hamilton Facing Mill Co., Hamilton, Ont.  
McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Crucible Covers

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Cutter Grinding Machines

Becker-Brainard Milling Machine Co., Hyde Park, Mass.

## Dashes

McKinnon Dash & Metal Works Co., St. Catharines, Ont.

## Dies (Socket, Sewer Pipe and Tile)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio

## Directories

Kelly's Directories, Limited, Toronto

## Draw Benches (Wire)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.

## Dredges

Allis-Chalmers-Bullock, Limited, Montreal.

## Drill Chucks

Krug & Crosby, Hemilton, Ont.

## Drills

Allis-Chalmers-Bullock, Limited, Montreal.  
Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
Petrie, H. W., Toronto.

## Drills (Pneumatic and Rock)

Allis-Chalmers-Bullock, Limited, Montreal.  
Canadian Hand Drill Co., Sherbrooke, Que.  
Jeffrey Mfg. Co., Columbus, Ohio.

## Drop Forgings

Globe Machine & Stamping Co., Cleveland, Ohio.

## Drop Forging Dies

Globe Machine & Stamping Co., Cleveland, Ohio.

## Dry Battery Filler

International-Acheson-Graphite Co., Niagara Falls, N.Y.

## Dry Kiln Apparatus

Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## Dust and Shavings Separators

Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## Dye Stuffs and Chemicals

Benson, W. T. & Co., Montreal.  
Brunner, Mond & Co., Northwich, England.  
Canada Chemical Mfg. Co., London, Ont.  
Cassella Color Co., New York City.  
McArthur, Cornille & Co., Montreal.  
Nichols Chemical Co. of Canada, Montreal.  
Winn & Holland, Montreal.

## DYNAMIOS (See Motors and Dynamos)

### Electric Meters and Transformers

Parkard Electric Co., St. Catharines, Ont.

### Electric Mine Locomotives

Canadian General Electric Co., Toronto.  
Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
Jeffrey Mfg. Co., Columbus, Ohio.

### Electric Transformers

Allis-Chalmers-Bullock, Limited, Montreal.

### Electrical Supplies

Bristol Co., Waterbury, Conn.  
Canadian General Electric Co., Toronto

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# CLASSIFIED INDEX.

Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
Electrical Construction Co., London, Ont.  
Fotman, John, Montreal.  
Jones & Moors Electric Co., Toronto  
Packard Electric Co., St. Catharines, Ont.  
Toronto & Hamilton Electric Co., Hamilton, Ont.

## Electrodes

International-Acheson Graphite Co., Niagara Falls, N.Y.

## Elevators and Conveyors

Darling Bros., Montreal.  
Jeffrey Mfg. Co., Columbus, Ohio.  
Jenckes Machine Co., Sherbrooke, Que.

## Elevator Insurance

Canadian Casualty & Boiler Insurance Co., Toronto.

## Emery and Emery Wheels

Forman, John, Montreal.  
Hamilton Facing Mill Co., Hamilton, Ont.  
Petrie, H. W., Toronto.

## Engineers (Chemical)

Heys, Thomas & Son, Toronto.  
Hunt, Robert W. & Co., Chicago, Ill.

## Engineers (Civil)

Parke, R. J., Toronto.

## Engineers (Consulting)

Aitken, K. L., Toronto.  
Electrical Construction Co., London, Ont.  
Fensom, C. J., Toronto.  
Hunt, Robert W. & Co., Chicago, Ill.  
Marion & Marion, Montreal.  
Parke, R. J., Toronto.  
Perrin William R. & Co., Limited, Toronto.

## Engineers (Contracting)

Babcock & Wilcox, Limited, Montreal.  
Canada Foundry Co., Toronto.  
Darling Bros., Montreal.  
Electrical Construction Co., London, Ont.  
Fensom, C. J., Toronto.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Robb Engineering Co., Amherst, N.S.

## Engineers (Electrical)

Aitken, K. L., Toronto.  
Allis-Chalmers-Bullock, Limited, Montreal.  
Canadian General Electric Co., Ltd., Toronto.  
Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
Croker-Wheeler Co., St. Catharines, Ont.  
Electrical Construction Co., London, Ont.  
Fensom, C. J., Toronto.  
Jones & Moore Electric Co., Toronto.  
Marion & Marion, Montreal.  
Toronto & Hamilton Electric Co., Hamilton, Ont.

## Engineers (Mechanical)

Allis-Chalmers-Bullock, Limited, Montreal.  
Babcock & Wilcox, Limited, Montreal.  
Darling Bros., Montreal.  
Electrical Construction Co., London, Ont.  
Fensom, C. J., Toronto.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Hunt, Robert W. & Co., Chicago, Ill.  
Kerr Engine Co., Walkerville, Ont.  
Marion & Marion, Montreal.  
Robb Engineering Co., Amherst, N.S.  
Sheldons, Limited, Galt, Ont.  
Smart-Turner Machine Co., Hamilton, Ont.

## Engineers (Mill and Hydraulic)

Fensom, C. J., Toronto.  
Smart-Turner Machine Co., Hamilton, Ont.

## Engineers (Mining)

Heys, Thomas & Son, Toronto.  
Mills, S. D., Toronto.

## Engineers and Contractors

Jeffrey Mfg. Co., Columbus, Ohio.  
Jenckes Machine Co., Sherbrooke, Que.  
Smart-Turner Machine Co., Hamilton, Ont.

## Engines and Boilers

Allis-Chalmers-Bullock, Limited, Montreal.  
Babcock & Wilcox, Limited, Montreal.  
Canada Foundry Co., Toronto.  
Goldie & McCulloch Co., Galt, Ont.  
Jenckes Machine Co., Sherbrooke, Que.  
Morris Machine Works, Baldwinville, N.Y.  
McDougall, John, Caledonian Iron Works Co., Montreal.

Petrie, H. W., Toronto.  
Robb Engineering Co., Amherst, N.S.  
Smart-Turner Machine Co., Hamilton, Ont.  
Sturtevant, B. F. Co., Boston, Mass.  
Williams, A. R. Machinery Co., Toronto

## Engravers

Canadian Manufacturer, Toronto.  
Jones, J. L., Engraving Co., Toronto.

## Exhaust Fans

Hamilton Facing Mill Co., Hamilton, Ont.  
Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## Exhaust Heads

Darling Bros., Montreal.  
Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Hyde Park, Mass.

## Exhausters

Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Hyde Park, Mass.

## Factory Sites

(See Factory Locations, page 31.)

## Fans

Sturtevant, B. F. Co., Hyde Park, Mass.

## Feed Water Heaters

Babcock & Wilcox, Limited, Montreal.  
Darling Bros., Montreal.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Pittsburg Filter Mfg. Co., Pittsburg, Pa.  
Robb Engineering Co., Amherst, N.S.  
Smart-Turner Machine Co., Hamilton, Ont.

## Feed Water Purifiers

Pittsburg Filter Mfg. Co., Pittsburg, Pa.

## Files

Spence, R. & Co., Hamilton, Ont.

## Fillet (Pattern)

Hamilton Facing Mill Co., Hamilton, Ont.  
Sadler & Haworth, Montreal and Toronto.

## Filters (Oil)

Babcock & Wilcox, Limited, Montreal.  
Darling Bros., Montreal.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Perrin William R. & Co., Limited, Toronto.

## Filters and Filtering Systems (Water)

Babcock & Wilcox, Limited, Montreal.  
Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Pittsburg Filter Mfg. Co., Pittsburg, Pa.

## Financial

Bradstreet's, New York City.  
Dun, R. G. & Co., Toronto.  
Neff & Postlethwaite, Toronto.  
Petrie, H. D., Hamilton, Ont.

## Finials

Metallic Roofing Co., Toronto.  
Pellar People, Oshawa, Ont.

## Fire Brick and Clay

Dunbar Fire Brick Co., Pittsburgh, Pa.  
Elk Fire Brick Co., St. Mary's, Pa.  
Hamilton Facing Mill Co., Hamilton, Ont.  
Harbison-Walker Refractories Co., Pittsburg, Pa.  
Pennsylvania Fire Brick Co., Beech Creek, Pa.  
Queen's Run Fire Brick Co., Lock Haven, Pa.  
Stowe-Fuller Co., Cleveland, Ohio.

## Fire Escapes

Darling Bros., Montreal.

## Fireproof Partitions

Metallic Roofing Co., Toronto.  
Pellar People, Oshawa, Ont.

## Flour Mill Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
Goldie & McCulloch Co., Galt, Ont.

## Forges and Blowers

Canada Foundry Co., Toronto.  
Hamilton Facing Mill Co., Hamilton, Ont.  
Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## Forgings

Canada Forge Co., Welland, Ont.

## Founders

Canada Foundry Co., Toronto.  
Goldie & McCulloch Co., Galt, Ont.  
Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Robb Engineering Co., Amherst, N.S.  
Smart-Turner Machine Co., Hamilton, Ont.

## Foundry Patterns and Supplies

Hamilton Facing Mill Co., Hamilton, Ont.  
International-Acheson-Graphite Co., Niagara Falls, N.Y.

## Fuel Economizers

Babcock & Wilcox, Limited, Montreal.  
Sturtevant, B. F. Co., Hyde Park, Mass.

Furniture (Lodge, Opera and School)  
Canadian Office & School Furniture Co., Prescott

## Galvanizing

Ontario Wind Engine & Pump Co., Toronto

Galvanizing and Tinning Machinery and Furnaces (Wire)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio

Gas Blowers and Exhausters

Sturtevant, B. F. Co., Hyde Park, Mass.

## Gas and Gasoline Engines

Economic Power, Light & Heat Supply Co., Toronto.  
Morrison, T. A. & Co., Montreal.  
Smart-Turner Machine Co., Hamilton, Ont.

## Gauges (Recording Pressure)

Bristol Co., Waterbury, Conn.

## Gauges (Steam)

Petrie, H. W., Toronto.  
Williams, A. R. Machinery Co., Toronto.

## Gauges (Water)

Babcock & Wilcox, Limited, Montreal

## Generating Sets

Sturtevant, B. F. Co., Hyde Park, Mass.

## Generators

Allis-Chalmers-Bullock, Limited, Montreal.  
Canadian General Electric Co., Toronto.  
Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
Electrical Construction Co., London, Ont.  
Forman, John, Montreal.  
Jeffrey Mfg. Co., Columbus, Ohio.  
Jones & Moore Electric Co., Toronto.  
Phillips, Eugene F., Electrical Works, Montreal.  
Toronto & Hamilton Electric Co., Hamilton, Ont.

## Gloves, Mittens and Moccasins

Storey, W. H. & Son, Acton, Ont.

## Government Notices

Factory Inspectors.  
Minister of Agriculture.

## Graphite

Dixon, Jos. Crucible Co., Jersey City, N.J.  
Hamilton Facing Mill Co., Hamilton, Ont.  
International-Acheson-Graphite Co., Niagara Falls, N.Y.

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Hack Saws

Krug & Crosby, Hamilton, Ont.

## Hammers

McKinnon Dash & Metal Works Co., St. Catharines, Ont.

## Hardware

Butterfield & Co., Rock Island, Que.  
Gartshore, John J., Toronto.  
Globe Machine & Stamping Co., Cleveland, Ohio.  
Morrow, John, Screw, Limited, Ingersoll, Ont.

## Heating and Ventilating Apparatus

Darling Bros., Montreal.  
Sheldons, Limited, Galt, Ont.  
Sturtevant, B. F. Co., Boston, Mass.

## High Pressure Blowers

Sturtevant, B. F. Co., Hyde Park, Mass.

## Hoisting Engines

Allis-Chalmers-Bullock, Limited, Montreal.  
Jenckes Machine Co., Sherbrooke, Que.

## Hoists (Chain and Pneumatic)

Canadian Rand Drill Co., Sherbrooke, Que.

## Hose (Fire and Pneumatic)

Gutta Percha & Rubber Mfg. Co., Toronto.

## Hydrants

Kerr Engine Co., Walkerville, Ont.  
Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.

## Hydraulic Accumulators

Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Smart-Turner Machine Co., Hamilton, Ont.

## Hydraulic Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
Canada Foundry Co., Toronto.  
Darling Bros., Montreal.  
Jenckes Machine Co., Sherbrooke, Que.  
McDougall, John, Caledonian Iron Works Co., Montreal.  
Perrin, William R. & Co., Limited, Toronto.  
Petrie, H. W., Toronto.  
Smart-Turner Machine Co., Hamilton, Ont.

## Hydro-Electric Plant

Allis-Chalmers-Bullock, Limited, Montreal.

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 Brick, Cupola Linings, Bricks  
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**MCCULLOUGH-DALZELL CRUCIBLE COMPANY, PITTSBURG, PA.**

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# CLASSIFIED INDEX.

(CONTINUED).

## Insulated Wires and Cables

Phillips, Eugene F., Electrical Works, Montreal.

## Iron and Steel Specialties

Armstrong Mfg. Co., Bridgeport, Conn.  
 Bourne-Fuller Co., Cleveland, Ohio.  
 Canada Foundry Co., Toronto.  
 Leslie, A. C. & Co., Montreal.  
 London Rolling Mill Co., London, Ont.  
 Lysaght, John, Limited, Bristol, England and Montreal.  
 Metallic Roofing Co., Toronto.  
 Nova Scotia Steel & Coal Co., New Glasgow, N.S.  
 Pedlar People, Oshawa, Ont.  
 Petrie, H. W., Toronto.  
 Union Drawn Steel Co., Hamilton, Ont.

## Injectors

Canada Foundry Co., Toronto.  
 Hamilton Brass Mfg. Co., Hamilton, Ont.  
 Williams A. R. Machinery Co., Toronto.

## Iron and Steel Inspection

Hunt R. W. & Co., Chicago, Ill.

## Lamps—Electric

Allis-Chalmers-Bullock, Limited, Montreal.  
 Canadian General Electric Co., Toronto.  
 Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
 Forman, John, Montreal.  
 Packard Electric Co., St. Catharines, Ont.

## Lathes

Petrie, H. W., Toronto.  
 Williams, A. R. Machinery Co., Toronto.

## Lathes (Wood-working)

Goldie & McCulloch Co., Galt, Ont.  
 Petrie, H. W., Toronto.  
 Williams, A. R. Machinery Co., Toronto

## Linoleum

Dominion Oil Cloth Co., Montreal.

## Lubricators

Hamilton Facing Mill Co., Hamilton, Ont.

## Machinists

Goldie & McCulloch Co., Galt, Ont.  
 Krug & Crosby, Hamilton, Ont.  
 Robb Engineering Co., Amherst, N.S.  
 Smart-Turner Machine Co., Hamilton, Ont.

## Machinists' Supplies

Armstrong Mfg. Co., Bridgeport, Conn.  
 Butterfield & Co., Rock Island, Que.  
 Goldie & McCulloch Co., Galt, Ont.  
 Gutta Percha & Rubber Mfg. Co., Toronto.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 Morrow, John, Screw, Limited, Ingersoll, Ont.  
 Petrie, H. W., Toronto.

## Machine Tools

Becker-Brainard Milling Machine Co., Hyde Park, Mass.  
 Darling Bros., Montreal.  
 Petrie, H. W., Toronto.

## Malleable Castings

McKinnon Dash & Metal Works Co., St. Catharines, Ont.  
 Smith's Falls Malleable Castings Co., Smith's Falls, Ont.

## Marine and Stationary Engines and

### Boilers

Allis-Chalmers-Bullock, Limited, Montreal.  
 Jenckes Machine Co., Sherbrooke, Que.  
 Smart-Turner Machine Co., Hamilton, Ont.

## Mechanical Draft

Babcock & Wilcox, Limited, Montreal.  
 Sheldon, Limited, Galt, Ont.  
 Sturtevant, B. F. Co., Boston, Mass.

## Metal Doors

Metallic Roofing Co., Toronto.  
 Pedlar People, Oshawa, Ont.

## Metal Stamping

Globe Machine & Stamping Co., Cleveland, Ohio.  
 Metallic Roofing Co., Toronto.  
 Pedlar People, Oshawa, Ont.

## Metallurgists

Mills, S. D., Toronto.

## Mill Machinery and Supplies

Allis-Chalmers-Bullock, Limited, Montreal.  
 Armstrong Mfg. Co., Bridgeport, Conn.  
 Becker-Brainard Milling Machine Co., Hyde Park, Mass.  
 Darling Bros., Montreal.  
 Gartshore, John J., Toronto.  
 Goldie & McCulloch Co., Galt, Ont.  
 Gutta Percha & Rubber Mfg. Co., Toronto.  
 Hay, Peter Knife Co., Galt, Ont.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 Jenckes Machine Co., Sherbrooke, Que.  
 Morrow, John, Screw, Limited, Ingersoll, Ont.  
 McDougall, John, Caledonian Iron Works Co., Montreal.  
 McLaren, D. K., Montreal and Toronto.  
 Petrie, H. W., Toronto.  
 Robb Engineering Co., Amherst, N.S.  
 Sadler & Haworth, Montreal and Toronto.  
 Smart-Turner Machine Co., Hamilton, Ont.  
 Spence, R. & Co., Hamilton, Ont.

## Milling Cutters and Machines

Becker-Brainard Milling Machine Co., Hyde Park, Mass.

## Mining Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
 Canadian Rand Drill Co., Sherbrooke, Que.  
 Gartshore, John J., Toronto.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 Jenckes Machine Co., Sherbrooke, Que.  
 McDougall, John, Caledonian Iron Works Co., Montreal.  
 Perrin, William R. & Co., Limited, Toronto.  
 Petrie, H. W., Toronto.  
 Williams, A. R. Machinery Co., Toronto.

## Motors and Dynamos

Allis-Chalmers-Bullock, Limited, Montreal.  
 Canadian General Electric Co., Toronto.  
 Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
 Electrical Construction Co., London, Ont.  
 Forman, John, Montreal.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 Jones & Moore Electric Co., Toronto.  
 Petrie, H. W., Toronto.  
 Sturtevant, B. F. Co., Hyde Park, Mass.  
 Toronto & Hamilton Electric Co., Hamilton, Ont.

## Motors (Electric)

Sturtevant, B. F. Co., Hyde Park, Mass.

## Moulding Sand

Hamilton Facing Mills Co., Hamilton, Ont.

## Moulders Supplies.

Hamilton Facing Mill Co., Hamilton, Ont.

## Municipal Filtration Plants (Water)

Pittsburg Filter Mfg. Co., Pittsburg, Pa.

## Nickel

Canadian Copper Co., New York, N.Y.  
 Orford Copper Co., New York, N.Y.

## Nozzles

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Office and Bank Fittings

Canadian Office & School Furniture Co., Preston, Ont.

## Oils and Lubricants

Dixon, Jos. Crucible Co., Jersey City, N.J.  
 Hamilton Facing Mill Co., Hamilton, Ont.  
 Imperial Oil Co., Petrolia, Ont.  
 Queen City Oil Co., Toronto.

## Oil Cloth

Dominion Oil Cloth Co., Montreal.

## Paint Pigment

International-Acheson-Graphite Co., Niagara Falls, N.Y.

## Paints and Colors

Berry Bros., Walkerville, Ont.  
 McArthur, Cornelle & Co., Montreal.

## Paper Manufacturers

Barber, Wm. & Bros., Georgetown, Ont.  
 Toronto Paper Mfg. Co., Cornwall, Ont.

## Patents

Budden, Hanbury A., Montreal.  
 Featherstonhaugh & Co., Toronto.  
 Marion & Marion, Montreal.

## Patterns (Wood and Iron)

Maxwell, David & Sons, St. Mary's, Ont.

## Perforated Metals

Globe Machine & Stamping Co., Cleveland, Ohio.  
 Greening, B. Wire Co., Hamilton, Ont.  
 Metallic Roofing Co., Toronto.  
 Pedlar People, Oshawa, Ont.

## Personal Accident

Canadian Casualty & Boiler Insurance Co., Toronto.

## Phosphorizers

McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Pig Iron

Bourne-Fuller Co., Cleveland, Ohio.  
 Canada Iron Furnace Co., Montreal.  
 Nova Scotia Steel & Coal Co., New Glasgow, N.S.  
 Syracuse Smelting Works Montreal.

## Pipe (Riveted, Iron and Steel)

Babcock & Wilcox, Limited, Montreal.  
 McDougall, John, Caledonian Iron Works Co., Montreal.

## Pipe Threading Machines

Armstrong Mfg. Co., Bridgeport, Conn.  
 Butterfield & Co., Rock Island, Que.  
 Petrie, H. W., Toronto.

## Pipes and Tubes

Bourne-Fuller Co., Cleveland, Ohio.  
 Canada Foundry Co., Toronto.  
 Montreal Pipe Foundry Co., Montreal.

## Plaster

Albert Mfg. Co., Hillsborough, N.B.

## Plates

Bourne-Fuller Co., Cleveland, Ohio.  
 Nova Scotia Steel & Coal Co., New Glasgow, N.S.

## Plumbago

Hamilton Facing Mills Co., Hamilton, Ont.  
 International-Acheson-Graphite Co., Niagara Falls, N.Y.  
 McCullough-Dalzell Crucible Co., Pittsburg, Pa.

## Pneumatic Separators

Sturtevant, B. F. Co., Hyde Park, Mass.

## Pneumatic Tools

Allis-Chalmers-Bullock, Limited, Montreal.  
 Canadian Rand Drill Co., Sherbrooke, Que.  
 Hamilton Facing Mill Co., Hamilton, Ont.

## Pointer Rolls (For Rods and Wire)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.

## Power Plants—Equipments

Allis-Chalmers-Bullock, Limited, Montreal.  
 Babcock & Wilcox, Limited, Montreal.  
 Canadian General Electric Co., Toronto.  
 Canadian Westinghouse Co., Ltd., Hamilton, Ont.  
 Darling Bros., Montreal.  
 Economic Power, Light & Heat Supply Co., Toronto.  
 Electrical Construction Co., London, Ont.  
 Goldie & McCulloch, Galt, Ont.  
 Gutta Percha & Rubber Mfg. Co., Toronto.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 Jones & Moore Electric Co., Toronto.  
 McDougall, John, Caledonian Iron Works Co., Montreal.  
 Packard Electric Co., St. Catharines, Ont.  
 Perrin, Wm. R. & Co., Limited, Toronto.  
 Petrie, H. W., Toronto.  
 Phillips, Eugene F., Electrical Works, Montreal.  
 Robb Engineering Co., Amherst, N.S.  
 Sadler & Haworth, Montreal and Toronto.  
 Smart-Turner Machine Co., Hamilton, Ont.  
 Sturtevant, B. F. Co., Boston, Mass.  
 Toronto & Hamilton Electric Co., Hamilton, Ont.

## Presses (Tile, Sewer Pipe, Nozzles & Sleeves)

Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.

## Pulleys

Darling Bros., Montreal.  
 Goldie & McCulloch Co., Galt, Ont.  
 Jeffrey Mfg. Co., Columbus, Ohio.  
 McDougall, John, Caledonian Iron Works Co., Montreal.  
 Petrie, H. W., Toronto.  
 Smart-Turner Machine Co., Hamilton, Ont.

## Producer Gas Plants

Economic Power, Light & Heat Supply Co., Toronto.

## Pumps and Pumping Machinery

Allis-Chalmers-Bullock, Limited, Montreal.  
 Canada Foundry Co., Toronto.

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# CLASSIFIED INDEX.

(CONTINUED).

**Darling Bros., Montreal.**  
**Downs Pump Co., Downsville, Pa.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**Jenckes Machine Co., Sherbrooke, Que.**  
**Kerr Engine Co., Walkerville, Ont.**  
**Morris Machine Works, Baldwinsville, N.Y.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Ontario Wind Engine & Pump Co., Toronto.**  
**Petrie, H. W., Toronto.**  
**Smart-Turner Machine Co., Hamilton, Ont.**

**Punches and Shears**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**  
**Petrie, H. W., Toronto.**

**Purifiers**  
**Babcock & Wilcox, Limited, Montreal.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**

**Purifying and Softening Systems (Water)**  
**Babcock & Wilcox, Limited, Montreal.**  
**Darling Bros., Montreal.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**

**Railroads**  
**Chicago & North-Western Ry., Toronto and St. Paul, Minn.**

**Railway Supplies**  
**Algoma Steel Co., Sault Ste. Marie, Ont.**  
**Allis-Chalmers-Bullock, Limited, Montreal.**  
**Gartshore, John J., Toronto.**  
**Greening, B. Wire Co., Hamilton, Ont.**  
**Gutta Percha & Rubber Mfg. Co., Toronto.**  
**Nova Scotia Steel & Coal Co., New Glasgow, N.S.**  
**Phillips, Eugene F. Electrical Works, Montreal.**

**Beamers**  
**Butterfield & Co., Rock Island, Que.**

**Rivets**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**London Rolling Mills, London, Ont.**

**Rock and Ore Crushers**  
**Allis-Chalmers-Bullock, Limited, Montreal.**  
**Bradley Pulverizer Co., Boston, Mass.**

**Rolling Mill Engineers**  
**Bourne-Fuller Co., Cleveland, Ohio.**

**Roofing**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Metallic Roofing Co., Toronto.**  
**Pedar People, Oshawa, Ont.**

**Rotary Blowers**  
**Sturtevant, B. F. Co., Hyde Park, Mass.**

**Rubber Goods**  
**Gutta Percha & Rubber Mfg. Co., Toronto.**

**Rubber Packing**  
**Gutta Percha & Rubber Mfg. Co., Toronto.**

**Rubber Washing Tubs**  
**Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.**

**Rural Mail Boxes**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**

**Saddlery Hardware**  
**McKinon Dash & Metal Works Co., St. Catharines, Ont.**

**Safes and Vaults**  
**Goldie & McCulloch Co., Galt, Ont.**

**Saw Mill Machinery**  
**Allis-Chalmers-Bullock, Limited, Montreal.**

**Screws**  
**Kerr, John, Screw, Limited, Ingersoll, Ont.**

**Screw Plates**  
**Armstrong Mfg. Co., Bridgeport, Conn.**  
**Butterfield & Co., Rock Island, Que.**

**Second-Hand Machinery**  
**Krug & Crosby, Hamilton, Ont.**

**Sewer Pipes.**  
**Tomlinson Sewer Pipe Co., Swansea, Ont.**

**Shafting**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**Harvey Mfg. Co., Columbus, Ohio.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Nova Scotia Steel & Coal Co., New Glasgow, N.S.**  
**Petrie, H. W., Toronto.**  
**Smart-Turner Machine Co., Hamilton, Ont.**

**Shear Knives**  
**Ray, Power Knife Co., Galt, Ont.**

**Sheets (Iron and Steel)**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Leslie, A. C. & Co., Montreal.**  
**Wright, John, Limited, Bristol, England, and Montreal.**  
**Metallic Roofing Co., Toronto.**  
**Pedar People, Oshawa, Ont.**

**Sheet Metal Goods**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**  
**Metallic Roofing Co., Toronto.**  
**Pedar People, Oshawa, Ont.**

**Sheet Metal Stamping**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**  
**Metallic Roofing Co., Toronto.**  
**Pedar People, Oshawa, Ont.**

**Shovels.**  
**Hamilton Facing Mill Co., Hamilton, Ont.**

**Signal Contacts**  
**International-Acheson-Graphite Co., Niagara Falls, N.Y.**

**Smoke Stacks**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Robb Engineering Co., Amherst, N.S.**  
**Smart-Turner Machine Co., Hamilton, Ont.**

**Solder**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**  
**Syracuse Smelting Co., Montreal.**

**Special Machinery**  
**Allis-Chalmers-Bullock, Limited, Montreal.**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**  
**Krug & Crosby, Hamilton, Ont.**  
**Smart-Turner Machine Co., Hamilton, Ont.**

**Speed Recorders**  
**Bristol Co., Waterbury, Conn.**

**Sprinkler Insurance**  
**Canadian Casualty & Boiler Insurance Co., Toronto.**

**Stamps and Stencils**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**

**Steam, Hot Blast Apparatus**  
**Sturtevant, B. F. Co., Hyde Park, Mass.**

**Steam Pumps**  
**Allis-Chalmers-Bullock, Limited, Montreal.**  
**Canada Foundry Co., Toronto.**  
**Darling Bros., Montreal.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Petrie, H. W., Toronto.**  
**Smart-Turner Machine Co., Hamilton, Ont.**  
**Williams, A. R. Machinery Co., Toronto.**

**Steam Separators**  
**Babcock & Wilcox, Limited, Montreal.**  
**Darling Bros., Montreal.**  
**Robb Engineering Co., Amherst, N.S.**  
**Sheldons, Limited, Galt, Ont.**  
**Smart-Turner Machine Co., Hamilton, Ont.**

**Steam Shovels**  
**Allis-Chalmers-Bullock, Limited, Montreal.**

**Steam Specialties**  
**Darling Bros., Montreal.**  
**Sheldons, Limited, Galt, Ont.**  
**Sturtevant, B. F. Co., Hyde Park, Mass.**

**Steam Valves**  
**Babcock & Wilcox, Limited, Montreal.**  
**Darling Bros., Montreal.**  
**Kerr Engine Co., Walkerville, Ont.**  
**Petrie, H. W., Toronto.**  
**Williams, A. R. Machinery Co., Toronto.**

**Steel Balls**  
**Algoma Steel Co., Sault Ste. Marie, Ont.**  
**Drummond, McCall & Co., Montreal and Toronto.**  
**Gartshore, John J., Toronto.**

**Steel Shafting**  
**Darling Bros., Montreal.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**Leslie, A. C. & Co., Montreal.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Nova Scotia Steel & Coal Co., New Glasgow, N.S.**

**Stocks and Dies**  
**Armstrong Mfg. Co., Bridgeport, Conn.**  
**Butterfield & Co., Rock Island, Que.**  
**Petrie, H. W., Toronto.**

**Stoppers**  
**McCullough-Dalzell Crucible Co., Pittsburg, Pa.**

**Structural Steel**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Canada Foundry Co., Toronto.**

**Sulphate of Alumina**  
**Nichols Chemical Co. of Canada, Montreal.**

**Suspension Furnaces**  
**Continental Iron Works Co., New York City.**

**Switchboards**  
**Allis-Chalmers-Bullock, Limited, Montreal.**

**Systematizers**  
**Viau, Henri, Montreal.**

**Tanks (Oil and Water)**  
**Canada Foundry Co., Toronto.**  
**Goldie & McCulloch Co., Galt, Ont.**  
**Jenckes Machine Co., Sherbrooke, Que.**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Ontario Wind Engine & Pump Co., Toronto.**

**Taps and Dies**  
**Butterfield & Co., Rock Island, Que.**  
**Globe Machine & Stamping Co., Cleveland, Ohio.**

**Tees**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Canada Foundry Co., Toronto.**

**Textile Manufacturers**  
**Dominion Oil Cloth Co., Montreal.**  
**Storey, W. H. & Sons, Acton, Ont.**

**Thermometers (Recording)**  
**Bristol Co., Waterbury, Conn.**

**Tin**  
**Leslie, A. C. & Co., Montreal.**  
**Syracuse Smelting Works, Montreal.**

**Tool Steel**  
**Bourne-Fuller Co., Cleveland, Ohio.**  
**Leslie, A. C. & Co., Montreal.**

**Traps (Steam)**  
**Sturtevant, B. F. Co., Hyde Park, Mass.**

**Trucks**  
**McDougall, John, Caledonian Iron Works Co., Montreal.**  
**Sheldons, Limited, Galt, Ont.**

**Trucks (Railway)**  
**Canada Foundry Co., Toronto.**

**Trucks (Wire Mill Supplies)**  
**Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio**

**Tubs (Cleaning and Coating Wire)**  
**Turner, Vaughn & Taylor Co., Cuyahoga Falls, Ohio.**

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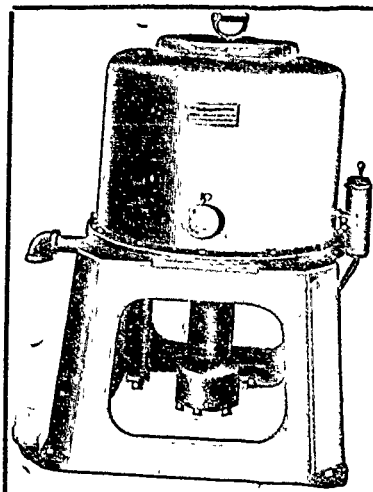
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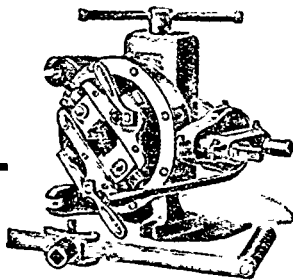
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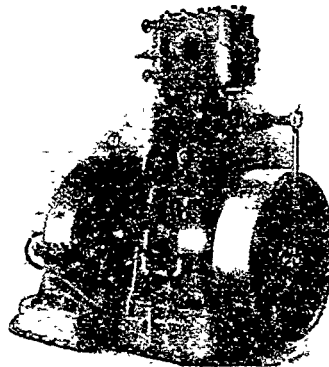
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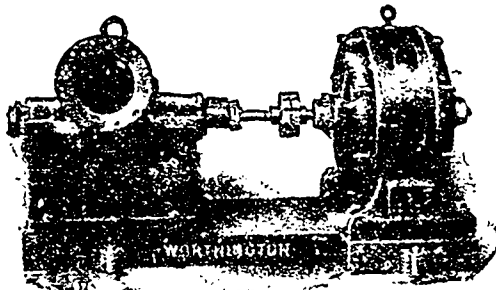


INDEX TO ADVERTISEMENTS (Continued).

	PAGE		PAGE		PAGE
Goldie & McCulloch Co., Galt, Ont...	3	<b>M</b>		Petrie, H. D., Hamilton, Ont.....	8
Goldschmidt Thermit Co., Montreal .....	40	Marion & Marion, Montreal.....	8	Phillips, Eugene F., Electrical Works, Montreal	14
Grant & Toy, Toronto .....	37	Maxwell, David, & Sons, St. Mary's, Ont.....	49	Piper, N. L. Railway Supply Co., Toronto.....	16
Greening, B. Wire Co., Hamilton, Ont.....	39	Metallic Roofing Co., Toronto .....	37	Pittsburg Filter Co., Pittsburg, Pa.....	66
Gutta Percha & Rubber Mfg. Co., Toronto.....	ofc	Mills S. D. Toronto.....	39	Producer Gas Co., Toronto.....	18
		Morris Machine Works, Baldwinsville, N.Y.....	2		
		Morrison, James, Brass Mfg. Co., Toronto.....	10		
		Morrison, T. A. & Co., Montreal.....	8	<b>Q</b>	
<b>H</b>		Morrow, John, Screw, Limited, Ingersoll, Ont.....	6	Queen City Oil Co., Toronto.....	ofc
Hall, J. B., Toronto.....	ofc			Queen's Run Fire Brick Co., Lock Haven, Pa.....	ofc
Hamilton Facing Mills Co., Hamilton, Ont.....	ofc				
Harbison-Walker Refractories Co., Pittsburg, Pa.....	45				
Hay, Peter Knife Co., Galt, Ont.....	9	<b>Mo</b>			
Henry & Adams, Toronto.....	33	McArthur, Cornelio & Co., Montreal.....	ofc	<b>R</b>	
Heys, Thomas & Son, Toronto .....	8	McCullough-Dalzell Crucible Co., Pittsburg, Pa.....	45	Robb Engineering Co., Amherst, N.S....	16
Hore, F. W. & Son, Hamilton, Ont .....	39	McDougall, John, Caledonian Iron Works Co., Montreal.....	50	<b>S</b>	
Horsburgh & Scott, Cleveland, Ohio .....	40	McGuire, W. J. & Co., Toronto and Montreal..	ofc	Sadler & Haworth, Montreal .....	11
Hunt, Robert W. & Co., Chicago, Ill. ....	8	McKinnon Dash & Metal Works Co., St Catharines, Ont.....	ofc	St. Lawrence Supply Co., Montreal.....	42
		McLaren, D. K. Montreal and Toronto.....	48	Sheldons, Limited, Galt, Ont.....	2
		McLean, W. B. & Co., Montreal.....	10	Smart-Turner Machine Co., Hamilton, Ont....	ofc
				Smith's Falls Malleable Castings Co., Smith's Falls, Ont.....	ofc
<b>I</b>				Spence, R. & Co., Hamilton, Ont.....	46
Ideal Concrete Machinery Co., South Bend, Ind.	17	<b>N</b>		Stevens Mfg. Co., Galt, Ont.....	40
Imperial Oil Co., Petrolia, Ont.....	7	Neff & Postlethwaite, Toronto.....	8	Storey, W. H. & Son, Acton, Ont.....	38
International-Acheson-Graphite Co., Niagara Falls, N.Y.....	39	Nichols Chemical Co. of Canada, Montreal.....	6	Stow-Fuller Co., Cleveland, Ohio.....	45
		Northern Aluminum Co., Shawinigan Falls, Que. and Pittsburg, Pa.....	16	Sturtevant, B. F. Co., Boston, Mass.....	43
		Northern Electric & Mfg. Co., Montreal.....	37	Syracuse Smelting Co. Montreal and New York	11
<b>J</b>		Nova Scotia Steel & Coal Co., New Glasgow, N.S.....	4		
Jeffrey Mfg. Co., Columbus, Ohio.....	12			<b>T</b>	
Jencks Machine Co., Sherbrooke, Que.....	15	<b>O</b>		Tippett, Arthur P. & Co., Montreal.....	6-16
Jones & Moore Electric Co., Toronto.....	14	Oakey, John & Sons, London, England.....	7	Toronto & Hamilton Electric Co., Hamilton, Ont.....	11
Jones, J. L., Engraving Co., Toronto.....	41	Ontario Wind Engine & Pump Co., Toronto...	40	Toronto Paper Mfg. Co., Cornwall, Ont.....	43
		Orford Copper Co., New York, N.Y.....	16	Trussed Concrete Steel Co., Toronto.....	1
		O-hawa Hay Carrier Works, South O-hawa, Ont.....	40	Turner, Vaughn & Taylor, Cuyahoga Falls, Ohio.....	ofc
<b>K</b>					
Kahn, Gustave, Toronto.....	5	<b>P</b>		<b>U</b>	
Kaye, Joseph & Sons, Limited, London, Eng...	17	Packard Electric Co., St. Catharines, Ont.....	15	Union Drawn Steel Co., Hamilton, Ont.....	7
Kelly's Directories, Toronto and London, England.....	6	Parke, Roderick J., Toronto.....	8	<b>V</b>	
Kerr Engine Co., Walkerville, Ont.....	17	Pears, George, Jr., Toronto.....	37	Viau, Henry, Montreal.....	1
Krug & Crosby, Hamilton, Ont.....	6	Pedlar People, Oshawa, Ont.....	38	<b>W</b>	
		Pennsylvania Fire Brick Co., Beech Creek, Pa.....	9	Westinghouse Electric & Mfg. Co., Pittsburg, Pa.....	51
<b>L</b>		Perrin, William R. & Co., Limited, Toronto and Chicago, Ill.....	49	Williams A. R. Machinery Co., Toronto.....	1
Laurie Engine & Machine Co., Montreal.....	ofc	Petrie, H. W., Toronto.....		Winn & Holland, Montreal.....	
Leslie, A. C. & Co., Montreal.....	8				
Loignon, A. & E., Montreal.....	19				
London Rolling Mill Co., London, Ont.....	40				
Lowell Crayon Co., Lowell, Mass.....	40				
Lysaght, John, Limited, Bristol, England and Montreal.....					

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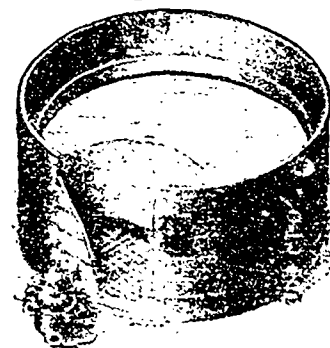
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