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**CANADIAN MANUFACTURER**  
AND INDUSTRIAL WORLD  
DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 41.

TORONTO, AUGUST 3, 1900.

No. 3.

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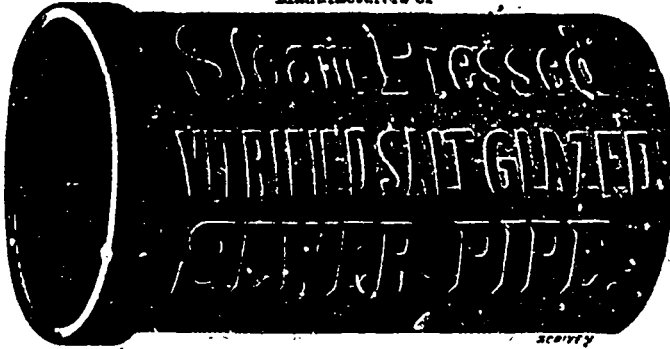
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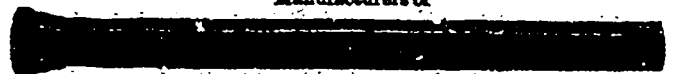
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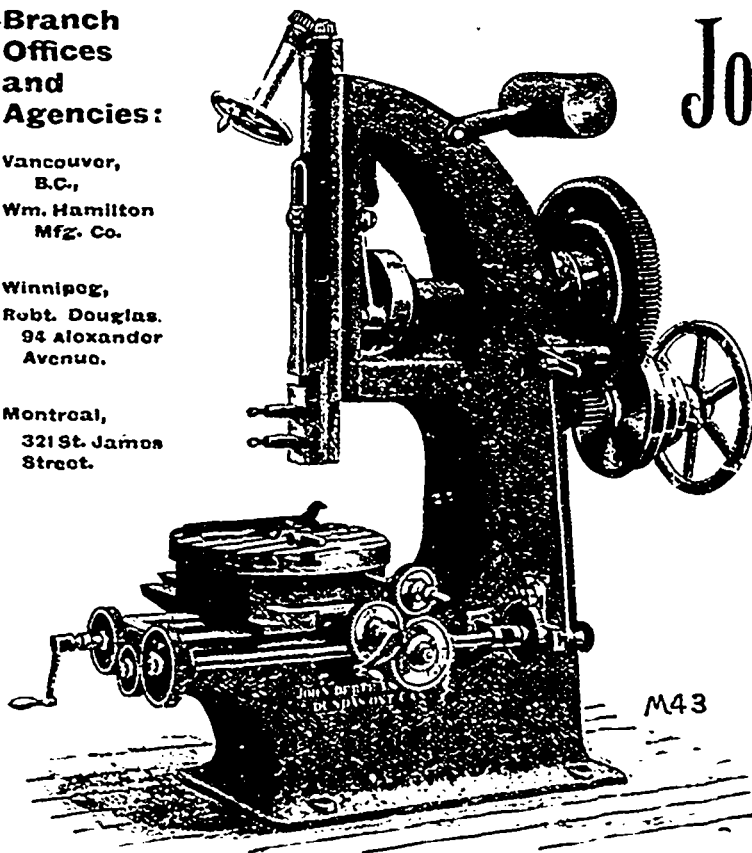
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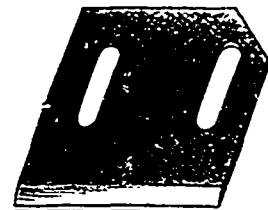
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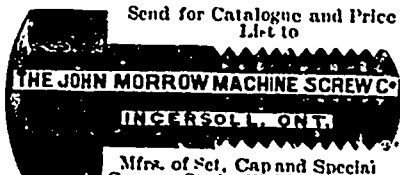
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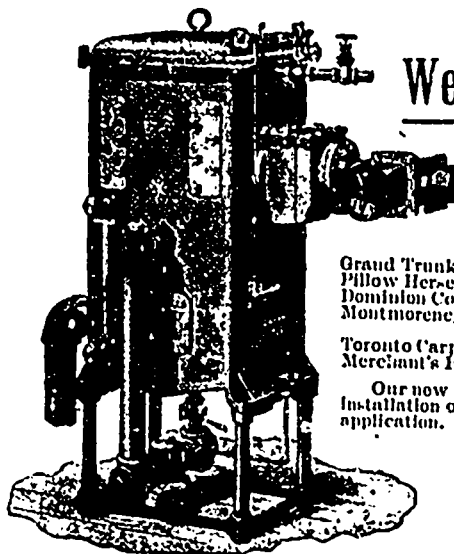
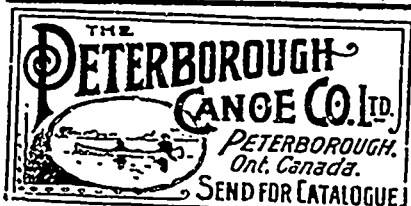


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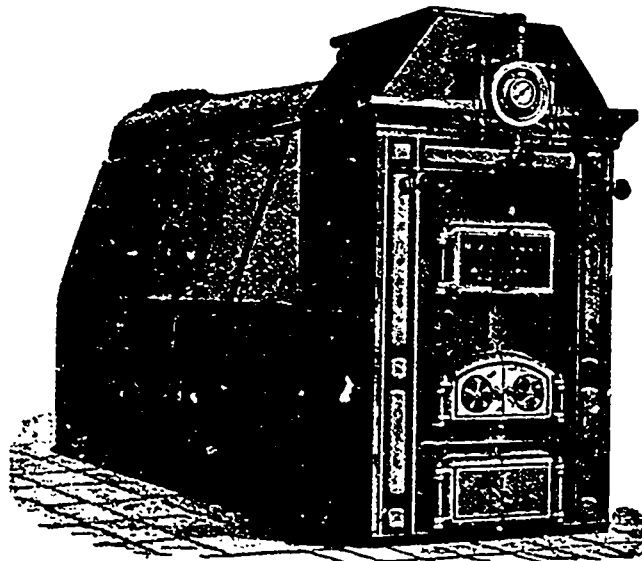
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This boiler is built with sheet steel case or for brick casing as desired.  
It is internally fired, has perfect water circulation, is a quick steamer  
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Two settling chambers are provided for catching deposits of scale, and  
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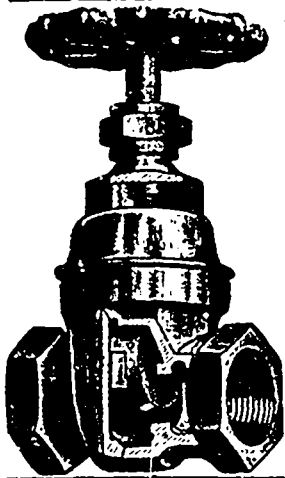
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## FRANK B. WHITE COMPANY.

The Fisher Building, CHICAGO. 129 Nassau St., NEW YORK.  
Represent the Advertising Department of THE CANADIAN  
MANUFACTURER in the United States.

## OUR TARIFF EDITION.

The special edition of THE CANADIAN MANUFACTURER of July 6, containing the tariffs in full of Canada, United States, Great Britain and Newfoundland, all accurately indexed, is meeting with a most kind and flattering reception at the hands of our friends. We are in receipt of many letters regarding it, the following being a synopsis of what is said in some of them:

\* The Canadian Manufacturers' Association, T. A. Russell, Secretary:—I desire to congratulate you on the manner in which the edition has been produced, and am perfectly satisfied that it will prove of great value to manufacturers, as they will have in official form the tariffs of the countries to which they make their principal shipments.

\* P. W. Ellis & Co., manufacturing jewellers, Toronto:—A very creditable production, which will be of value for reference. Having the four tariffs within one cover will be a great saving of time.

\* R. W. Elliot, of the Elliot Co., manufacturing chemists, Toronto:—We are in receipt of your tariff edition of July, 1900, and can now lay aside that of August, 1897, which has become dog-eared from constant use. The indices are immense time savers, and the advertisements tell their story so plainly that they should greatly increase the sale of the goods they represent. A great value of the publication is that it affords instant means of comparison of the Canadian and the United States' tariffs.

\* The T. W. Capp Co., manufacturing jewellers, Toronto:—We earnestly thank you for your most valuable tariff edition. It is the best and most useful premium we have ever received with any publication.

\* J. A. Kammerer, Toronto manager for The Royal Electric Co.:—I am free to say that the tariff edition of THE CANADIAN MANUFACTURER is the best thing in its line I have ever seen.

\* Wm. H. Brown, general manager The Royal Electric Co., Montreal:—I have examined your tariff edition carefully and am well pleased with it. The arrangement and display, both of tariff matter and advertisements, indicates great care and good discernment and taste, and we are sure that all your advertisers will feel quite satisfied with the care with which

Those marked (\*) are members of the Canadian Manufacturers' Association.

you have published their cards. Those who have occasion to make use of the tariff lists will find your arrangement thereof of great assistance in the procurement of the information they require. It is quite satisfactory to see work so thoroughly well done as appears in your paper.

\* John Buillie, managing director the Dominion Oil Cloth Co., Montreal:—We are greatly obliged for your tariff edition, which will, without doubt, be found very useful. We therefore take much pleasure in congratulating you on your enterprise in getting out such a complete and valuable production.

\* John Bertram & Sons, Canada Tool Works, manufacturers of machinists tools, etc., Dundas, Ont.:—We take pleasure in acknowledging receipt of the handsome tariff edition of THE CANADIAN MANUFACTURER. We consider the publication a very superior one and of great value to the business world. We commend your enterprise in getting it up.

\* The Kerr Engine Co., marine engines, pumping machinery, hydrants, valves, etc., Walkerville, Ont.:—We compliment you on the manner in which your tariff edition is compiled, and the spirit of enterprise which it demonstrates. It is a complete handbook and will be much appreciated.

\* The B. Greening Wire Co., manufacturers of wire work of every description, Hamilton, Ont.:—We congratulate you upon your tariff edition. We may say that we found your 1897 tariff edition very useful, in fact, has been in daily service, and is only now replaced by the present number.

\* W. Doherty & Co., organ manufacturers, Clinton, Ont.:—Acknowledging receipt of your superb tariff edition, the four tariffs with indexes alphabetically arranged is a splendid idea. It is a great convenience in our office and supplies a long-felt want.

\* M. J. Taylor, manager Dominion Dyewood & Chemical Co., Toronto:—We acknowledge with thanks the special edition of THE CANADIAN MANUFACTURER of July 6, showing different tariffs. It should certainly be very useful to all business people, especially manufacturers.

\* R. A. Donald, managing director the Pure Gold Manufacturing Co., manufacturers of the Pure Gold brand of grocers' supplies, Toronto:—You have our hearty thanks for your valuable compilation of tariffs. We cannot express too highly the value to us of this publication in such a concrete form, as we are continually referring to it. You certainly deserve all the credit which can be given to you for it.

The Sydenham Glass Co., Wallaceburg, Ont.:—Many thanks for your tariff edition. It is a work which will be appreciated very much by manufacturers throughout the country.

George W. Armstrong, president the London Brass Works Co., London, Ont.:—It is invaluable to importers, and the commercial community are under great obligations for it.

## THE GROWING TIME IN AFRICA.

Some valuable hints to manufacturers who may be desirous of entering the South African market as soon as the conditions prevailing there admit, are thrown out by the British and South African Gazette, and apply to Canadians as well as the enterprising men of other countries. The remarks are based upon a recently published German pamphlet entitled "Sud Africa und der Handel Deutschlands," which, according to a British Commercial Attache at Berlin, has attracted considerable attention.

Speaking of commercial travellers in South Africa, it is said:

The influx of commercial travellers from Europe and America into South Africa has been especially noteworthy of late years. In 1898, about 300 licenses were granted to

commercial travellers in the Cape alone. Although commercial travellers enjoy certain privileges on the railways, inasmuch as they may travel first class at second class rates and are granted reductions in respect of their luggage, yet commercial travellers' expenses are as a rule fairly high. After referring to costs of licenses, e.g., Cape Colony, £25 annually; British Bechuanaland, £10; Natal (from January 1, 1899) £10; the pamphlet states that some German firms have already adopted the system of other competing countries and pay the agents who introduce their goods a fixed salary besides commission, with additions for travelling, advertising, etc. Travellers for single firms or for combinations of firms have to be supported liberally by their principals if they are to be successful. The South African Commercial Travellers' Association was recently formed in Cape Town to protect the interests of travellers; its members soon numbered 300.

The travellers of larger houses, as a rule, only visit important wholesale and importing firms; these are situated principally at the ports, and in some of the larger inland towns. Owing to the keenness of competition some commercial travellers have sold goods on credit to small inland firms, but there is considerable risk about business of this kind, as many of the smaller houses are not supported by sufficient capital, and are too ready to engage in larger transactions than their means justify, and it is not advisable to depart from the usual plan of selling only to importing firms or agents.

The usual tour of commercial travellers in South Africa is as follows:—Cape Town, Port Elizabeth, Graaff-Reinet, Middelburg (Cape Colony), Graham's Town, East London, King William's Town, Queenstown, Durban, Pietermaritzburg, Johannesburg, Pretoria, Potchefstroom, Kimberley, Bloemfontein, Beaufort West, Cape Town or in the inverse direction, direct from Cape Town to the north and back by the east route. Many commercial travellers start from Delagoa Bay and visit the Transvaal before going south. Expenses amount to from £2 10s. to £3 per day along the lines of railway, and correspondingly more on other routes.

Commercial travellers and representatives should be furnished with complete assortments of patterns and samples. The more familiar types meet with ready sale. The establishment of sample depots is said to answer. The Americans especially attach much importance to exhibiting their samples to advantage; for example, machines and agricultural appliances are shown at work whenever practicable. Although the outlay in establishing such depots is often very considerable, their establishment is as a rule remunerative if they are intelligently and energetically managed. In this respect, as well as in the selection of agents and representatives, economy is a mistake.

Great attention should be paid to advertising, which plays a great part in commerce in South Africa, as well as in other English-speaking countries. Poorly got up placards and catalogues say little for the goods they refer to and their manufacture. Exporters should, like those of other countries, send suitable circulars or cards with each consignment of goods, when the nature of the goods allows of this course. Advertisement for exhibition outside buildings, etc., should be weather-proof and made of sheet-iron or similar material. Catalogues and price lists should be well printed and on good

paper, and if provided with illustrations, they should be printed in the best style. An importer will not throw aside a well-got-up catalogue, but will keep it for frequent reference, so that a durable binding should be provided.

Price lists, catalogues, etc., of whatever kinds, should be drawn up in English and German. If they are intended to reach the Boer population, the "taal" (Dutch-African dialect) should be used. All these points, on which local representatives, knowing the country well in each particular case, would be able to give the best information, should be scrupulously observed by manufacturers and exporters, or else their interests will suffer and the work of their agents be rendered difficult or impossible.

Complaints are frequently heard of careless and faulty packing of goods ordered. The following rules should be observed:—Packing should never be left to inexperienced hands, and should be effected in exact accordance with the wishes of the customer; and only such material as he specifies should be used to fill the interstices between the articles in the package. If, for example, an importer requests that bottles of acid should be packed in carbonate of lime, it will not do to pack them in shavings. Only good, strong boxes should be used for packing, about forty-nine or fifty inches square, and under no circumstances should boxes be selected which are too large for the goods they are to contain, and empty spaces should always be avoided. Several smaller boxes are preferable to one large one. At port towns there are facilities for unloading, etc., but packages have often to be sent long distances in the interior by wagon, when they are subjected to rough handling. The external covering of the goods in the boxes should be, as far as possible, waterproof, and each separate package should be wrapped in good packing paper. The articles themselves should, whenever practicable, be packed in cardboard boxes and the like; for example, knives and scissors should be fastened on cards instead of being wrapped in untidy-looking brown paper. Articles got up in this way are more attractive to buyers, and remain presentable, even though subjected to frequent handling. Breakable articles should be very carefully packed. Broken parts of bronze hanging lamps, articles of cast metal, etc., can only be replaced after considerable loss of time.

Terms on which business is done vary in South Africa as in other countries. Credit of from three to six months is as a rule, accorded to firms of good reputation. Some houses settle against bills of lading at thirty, sixty, ninety and a hundred and twenty days' sight, others again pay cash through German or English houses on sale of the goods. The amount of credit to be given should of course be regulated according to the circumstances of each case, and manufacturers who have never before done a direct export trade to South Africa, should make a thorough study of the market and all relative circumstances, or else leave direct trade to experienced exporters. The chief point is and always will be to supply the customer punctually and rapidly with the exact article he requires and in the exact way he prescribes.

The pamphlet from which the above has been summarized deals with many points likely to interest persons engaged in an export business with South Africa or proposing to start a business there. Amongst the matters referred to are:—Cost of living, native industries and the advantages they enjoy, agricultural produce of South Africa, shipping communica-

tions, railways, posts and telegraphs. Statistics of the foreign trade of South Africa are also given, as well as information respecting each of the principal South African towns and its trade, and many articles finding a ready market are indicated which could be supplied by Germany.

The pamphlet concludes by advising merchants to be quite ready to take full advantage of the boom in South African trade, which it is thought, says the writer, will inevitably follow the conclusion of the present war.

### THE BOYS OF THE OLD BRIGADE.

Referring to the forthcoming annual meeting of the Canadian Manufacturers' Association to assemble in Toronto on August 30, *Industrial Canada*, published by the Association, says:

Every manufacturer should endeavor to be present at the first representative gathering of the Manufacturers of Canada.

Where, Oh! where are the old timers and standbys, whom we read about in *THE CANADIAN MANUFACTURER* of June 9, 1882, who, in response to a circular letter, attended a large meeting of manufacturers, held at the Queen's Hotel, this city, to discuss the National Policy and its relation to the prosperity of manufacturers and of the country generally. The meeting was composed of gentlemen from all parts of the country among whom were Joseph Simpson, Edward Gurney, R. W. Elliot, James Watson, William Bell, John Bertram, Bennett Rosamond, W. H. Storey and William Chaplin, all of whom have been presidents of the Association; other influential members of the Association present being, George Booth, Samuel May, H. Heitzman, Daniel Lumb, John Milne, James Stewart, R. M. Wanzer, James Young, J. H. Killey, Adam Warnock, David Spies, Hugh McCulloch, J. B. Armstrong, Charles Raymond, Robert McKechnie, John R. Barber, John Riordan, William Rosamond and many others, who represented many of the most important manufacturing enterprises in Canada at that time. And yet *Industrial Canada*, speaks of the forthcoming meeting as being the first representative gathering of the manufacturers of Canada.

### THE STEEL RAIL INDUSTRY.

On July 12, when Hon. Mr. Blair, Minister of Railways and Canals, moved the House of Commons into committee upon the railway subsidy resolution, he stated that there was one thing which he desired to refer to and that was that the Government had considered the advisability of giving the subsidies in the future in such a way as to stimulate the manufacture of steel rails in this country, an industry which might, with encouragement and every probability of success, be established in Canada. The Government had contemplated embodying in their railway subsidy contracts a clause which would make it a condition precedent to the earning of the subsidy that the company should procure Canadian-made rails if there were such rails to be bought in Canada upon terms as reasonable and as favorable as rails could be produced elsewhere. The Government determined upon that policy, and it was in their minds to incorporate a clause in subsidy contracts giving effect to that policy. They were and still are of the opinion that such a clause would ensure

every useful purpose, and that it would suffice to embody it in the contract without making it a law of the land; but on consideration it had occurred to him that it would be preferable if they took power in the resolutions to make that condition. By doing so they would give greater publicity to the design of the Government and of Parliament, and accomplish their object better than if they did not give their intentions publicity in that form. He proposed, therefore, when the House was in committee to move a resolution giving the Governor-in-Council power to make it a condition in all subsidy contracts made under this resolution, or to be made in the future, that Canadian steel rails shall be used when procurable, and that the Minister of Railways shall be the judge as to the possibility of procuring them.

For which many thanks. This is more than has ever before been done by the Dominion Government, looking to the encouragement of rail-making in Canada.

Reference to the files of this journal will show that for many years it has advocated the adoption of a policy that would bring about the production of Canadian rails, and the country has now to thank Mr. Blair and the Government for bringing that event within measureable distance. It may be that Mr. Blair's scheme may prove unworkable, but it should be given a fair trial. Otherwise a light duty should be placed upon rails made elsewhere, the proceeds of which, or so much thereof as might be necessary, should be given as a bonus, extending over a short term of years, upon the production of rails in Canadian mills, made of Canadian materials.

### THE WOOL PRODUCTION OF BRITISH COLUMBIA.

On a recent occasion a large woolen manufacturing concern in Nova Scotia asked information of *THE CANADIAN MANUFACTURER* regarding the wool production of British Columbia, and in an endeavor to obtain it the question was referred to the Vancouver Board of Trade. Mr. W. T. Stein, the Secretary of that Board, forwarded our enquiry to Mr. W. E. Nachtrieb at Victoria, who is the British Columbia agent of Messrs. W. B. Sumner & Co., of San Francisco, Cal., who are among the largest wool dealers on the Pacific Coast, and we are now in receipt of a copy of Mr. Nachtrieb's letter to Secretary Stein, in which he says that the production of wool in British Columbia is not carried on as a special industry. All the wool grown is the product of small bands of sheep owned by farmers who carry on agriculture in general, sheep being kept principally for meat purposes, and therefore the wool is a secondary consideration. Consequently the wool varies in quality and fineness of staple, some farmers having fine breeds producing a coarse filler, some of which is very long, and, owing to their being much burnt timber in the country, is very black and heavy with charcoal. The Fraser River Valley and Ashcroft Districts, as a rule, produce a light clean article, but rather coarse in texture. His impression is that the total amount of wool grown in the Province will not exceed one hundred thousand pounds per year.

### EDITORIAL NOTES.

E. P. Wilson, Esq., Secretary of the National Association of Manufacturers of the United States, has sent us a very nicely bound copy of Proceedings of the Fifth Annual Convention of that Association, held at Boston on April 24, 25 and 26 last.

In its more than 200 pages is included the report of President Search, which is indeed a most able resume of the affairs of the Association, which cannot but be of the utmost interest not only to American but to Canadian manufacturers also. An index covering nearly four pages refers to all the matters considered and discussed in the convention and the page or pages in which they were mentioned.

In addition to the tariffs of Canada, United States, Great Britain and Newfoundland, reproduced in full from official copies in THE CANADIAN MANUFACTURER of July 6, we also have official copies of every habitable country on the globe where customs tariffs are imposed and Custom Houses exist. Europe, Asia, Africa, North America, South America, the Australian Colonies and all of the Isles of the Sea, every one of them; and if any of our friends desire to learn anything included in any of these tariffs, come and see us. We have them all.

By the compliments of the Canadian Manufacturers' Association, we are favored with a copy of Canadian Trade Index, a classified membership directory of the Association, arranged for the use of buyers and sellers, home and foreign. The aim of this Index, we are told, is to furnish merchants who may be interested with a comprehensive list of the manufacturers of Canada, in which is comprised only the members of the Association. Reference is made to the fact that the Association desires to aid foreign buyers who desire to purchase Canadian products, and that it also seeks affiliation with foreign Boards of Trade in order that there may be a free exchange of publications issued by them. A portion of the book is devoted to explaining the aims and objects of the Association and its claims upon Canadian manufacturers. The book contains a list of officers of the Association, chairmen of committees and of the executive committee for the current year. It shows much care in preparation, is printed on good paper and is substantially bound.

"Educational and Entertaining, Aggressive and Progressive," are the very appropriate watch-words adopted by the Toronto Industrial Exhibition this year, which will be held from August 27 to September 8. This is the twenty-second successive year of Canada's great Exposition at Toronto, and each year has not only seen an improvement in the arrangements as compared with the years that have gone, but the quality of the stock is very far ahead of what it was at the beginning, thus proving the inestimable value of Fairs such as that held annually at Toronto. It is an old story to say that the Exhibition immediately approaching will be superior to all its predecessors, but it can safely be said that arrangements have been made, and negotiations are pending, that warrant the statement that the Toronto Fair of 1900 will fully maintain the reputation it has gained of being the best of all that are annually held. A good deal of the space has already been taken up, and a number of entries have been made, but there are so many divisions comprised in the prize list, with its 131 classes and \$35,000 in premiums, that there is ample provision for all; and, talking of those divisions, it is interesting to note that there are no fewer than 55 in class 128, knitting, shirts, quilts, cloths, etc.; 354 in class 54, poultry; and an average of 16 or 17 in each of the two dozen

classes devoted to horses and cattle. This will give some idea, not only of the scope of Toronto's Great Exposition, but also of the opportunities offered to secure prizes. It is a little early to refer to what is promised in the way of entertainment, but when it is stated that \$30,000 is spent annually on this department, visitors have ample guarantee that they will be abundantly provided for, and the admission to the Toronto Exhibition with its myriads of attractions is only twenty-five cents. Entries close on August 4, and prize lists can be had by addressing H. J. Hill, Manager Industrial Exhibition, Toronto. As last year, so this, the Exhibition will be inaugurated on Tuesday evening, August 28, with a brilliant Military Tattoo. Reduced rates will be given and excursions held on all lines of travel.

Mr. Robert McConnell, late of The Halifax Chronicle, has been appointed chief of the statistical branch of the Customs Department recently formed at Ottawa.

An important regulation governing shipping from Europe by the St. Lawrence route has been issued by the Dominion Customs Department. The Customs Act provides that the value for duty shall be the fair market value of goods when sold for home consumption in the principal markets of the country whence imported direct to Canada. This word "direct" has been somewhat loosely interpreted in the past in the case of British and Continental goods imported through United States ports. It is the intention of the Customs Department now to apply the law relating to direct importations more strictly, and to require that the evidence of goods brought from Europe to Canada via the United States being a direct importation shall be clear and conclusive. It is expected that the new regulation will promote trade via the St. Lawrence, as there can be no question of importations by ocean steamers to a Canadian port being direct. Hereafter European goods coming into Canada through the United States will be valued for duty as though imported from the United States, and duty will be levied on the open market value in that country, unless the bill of lading clearly shows the goods to have been consigned from Europe to an importer at a particular port in Canada.

Walter Dean, builder of high grade canoes and boats, Toronto, writes us as follows:—"I am well pleased with the results I have received from my advertisement in THE CANADIAN MANUFACTURER." Mr. Dean informs us that his business during the past season has been remarkably satisfactory.

Mr. J. S. Larke, commercial agent for Canada in Australia, writes to the Department of Trade and Commerce that the imports from Canada into New South Wales during 1899 show a decrease, as was anticipated, and the exports a very marked increase, owing to the large reshipment of the Queensland sugars from Sydney. The trade of New Zealand with Canada and the United States has fallen, so far as the imports are concerned, but the exports to Canada increased. With two exceptions, all the chief articles exported from Canada have held their own or gained, and indeed the whole imports from Canada west of the Rockies were greater last year than during the year previous. The two exceptions are

# THE CANADIAN MANUFACTURER

ESTABLISHED IN 1880.

Devoted to the Development of Canadian Trade,  
Foreign and Domestic.

## THE INTERNATIONAL BUREAU OF COMMERCE

.. OF CANADA ..

In connection with The Canadian Manufacturer, works to attain this end.

Any inquiry addressed to THE CANADIAN MANUFACTURER will result in placing the writer, if he so desires, in communication with Manufacturers, Buyers or Sellers of any sort of merchandise in Canada or any other country.

Merchants, Importers, Exporters, Boards of Trade, Chambers of Commerce and Commercial Organizations in any part of the world are invited to make full use of the facilities afforded by THE CANADIAN MANUFACTURER whenever they may desire information about any article produced in Canada, Tariff Law, Customs Regulations, Routes of Transportation, etc.

We especially request Canadian manufacturers to send us lists of the different lines of goods produced by them so that we may address to them special letters of inquiry as soon as information is received by us.

We have information, principally from buyers, that is valuable to manufacturers who desire to increase their trade in the British and foreign markets, that will be furnished on application. If you find any item in this list (which is changed every issue) that you are interested in, write to us. If you see any item that does not interest you but would be of value to some friend, kindly inform him or us.

Cutlery.  
Silverware.

**AUSTRALIA.**

Table Cutlery.  
Optical Goods.

**BELGIUM.**

Oak  
Walnut } Lumber.  
Poplar }

Cedar  
Pitch Pine } Lumber.

**DENMARK.**

Rope and Twine.  
Scales.  
Wire Rope.  
Vehicle Parts.  
Axles and Springs.  
Horseshoes.  
Builders' Hardware.  
Cabinet -  
Household  
Upholstery }  
Saddlery }  
Carriage }  
Marine }  
Stationers' }  
Bar Iron and Steel.  
Pig and Corrugated Iron.  
Wrought and Cast Iron Pipe.  
Canned Goods.

Carpenters' }  
Machinists' }  
Blacksmiths' }  
Plasterers' }  
Butchers' }  
Contractors' }  
Tinsmiths' }  
Plumbers' }  
Light Railway Supplies.  
Sanitary Appliances.  
Valves and Pipe Fittings.  
Electrical Sundries.  
Farming Tools.  
Barb and Fence Wire.  
Glassware.  
Furniture.  
Organs.  
Leather.

**GERMANY.**

Sulphate of Copper.  
Pig Iron.  
Prussiate of Potash.  
Wheat Bran.

Fresh Apples.  
Butchers' Cleavers, Saws and  
Blocks.  
Meat Choppers.

**GREAT BRITAIN.**

Telephone and Telegraph Material.  
Agricultural Machinery.  
Signals.  
Paints, Oils and Varnishes.  
Window Glass.  
Rope and Twine.  
Carriage Hardware.  
Bar Iron and Steel.  
Metal-working & Milling Machinery.  
Carpenters' and Machinists' Tools.  
Plows and Cultivators.

Electric Light Fixtures.  
Barb Wire and Fence Material.  
Roofing Slate.  
Corrugated Iron.  
Lamps.  
Butter and Cheese.  
Confectionery.  
Shafting, Hangers and Pulleys.  
Provisions for ships' use.  
Bicycles and Bicycle Accessories.  
Automatic Shade Rollers (2).

**GREAT BRITAIN—Continued.**

Broom Handles.  
Carriage Stock.  
Electrical Supplies and Fittings.  
Brass-mounted Metallic Bedsteads.  
Canned Provisions, Mess Pork, Beef  
and Food Products for India.  
Wagon and Carriage Parts (2).  
Carriage Parts.  
Axles and Springs (2).  
Engines and Rollers (2).  
Pumping (2), Mining and Blasting  
Machinery.  
Contractors' Tools.  
Electrical Goods.  
Electrical Railway Equipment.  
Blasting Powder.

**HOLLAND.**

Machinists' Tools.  
Wagon and Carriage Hardware.  
Metal & Wood-working Machinery.  
Mining and Hoisting Machinery.  
Wrought Iron Pipe.  
Pumping Machinery.  
Pulleys.  
Plumbing Materials.  
Shoe and Leather Machinery.  
Milling Machinery (2).  
Engines and Boilers.  
Shafting, Hangers and Pulleys.  
Factory Supplies.  
Textile Machinery.  
Wire Rope.  
Portable Forges.

Belting.  
Contractors' Tools.  
Blasting Powder  
Linoleums.  
Curtains.  
Cocoa Mats.  
Jute.  
Table and Floor Oilcloths.  
Brussels and Axminster Carpets.  
Rugs, Mats, Tapestry, etc.  
Leather Cloths.  
Hair Upholstery.  
Carriage Cloths.  
Table Covers.  
Hair Pads and Carpetings.  
Woolen Goods.

**ITALY.**

Paints, Varnishes and Oils.  
Hams, Bacon Pork and Lard.  
Drugs and Chemicals.  
Patent Medicines.

Toilet Preparations.  
Hides.  
Leather and Leather Findings.

**MEXICO.**

Oak, Poplar and Maple Lumber. | Writing Papers.

**RUSSIA.**

Bicycles and Sundries. | Hardware.

**SOUTH AFRICA.**

Cupboards.  
Sideboards.  
Kitchen Dressers.  
Cutlery.  
Rope and Twine.  
Carpets, Rugs and Oilcloths.  
China and Glassware.  
Kitchen Utensils.  
Sheetings and Shirtings.  
Trunks.  
Toys and Games.  
Fishing Tackle.  
Sportmen's Clothing.

Groceries.  
Hams, Bacon, Pork and Lard.  
Confectionery.  
Boots and Shoes.  
Dried Fruits.  
Canned Salmon.  
Tobacco for Cigars, etc.  
Cigarette Papers and Machines.  
Tobacco-cutting Machinery.  
Cigar Box Goods.  
Book Slates.  
Slate Pencils.  
Office Furniture.

**TURKEY-IN-ASIA.**

Dress Goods.  
Prints and Gingham.  
Sheetings.  
Gray Muslins.  
Blankets.  
Stationery.  
Oilcloth.  
Lamps.

Sole Leather.  
Handkerchiefs.  
Muslins.  
Hosiery and Underwear.  
Clothing.  
Bees.  
Agricultural Implements.

Preserve this Bulletin for Reference—it will not be Duplicated.

*If You want Information, Ask for It.*

Address, THE CANADIAN MANUFACTURER, Toronto, Canada.

bicycles and canned goods. Mr. Larke speaks of New Zealand as an interesting field for the Canadian exporter. He hopes that at no distant date there may be a direct steamship service from Canada to Australia, and that there may be a preferential trade agreement with the Dominion.

The position of Dominion Census Commissioner has been offered to and accepted by Mr. Archibald Blue, lately the Director of Mines of Ontario. No better appointment could be made.

We feel quite assured that manufacturers, as well as the public generally, are well satisfied in the appointment by the Ontario Government, of Mr. Robert Glockling to the office of secretary of the new Labor Bureau. He is a man of decided ability, and in his hands the Bureau will undoubtedly become what it was intended to be.

A telegram from Ottawa states that a syndicate is being formed in that city with a capital of \$50,000,000, to control the output of lumber in the Ottawa valley and to regulate the prices thereof. The name of Mr. J. R. Booth is mentioned in connection with the enterprise.

American Trade says that Mr. W. J. Mathieson, a commissioner of steam railways from the Government of Victoria, Australia, with several other officials, is expected to arrive in the United States shortly. The object of their visit, it is stated, is for the purpose of placing orders for public undertakings, including machinery, supplies, etc. It is said that the expenditures will amount to all of \$1,000,000. Canadian manufacturers who desire to capture a portion of this Australian trade should take notice.

The Canadian Manufacturers' Association have sent us a very neat twelve page pamphlet containing a report of the delegates sent by the Association to visit the fifth annual convention of the National Association of Manufacturers of the United States, which convened in Boston in April last. It includes a synopsis of the address of Mr. T. C. Search, the president, and references to what he considered the leading features of the Association which he desired to have discussed; also references to other addresses, to the resolutions which were passed, and to the banquet at which many excellent speeches were made

#### OPPORTUNITIES FOR CANADIAN TRADE.

The following enquiries have been received at the offices of the High Commissioner of Canada in London, and of the Canadian Section of the Imperial Institute, London, England.

NOTE.—Those who may wish to correspond with any of these enquirers can obtain the names and addresses by applying to THE CANADIAN MANUFACTURER, Toronto. No charge for giving information. When writing refer to the numerals opposite the enquiries.

300. An old established firm of whiskey blenders in Scotland, who have not been represented in Canada heretofore, are desirous of hearing from responsible agents in the different provinces.

301. A Constantinople firm have a customer who desires to place a contract with a Canadian house for a large quantity of lard and nutton tallow to be taken as required within six or nine months. They also express a desire to represent Canadian firms who wish to push their goods in the Orient.

302. A London firm desires to get into communication with Canadian shippers of frozen salmon, poultry and provisions with a view to acting as agent.

303. The manufacturers of lawn tennis goods, croquet, lawn bowls and other games, enquire for names of firms in Canada importing such goods.

304. Enquiry has again been made for exporters of wood-flour by parties able to take large quantities of the commodity.

305. A firm of lumber merchants in Canada, who contemplate erecting a large factory for the manufacture of spruce box shooks, desire to correspond with English firms who would be disposed to deal in such goods.

306. A Belgian firm desire to hear of Canadian houses who might be disposed to take up the sale of their rice, starch and ultra-marine blue (in powder and balls).

307. A large Canadian concern, manufacturing wood-working and saw mill machinery, creamery and cheese factory outfits, etc., are desirous of extending their trade in foreign countries. Correspondence desired. Catalogues and particulars on demand.

308. A Glasgow firm would like to hear from Canadian makers of Excelsior packing with samples and quotations per ton (2,240 lbs.) c.i.f. Glasgow.

309. An Austrian commission merchant invites communication from Canadian shippers wishing to extend their export trade.

310. A Danish merchant would be pleased to hear from Canadian manufacturers and others desirous of opening up trade relations.

311. A Mideands manufacturer of steel trunks, deed boxes, etc., asks to be placed in touch with Canadian importers handling these goods.

# Transfer Ornaments, AMERICAN MADE.

TRADE MARKS, DECORATIONS, NAME PLATES, ETC.

For **HARDWARE, BICYCLES, VEHICLES, POTTERY, FURNITURE, etc.**

Sketches submitted free of charge. Being home makers can deliver promptly. Write us.

**THE MEYERCORD CO., Inc.,** MAIN OFFICE— CHAMBER OF COMMERCE, - CHICAGO.

Canadian Travelling Representative,  
CHAS. H. JAGGAR, Buffalo, N.Y.

Largest Makers in the World Guaranteed Decalcomania Transfers.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.



## CAPTAINS OF INDUSTRY.

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

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

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

The Rehder Plating & Mfg. Co., Thorold, Ont., have succeeded to the business of the Paris Electro-Plating Co., Paris Station, Ont. This is a change of name and location and not a change of personnel or business. Mr. C. Rehder having for a number of years been the manager of the Paris Electro-Plating Co., and his name is brought forward more prominently in the Rehder Plating & Mfg. Co., at Thorold. The special features of the business will be as it has been, the manufacture of stove and piano trimmings and novelties, and fine grey iron castings.

The Electrical Construction Co., London, Ont., have received an order from the Blind River Lumber Co., Blind River, Ont., for the supply of a 150-light multipolar dynamo for their mills and also complete wiring of their mills and lumber docks.

C. W. Thompson of the Napanee Mills Paper Co., Newburg, Ont., is replacing his arc lighting plant with a complete direct current incandescent system supplied by the Royal Electric Co., Montreal.

The steamer Theano of the Algoma Central Railway steamship line passed down through the Canadian Canal at Sault Ste. Marie, Ont., on July 20 with the first cargo of iron ore ever shipped from the Canadian shore of Lake Superior. She had 2,153 tons, and was bound for Midland. From this out it is expected to ship three or four cargoes per week to the same place.

The Diamond Machine Screw Co., Toronto, have increased the screw department of their works to double their former capacity by the introduction of much new machinery and appliances. They inform us that their works in all departments are being

run to their fullest capacity, and that they are rushed to fill orders. These goods are exceedingly well received by the trade, the standard of them being of the highest character. They will send catalogues and price lists on application.

The ratepayers of St. Catharines, Ont., have voted favorably upon a by-law to bonus the Welland Vale Mfg. Co., to the extent of \$4,000 a year for fifteen years. It will be remembered that a few weeks ago the extensive works of that company in that city were destroyed by fire.

The law of the Inter-State Commerce Commission requiring automatic couplers on all railway cars in the United States went into effect August 1. The work of installing them on the Canadian Pacific freight cars is going ahead rapidly in the shops at Toronto Junction, and one hundred cars are being equipped every month.

The Central Peat Co., Welland, Ont., have placed an order with the Electrical Construction Co., London, Ont., for one 25 h.p. multipolar generator, one 15 h.p. multipolar motor, one 10 h.p. multipolar motor, and one 5 h.p. multipolar motor to operate their works at Welland.

The Volta Electric Storage Co., Hamilton, Ont., is installing a 120 k.w. 110 volt, bipolar direct current generator and a 25 k.w. direct current 250 volt multipolar generator for charging batteries and for testing purposes, purchased from the Royal Electric Co., Montreal.

Messrs. C. K. Johnston & Co., Toronto, manufactures of Crown boiler compound, inform us that they are meeting with a brisk demand for their article. Shipments

sent out one day last week were to the Firstbrook Box Co., Clarke & Clarke, and Cobban Mfg. Co., all of Toronto, and to F. W. Hore's Sons, Hamilton. They are in receipt of a letter from Christie, Brown & Co., biscuit manufacturers, Toronto, in which they say that having used the Crown boiler compound for a year, can truthfully say that it is the best they have ever used.

The J. C. McLaren Belting Co., Montreal, have sent us a circular in which is enumerated a few points of interest in connection with transmission of power by belts. In it is embodied an article on tests of leather, rubber, cotton and other belts made by Prof. G. R. MacLeod, of McGill University, Montreal, made with belts made of English oak tanned leather, such as the McLaren belts are made of, and of hemlock tanned leather. The experiments are very interesting regarding which the company will give further information upon application.

The Electrical Construction Co., London, Ont., are having a great demand for machines from Winnipeg, Man., they have received a further order from the Stuart Arbuthnot Machinery Co., for one 16 h.p. multipolar motor, one 15 h.p. multipolar motor, and one 8 h.p. bi-polar motor.

The Dominion Government has placed an order with the Royal Electric Co., Montreal, for a 30 k.w. direct current multipolar generator direct connected to a Robb-Armstrong engine, together with a marble switchboard, and arc and incandescent lamps to light the docks at Sorel, Que.

Manufacturers and consumers of fuel generally will be interested in the announcement of Messrs. James H. Milnes & Co., Toronto, who speak of their readiness to promptly fill all orders for blacksmiths and steam, coals and cokes, from their extensive yards in this city. The grades of fuel they handle are the best obtainable, and they are in position, through their connections with the Pennsylvania and other coal operators to give their customers quite as good treatment as could possibly be obtained in Buffalo or any other American city. Therefore they appeal to all classes of Canadian consumers—blast furnaces, iron and steel works, rolling mills, foundries, factories, blacksmiths, etc., for patronage, asking no better prices or terms that can be obtained elsewhere. This is an old and well established concern.

The McLean Publishing Co., Toronto, have ordered from the Electrical Construction Co., London, Ont., one slow speed press motor to be direct belted to printing press.

## INGERSOLL-SERGEANT Rock Drills

FOR MINES, TUNNELS AND QUARRIES

PISTON INLET **Air Compressors** STRAIGHT LINE  
 DUPLEX and  
 COMPOUND.

FOR ALL DUTIES.

... COMPLETE MINE EQUIPMENT ...

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

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

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.



It is understood that the works of the Locomotive & Engine Co., at Kingston, Ont., which were recently offered for sale, have been withdrawn from the market, and that a new company has been found to take them over and run them to their full capacity, to be engaged in building locomotives for the new Great Northern Railway which extends from Fort William, Ont., to Winnipeg, Man., and which is to be continued to the Pacific Coast. Messrs. Mackenzie & Mann, of Toronto, and James Ross, Campbell Reaves and James Pyko, of Montreal, are interested.

The Farmers Co-Operative Packing Co., Brantford, Ont., has purchased from the Royal Electric Co., Montreal, a complete direct current plant to light its packing houses at Brantford.

The Glucose Works of the Edwardsburg Starch Co., at Cardinal Ont., which were completely destroyed by fire last April, are being rapidly rebuilt on a very large scale. The buildings are of brick, and are of the most substantial construction, with a capacity which, in the opinion of the management of the company, should enable them to supply the trade of the Dominion with all the glucose and syrup that there is a market for. The works destroyed were modern in every respect, but the new plant, besides having more than double the capacity of the old, will have several improvements, which the company think will not only make their product equal to anything on the continent, but will add very much to the economy of production. The by-products plant will also be very much enlarged and improved, and the new buildings constructed for this purpose are expected to be completed and in operation this month, after which the starch department of the works will be run to its full capacity, nearly doubling the starch production of the company. The company complain that they have been very much handicapped in their starch production since the fire, and have not been able to turn out any more starch than last year, although a large amount of money was spent during the early winter in improvements on the starch department alone, all the advantages of which were lost on account of the fire destroying their plant for handling the refuse. Before long, however, they expect to have everything throughout every department of the works in full working order, with increased

capacity and improved facilities, and will then be in a position to supply all the trade will take of the different lines of starches, glucose and syrup, as well as the by-products such as gluten, germ meal, corn oil, etc.

The planning mill and sash and door factory of Messrs. L. B. & A. M. Bowman, near Waterloo, Ont., was destroyed by fire July 23, loss about \$2,000.

By a by-law favorably voted on in Waterloo, Ont., a few days ago, \$9,000 was granted towards the construction of the Port Dover, Brantford, Berlin & Goderich Railway, by which Waterloo and Berlin will have connection with the Canadian Pacific Railway.

The Electrical Construction Co., London, Ont., have received orders from G. E. Matthews, Montreal, for one 6 h.p. motor; Clark, Pennock & Co., London, Ont., one 8 h.p. bi-polar motor; Messrs. Malloch & Co., London, Ont., three 6 h.p. elevator motors; and Messrs. Burnett & Sons, London, Ont., one 8 h.p. hoisting motor with controller.

The first new 2,000 k.w. generator for the Cataract Power Co., Hamilton, Ont., was shipped from the shops of the Royal Electric Co., Montreal, on July 25. It occupied four cars.

The entire premises and plant of the Loretto Butter & Cheese Works, at Loretto, Man., were destroyed by fire July 17.

The Paris Electro Plating Co., late of Paris Station, Ont., have sold their entire outfit and plant of patterns, stock in trade, etc., to the Rehder Plating & Mfg. Co., of Thorold, Ont., where they have obtained extensive and convenient premises and abundant power for the production of their general and special lines. They will continue to manufacture under the experienced practical management of Mr. C. Rehder, the founder of the business, full lines of stove trimmings, iron, steel and brass trimmings, parts, etc., used in the construction of pianos, organs, etc., in various kinds of finest bronze, nickel, brass and copper plate; also fine grey iron castings and novelties. The company are getting out a new catalogue and price list of their specialties which they expect to have ready for distribution at an early day, meantime they invite correspondence at their new quarters at Thorold.

The Toronto Woolen Machinery Co., Toronto, dealers in all kinds of woolen

machinery and mill supplies, and manufacturers of machinery for baling paper, rags, shoddy, wool, etc., have just supplied to Messrs. M. Staunton & Co., wall paper manufacturers of Toronto, one of their Empire power baling presses for handling waste paper. They are also supplying a similar machine to Mr. R. Walker, Montreal, for handling rags, millstock, etc. These machines are meeting with much favor.

The Mail Job Printing Co., Toronto, have placed their order for six slow speed press motors with the Electrical Construction Co., London, Ont. This order together with the three recently placed for the same purpose with the Salvation Army, Toronto, and two with the W. J. Gage Co., Toronto, show the general favor with which these special slow speed motors are regarded.

The Galt Gas Light Co., Galt, Ont., have ordered from the Royal Electric Co., Montreal a 100 k.w. S.K.C. generator with switchboard and exciter. Also a new switchboard for their present single phase alternator and one for their arc lighting system.

The William C. Wilson Co., Toronto, who are agents for some of the largest independent oil refiners in the United States, and who say that they handle what is perhaps the finest lubricating oils sold in Canada, are showing autograph letters from some of our large manufacturing concerns setting forth the excellence of the Sempar Idem cylinder oils handled by them. They will have pleasure in sending particulars to enquirers.

A prospector named Wilson, of Perth, Ont., has unearthed a large deposit of iron ore near Crow Lake, North Frontenac. It is said to be the largest deposit of ore yet discovered in that country, and active operations have been begun to sink a shaft.

The Kingston & Pembroke Railway Co., is working on a contract to haul 3,000 cords of pulp wood from the backwood places to Kingston, Ont.

The Volta Electric Storage Co., Hamilton, Ont., is installing a battery switchboard for Mr. W. E. H. Massey at his farm at East Toronto. This switchboard is being built by the Royal Electric Co., Montreal.

The Gasoline Engine Co., Toronto Junction, Ont., has increased its capital stock from \$10,000 to \$50,000.



A belt never runs off the pulley until it starts to slip.

Cling-Surface will prevent any belt from slipping—we guarantee it.

Cling-Surface also preserves the belt and increases its power at least 15%.

Write for a trial can. It costs nothing if it doesn't do as we say. Cling-Surface will earn the cost of a sample can in a fair-sized plant in one month.

**CLING-SURFACE  
MFG. CO.,**

120-128 Virginia St.,  
Buffalo, N.Y.

Mr. L. P. Bouvier, 31 Lombard street, Toronto, manufacturer of machinery for making all kinds and sizes of business and commercial envelopes, is shipping several invoices of these machines including ten to Costa Rica, Central America, ten to Japan, and three to Montreal. Mr. Bouvier is the inventor and patentee of this machine, which is now almost universally used in Canada, United States and some other countries. In addition to building these machines, Mr. Bouvier operates one of the most extensive envelope factories in Canada.

Messrs. R. A. L. Gray & Co., Toronto, electrical contractors inform us that among other large contracts they have just closed one with the McLaughlin Carriage Co., for a 500-light plant for their new works at Oshawa, Ont.

Hourd & Co., London, Ont., has been incorporated with a capital stock of \$25,000,

to manufacture furniture, etc. The provisional directors include A. E. Hourd, F. G. Rumball and S. H. Hunt, all of London, Ont.

The Hughes, Owen Co., Montreal, has applied for incorporation with a capital stock of \$35,000, to manufacture lithographic paper, etc. The applicants include J. H. Hough, Montreal, and H. Hughes, Toronto.

The Gas Appliance Mfg. Co., Montreal, has applied for incorporation with a capital stock of \$50,000, to manufacture gas stoves, ranges, etc. The applicants include John Fee, J. S. Smith, both of Montreal.

The Imperial Steel Works, owned and operated by the Japanese government, has just placed an order for the complete equipment of the plant with Cross oil filters, with the Burt Mfg. Co., of Akron, Ohio. As the

Burt Co. were in competition with the best manufacturers of filters in Europe and other American makes, they regard it as a distinct triumph for Cross filters. The Imperial Steel Works is probably the most important plant of the kind in the Flowery Kingdom.

The Canada Cold Storage Co., Montreal, has been incorporated with a capital stock of \$1,000,000. The provisional directors include E. H. Barchard, W. F. Robinson and A. R. Holden, all of Montreal.

The Renfrew Power Co., Renfrew, Ont., has been incorporated with a capital stock of \$50,000. The provisional directors include Alex. Barnet, P. S. Stewart and W. A. MacKay, all of Renfrew, Ont.

The Council of Hespeler, Ont., will take over and operate the electric light plant of that town. It cost \$10,000 to effect the purchase.

# W. A. FLEMING & CO.

MILL SUPPLIES

CAMEL BRAND BELTING

HOSE of all kinds

DRIVING ROPE

BELTING of all kinds



771 CRAIG STREET, MONTREAL.

## ONTARIO GOLD MINING DISTRICT :

- Sultana Mine.
- Foley Mine.
- Mikado Mine.
- Olive Gold Mine.
- Cameron Island Mine.
- Hammond Reef Mine.

## A Few Mines

WHO USE



## BRITISH COLUMBIA :

- Le Roi Mine.
- War Eagle Mine.
- Old Ironsides Mine.
- Centre Star Mine.
- Crown Point Mine.
- Knob Hill Mine.

# CANADIAN RAND DRILL COMPANY, Montreal

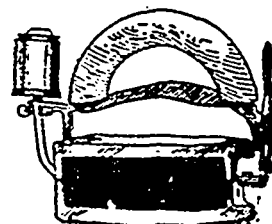
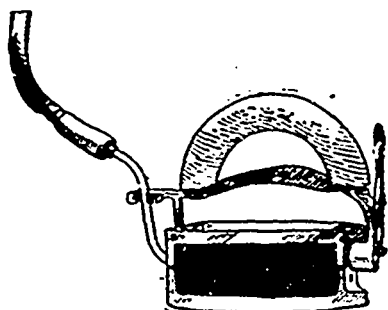
## ONE AGENT ONLY IN EACH TOWN WANTED

WRITE US FOR PARTICULARS ABOUT

**"PERFECTION"**

## Self-Heating Sad Iron

Something New. Sells Well.



The EDWARDS SAD IRON CO., Confederation Life Building, Toronto, Canada.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

# MAIN DRIVING BELTS.

BELTS MADE  
ANY THICKNESS  
WIDTH, LENGTH,  
AND STRENGTH  
DESIRED.



OUR BELTING  
HAS BEEN TRIED  
AND PROVED TO  
MEET EVERY  
REQUIREMENT.

**SADLER & HAWORTH,**  
MANUFACTURERS,  
**MONTREAL AND TORONTO.**

The National Table Co., Owen Sound, Ont., has been incorporated with a capital stock of \$100,000, to manufacture furniture, etc. The provisional directors include W. H. Merritt, Strathroy, Ont., J. G. Hay and J. L. Kilbourn, Owen Sound, Ont.

The Dominion Rock Drill & Foundry Co., Napaneo, Ont., has been incorporated with a capital stock of \$8,000, to manufacture rock-drills, etc. The provisional directors include J. M. Wallace and J. P. Vrooman, both of Napaneo, Ont., and E. J. Roy, Belleville, Ont.

The McCollum Power Brake Syndicate, Toronto, has been incorporated with a capital stock of \$40,000, to manufacture power brakes, etc. The provisional directors include J. H. K. McCollum and R. H. Bowes, both of Toronto, and J. R. Minnick, London, Ont.

The electric light station and plant at Colborne, Ont., was recently destroyed by fire. Loss about \$7,000.

It is estimated that American lumbermen have from \$25,000,000 to \$30,000,000 invested in pine lands in the province of Ontario, Canada. Under present circumstances this is not deemed a particularly happy investment. It was well enough when the Americans could float their logs across the lakes and saw them in their own mills, but

when the Ontario legislature passed a law that logs cut in Ontario should be manufactured there, the matter assumed a different phase. From a Canadian standpoint the law is justifiable. It prevents the denudation of the forests. When the timber is cut and manufactured on the ground, as it must be under the present law, it will employ tens of thousands of laborers and build up thriving towns on the Canadian side of the line. The High Joint Commission labored with the matter last year, and if the Alaskan boundary question had not upset the deliberations of that body, a compromise of \$1.25 on Canadian lumber might have been reached, with a repeal of the objectionable Ontario law. There is only a handful of American lumbermen concerned in the matter at best, and they have all the rights and privileges in respect to the cutting of Canadian pine that the Canadians themselves have. To imperil other trade relations with Canada in order to compel Ontario to discriminate against her own citizens in favor of citizens of the United States, is to exalt individual hoggishness at the expense of national interests.—Cleveland, Ohio, Marine Record.

Messrs. Sadler & Haworth, Toronto and Montreal, have sent us a copy of their uniform price list of leather belting, showing the price list, per running foot, of different

widths and thicknesses as adopted by the belt manufacturers of Canada, February 19, 1900, quotations being also given for round, solid and twist belts for light work, and for cut lacing. The publication consists of a four page folder, got up, as a matter of course, in the style that our own Georgie always presents the literature of his concern to an appreciative public.

Considerable progress is being made towards the construction of the Collingwood, Ont., shipyards. The masons and bricklayers are at work on the boiler house, machine shop and engine room. The building which is of brick, will be 55x50 feet, one story high. There will be two boilers six feet in diameter and fourteen feet in length, capable of supplying a pressure of 125 pounds of steam to a tandem compound Corliss engine of 175 horse-power besides a number of smaller engines used in driving the immense rolls in the main building, the steam hammers, shears, hoists, etc. Considerable more machinery, which is being manufactured in Canada, will be placed in the buildings immediately on its arrival which is expected will be in the course of a few weeks. The large and heavy machinery in the main building has been placed on the cement beds prepared, and the machinists are now busily engaged in placing the pulleys and shafts.

**THE CUMMER DRYERS.**

**FOR Mechanically Drying Everything**

**THE F. D. CUMMER & SON CO.,**  
HUNDREDS IN OPERATION. CLEVELAND, OHIO.

John R. Barber, President.

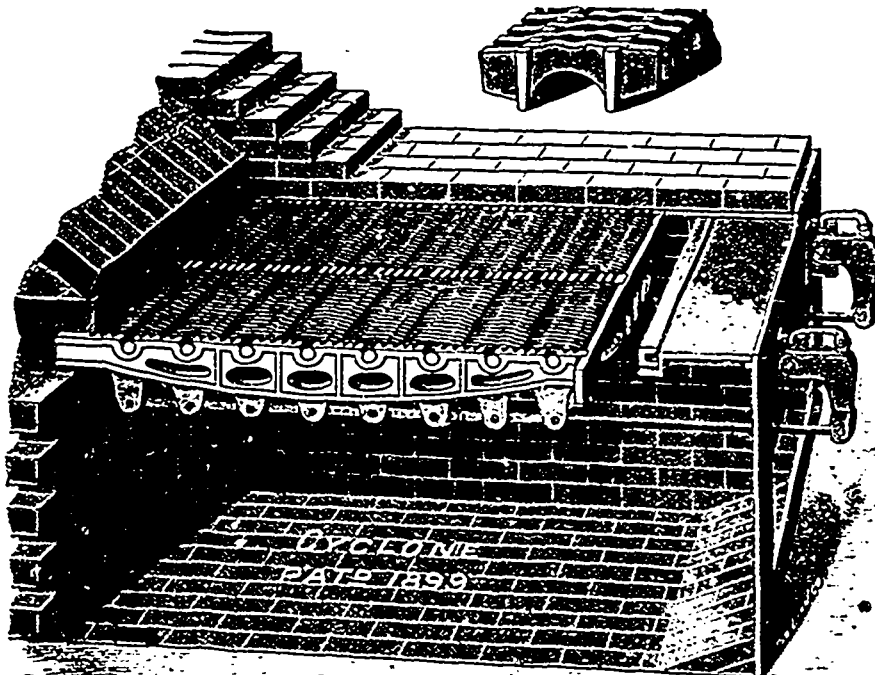
Geo. E. Challes, Sec.-Treas.

Henry Truesdell, Bus. Man.

**THE CYCLONE GRATE BAR**

Economy of Fuel and Increased Boiler Efficiency Guaranteed.

Cut shows construction of the Grate. No alteration of Plant necessary.



**Simplicity, Durability, Economy.**

Burns the Cheapest Fuel with the Best Results.

**A BOY CAN OPERATE IT.**

Send for Descriptive Circulars and Testimonials.

COPY OF TESTIMONIALS.

TORONTO, Jan. 19, 1900.

THE CYCLONE GRATE BAR Co. (Limited), Toronto.

DEAR SIRS,—We deem it only fair to you to express the appreciation and satisfaction which we have in using your Grate Bar.

As a fuel saver we think it is the only Grate with any merits in this respect, and for operating it is perfect.

Wishing your Company every success,

We are, yours truly,

SEAMAN, KENT & Co.

**W. G. BLACKGROVE,**

Gen'l Agent for Ontario,  
Office, 10 KING ST. WEST,  
TORONTO, CAN.

Manufactured by... **Cyclone Grate Bar Co. Limited,**

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

It is stated that Messrs. McKenzie Bros., of Vancouver, B.C., are promoting the erection of a large pulp and paper mill in that province, in the vicinity of Vancouver.

The Great Northern elevator now being constructed at Duluth, will be the largest elevator in the world. The foundation for this mammoth structure is 370x128 feet in size, constructed of Portland cement concrete on a foundation of piles. The cost of the foundation alone is \$85,000. When completed the elevator will tower 230 feet above the foundation and will be one of the most imposing iron and steel structures ever erected. The capacity of this elevator will be 6,000,000 bushels and the interior will be arranged for the storage of corn as well as small grain. The storage bins will be 134 feet square. The square bins are a new departure in steel construction. No one has dared to use them heretofore, former bins having always been round, and, of course, of less capacity. Tests have been made of grain pressure in these square bins at the University of Minnesota by a member of the Institute of Engineers of England, and by the engineering corps of the great

Northern Railway. There will be a basement floor and a main floor, where all cleaning machinery will be located, with a capacity of three million bushels. Above the main floor are the bins about a hundred feet in depth. The cupola above the bin has six stories. Thirty steel storage tanks will be erected surrounding the main elevator, which will be fifty feet in diameter and sixty-five feet high. The largest elevator now in existence has a capacity of only 4,000,000 bushels, so it will be seen that this structure will be the greatest grain elevator in the world. Twenty million pounds of steel will be used in the construction of the main building. Total cost of the building will be about \$2,000,000.

National Nickel Co.—Those who imagine we control the nickel resources of America should read the advertisement of this company in the New York Times. On its property in Churchill Co., Nevada, it claims to have \$17,000,000 worth of nickel ore exposed. Canadian Mining Review.—Why not claim a few castles in Spain, also, or a mansion in the skies? Why not claim that there is 17,000,000 tons of nickel in sight?

The William C. Wilson Co., Toronto, are sending out to their customers an exceedingly neat circular in which it is stated that they are agents for the largest independent oil refiners in America, and also calling attention to their "Semper Idem" cylinder oil. They are manufacturers of "The Engineer's Favorite," sectional ring and spiral packing steam chest, elevator and pump packings, etc.

Mr. William Hutt has acquired the water power at Fraserville Falls, near Ottawa, where he will construct a large pulp and paper mill.

The Calabogie Mining Co. has received a contract to supply 10,000 tons of ore to the Midland Furnace Co., Midland, Ont., and the first shipment of 200 tons was sent along recently. The ore will be shipped by K. & P. to this city and then by G.T.R. to Midland.—Kingston News.

The works and a great deal of material of the Cossit Bros., at Brockville, Ont., were destroyed by fire a few days ago, loss about \$200,000.



# BUTTING YOUR HEAD AGAINST A ROCK

Is a poor way to make gravel, but it's on a par with the principle of wasting the energy of good steam by allowing it to pound against water in the engine cylinder.

Wet steam is more than a nuisance—it's dangerous.

## AUSTIN SEPARATORS

Deliver dry steam, increase the efficiency of your engine and save money. We have demonstrated this in a thousand prominent power plants all over America.

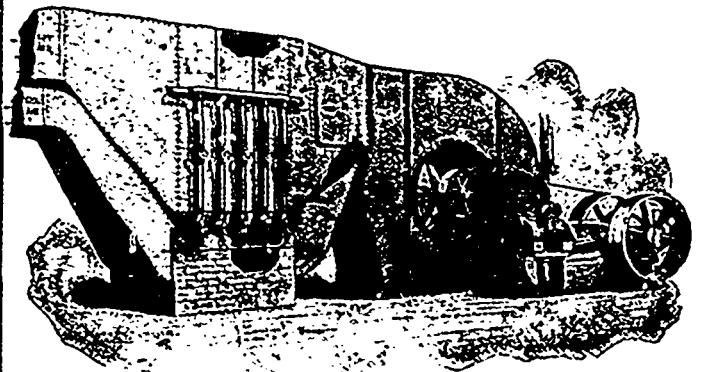
Send for our Catalogue, containing testimonials.

### Austin Separator Co.,

38-40 Woodbridge St.  
DETROIT, MICH., U.S.A.

# THE BUFFALO FAN SYSTEM OF HEATING and VENTILATION

For PUBLIC and INDUSTRIAL BUILDINGS



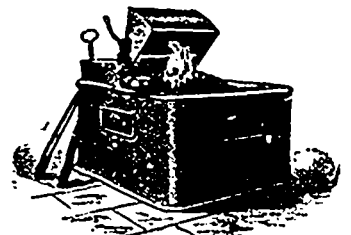
Type of Apparatus for Double Duot Installation.

Buffalo Forge Co.,  
BUFFALO, N.Y.

Canadian Representative,

E. A. WALLBERG,  
410 Temple Bldg.,

TORONTO



Buffalo Down-Draft Forge.

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

Wire Screens for Every Class of Material.

Perforated Metal of Steel, Copper, Brass, Zinc for all purposes.

Special Attention given to Minors' Requirements.

A New York contemporary tells of a leather belting manufacturer in that city who is doing a large export trade. Among their exports for a month were three 24-inch 7-leather link belts, to Seoul, Korea, for an electric railroad, the first in that country; two 22-inch 3-ply belts, for Trinidad; a 46-inch 3-ply and 18-inch 3-ply belt for an electric light plant in Venezuela; a complete outfit for a saw mill near Christiania, Norway; a shipment to Port Elizabeth, South Africa, the first belting sent there since the beginning of the war; a 10-inch leather link belt to Auckland, New Zealand; 5,500 feet to Moscow, Russia, for a cotton mill; 6,800 feet to Oporto, Portugal. There are also shipments almost weekly to Yokohama, Japan, where the firm have an agency, showing the development of the industry in that country. Why do not Canadian belting manufacturers enjoy a portion of this export business? Labor is as cheap in Canada as in the United States, the cost of raw material is no greater, and no better belts can be made than those produced in this country. There is rarely an issue of THE CANADIAN MANUFACTURER that does not contain intimations of demands for leather belting in foreign countries.

Employment will be given to 150 men in the new wood-working establishment the W. C. Edwards Co. purposes fitting up. The large grist mill on the company's premises in New Edinburgh, near Ottawa, which has been unoccupied some years, will be again the scene of activity. The Edwards Co. has secured control of the Capital Planing Mill Co. and the Ottawa Specialty Co. and will carry on the business conducted heretofore by these concerns. About \$50,-

000 will be invested in the new business to be conducted in the New Edinburgh establishment. Up-to-date machinery to the value of \$10,000 will be installed, and the business started in the new branch in about three months.

The deal for the acquiring of ten stove factories in Ontario, by an American syndicate is said to be nearing consummation. The concern is to have a capital of about \$2,500,000. The prices placed on the real estate, buildings, plants and stocks are being considered, and as soon as they can be decided on the deal will be closed. The firms concerned are: -Copp Bros., Gurney-Tilden Co., D. Moore Co., Burrow, Stewart & Milne, Bowes, Jamieson & Co., of Hamilton; McClary Mfg. Co., London; Clare Bros., Preston; James Stewart Mfg. Co., Woodstock; Buck Stove Co., Brantford, and the James Smart Mfg. Co., Brockville.

The Hamilton Gasoline Engine & Automobile Co., Hamilton, Ont., has been incorporated with a capital stock of \$40,000 to manufacture gasoline and electrical engines and motors, automobile carriages, etc. The provisional directors include W. C. G. Smart, W. G. E. Boyd and W. A. Logie, all of Hamilton, Ont.

Messrs. F. E. Atteaux & Co., of Boston, Mass., whose Toronto office, in charge of Mr. John B. Paine, is at 53 Colborne street, are directing attention to some of their dye stuffs, among which they mention a new black for cotton—Colonial Black—which dyes with common salt, the product being very economical, requiring only 3½ pounds of black to one hundred pounds of stock, giving a result very fast to light and fulling. They show a new line of union browns and blues,

all salt colors, more fully described in their current monthly Bulletin. They are also showing a new acid black for wool, 4 B.S., which is especially suited for yarns and piece goods. Their dye is very popular with manufacturers of hats, as it penetrates the felt very thoroughly, and holds its color.

The authorities of the town of Hespeler, Ont., have taken over the electric light plant in that place belonging to J. S. Shantz, and will operate it as a municipal venture. An incandescent lighting plant will also be established.

The Western Canada Woolen Mills Co., Toronto, has been incorporated with a capital stock of \$125,000, to manufacture woolen cloths. The provisional directors include H. C. Fortier and Thos. Kennedy of Toronto, and Philip Whelen of Brantford, Ont.

The Montreal Automobile Co., Montreal, has been incorporated with a capital stock of \$250,000, to manufacture automobile carriages, etc. The provisional directors to include E. Lepage and J. W. Foucher, both of Montreal, and L. Bolduc of St. Louis, Que.

The Standard Chemical Co., Toronto, are about making considerable enlargements to their works by which they will double their capacity for production, which will enable them to go more largely into the export trade. Their enlarged works will be in operation by or before the end of the current year.

Messrs. Mearny & Co., lumber merchants, Toronto, contemplate the erection of a large mill for the manufacture of spruce and other box shooks for the foreign market.

## THE BEST PIPE THREADING and CUTTING-OFF MACHINES

Are Made by the **ARMSTRONG MFG. CO., BRIDGEPORT, CONN.**

Also Manufacturers of a FULL LINE of

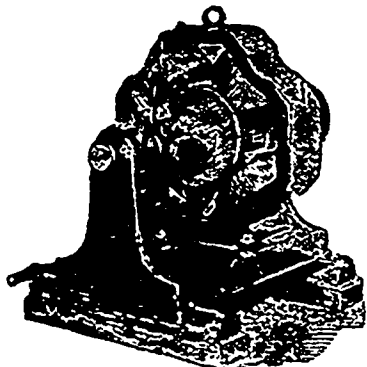
**ADJUSTABLE STOCKS and DIES** and Water, Gas and Steam Fitters' Tools.

Send for Catalogue 27.

Factory: BRIDGEPORT, CONN.

New York Office. 139 CENTRE STREET.

**The Electrical Construction Co. of London, Limited.**



**MULTIPOLAR MOTORS & DYNAMOS**

And Direct Connected Plants for Isolated Lighting.

Repair Work a Specialty.

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**RICE LEWIS & SON, LIMITED**

**HARDWARE and METAL**

Bar Iron, Steel,  
Boiler Plate Tubes.

**MACHINIST TOOLS,  
PIPE FITTINGS.**

A COMPLETE STOCK OF

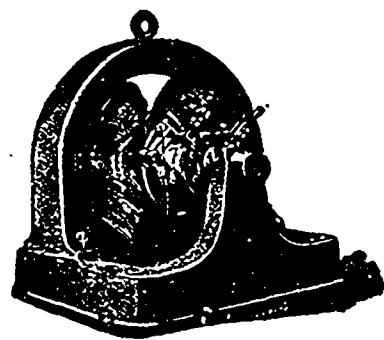
**STOCKS and DIES. PIPE VICES.**

STILLSON & TRIMO  
**WRENCHES.**

**STEAM PIPE.**

Cor. King and Victoria, TORONTO

**Toronto and Hamilton  
ELECTRIC CO.**



**Motors and Dynamos**

COMMUTATORS REFILLED.

99-103 McNab St. N., Hamilton

'Phone 958.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

**THE KERR ENGINE COMPANY.**

The Kerr Engine Co., Walkerville, Ont., have sent in their new catalogue having reference to the different kinds of valves manufactured by them. They state that they have recently added several new lines of valves to their list which are of the highest excellence, all being made of the best material and workmanship. Some of the valves alluded to in the index of the catalogue include globe and angle with iron and wood wheels and Jenkin's disc wheel; horizontal, vertical and angle check valves, radiator valves, including globe and Jenkin's disc; radiator valves, quick opening for hot water; Weber patent straightway blow-off valves, Weber sliding steam and lever valves, all of these being of brass. Mention is also made of Weber iron valves in large variety, Matthew pattern hydrant, etc. Many of the valves mentioned are suitably illustrated, giving different sizes numbered, and the trade list prices. Included in these are Kerr's standard brass globe; Kerr's standard brass angle; Kerr's standard brass globe and angle with brass

or wood wheels; Kerr's Jenkin's disc globe and angle of best steam metal; vertical, horizontal and angle check; radiator valves, and in all varieties. Regarding the Matthew pattern hydrant, it is made in sizes to suit all demands, with any size and number of hose connections. Muzzle threads are made to suit corporation standards.

For further information, catalogues, etc., apply to the Kerr Engine Co., Walkerville, Ont.

**TRADE IN TURKEY.**

United States Consul Dickenson, writing from Constantinople says:—

The freight brought to Constantinople and other Levantine ports by the steamship Brand, of the Barber Direct Line, indicates a gratifying increase in amount and variety of American products entering these ports. The Brand has started on her return voyage to the United States, having delivered about 2,000 tons of railroad material at Alexandria, intended for the railroad up the Nile,

about 800 tons of other products at this port and Smyrna.

The American goods and products delivered at Smyrna, Constantinople, and Salonica include pumps, phonographic goods (nearly 4,550 pounds), leather, rubber boots and shoes, large variety of hardware, cotton cloth, tinware, lamp goods, wooden ware, milling machinery, cotton belting, mowing-machines, chairs and other furniture, clocks, iron bedsteads, paints, lard, domestics, flour, and nearly 6,000 kegs of wire nails.

Since the establishment of the direct line and the consequent reduction in freights, wire nails and a few other articles of American manufacture appear to have taken possession of the Levantine markets. In the opinion of good judges, many other staple articles will be equally popular when once fairly introduced. For the first time in the history of Constantinople, some of the leading stores, notably the Bon Marché and Hayden Bros., have given orders for a line of American boots and shoes. They are so far superior to those of European manufacture that importers have every confidence in their extensive sale.

With the exception of nails, no article

**"Capitol" Cylinder**

**"RENOWN" ENGINE**

**"ATLANTIC" RED**



**RELIABLE WELL-KNOWN BRANDS.**

**ALL ORDERS PROMPTLY FILLED**

THE...

**QUEEN CITY OIL CO.**

LIMITED

SAMUEL ROGERS, President.

TORONTO, CANADA



SEND FOR CATALOGUE AND PRICE LIST

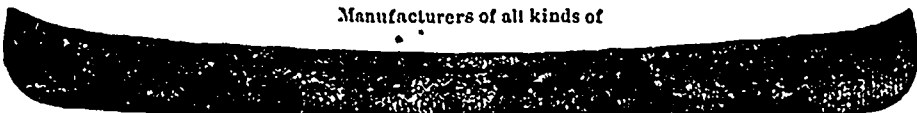
**The Diamond Machine & Screw Co.**

Manufacturers of TORONTO, Limited.

**MACHINE SCREWS and BICYCLE PARTS OF EVERY DESCRIPTION.**

**The Canadian Canoe Co., Limited,** P.O. BOX 107, PETERBOROUGH, ONT.

Manufacturers of all kinds of



**CANOE AND SKIFFS** Canoes for Paddling, Sailing, Rowing and Prospecting. Skiffs for Rowing and Sailing. A FULL STOCK OF PADDLES, OARS, FITTINGS, ETC. Write for Catalogue J. Correspondence Solicited.

**Chemistry of the Arts and Manufacturers.**

**DR. GEO. ARCHBOLD,**

A.M., Ph.D.,

CONSULTING CHEMIST,

(Formerly Chief Chemist, Ordnance Dept., U.S. Navy Yard, Washington, D.C.)

Gives expert technical advice in all matters relating to chemical arts and manufactures. Thirty years practical experience in Great Britain, Europe and the United States.

409 Temple Building, Toronto, Ont. TELEPHONE 8017.

**AT OUR EXPENSE.**  
If any of our Oil Filters should prove defective in workmanship or material, we repair them at our own expense.  
**Cross Oil Filters** have always carried this guarantee, but its surprising how little repairing we have to do, notwithstanding their extensive use in twenty countries.  
Catalogue 26.  
**The Burt Mfg. Co.**  
Akron Ohio, U.S.  
Largest Mfrs. of Oil Filters in the World.

**Dominion Oil Cloth Co.**

(LIMITED)

Manufacturers of....

**OIL-CLOTHS** of Every Description

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

Office and Works

Cor. St. Catherine and Parthonsals Sts MONTREAL, Que.



mentioned by Consul Dickenson as coming from the United States that cannot be produced in Canada, and is now being produced here. Canadian manufacturers should enjoy a part of this trade.

**A BIG ELECTRIC COMBINATION.**

The union of interests involved in the Montreal Street Railway, the Royal Electric Co., and the Chambly Mfg. Co., which has been spoken of for some time, has been practically completed. At the recent annual meeting of the Chambly Co., a compact was ratified with the Montreal Street Railway

Co., by which the former undertakes to provide the Street Railway Co. with 5,000 electric horse-power for a period extending over twenty-three years, with the option of a five years' renewal, at \$25 per horse-power per year, or about \$125,000 per annum, with the condition that if at any future time the Chambly Co. decides to sell power to any other company of less than \$25 per horse-power per year the Street Railway Co. must be placed on the same basis. The following directors were elected.—Messrs. Rudolphe Forget, James Wilson, jun., K. W. Blackwell, F. C. Henshaw and C. E. Porteous. Messrs. Forget and Wilson represent the Royal Electric interests, and

Messrs. Blackwell and Henshaw the Street Railway interests on the board. The Royal Electric Co. at its annual meeting held the same day ratified a contract to take the power developed at Chambly for fifty years at \$15 per horse-power. The old contracts, under which the power cost \$32, were cancelled. The transmission line from Chambly is seventeen miles long, and it was stated that the loss of power in transmission would be about twelve per cent. Then the shareholders accepted the offer of Mr. James Koss, Vice-President of the Royal Co., to purchase the interest which the Royal Co. held in the Chambly Co., namely 300 bonds of a par value of \$1,000 each,

# What the Trade Wants

**YOUR OWN PAPER  
MADE INTO**

## ENVELOPES

**ANY SIZE OR  
SHAPE.**

**WE SELL  
TO THE  
TRADE ONLY.**

**YOUR OWN PAPER—YOUR OWN LABEL—YOUR OWN BANDS.  
NO NEED TO BUY FOREIGN GOODS.  
OUR GOODS ARE MADE EQUAL TO THE BEST IN THE WORLD.**

The Trade will find it to their advantage to get our prices.

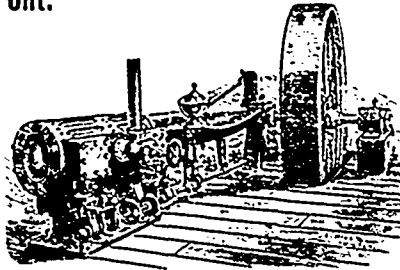
**L. P. BOUVIER, Envelope Manufacturer, 31 Lombard St., TORONTO.**

# THE SMART-EBY MACHINE CO.

193 Barton Street East, Hamilton, Ont.

LIMITED.

**High Speed Engines,  
Brown Automatic Engines,  
Boilers, Pumping Machinery,  
Electric and Hand Power  
Travelling Cranes,  
Shafting, Pulleys,  
General Machinery, Etc.**



## TORONTO WOOLEN MACHINERY CO. MACHINERY WANTED and FOR SALE

We offer for sale, together or in part, the following machinery:

- One 18 in. Iron Frame (G. & McC.) Picker.
- One set (D. & F.) Iron Frame.
- 1st and 2nd Brinker 18 in. Five Workers.
- One Condenser, 40 in., 20 Rings, 7 Rubs.
- One 20 Spindle Jack, 2 in. gauge.
- One Yarn Reel, 20 Spindles.
- One Yarn Twister, 20 Spindles.
- One 18 in. Card Grinder, Wood Frame.
- One Spooler and Stand (D. & F.) Iron Frame, 18 Spindles.
- One Warper, Frame Spools.
- One Single Gear Beamer.
- Two Crompton Looms, Pump Motion, 3 x Box, 24 Hamers.
- One Crompton Loom Bow Jack, 4 x 4 Box, 24 Hamers.
- One Cam Loom (D. & F.), 2 x 1 Box, 4 Hamers.
- One 108 in. Cam Loom (D. & F.), 2 x 1 Box, 4 Hamers.
- One Cloth Washer. One Fulling Mill, Crank.
- One Hand Press and Plates.
- One Up and Down 90 in. Gig (D. & F.)
- One Drum Shear 36 in., 22 (Curtis & Marble).
- One 24 in. Double Roll Card, Iron Frame (G. & McC.).
- One Boiler, 20 H.P. One Engine, 16 H.P.
- Shafting, Pulleys, Hangers, Steam Piping, Belting, etc. One Set Yarn Mill, complete.

We also are Builders of the **EMPIRE BALING PRESS** for baling paper, rag, shoddy or wool.

**TORONTO WOOLEN MACHINERY CO.  
118 DUKE ST., TORONTO.**

## THE BEST ROOF and IRON PAINT



**Branch  
Warehouse**

**WINDSOR, ONT.**

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## Protection Against Fire

Apart from the protection it affords, it pays as an investment to use the

### GRINNELL AUTOMATIC SPRINKLER



From 40 to 70 per cent. of cost of insurance saved by putting in a

**GRINNELL  
AUTOMATIC  
SPRINKLER  
EQUIPMENT**

**Over 3,990 Fires—  
—NO FAILURES**

No charge for estimating

Endorsed by Insurance Companies.

"THE GRINNELL"

**The General Fire Equipment Co.  
72 Queen Street East,  
TORONTO.**



for \$320,000, and 3,000 shares of stock of a par value of \$100 each, for \$468,000, or a total of \$788,000. The old Board of Directors was re-elected with Mr. Rudolphe Forget as President. It will be remembered that at the recent meeting of the Montreal Street Railway Hon. L. J. Forget was re-elected President.

**AN IMMENSE NEW BRUNSWICK PULP AND PAPER PLANT.**

The building of the pulp plant at Grand Falls, N.B., in which Hon. Redfield Proctor, of Vermont, and other prominent Americans are interested, is now said to be assured. The plant is to be by far the largest in the world, nearly double the size of the great plant at Millinocket, Maine. It will cost \$7,000,000, and one-half the capital is to be furnished by Americans, and the other half by British capitalists.

The plans for this mill have been in course of preparation for two years. Its capacity will be 300 tons of white newspaper, 225 tons of ground wood pulp and 175 tons of sulphite pulp daily, requiring 525 cords of wood a day. The plant will furnish employment for 1,000 hands, and a small city is expected to grow up where now is a sleepy little village. The power afforded by the Grand Falls of the St. John river is immense

beyond conception, and other industries will be established either at this spot or nearby. Twelve miles above the falls plans are being made for the erection of a number of mills for the manufacture of pulp and various products of hard and soft woods. In this enterprise several prominent men are interested, among them Lord Strathcona, Frank Stetson, of St. John, N.B., and Hon. E. R. Burpee, of Bangor. The power will be electricity generated at Grand Falls and transmitted over twelve miles of wire. Land has been purchased for the sites of these mills, and it is expected that the work of construction will soon begin.

**GEORGIAN BAY LUMBER.**

At a recent meeting of the Ontario Lumbermen's Association, held in Toronto, one of the principal matters for discussion was the business outlook for the balance of the year, particularly as to the advisability of the present prices being maintained.

The following facts were presented:—

Total amount of lumber of the cut of 1899 on hand at manufacturing points on Georgian Bay.....	Feet. 11,000,000
Total cut of 1900, as now known.	470,000,000
Total.....	481,000,000

Of this new cut 70,000,000 feet is sold to American yards for distribution and placed for industrial uses, leaving only 411,000,000 feet available for the season's competitive trade, including last year's stock. Taking into consideration the stocks that under ordinary conditions must be carried over from one year to another at these mills to be 220,000,000 feet, which was the quantity on hand January 1st, 1899, it was shown that the amount short on this season's market from Georgian Bay points would be at least 240,000,000 feet.

The meeting was unanimously of the opinion that with the limited cut and the active English demand, and with a very large shortage of logs at all manufacturing points in Wisconsin and Minnesota, as confirmed by the trade press of the United States, and also a great shortage occasioned by the Ottawa fire, there was no fear that a good demand at present ruling prices for all grades would soon set in. Notwithstanding this, owing to the high wages of last winter, only a fair profit would remain to the mill.

**AT FORT FRANCIS, ONT.**

Fort Francis on Rainy Lake is mentioned as the site of the next great pulp mill to be built in Canada. Rainy Lake, as everybody knows, is the chief expanse of that great

# THE BEST IS NONE TOO GOOD

The largest machinery builders in Canada and United States use our Babbitt Metal.  
Is this not sufficient proof of its superiority over other anti-friction metals?  
If the largest users are satisfied with our Babbitt Metals, why should it not suit you?  
We can furnish you with numbers of testimonials.

**SYRACUSE  
BABBITT**

**BEATS  
THEM  
ALL**

Importers and Dealers in

PIG TIN  
ANTIMONY  
INGOT COPPER  
ALUMINUM

NICKEL  
BISMUTH  
IRON AND STEEL  
SCRAP



Manufacturers of

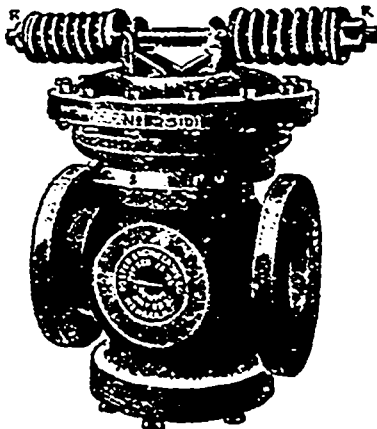
BABBITT METALS  
SOLDER  
TYPE METALS

COLUMBIA  
PHOSPHOR TIN  
AND ALL OTHER  
WHITE METALS

## SYRACUSE SMELTING WORKS,

WILLIAM and ST. THOMAS STREETS,

MONTREAL



# FOSTER PRESSURE REGULATING VALVES.

Automatically Control the Delivery Pressure of  
Steam, Gas, Air or Water, regardless of Variation in Initial Pressure.

SEND FOR CIRCULARS AND PRICES.

## THE FAIRBANKS COMPANY,

749 CRAIG STREET, MONTREAL.

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water stretch in Northwestern Ontario, otherwise known as the Rainy River district. Fort Francis is on the very edge of Canadian territory, and as close as possible to the territory of the United States. Here it is said to be the purpose of Mackenzie & Mann to establish great pulp mills.

The place offers every natural condition for the prosperity of such an industry. In that section of the Rainy River district spruce abounds. Any amount of water power needed can be developed at points on the Rainy River system, and at the same time that system affords means of transportation over a great area, so that raw material can be easily collected from distant points and products can be widely distributed without the aid of railroads. At the same time railroads will not be wanting. Mackenzie & Mann are constructing the Ontario & Rainy River Railway, from a point near Port Arthur on Lake Superior to a point on the Rainy River, where the road joins another line being built by the same company to the boundary of Manitoba, which line is to be continuous with the Manitoba Eastern, running to Winnipeg.

In fact, Mackenzie & Mann have already built or under way two or three large links in a transcontinental railway system. Mr. Mackenzie is a Toronto capitalist, and is the leader in some of the biggest enterprises in Canada.

For the pulp mill at Fort Francis the falls there would be utilized, and it is understood that application has already been made for the privilege of using the power. Two thousand square miles of fine spruce lie immediately tributary to Fort Francis and

along the three or four thousand miles of coast line which is skirted by the Rainy River waterway hundreds of thousands of cords can easily be secured. The market of the Western States would be accessible for the products of pulp mills at the Fort. If Mackenzie & Mann's pulp mills are built at Fort Francis, John Mather's large one at Rat Portage, and Jensen's at Port Arthur, the Rainy River district will become a considerable factor in the pulp industry.—The Paper Mill.

**The WILLIAM C. WILSON CO. Limited,**  
24 Front Street East, Toronto,

WHO ARE AGENTS FOR THE LARGEST INDEPENDENT OIL REFINERS IN AMERICA, ARE IN RECEIPT OF NUMEROUS LETTERS WITH REFERENCE TO THEIR "SEMPER IDEM" VALVE CYLINDER OIL, OF ONE OF WHICH THE FOLLOWING IS A FACSIMILE:



Upper Canada College,  
DEER PARK, P. O. BOX

*June 8<sup>th</sup> 1900.*  
*Wm C Wilson Co.*  
*24 Front St East.*  
*Toronto*

*Gentlemen*

*We have used your Semper Idem Valve Cylinder Oil for the last six years on our Canadian Ball & Grooved Engines & always found it perfectly satisfactory I have experimented with other Cylinder Oils at different times but could not get equal results*

*J. H. Harris*  
*Chief Engineer*  
*U. C. College*

**Lighting, Heating**  
**and Motive Power**  
**BY GAS**

**GAS FROM WOOD**—A rich permanent Gas almost equal to that of Coal Gas, can be made by using the

**RICHE GAS GENERATOR,**

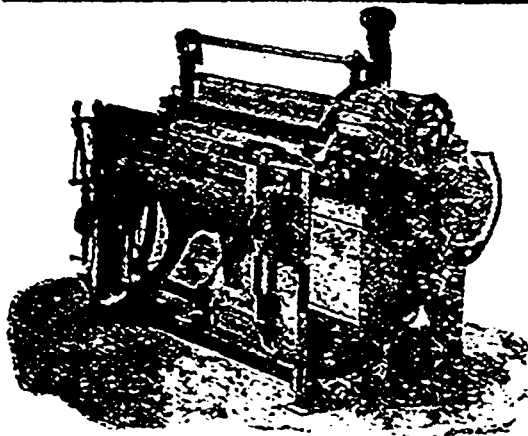
at a mere nominal cost per thousand cubic feet.

The Generator is simple in construction, and does not require skilled labor to work it. No purifiers required. Products being a rich permanent Gas and Charcoal.

These Generators are extensively used in Europe, and are on exhibit at the Paris Exposition.

Particulars by applying to

**JAMES MILLAR NEIL**  
GAS EXPERT,  
7 Beaver Hall Square,  
MONTREAL.



THE NORTHROP LOOM.

There is only one Profitable Plan—**BUY NORTHROP LOOMS**

With them the Future is Assured.  
They are no Experiment.

Thousands have been running in the United States, and a large number are now in Canada. Sales steadily on the increase.

"The Mills that refuse their opportunities will find their future utility serving as picturesque ruins in the landscape."

We also Manufacture the Best Warper at present Known—also Spoolers.

Write for particulars and quotations. Address

**The NORTHROP LOOM CO. OF CANADA, Ltd.**

VALLEYFIELD, P. Q.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

**PULP WOOD IN QUEBEC.**

Henry O'Sullivan, an Inspector of Surveys in Quebec, speaks of the timber resources of the northern part of that Province as follows: In the virgin forest spruce, fir, tamarac and cypress or Banksian pine are the chief conifers, while the deciduous trees are limited to poplar of different varieties, white birch, willow, alder, hazel, pambina and similar undergrowth, with occasional black ash along the river and lake shores. There is an abundance of spruce and tamarac wherever the country has not been burned.

Here and there areas more or less extensive have been swept by fire from twenty-five to fifty years ago, and are now well grown up with poplar, white birch, spruce, tamarac and cypress of fair size according to age, insuring an abundance of pulp wood for

ages to come and bringing down pulp as the industry of the coming age. Black spruce is the king of woods for pulp-making, and this country is the home of the black spruce.

Another man who has surveyed the same area says of it: The great forest which bounds Hudson Bay on the east and extends up the interior of East Main and Labrador to Ungava Bay and Hudson Straits, six hundred miles north of Moose Factory, attains its greatest characteristic development just south of James' Bay, which lies nearly mid-way between the northern and southern limits of the peculiar trees which compose the great northern woods. Some trees, such as the Banksian pine and the spruce, which along their southern limits in Southern Ontario are almost valueless commercially, here become giants of the forest, and are valuable for timber.

The list of trees which flourish at James' Bay or on its drainage basin includes, according to Prof. Bell, the spruce (two feet or more in diameter,) Banksian pine, silver fir, arbor vitae, elm, white pine and red pine, and of lesser importance the poplar, mountain ash and mountain maple.

The effects of the law, requiring the manufacture of lumber in the province, and forbidding the export of logs, are very apparent throughout the lumbering districts of Northern Ontario. Where formerly a few hands were employed casually in a few mills, to-day not only have the number of mills greatly increased, but the men employed by them have increased ten-fold in number. In Parry Sound all the mills are working three shifts a day, and the demand for lumber is great enough to continue this overtime work for a considerable time.

# CRUSHERS--ROLLS

Roll Jaw Fine Crushers Reduce Large Rocks at once to Gravel and Sand. Centrifugal Rolls. Cost half and do three times as much as Common Rolls of equal dimensions, and do finer work.

SEND FOR CIRCULAR.

STURTEVANT MILL CO., 104 Clayton St., BOSTON, MASS.

CHARLES F. CLARK, President.  
JARED CHITTENDEN, Treasurer.  
Established 1849.

**BRADSTREET'S**  
Capital and Surplus, \$1,500,000

Offices Throughout the Civilized World.  
EXECUTIVE OFFICES,  
346 & 348 Broadway, New York City, U.S.A.  
Correspondence Invited.  
Toronto Office, - Cor. Jordan and Melinda Sts.  
Hamilton " - 39 James Street South.  
London " - 365 Richmond Street.  
Winnipeg Office, - 398 Main Street.  
Vancouver " - Cor. Hastings and Hamilton Sts.  
Victoria " - Board of Trade Building.

THOMAS C. IRVING, Con'l Manager Western Canada,  
TORONTO.

F. W. Hore's Sons, HAMILTON, ONT.  
Manufacturers of  
Wheels, Wheel Materials, Shafts, etc.

## The Underwood Typewriter



Visible Writing from start to finish.

The descriptive pamphlet, or any stenographer using the Underwood Typewriter, will explain why 1,000 of these machines have been sold in Canada in one year—more than all others put together.—Visible writing and the tabulator are winners.

SOLE CANADIAN AGENTS.

Creelman Bros. Typewriter Co.,  
15 Adelaide St. East, TORONTO, ONT.

G. B. THISTLETHWAYTE,  
Manufacturers' Agent,  
(Canadian Lines).

31 VICKERY'S CHAMBERS,  
76 PITT STREET, SYDNEY, N.S.W.  
Will be pleased to communicate with Manufacturers seeking the extension of their trade to Australia.

**WILSON & BURNIE,**

FLOUR, OATMEAL,  
and COMMISSION AGENTS.  
Also at GLASGOW, SCOTLAND. LEITH.  
Advances on Consignments.

# Shafting—Hangers—Pulleys

FRICION CLUTCH PULLEYS AND COUPLINGS

Rope Transmission of Power.

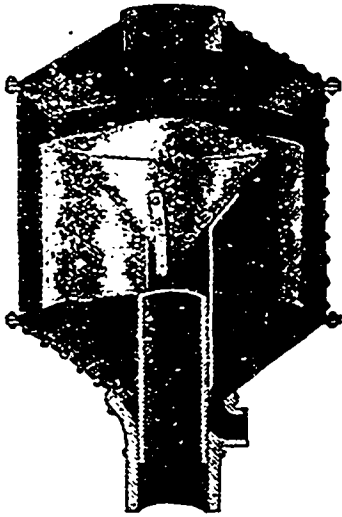
HANDSOME ILLUSTRATED CATALOGUE ON APPLICATION.

DODGE MANUFACTURING CO. OF TORONTO, Limited, - - TORONTO.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

**THE BURT EXHAUST HEAD.**

The accompanying illustration is of the Burt Exhaust Head, manufactured by the Burt Mfg. Co., Akron, Ohio.



encrusted, forming a scale very difficult to remove, and requiring a large consumption of fuel. Water returned from the exhaust head is distilled water in which there is no lime.

The Burt is a modern exhaust head built to meet the requirements of the modern power plant. Instead of being cone-shaped it has perpendicular sides, giving the greatest possible area on the inside, which means more room for the expansion of the escaping steam, and as there is enough room in it for this expansion, back pressure is impossible. The area of this steam chamber is not lessened by stuffing of any sort—no baffle plates—no scrap metal—no diaphragm.

The head is made of heavy iron, and is

quite as strong as is necessary. The joints, seams and attachments are water tight. It cannot be overloaded. It cannot explode. It will not rust. It will last a life-time.

The exhaust steam, after coming in through the pipe, strikes the cone immediately over the inlet. This cone separates the steam into the finest particles, condensing some of the vapor. The greater volume of steam rises up to the small projection extending round the top of the head, and is held there for an instant, causing the particles of water and oil to drop by force of gravity down between the double walls on the side and out through the drip below.

For further information address The Burt Mfg. Co., Akron, Ohio.

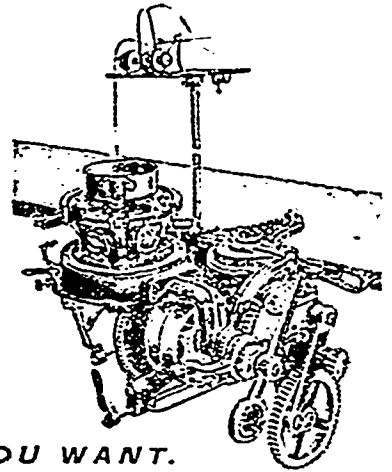
**RICHARD SCHOFIELD,  
TORONTO**

Sells "BRANSON THREE-QUARTER  
AUTOMATIC"

**KNITTING MACHINES**

AND ALL OTHER KINDS OF  
Hosiery and Underwear **MACHINERY**

ASK US FOR WHAT YOU WANT.



In describing this appliance and the usefulness of it, we are told that, being attached to the exhaust pipe of the boiler system, it prevents oil and wet steam from escaping, which might otherwise drench and disfigure the surrounding buildings, but, more important, it saves the water of condensation, and returns it to the boiler. Thus the same water is used repeatedly. Most fresh water holds lime in solution, when taken into the boiler it becomes

**Keep Before the People  
MANUFACTURERS**

Who would increase their output—  
Retain their present customers  
and secure new ones, will  
not fail to exhibit at



**CANADA'S GREAT  
Industrial Exposition  
TORONTO  
AUGUST 27 to SEPTEMBER 8, 1900**

Applications for space should be made forthwith.  
**Entries Close Aug. 4th.**

**Educational  
Entertaining  
Aggressive  
Progressive**

For  
Prize Lists, Entry  
Forms,  
and all information,  
address the Manager.

**H. J. HILL, Manager, Toronto.**  
**ANDREW SMITH, Jr., F.R.C.V.S.,  
President.**

*Reduced Rates on all Lines of Travel.*

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

**THE HAMILTON AND LAKE ERIE POWER CANAL.**

The first sod on the Hamilton & Lake Erie Power Canal was turned with appropriate ceremonies at Silversdale, near Welland, Ont., on July 18, in the presence of nearly 2,000 people. No time has been lost in starting this work, as the order in Council authorizing it was only signed on July 7.

Mr. Windell Johnson, Reeve of Gainsboro', introduced Mr. E. A. C. Pew, who is the promoter of the enterprise. Mr. Pew gave an interesting account of the starting of the canal. It became necessary in order to start it to find a market for the power. For this he organized the Canadian Steel Company, with a capital of \$12,000,000, to locate at Welland, and an act of Parliament was passed authorizing the steel company to guarantee the bonds of the power canal, and they did so, also contracting for 15,000 electric horsepower, which they get at \$20 per year, a horsepower for twenty-four hours a day. The map approved by the Govern-

ment shows a canal starting at Welland River and running six and one-half miles to the Jordan River, where it runs six miles to the Jordan Village. A diversion canal will be built by which a fall of 255 feet will be secured. The canal will be completed about the same time as the steel works, about September 1, 1901, and power will also be transmitted to Toronto and Hamilton at about half the steam rates. Electric power, Mr. Pew claims, can be produced at this point at a lower rate than any other point where electricity is developed, as there are no engineering difficulties to be overcome. The installation plant will develop 25,000 horsepower, which can be increased to 50,000 or 60,000 as required. The canal will be 150 feet wide at the top, 60 at the bottom, 12 feet deep with a current of 3½ miles an hour. The cost is estimated at about \$1,000,000, and estimates for electrical machinery have already been received from the Stanleys, of Pittsfield, Mass., the Royal Electric Co., Montreal, and others. A number of other speakers compli-

mented the district upon the bright prospect of power being furnished so cheaply, and the great strides being made by electricity. The water for the power canal comes from Lake Erie, via Niagara River and Welland River, and its success means much to Welland and vicinity, not only as to starting the steel works but other manufacturing in the section. Mr. Pew, who is promoting these enterprises, deserves great credit for his perseverance and success.

**MINERAL OUTPUT OF BRITISH COLUMBIA FOR 1899.**

The report of the Commissioner of Mines for the Province of British Columbia for 1899 shows that the yield of the mines in that year was worth \$12,356,555, as against \$10,906,861 in 1898. To this increase of almost a million and a half every mineral contributed save two. Silver, which in 1897 headed the list, shows a shrinkage from the figures of 1898, and the baser metal, lead, which is found chiefly in silver ore, has likewise fallen off. The value of the production for the last three years is shown in the following table:—

	1897.	1898.	1899.
Gold placer.....	\$513,520	\$613,346	\$1,344,900
Gold, lode.....	2,122,820	2,201,217	2,857,573
Silver.....	3,272,836	2,375,841	1,673,708
Copper.....	236,258	874,781	1,351,453
Lead.....	1,300,517	1,077,581	578,870
Coal.....	2,618,562	3,407,595	3,882,396
Coke.....	28,155	175,000	171,235
Other materials...	151,600	151,500	206,400
Totals.....	\$10,455,263	\$10,906,861	\$12,356,555

The tremendous leap in placer gold, from \$613,346 to \$1,344,900, is due to two causes—one, the addition of Atlin's output, amounting to \$600,000; the other, a plentiful supply of water for hydraulic operations in Cariboo and Cassiar. In lode gold the returns show great progress, the value of the output being \$2,857,573, as against \$2,201,217 in 1898. This increase of \$656,356 is credited to the increased tonnage of the Rossland camp, and to the operations of the Ymir mines.

The works, and materials therein, of the Toronto Plate Glass Co., Toronto, were damaged by fire on July 22 to the extent of about \$20,000.

ESTABLISHED 1823.

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

**WILSON BROS. BOBBIN CO.**

(LIMITED)

CORNHOLME MILLS, TODMORDEN, ENGLAND.

**BOBBIN AND SHUTTLE MANUFACTURERS.**

FORTY PRIZE MEDALS AWARDED.

HIGH-CLASS WORKMANSHIP. SEVENTY YEARS' REPUTATION.

LARGEST BOBBIN MAKERS IN THE WORLD—(Over 1,400 Workmen).

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**CORNHOLME MILLS, TODMORDEN, ENG.**

BRANCH ESTABLISHMENT:

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

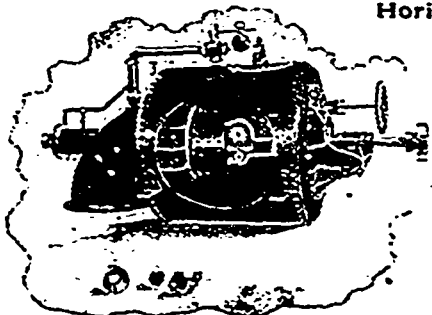
OFFICE AND SHOWROOMS:

**14 MARKET PLACE, MANCHESTER.**

THE

**Crocker Patent Turbine**

Horizontal Setting, with Quarter Turn Elbow.



Where the nature of the location will permit its use this type has many advantages. It is very suitable for direct connection to dynamos, and many are in operation in this class of service.

Notice how complete and compact this arrangement is, and how easily it may be installed. Can you use anything of this kind? Your inquiries will receive prompt attention.

WATER POWERS examined and Reports made. Estimates submitted for Complete Equipments. - - - -

**The JENCKES MACHINE CO.,**

**42 Lansdowne St., Sherbrooke, Que.**

# COAL JAS. H. MILNES & CO. COKE

WHOLESALE DEALERS IN  
 Best Grades of STEAM COALS.  
 Best Grades of BLACKSMITHS COALS.  
 Best Grades of FOUNDRY COKES.

Shipments made direct from Mines to any point in Canada. Write for quotations.

Head Office: 78 QUEEN ST. EAST,

TORONTO.

Docks: Esplanade, Foot of Yonge.

### CANADA'S FOREIGN TRADE.

The following summary of the foreign trade of Canada shows the remarkable expansion experienced within the dates named: EXPORTS IN 1899.

	Products of Canada.	Not products of Canada.
Mines.....	\$13,341,061	\$180,237
Fisheries.....	9,917,337	36,672
Forest.....	28,625,487	89,589
Animals.....	46,688,229	1,230,232
Agriculture.....	23,011,314	14,451,521
Manufactures.....	11,457,162	1,020,977
Miscellaneous.....	291,478	338,410

Total.....	\$132,675,691	\$17,338,101
Bullion.....	1,623,287	
Coin.....		2,916,572

\$133,768,977 \$20,311,673

Total.....\$151,082,650  
 Or without coin and bullion, \$150,673,792.

### EXPORTS OF PRODUCTS OF CANADA.

	1878.	1896.	1900.
Products of			
Mines.....	\$2,816,317	\$8,029,650	\$14,156,761
Fisheries.....	6,833,975	11,077,763	11,303,028
Forest.....	19,511,575	27,175,686	30,650,018
Animals and their products.....	14,019,857	26,507,511	43,867,800
Agriculture.....	18,008,751	11,083,391	27,429,121
Manufactures.....	1,127,735	9,365,381	13,022,773
Miscellaneous.....	401,875	109,355	339,413

Exclusive of coin and bullion.....	\$65,710,131	\$106,378,732	\$132,818,917
In 18 years.....		\$10,638,618	
In 4 years.....			\$16,378,752

Exports, 1900, not products of Canada, but on the in-transit trade, of which we make a profit:

Mines.....	\$191,861
Fisheries.....	82,113
Forest.....	230,741
Animals and their products.....	1,113,829
Agriculture.....	10,236,632
Manufactures.....	1,232,450
Miscellaneous.....	325,891

Coin.....	\$14,196,329	6,281,657
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Products of Canada.....	\$21,178,287
Bullion.....	132,818,917
Total exports.....	\$173,636,917

### EXPORTS - TWELVE MONTHS.

	1899.	1900.
Canadian.....	\$12,891,262	\$12,818,917
Foreign.....	17,520,088	14,196,599
C. and B.....	1,016,025	8,611,131
Total trade.....	\$31,427,375	\$35,626,647
	\$38,338,968	\$32,866,230

### IMPORTS FOR CONSUMPTION - TWELVE MONTHS.

	1899.	1900.
Dutiable.....	\$89,433,172	\$106,327,123
Free.....	39,913,287	64,581,101
C. and B.....	4,705,134	8,233,016
Duties collected.....	\$151,051,593	\$183,200,273
	\$24,731,229	\$28,866,987

### A SEVERE TEST OF ROOF PAINT.

The Garfield Oil Co., of Cleveland, Ohio., has just received an order for fifteen barrels of their zanzibar anti-rust roof paint from the Ball Bros. Glass Co., of Muncie, Ind., the largest fruit jar factory in the world.

Zanzibar paint is now being used on quite

a number of the factories of the American Window Glass Co.

No more severe test could be used and the duplication of their first orders by these companies indicates that Zanzibar paint has stood the test satisfactorily.

The following letter is one of many showing the general satisfaction resulting from the use of zanzibar paint made by the Garfield Oil Co., who ship their goods on a strict guarantee as to its high quality.

CASNOVIA, MICH., June 29, 1900.

THE GARFIELD OIL Co., Cleveland, Ohio.

GENTLEMEN:—I have great pleasure in recommending your zanzibar anti-rust paint. My elevator and mill roofs leaked so badly that I thought I would have to put on new shingles. I used one (1) barrel of zanzibar paint and the roofs are better than when new. Don't leak a drop.

Yours truly,

A. H. ARMITAGE.

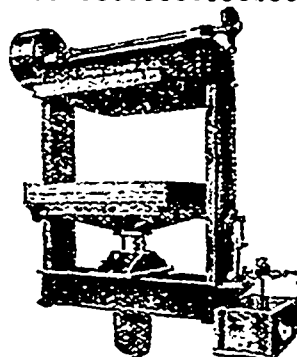
## WM. R. PERRIN & CO.

122 Church St., Toronto.

MANUFACTURERS

Hydraulic Presses,  
 Screw Presses,  
 Filter Presses.

SEND FOR CATALOGUE.



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94 ADELAIDE ST. WEST. TORONTO

MAKE Gas or Gasoline Engines from 1 h.p. to 6 h.p.  
 Stationary or Marine and Electric Motors from 1/2 h.p. up.  
 Motor Carriages for Pleasure or Business. One cent spent for a postal will bring you any information you wish.

# PITT & SCOTT

ESTABLISHED 1876.

Foreign Freight Brokers and Express Carriers TO ALL PARTS OF THE WORLD.

THROUGH BILLS OF LADING ISSUED AND RATES QUOTED TO ALL PARTS OF EUROPE, ASIA AND OCEANIA.

SENDERS INVOICES COLLECTED AGAINST DELIVERY OF GOODS ANYWHERE ABROAD.

PITT & SCOTT, - - 39 Broadway, NEW YORK.—121 Water Street, BOSTON.

ALSO AT..... LONDON, LIVERPOOL; PARIS, HAMBURG.

AND AGENCIES EVERYWHERE ABROAD.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

## A STUDY IN BLACK.

The Garfield Oil Co., Cleveland, Ohio, manufacturers of Black Zanzibar Roof Paint, have sent us a very unique little publication having reference to their special production. It catches the attention by a brief introduction containing the following verse from the world known Bill Nye:

"Go! little Booklet, go!  
Bearing this honored name,  
Till everywhere that you have vent  
They're glad that you have came."

Of course the "honored name" has reference to "Garfield," who was one of the most beloved presidents of the United States. The accompanying illustration being a truthful picture of the tomb beneath which his remains are buried.

Speaking of the excellence of this Zanzibar paint, we are told that it is elastic, spark, water, rust and weather proof, and jet black, absolutely free from injurious acids, guaranteed to wear for five years, and that it will not blister, crack or peel off. It penetrates the fibre of the wood and presents a surface absolutely impervious to water, and not affected by climatic change, thus preventing decay.

Some of the axioms embodied in the book are:

"The proper care and protection of your roof is not an expense, but an investment."

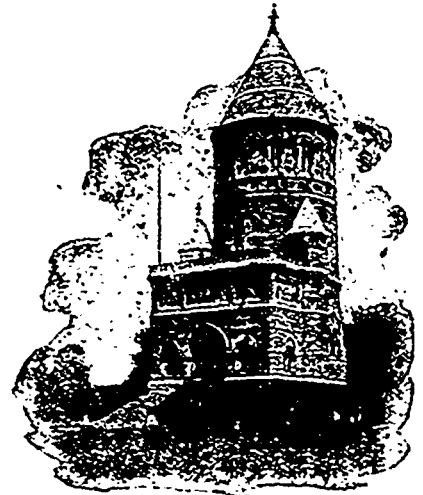
"Paint your roofs when now and bright and thereby avoid trouble, annoyance and loss later on."

"Your roof has been neglected and is becoming rusty and full of holes because unprotected, B-Z-R paint will prolong its

life. It fills up the small holes and cracks, kills and prevents rust, and preserves the roof from further decay."

"Absolute protection from fire, nothing better for elevators, round-houses, railway shops, school buildings, office buildings, asylums and hospitals. Invaluable for fire escapes, metal roofs, iron fences, structural iron and bridges of all kinds."

The formula for making B-Z-R paint has been improved upon from time to time and now in the manufacture of the goods a



special process is used whereby all injurious acids are removed and the proper chemical (not mechanical) combination of the different ingredients is effected, producing thorough elasticity, exceptional durability and absolute freedom from the many faults common to the majority of roof paints, such as brittleness, blistering, cracking, scaling and peeling off.

A Canadian branch of the Garfield Oil Co., has been established at Windsor, Ont., from which orders can be filled with much expedition.

Mr. A. Dobson's peat fuel factory at Beaverton, Ont., was destroyed by fire July 26, loss about \$7,000.

## Electrical Repairs Cost Money.

By doing only good work, work that lasts, we practically save you this expense.

The high quality of our work, combined with close prices, has doubled our business during the past year.

Write us for figures.

### R. A. L. GRAY & CO.,

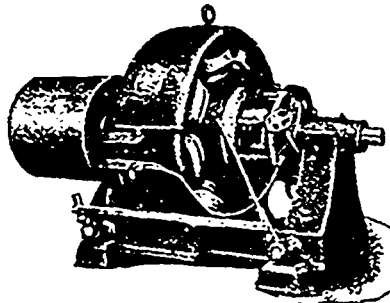
Electrical Contractors,

83 York St., TORONTO.

## The Jones & Moore

**ELECTRIC CO.**

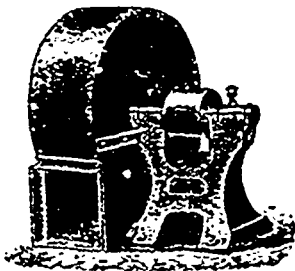
**ELECTRICAL CONTRACTORS**



DYNAMOS, TELEPHONES, SLOW SPEED MOTORS, MOTORS, SUPPLIES, DIRECT CONNECTED DYNAMOS.

We manufacture Direct Current Machinery in all sizes and for any purpose.

20 and 22 ADELAIDE W., TORONTO.



## PLANING MILL STEEL PLATE EXHAUST FANS

For removal of refuse from Wood-Working Machinery.

## CYCLONE DUST SEPARATORS

Made of Galvanized Steel. All Sizes for Fans from 30 inches and up.

Estimates cheerfully given for Complete Installations of Fans, Piping, Gates, Hoods and Separators, with or without Shavings Feed Attachment to Boiler Fires.

## McEACHREN HEATING AND VENTILATING CO.,

GALT, - ONT.

WE MAKE

Forge, Cupola and Disc Fans, Electric Fans, Heaters and Fans for Lumber and Wool Drying, etc., and for Heating of Factories.

STEAM TRAPS, OIL SEPARATORS, ETC.

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## JOHN J. KELLER & CO.

104 and 106 MURRAY ST.  
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220 Church St., Philadelphia.

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## Aniline Colors, Dyewood Extracts, Sumac and Nutmeg Extracts.

FAST COLORS for Wool Dyeing.  
One Dip Cotton Colors, Novelties  
and Specialties for Calico  
Printing.

MANUFACTURED BY

### JOHN R. GEIGY & CO.

BASLE, SWITZERLAND

**A NEW REFRIGERATOR.**

The fertile and inventive brain of J. D. Pennington, the general manager of the Valley City Seating Co., Dundas, Ont., is over busy, and its latest production is a refrigerator which bids fair to supersede all others which have been placed on the market heretofore and laud its inventor among the millionaires of our country. There are several new features connected with this refrigerator, but the one of most importance to its user is the ease with which it can be cleaned. Every part of the interior can be taken apart, leaving nothing but the bare wooden frame, and after being cleaned a child can put them together in from three to five minutes—and it will be known as the New Century refrigerator. Mr. Pennington, after exhibiting a model to a representative of one of the largest exporting and importing firms of Great Britain, is now in direct correspondence with the view of having them take the complete control and handling of the entire demand for export trade of Europe, India, Africa and Australia. He also has an offer from a gentleman in Toronto, as follows: The assignment to him of a half interest, Mr. Pennington retaining Canada and the United States; he will go to all the expense of patenting the article and registering the name in Great Britain, France, Germany, Australia, Spain, Italy, Austria and South Africa, and guarantees to look after the business in these countries and the management of the same, Mr. Pennington only being required to see personally to the inspection of the finished article as it leaves the works.—Dundas Banner.

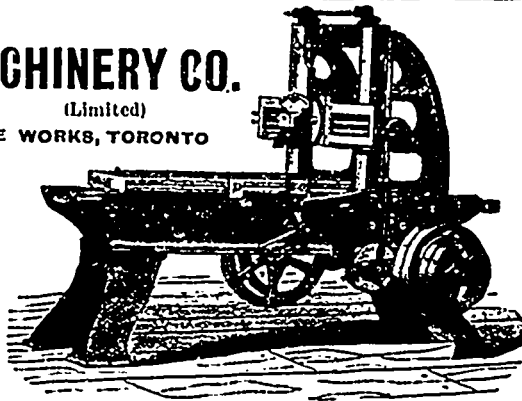
THE....  
**A. R. WILLIAMS MACHINERY CO.**

(Limited)

Head Office, - SOHO MACHINE WORKS, TORONTO

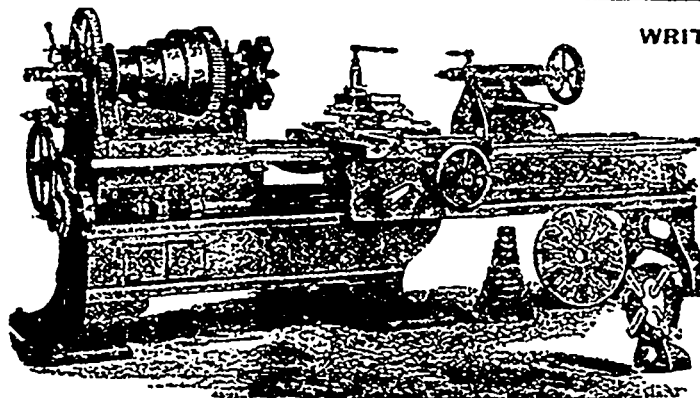
Manufacturers of and Dealers in

**High-Class Iron Tools,  
Wood-working Machinery,  
Engines, Boilers,  
Motors, Water Wheels,  
General Machinery  
and Supplies.**



WE ARE THE EXCLUSIVE AGENTS OF THE **McGregor-Gourlay Co. Limited,** G.A.L.T., ONT.

**IRON WORKING MACHINERY.**



WRITE TO US FOR PRICES.

BRANCHES  
193 Colborne St.,  
BRANTFORD  
345 and 347  
St. James St.,  
MONTREAL

Send for Circulars,  
Referring  
to this Advt.

**BLACK IS BLACK**

**Extra C** is our **best** grade. We cannot make anything better than the **best**. You cannot buy anything better, try where you will. When you buy, see that our Trade Mark and grade are stamped on it and quality will be there.

**D. K. McLAREN**

Mfr. "GENUINE OAK" BELTING

88 Bay St., TORONTO Factory, MONTREAL

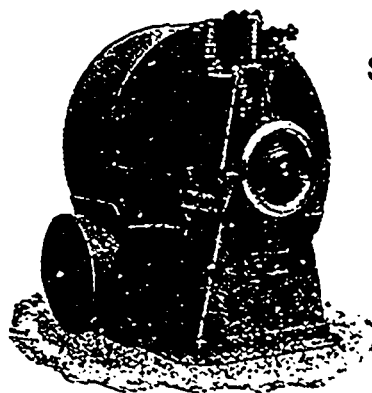
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**CANADIAN  
MANUFACTURER.**

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FOR RATES.

**INCREASE YOUR  
BOILER OUTPUT**

BY USING

**MECHANICAL  
DRAFT**



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STURTEVANT  
COMPANY  
BOSTON, MASS.  
NEW YORK  
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### THE MICHIPICOTEN IRON ORE BEDS

Mr. Arthur White, of the Grand Trunk Railway, returned to Toronto a few days ago from a visit to Michipicoten, Ont., where he had been for the purpose of inspecting the Hellen iron mine. He was conveyed to the mine by Mr. Clorgue and had as his fellow-traveller Hon. Charles E. Turner, Consul-General for the United States, who was taking the trip for the purpose of making a special report to the United States Government covering the industries of New Ontario, as now being promoted by Mr. Clorgue. When the party reached Michipicoten Harbor they found a bustling railway terminus, with large trestle works for the unloading of iron ore, extensive freight yards, locomotive and car sheds, stores, etc., and all the necessary appliances for conducting a heavy freight traffic.

Proceeding by special train to the Hellen mine, a distance of twelve miles, they viewed with astonishment a mountain of almost pure brown hematite ore, which after careful tests by diamond drills is estimated to contain over thirty million tons. The ore is being worked from the face of the mountain, the foot of which is almost on a level with the crusher now being placed in position for the purpose of crushing the ore. The ore is dropped down the face of the mountain with very small blasts, and gravitation does nearly the whole of the business after that through the crusher and down the railway to the trestle works at the harbor, the line being on a grade down of three in 100, with only one exception, where it crosses the Maggie River, when the up grade for a short distance is one in 100. The line is being equipped with 100-ton locomotives, and 50-ton capacity steel cars for the ore. Shipments when begun will be at the rate of 2,500 tons per day. Shipments of ore will be made to Midland,

Hamilton and Deseronto, possibly to Montreal, and largely to the United States.

After the company had got through with the testing of the Hellen Mountain mine water was required in connection with the ore crusher, and they commenced to run a lateral shaft into a mountain, but in place of getting water they were agreeably surprised to find a continuation of brown hematite ore, and up to date they have run two lateral shafts into this second mountain a distance of 250 feet each, finding nothing but a continuation of the best of brown hematite, making it look as if a supply of

iron ore had been deposited here specially for the world's use for years to come. The railway is a branch of the Algoma Central, and is intended to connect with the Canadian Pacific Railway at a point near Miasanable, and then eventually to run on to Hudson Bay.

The line from Michipicoten Harbor to the Hellen mine is most picturesque, being a continuation of beautiful lakes, having outlets by falls similar to that at Montmorency, Que., and in addition to the beautiful scenery it runs through a virgin country for forest products. The streams are full of

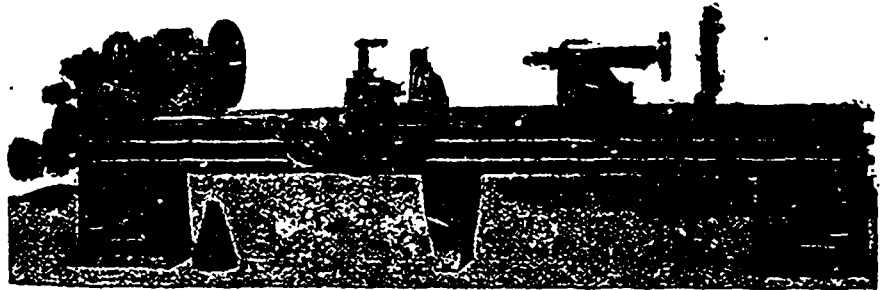
## The London Machine Tool Co., LONDON, ONT.

LATHES,  
PLANERS,  
DRILLERS,  
SHAPERS,

MANUFACTURERS OF

HAMMERS,  
BULL DOZERS  
PUNCHES,  
PRESSES.

### General Machinery



ALEX. GARTSHORE, President. J. G. ALLAN, Sec.-Treas. JAB. THOMSON, Vice-Pres. and Gen. Mgr.

## THE GARTSHORE-THOMSON PIPE & FOUNDRY CO. Limited

### CAST IRON PIPE

3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers

Special Castings and all kinds of

FLEXIBLE AND FLANGE PIPE.

WATER WORKS SUPPLIES

HAMILTON, ONT.

### THE ABBEY IMPROVED CHILLED SHOT COMPANY, Limited, Newcastle.

What better testimonials do Sportsmen require than the following, viz.:

Output of Shot in 1899 exceeded 1897 by 5,010 cwt., or equal to the loading of (at 1 oz. per load) 9,031,650 Cartridges.

The winner of the All-England Championship Cup in December, 1898, fired with our shot, and speaks highly of it.

### THE AMERICAN

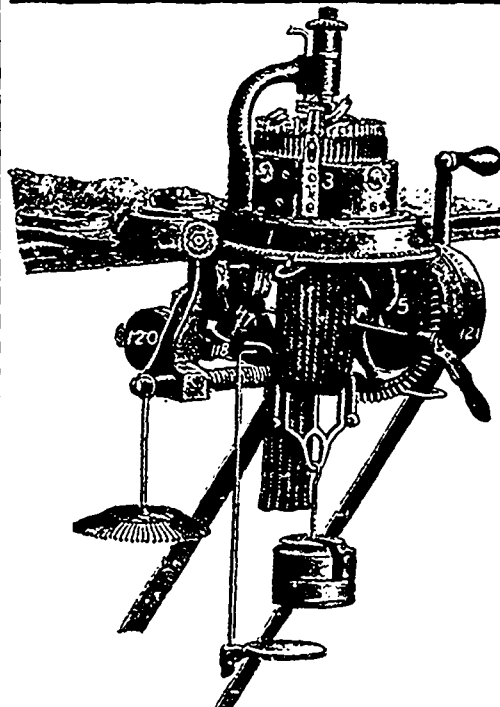
## CARPET and .. UPHOLSTERY .. JOURNAL

Each number contains valuable statistics as to the imports and exports of the United States, and all the news relating to the allied industries.

It carries the advertisements of the leading firms in the business, and is regarded as a most valuable medium for reaching the entire trade of the country.

Subscription Price, - \$2.00 a year  
For Canada and the United States.

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THE TRADES PUBLISHING COMPANY,  
102 South Twelfth Street,  
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### Seamless Hosiery

## KNITTING MACHINES

WE have been hard at it for nearly  
1/3 of a Century.

We have had Success.

Our Customers have had Success.

Why? MERIT and SUPERIORITY  
in our Machines tells the story  
CATALOGUE FREE.

CREELMAN BROS.,  
Manufacturers,  
GEORGETOWN, ONTARIO, Canada.

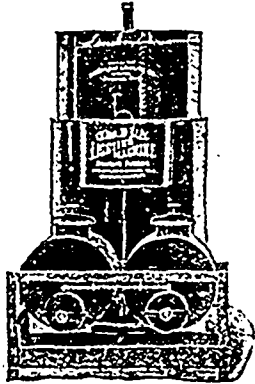
When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

trout, catches of fish averaging from twenty to twenty-four inches long being the rule and not the exception. It is the intention to erect a summer hotel during the next winter. Villages have sprung up, principally populated by the miners and railway employees, and there are now already permanently settled along the railway between 600 and 700 men, most of them in comfort.

Bring customers to your customers, by advertising to the consumer. Plans and rates will be cheerfully prepared and submitted by the E. DEBARATS ADVERTISING AGENCY, Montreal.

### Sun Lighting Machine.

ACETYLENE GAS.



The Acme of Perfection in Lighting.

At the Minimum of Cost.

Suitable for any place where Artificial Light is required. Dwellings, Stores, Churches, Factories, Hotels, Street Lighting, etc.

Write for Catalogue.

THE  
**Acetylene Lighting Co.**  
(LIMITED).  
LONDON, ONTARIO.

## Cheap . . . Typewriters

The following cash prices are the best values that have ever been offered in rebuilt typewriters. All machines are in the very best of order, and sample of any machine selected will be sent on application.

- |                              |                         |
|------------------------------|-------------------------|
| Remington, - \$50 00         | Smith Premiers, \$50 00 |
| Calligraphs, - \$25 00       | Yosts, - - - \$25 00    |
| New Franklins, \$20 00       | Nationals, - - \$17 50  |
| Remington-Scholes, - \$30 00 | Hammonds, - \$25 00     |
| Empres, - - \$35 00          | Williams, - - \$30 00   |

Special Rental Terms on above Typewriters.

The Canadian Typewriter Exchange  
45 Adelaide St. East, TORONTO.

able residences, and, none under canvas, whilst less than a year ago the whole population of the district was represented by two Indian families, who eked out a livelihood in the ordinary Indian fashion.

In connection with the railway, Mr. Clorgue has purchased four English steamers having a capacity of 2,500 tons each. These steamers at the present moment are being used for bringing 85-pound rails from Loraine, Ohio, with which to rail the Algoma Central Railway, the latter having under construction their main line from Sault Ste. Marie running north, and another branch from Norton, near Sudbury, tapping the nickel belt owned by Mr. Clergue's companies, which will make a connection in the first place with the Canadian Pacific Railway, in order to bring the nickel ore to the

Ferro Nickel Works, now being erected at the "Soo," and also to the Ferro Nickel Works, now being constructed at Hamilton, Ont.

The construction of the interprovincial bridge to span the Ottawa river from Gatineau Point, near Ottawa, to Hull, Que., is being pushed with much vigor. It will be completed in September. The anchor arm for the northern part of the cantilever span, and that part of the span itself, are all that are required now to make connection with both sides of the river. The span is the second or third largest of its kind on the American continent, the largest, probably, being in Memphis, Tenn. That portion projecting from the southern side is some 275 feet in length.

## The Packard Electric Co., Limited.

MAKERS OF

# Lamps and Transformers

All Electrical Supplies furnished promptly at lowest market prices.

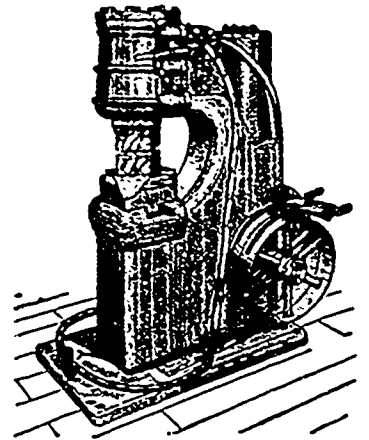
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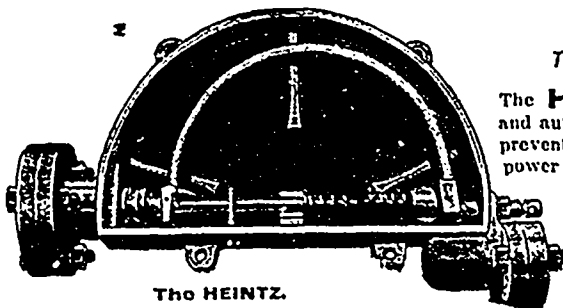


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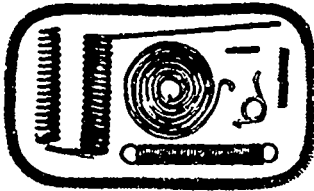
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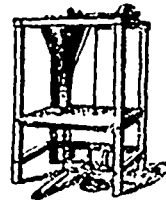
Route No. 1, which will run from Toronto to Rice Lake, passes through the townships of York, Scarborough, Pickering, Whitby, Whitby East, Darlington, Clarke, Hope and Monaghan, and the towns of East Toronto, Whitby and Oshawa. It will be sixty-three miles long and cost \$525,000. Route No. 2, which will run from Toronto to Prince Albert, is to pass through Pickering, Whitby and Reach townships. The total distance will be fifteen miles and the cost of construction \$125,000. Route No. 3 will run from Pickering to Beaverton, and will pass through Pickering, Uxbridge, Scott, Georgina and the towns of Uxbridge and Beaverton. The road would be forty-eight miles long and cost \$370,000. Route No. 4 will run from Toronto to Shelburne, passing through the townships of York, Vaughan, King, Tecumseh, Adala, Mono, Melancthon and the towns of Toronto Junction, Weston, Woodbridge and Tottenham. This line would be fifty-nine miles long and would cost \$455,000. Routes 5 and 6 form two branches, one of which will run from Lloyd-town to West Gwillimbury and the other from Tottenham to Beeton, a combined distance of 123 miles. Route No. 7 will run from Weston to Fergus, passing through Etobicoke, Toronto township, Chinguacousy, Esquesing, Georgetown, Brampton, Acton, Erin, Eramosa, West Garafraxa, Nichol and Fergus, a distance of fifty miles, to cost \$585,000. Route No. 8 will be a branch from Acton to Guelph. Route No. 9 will run from Toronto township, in Peel, through Trafalgar, Nelson, Streetsville, Milton, Flamboro East, Flamboro West, Beverley, South Dumfries, Brantford township and Brantford city, a distance of fifty-three miles, at an estimated cost of \$435,000. Route No. 10 is to join Toronto and Burlington, a distance of thirty miles along the lake front. The total mileage of the system would be 354, the cost \$2,850,000, and the population to be served outside of Toronto, 187,834. There are thirty nine townships interested, sixteen towns or villages and two cities. In these towns are 300 members of municipal councils, each of whom must be personally converted to the project. However great the task, Ald Lamb says that it certainly will be put through.

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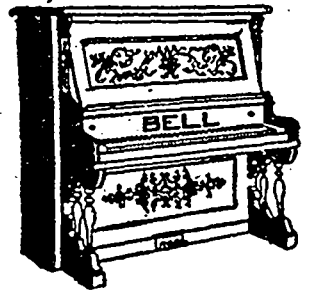
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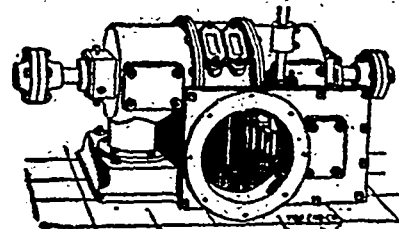
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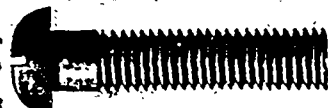
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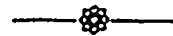
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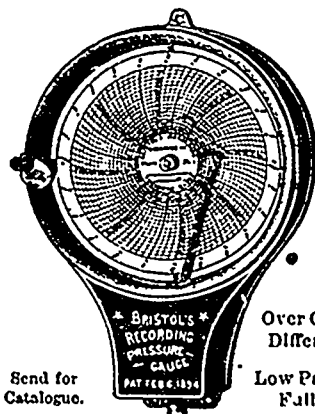
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