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Vol. 40.

TORONTO, FEBRUARY 2, 1900.

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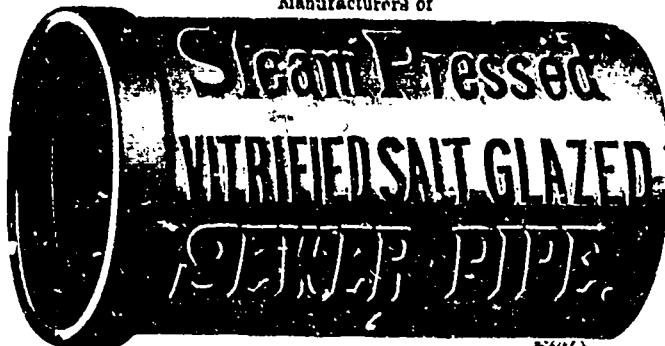
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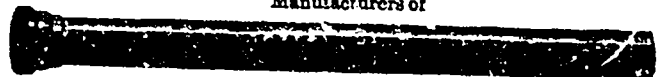
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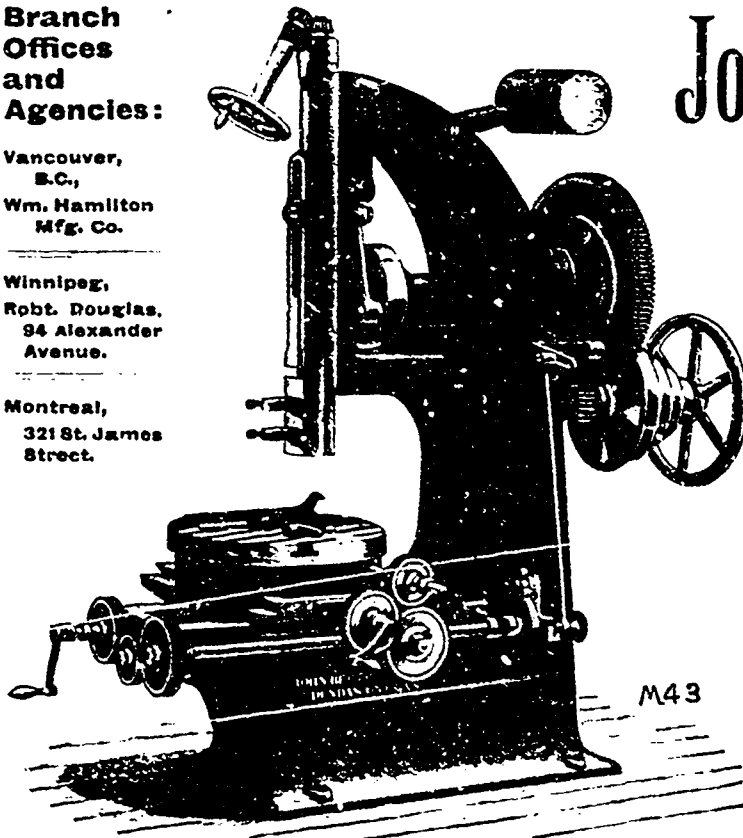
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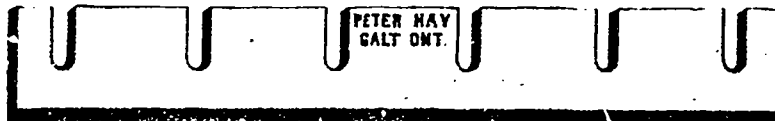
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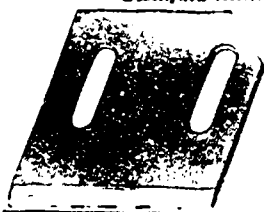


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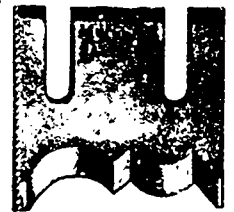
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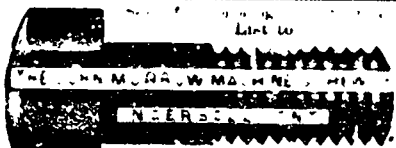
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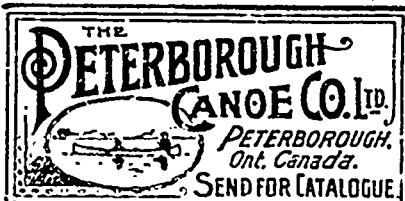


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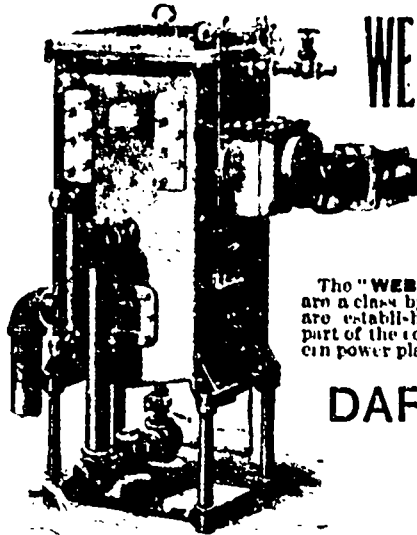
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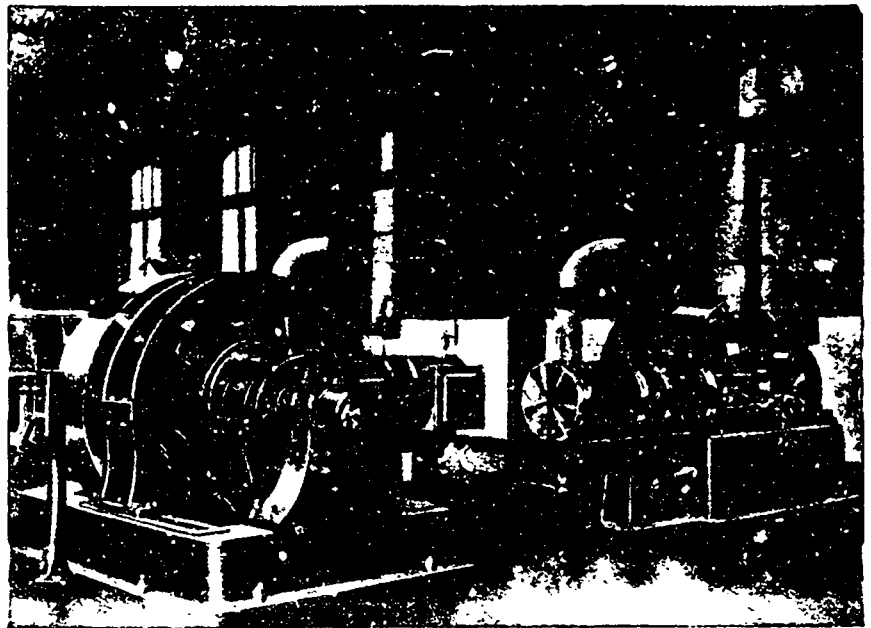
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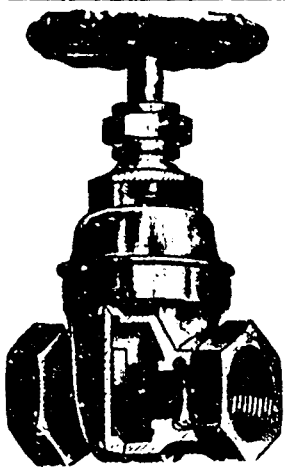
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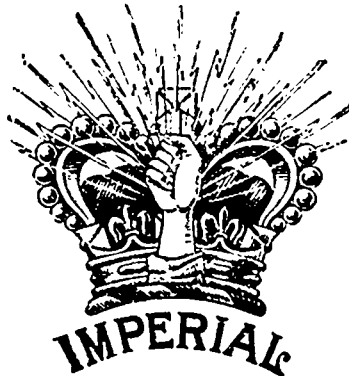
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J. J. CASSIDY, - - Editor and Manager.

THE ASSOCIATION AND ITS WORK.

In view of the fact that the regular annual meeting of the Canadian Manufacturers' Association will occur next week, it may be well to allude to the work it should undertake. Capital is now well and profitably employed; all machinery and appliances for manufacturing is kept in full operation; prices for manufactured articles are remunerative; labor finds steady employment at satisfactory wages; no man is idle who seeks employment, and contentment and prosperity go hand in hand.

There are numerous causes that contribute to the conditions that environ us, one of the most potent of which is that no uncasiness is felt by our manufacturers or by the country generally regarding the tariff. Time was, and that until quite recently, that grave apprehensions were constantly entertained that each succeeding session of the Dominion Parliament would make changes in our fiscal system that would not result in as much good as might be hoped for; and the Association might very properly be reminded that the very cause that brought it into existence was a desire to have accepted as a fixed policy of any government of the country the theory of adequate tariff protection to our manufacturing industries. A quarter of a century ago, when the Association was brought into existence, Canada did not enjoy such a policy, and our manufacturers did not enjoy either in profitability of investment or extent of home market the full measure that they believed they were entitled to. Hence the organization of the Association; and the man is indeed blind who cannot see that the influence of it was an important factor in educating the people to understand that the prosperity of the country was largely dependent upon the observance of a policy that would to as great extent as possible, enable us to produce within our own borders articles that were required for our existence and comfort, and to supply our wants from our own workshops and factories. We have cause for thankfulness that after many years of persistent endeavor we find that the theory of adequate tariff protection has become so impressed upon the country that even a change of government does not affect it. Undoubtedly protection is here to stay; and we may congratulate ourselves that however political parties may struggle to gain office or retain power, no differences can possibly exist between them looking to any violent change of the tariff system we now have.

And while this desirable condition prevails, the Association should be warned that eternal vigilance is the price of tariff protection, and that it is quite as important at the present time to preserve the organization with this special object in view as it was to bring into existence in the first place, or to perpetuate it through the intervening years. It would be suicidal for manufacturers to forget the vigils and vigilance of the past, and to relapse into feelings of fancied security because prosperity now crowns their efforts.

But in maintaining the organization of the Association, it should not be forgotten that the rapidly changing economic conditions of the country imperatively demand the addition of new features, and the adoption of such aims and objects as may be necessary to enable it to meet the requirements of the present. It must become active in devising and engrafting new ideas and new plans for the advancement of the interests of its members; and if it does so it will find its duties divided into two general groups, viz.:—

1. To promote the interests of Canadian producers in their own country :

2. To promote the extension of Canadian trade with other countries.

These propositions involve the advocacy by the Association of the enactment of laws regarding bankruptcy that will be uniform in their enforcement throughout Canada :

The improvement and simplification of our patent laws and laws relating to trade marks and copyright :

The uniform customs appraisalment of merchandise :

The uniform classification of freights on all routes of transportation :

The establishment and maintenance of a cold storage system in all commercial centres where necessary, and on railroads and steamships :

The improvement of our natural waterways, the creation of necessary artificial waterways, and the extension of railroads and all other similar routes of transportation, according to the requirements of the country :

The improvement and extension of service of Canada's Commercial Agents in other countries :

The extension of our foreign trade relations as far and as rapidly as possible in the interest of our home industries :

The obtaining of the greatest possible benefit from our preferential trade arrangement with the Mother Country and sister colonies :

The encouragement of commercial reciprocity with other countries according to the requirements of equity :

The supplying to the fullest extent possible, the demands of our home market with the products of home labor and enterprise :

Assistance to our manufacturers and other producers, and to our merchants in securing foreign markets in which to sell their merchandise :

The establishing of a Bureau of Information for the benefit of all who may desire to avail themselves of its advantages, looking to both the export and import trade of the country :

Assistance to foreign buyers in establishing desirable business relations with Canada :

The supplying of reliable reports upon trade conditions in foreign markets :

The furnishing of special lists of names of importers, mer-

chants and other possible purchasers in foreign countries of Canadian merchandise :

The giving of information regarding the best and most available routes for the transportation of merchandise to and from foreign countries :

The giving of any information required regarding the tariff and customs regulations of any country.

These are some of the features that should be prominent in the work of the Association. If they are adopted and carried out in a liberal and intelligent manner, the Association will not only hold what it has already gained for its members and manufacturers generally, but its scope of usefulness will become so enlarged as to command the support of the entire community.

THE WAY THEY DO IT.

In accordance with the established policies of the National Association of Manufacturers, the management of it will be kept in close touch with congressional legislation through official representatives in Washington, as outlined in a circular letter recently sent to Mr. T.C. Search, the president, to all members of the organization.

Mr. Search's circular sets forth as follows :

The Cincinnati Convention approved the establishment in the National Capital of a representative agency of this Association for the purpose of promoting the objects to which the Association has given its approval. This work is of such an important character as to demand close executive attention and supervision. It is my purpose as president to keep fully informed and to place before the membership information and suggestions as to the course of national legislation which may affect their interests. To this end the secretary of the Association, is assigned to duty in Washington that he may by personal observation keep in touch with the progress before Congress of the various objects of which the Association has declared its approval. The co-operation of our membership in this work is of the most vital importance, as members of Congress naturally rely upon their constituents for information as to the public importance and public estimate of measures which come before Congress to be enacted as the law of the land. Therefore the hope is expressed that our members will, when called upon, lend their personal influence and support to this work.

This indicates the way American manufacturers make use of their Association. The President takes an active interest in what is being done. The Secretary is assigned to duty when his services can be of most benefit, and the members generally hold themselves in readiness to give their personal assistance in accomplishing whatever work there may be to be done. Each member pays \$50 a year to maintain the Association, and the secretary is paid a salary commensurate with his services. Neither the president nor the local members of the executive committee seem to care whether the secretary signs his name with a rubber stamp or not.

MR. A. E. KEMP.

Mr. A. E. Kemp, who for two years was the president of the Canadian Manufacturers' Association, has just been re-elected by acclamation, president of the Toronto Board of Trade. This is a well-deserved tribute to one of the most energetic and prosperous manufacturers of Canada. During the time he was the chief officer of the Association he gave a large portion of his time to advancing its interests, and, during his régime and largely through his influence, intelli-

gently directed ; the membership was greatly increased. An address delivered by him, as president of the Association, was of such intrinsic merit that by a unanimous vote of the meeting before which it was made, it was printed in pamphlet form and widely distributed throughout Canada, and was published in full in *The Toronto Globe* at the time. The Board of Trade has done wisely in again choosing Mr. Kemp for its president. *The Globe* has the following to say regarding the occurrence :—

Mr. A. E. Kemp well deserved re-election as president of the Board of Trade. He has given much time to the duties of the office, and has been active in many well-considered movements for the development of Toronto's trade and the increase of her commercial importance. He has made a special study of the great question of transportation as it affects Toronto and Ontario, as well as in its larger national aspects, and we have some confidence that Toronto will yet derive substantial benefits from his work in this direction. We quite recognize that a man carrying on large business operations sacrifices a good deal in devoting so much of his time to public duties, and it is on this account that we should be the more grateful to men like Mr. Kemp who manifest public spirit, and who seem to realize that great success in private business but increases one's obligation to give generous public service.

EDITORIAL NOTES.

The Department of Trade and Commerce is inviting tenders for a monthly steamship service between Halifax and Kingston, Jamaica, calling at Bermuda and Turk's Island, the service to commence on July 1st next, and continue for five years. Steamships are to be of 1,000 tons register or over, accommodate at least thirty first-class passengers, and be able to steam not less than fourteen knots. Cold storage is also to be provided on board. Tenders will be received at the department up to March 1st.

Will lumber ever be cheap again ? is a question of particular importance at the present time, especially when the various elements entering into a discussion having to do with the commodity in hand is considered. On this point the *Cleveland, Ohio, Leader* observes that it is already a fair question whether or not lumber will ever be cheap, as values were rated less than one year ago. No sound judge of economic and industrial conditions can doubt that many staples will lose much of the advance made in the past ten months. It is inevitable, in the nature of things. With timber and all its products the case is different. The darkening shadow of inadequate or very expensive supplies lies over the trade in merchandise which comes from the forests. It will not be permanently lifted by any known agency. With population and production of all kinds fast increasing, and the country gradually filling up, the demand for timber and wood of all kinds will naturally increase. That means heavier drafts upon the forests, and the best possible care of our remaining sources of supply can hardly make lumber cheap and plentiful, in the old sense. There may be temporary depression in the market, but reactions from too sudden and violent advances in the price level will scarcely last long. Under such conditions it is the imperative duty of all governmental and educational authorities to do what they can to guard against the threatened lack of timber in the United States. There is no plainer responsibility.

As a matter of course the opposition press and speakers have vigorously assailed Mr. Ross' policy of developing New Ontario and building up home industries by stopping the exportation of raw material. It finds, however, a keen and enthusiastic supporter in THE CANADIAN MANUFACTURER, of Toronto, the organ of the Manufacturers' Association, which certainly ought to speak with a good deal more authority as to the effects of that policy in stimulating a demand for manufacturers than the Tory journals.

THE MANUFACTURER quotes approvingly Mr. Ross' Whitby speech last fall as embodying "just such an enlightened and progressive view of the crying needs of the country and the obvious practical duty of the Administration," as entirely coincides with the opinions it has always voiced. It trusts that "measures so wisely calculated to place the province in the position nature destined her to occupy, as a wealthy, progressive and populous community, will commend themselves to the support of the Legislature, as they certainly must to the approval of the public-spirited and enterprising men interested in promoting home manufactures."

Our contemporary disclaims any party feeling in the matter and certainly its record is sufficient to negative any suspicion of liberal leanings. It looks solely at practical results. It shows that the manufacturers of mill machinery and supplies have already benefited largely by the stimulus given to construction of lumber and pulp mills. It expects more important results as time progresses.

Evidently the manufacturers are fully alive to their own interests, and, with satisfactory evidence in hand of the benefits conferred upon home industry by the course of the Government, will hardly be persuaded to the contrary by the factious criticisms of the opposition.—Kingston Whig.

It is understood that the Ontario Government have under consideration an amendment to the regulations respecting pulpwood which provides for the application of the manufacturing clause to spruce logs, thus practically putting them on the same basis as sawlogs. The Order-in-Council will take effect at the close of the present license year, viz., April 30th, and after that date no pulpwood cut on any timber limits sold by the Government can be exported from Canada. A very small quantity of pulpwood is now exported from lands on which the settlers hold the patent. The total amount thus exported in 1898 was about 5,000 cords, but from figures now available, the export for 1899 will be something less. This Order-in-Council is another illustration of the Government's desire to retain for the people of Ontario the full profits resulting from the products of the forests, and will doubtless meet with the same approval as the orders relating to nickel and copper, which were passed some weeks since.

A sub-committee of the Cabinet has been appointed to consider the question of putting an export duty on nickel matte. The members of the committee are Sir Richard Cartwright, Sir Louis Davies, Hon. W. S. Fielding, Hon. A. G. Blair, and Hon. Wm. Paterson.

The Hamburg-American Line and North German Lloyds are each having their two new mail and passenger steamers fitted with ice-making and refrigerating machinery. One of the vessels has already left on her first voyage, and a matter of interest is that in addition to the usual cold chambers and ice making plant, two of the staterooms have been cooled. One of these was recently occupied by Sir Claude Macdonald on his return to China, and the cool atmosphere added great additional comfort to the voyage. This is said to be the first instance of staterooms being cooled by refrigerating machin-

ery though in several cases such machinery is used for cooling dwelling-houses. There appears to be a wide field for this special application, which will certainly add greatly to the comfort of passengers during a voyage through the tropics.

Hon. E. J. Davis, Ontario Commissioner of Crown Lands, has by no means exhausted his list of measures for promoting the interests of Ontario. The question of reforestation is one to which he is giving considerable attention, and in the course of a few days he hopes to put into operation certain measures for the renewal of the forest wealth upon lands which have been stripped or partially denuded of timber. The areas selected for the purpose will be those which are unsuitable for agriculture, but which, with careful attention to certain well-understood principles, can be made to reproduce merchantable timber. One forest reserve has already been set apart in the County of Hastings, and an Order-in-Council will shortly be passed creating reserves elsewhere in Ontario.

Domestic exports from the United Kingdom in 1899, according to official reports, were \$1,287,971,000, while those from the United States were \$1,253,486,000, making a difference of \$34,000,000 in favor of the United Kingdom in the year's exportation of domestic products. From 1875 to 1899 Great Britain's domestic exports increased from \$1,087,497,000 to \$1,287,971,000, or 19 per cent., while those from the United States increased from \$497,263,737 to \$1,253,486,000, an increase of 152 per cent. Adding to the domestic exports of each country, those brought in from other parts of the world and re-exported, we find that the total exports of the United Kingdom, including "domestic, foreign and colonial," were, in 1875, \$1,370,465,000, and in 1899, \$1,640,388,674, an increase of 20 per cent., and those from the United States, including "domestic and foreign," were, in 1875, \$510,947,422, and in 1899, \$1,275,486,641, an increase of 150 per cent.

The new discriminating stumpage dues on pulpwood are now in force in the Province of Quebec. They have been fixed and made effective by Order-in-Council, which has received the signature of the Lieutenant-Governor. No legislation in the matter will therefore be necessary. It is expected that the result of this action on the part of the Quebec-Government will be to largely increase the amount of capital invested there in the manufacture of pulp and paper, and the number of hands employed in the mills. The stumpage dues are increased from 40 cents to \$1.90 a cord, and there is a rebate of \$1.50 per cord upon all pulpwood manufactured in the province.

It is understood that the Dominion Minister of the Interior is urging upon his colleagues that under the act which was passed at the last session of Parliament giving the Government authority in that respect, regulations should be made by the Governor-General in Council for the purpose of providing proper safeguards for the health and well-being of working men employed upon public works. The act confers extensive powers upon the Government to make regulations respecting the medical treatment, sanitary inspection, and other matters relating to proper treatment of laboring men employed upon all railway and public works within the

legislative jurisdiction of the Federal Parliament. It is understood that a complete and carefully prepared set of regulations will be provided, and inspectors will be appointed for the purpose of seeing that the requirements of the regulations are properly carried out.

The Ontario Government have passed an Order-in-Council providing for the application of the manufacturing clause to all pulpwood cut on all Crown timber lands. The change goes into effect on May 1st next, and regulations for the enforcement of the order are now being framed.

The Grand Trunk Railway has taken steps to encourage the manufacture of pulpwood and paper in the Province of Ontario. By an order recently issued to freight agents, the special reduced rates on pulpwood shipped to United States points have been withdrawn. These rates have proved a great benefit to American paper manufacturers on the Niagara frontier, but the mills there will pay full freight rates on their pulpwood in future. The low rates continue in force as far as they affect shipments to local points.

Mr. F. H. Clergue, of the Lake Superior Power Company at Sault Ste. Marie, Ont., answering an enquiry on the subject, informs us that large works for the manufacture of calcium carbide are under construction at the American "Soo" which will be in operation in about a year. There are no carbide works projected on the Canadian side. The Canadian Electro-Chemical Company are erecting works on the Canadian side for the electrolytic production of caustic soda and bleaching powder. The Sault Ste. Marie Pulp and Paper Company are erecting a sulphite pulp mill, and the Lake Superior Power Company are erecting reduction and refining works for the treatment of copper, nickel and gold ores; and they also have under construction a plant for the production of ferro-nickel alloy for armor plates.

We beg to direct the attention of Hon. Mr. Ross, Premier of Ontario, to the fact that beet sugar produced in Illinois and Michigan is being sold at wholesale in Chicago in quantities large enough to make it a factor in the market. That it is now and will henceforth, be a commercial quantity to be reckoned with as seriously as any other item in the grocery list is conceded by all of the best posted sugar experts. The actual output of the Illinois and Michigan factories was about 34,000 tons last year, and it would have been much greater except for the serious drought in Michigan. Profits are reported to be good, and many new factories will be started in the Middle West, and will be made ready for next season's crop of beets. If this can be done in soil and climate identical with Ontario, why not diversify the farming and manufacturing industries in this province by the cultivation of the sugar beet and the manufacture of beet sugar?

Bradstreet's annual report of business failures in Canada and Newfoundland during the year 1899 show the good effects of the return of prosperity. The total number of failures, 1,306, was smaller than for a number of years previous. In 1898 the total number was 1,470; in 1897, 1,925; in 1896, 2,204. The total assets in 1899 were \$4,536,058; in 1898, \$4,230,065; in 1897, \$5,222,897; in 1896, \$6,793,057. The total liabilities in 1899 were \$11,009,491; in 1898,

\$10,062,140; in 1897, \$13,249,979; in 1896, \$16,450,456. The report shows that of last year's failures 124 were due to incompetence, 36 to inexperience, 959 to lack of capital, 11 to unwise credits, 5 to failures of others, 5 to extravagance, 31 to neglect, 17 to competition, 59 to specific conditions, 5 to speculation, and 54 to fraud.

The paper industry of this country is not in the least degree dependent upon Canadian spruce, nor will it be for many years to come, if ever.—The Paper Mill.

For one who claims that he is not hurt our respected and esteemed contemporary keeps in a mighty loud squealing.

LITERARY NOTES.

Mr. James M. Swank, General Manager of the American Iron and Steel Association, has just completed a thorough revision of the Association Directory to the Iron and Steel Works of the United States, bringing down to April, 1898, a description of these works. This edition constitutes a cloth-bound volume of nearly 400 well-printed pages—many more than in any previous editions—and it also contains a list of the iron and steel works in Canada and Mexico. These lists are complete and reliable down to date indicated. There are no advertisements in the book. As this work is the only one of the kind published, and as no manufacturer or merchant in Canada interested in the iron or steel industry can do without the names and addresses of the concerns who manufacture such articles, they should become possessed of this Directory. For further information address Mr. James M. Swank, 201 South Fourth Street, Philadelphia, Penn.

"The First Night of a Play," "Through the Slums with Mrs. Ballington Booth," "What it Means to be a Librarian," and "The Pew and the Man in It," by Iar. MacLaren, are among the notable features of the February Ladies' Home Journal. An American Mother answers conclusively, "Have Women Robbed Men of their Religion?" and there is an interesting article on Mlle. Chaminade, the famous composer and pianist. Molly Donahue discusses woman's rights with Mr. Dooley. The pictorial feature, "In Honor of St. Valentine," will recall some happy, by-gone days. The Curtis Publishing Company, Philadelphia. One dollar a year.

The Methodist Magazine for February. Sir John Bourinot's papers on "Canada During the Victorian Era" grow in interest. The historic portraits and other illustrations are of unique value. Dr. Blackstock's "Picturesque Spain" is also beautifully illustrated, as well as the Editor's stirring story on "The Redemption of Fiji." In lighter vein are the clever serial story, "Your Little Brother James," a humorous sketch, "The New Organ," and a Twentieth Century Fund Story, "A Costly Contribution." The new British Imperialism, which is welding the empire into one, is expressed in a stirring paper by Alleyne Ireland—one that makes our patriotic pulses thrill. This oldest Canadian monthly is putting on fresh vigor with its fifty-first volume, and is having largely increased subscription lists. Toronto: William Briggs. \$2 a year.

The January issue of Feilden's Magazine commences a new volume. It is as it claims to be, the world's record of industrial progress, and leading technical experts of world-wide reputation contribute to it special articles of profound interest. The illustrations are numerous and of excellent character, giving the readers an accurate idea of the progress that is being made in the mechanical and scientific world. It is perhaps the cheapest six-penny worth of magazine literature in the market. Published by Feilden's Magazine, Temple Chambers, Embankment, London, E.C., England. Subscription 12s. 6d. per year.

Outing for February is a magician's wand that transports its readers out of their environment through the gates of Enchantment to far off lands and pleasant pastimes. The South naturally claims a preponderance of space, for there the opportunities of outdoor life are in no way restricted by climatic conditions. There is fishing for the mighty Silver King, the Tarpon in Aransas Pass, off the Texas Coast. Yachting in the dreamy waters below New Orleans, from the pen of the Secretary of the Southern Yacht Club. "A Northern Girl's Huntin' of a Gaitah," from the pen and pencil of the gifted daughter of Senator Quay. There is "Wildcat Hunting in West Virginia," and the Skipper of the "Dragon" tells how he piloted her through inland waters to the South. Foreign lands yield "A Lion Hunt in Somali Land" and "The Banks of the Zuyder Zee," each beautifully illustrated.

inches and upwards in diameter. The wood is required for cutting veneers, and quotations must be at a very low figure.

132. A Paris house ask to be placed in touch with large exporters from Canada of spruce wood and yellow pine.

133. A metal and mineral broker at Swansea wishes to correspond with firms in the Dominion desiring representation in that city. He is prepared to accept agencies for goods suitable to the local market, and is in a position to place minerals and look after sellers' interest in weighing and sampling.

GAS ENGINES WANTED IN GREECE.

There is a good demand for gas engines in Greece. Hitherto Messrs. Tangey, of England, have had a good deal of this particular trade. There is a really capital opening for engines of this description, as the gas company at Athens and Piræus is taking a very low price for gas used for motive power. There is, further, a good opening for mining machinery. British speculators have followed the example of various French companies and are developing the mineral resources of the country. Among the articles that exporters could supply are the following: Pit cages, pulley belting, mine hammers, portable lamps, safety fuses and caps. It would be best for any firm wishing to compete to send a smart representative who could see the kind of tools and machinery to which the Greek miner is accustomed, and could then adapt the supply to local requirements.

WIND ENGINES WANTED IN GREECE.

Makers of windmills will be interested in knowing that there is a chance of doing business in Greece. Mr. Edward Hogg, at Athens, would probably be open to enter into correspondence with responsible makers of windmills. Many of the land proprietors in Greece would be willing to consider the question of erecting a windmill on their land if the matter were properly represented to them. A mill that will work either in a light or strong wind is needed, and would be made more salable if it could perform various other services in addition to drawing water, such as grinding corn, etc.

WIRE GAUZE IN SYRIA.

Wire gauze is now coming into demand; the kinds suitable for making sieves and window-blinds being chiefly required. Trellises for fences, aviaries, etc., are also sure of sale.—Belgian Consulate at Aleppo.

WOOD-WORKING MACHINERY IN ROUMANIA.

One has been so long accustomed to look upon Roumania as a land producing nothing but wheat, maize and petroleum—that its industrial development has been almost entirely overlooked. Perhaps no section of its manufactures makes such progress or prosperous development as does its wood-working industry. Gradually a number of factories have worked themselves into prominence. Most noticeable among these are perhaps the bent wood furniture works, twelve of which are now in full swing. Besides these other forms of furniture are strongly represented. Household and kitchen furniture as well as wooden articles needed in agricultural pursuits, and other forms of turnery, favorably compare with the articles hitherto imported from Western Europe. As this industry is in a flourishing condition, it is strange that it has been overlooked by the makers of our excellent wood-working machinery, who have left the entire field to Germany.—The Manufacturer.

HARVESTING MACHINERY IN URUGUAY.

Almost all the combined string-binders and mowing machines are of American origin, excepting the English "Hornshy" make which competes with them. It is hard to say which is the best of the "McCormick," "Deering," "Buckeye," "Toronto," or other makes imported here, all of them being in practical use. These machines cost from 130 to 140

piastres put down here, and are sold at from 180 to 195 piastres apiece.—French Official Report from Montevideo.

AUTOMOBILES IN JAVA.

This is the very finest kind of a country for automobiles, as the roads are good, and, owing to the bad climate, the wear and tear on horseflesh is very great. At present there are only two in the island—of what make I do not know. I am convinced that it would pay to introduce them. Power is cheap here, as water is abundant and fuel and labor reasonable in price.—United States Consul at Batavia.

MUST BE BY METRIC SYSTEM.

It should be borne in mind that scales imported into the Ottoman Empire must be marked on the metric system. All scales, etc., marked with the old weights and measures (cbs, etc.), are confiscated by the Customs.—French Consul-General at Beyrout.

WHISKY IN THE MAURITIUS.

The cognacs and brandies sold here have been entirely replaced by whisky, which, although almost unknown ten years ago, is now sold in the proportion of nine-tenths of the whole trade in spirits. These whiskies are quoted at rates which would not allow of their being sold in Europe at more than 6s. to 8s. per case of 12 bottles, f.o.b. port of shipment.—French Chamber of Commerce at Port Louis.

THAWING MACHINES IN THE KLONDIKE.

The thawing machine has proved a great labor-saving device, and is much more economical than the old method, burning far less wood. The thawing machines so far consist of a boiler of, say 10 h.p., a small engine, and piping. There will be a demand for all brought in.—United States Consul at Dawson City.

IRON GOODS WANTED IN MEXICO.

The New York Journal of Commerce states that the enquiries from Mexico for manufactured iron material show that the demand in this branch will be extensive early in the year, especially for wrought-iron pipe, galvanized corrugated sheets and other structural iron material, mining machinery, and machine-shop tools.

COOKING-STOVES IN SYRIA.

The report of the Austro-Hungarian Consul at Aleppo states that petroleum cooking-stoves are gaining ground in that district, especially as petroleum is, relatively speaking, much cheaper than charcoal. Such stoves have a good future before them in Syria. They are at present supplied almost exclusively by Germany.

A NEW USE FOR DRIED APPLES.

With characteristic ingenuity the French are using the dried apples imported from America for the production of a new beverage called "Piquette," some consignments of which have, we believe, been sent to this country. It closely resembles cider, having the same sparkling appearance and lightness, but it can be distinguished from cider by its peculiar flavor of baked or partly burnt apples. The process of manufacture is described as follows. 5 lbs. of raisins, 5 lbs. of dried sliced apples, and 5 gallons of water, are placed in an open cask and let stand for three days, after which the liquor is bottled with half a teaspoonful of sugar and a pinch of cinnamon in each bottle. In France the beverage thus produced is sold at two sous a glass. It appears to be a wholesome drink, which might be made in England from Colonial apples, for exportation to the tropics.—British Trade Journal.

Canadian fruit-growers and fruit-canners should investigate.

FLANNELS IN JAPAN.

English flannel manufacturers will be gratified by a recent report from Japan, which points out that their flannel has at last begun to regain the position it formerly occupied in the Japanese market. A few years ago the German-made fabric, which was cheap and in catching designs, took almost the entire trade from this country. Now, however, that the Japanese have had a few years' experience of the German article, they find that it wears out very quickly, is not pleasant to the touch, and has other disadvantages, the result being that it is patronized only by a few, and, though the volume of German trade in the article is still greater than the English, the proportions are being gradually changed in favor of the latter, the percentage of English flannel imports having risen since 1896 from 10.1 to 38.3 per cent.—British Trade Journal.

This is an opening that Canadian woolen manufacturers should investigate. They should enjoy a liberal portion of this Japan trade.

STEAM MACHINERY WANTED IN GUADELOUPE.

The United States Consul at Guadeloupe reports that he has been asked for information regarding steam boilers, engines, accessories, etc., for the largest machine shop in the place which is connected with the steamboat line of the island.

The manager particularly desires information regarding portable steam boilers, mounted on wheels; marine engines for small steamers; marine boilers; steam and safety valves; lubricators; steam and vacuum gauges; ordinary steam pumps; ordinary pumps; steam fire engines, small; centrifugal pumps; horse-power rigs, with and without shafting or other gear for transmitting power.

In every case illustrated catalogues, in French, if possible, are desired, and the following information: Weights, net and boxed or packed for shipment; dimensions; price f.o.b. Exterior elegance and beauty of appearance are not so much desired as solidity, efficacy and cheapness. Honest workmanship, good materials, absence of useless and expensive adornment and low prices are imperative.

LEATHER GOODS IN BELGIUM.

While American boots and shoes have won their way into all civilized countries of the world, and our leather has been universally recognized as excellent wherever it has made its appearance, it is a remarkable fact that our small leather ware has not yet met that recognition which it so manifestly deserves. And yet, the field which presents itself to the enterprising manufacturer is one which is worthy of all attention. Even a small country such as Belgium imported in 1898 over \$800,000 worth of these articles. The countries which contributed this vast importation were Germany, Austria,

France and the United Kingdom. Such things as our traveling-bags, pocket books, purses, and such like, have been acclaimed wherever seen, for their elegance of appearance, their workmanship, their happy combination of durability with lightness. The greatest opportunity presents itself in our high-class goods.—The Manufacturer.

PRINTING PAPER FOR ITALY.

In spite of the high development which has been attained by the Italian paper industry, the sum of over \$2,000,000 was spent last year in purchases from abroad. The leading contributors were Germany, Austria and France. Whilst in the finest qualities of writing paper Italy has acquired a reputation leading to considerable exports, the demand for cheap classes of news paper is steadily increasing, and will have to be obtained to a large extent from abroad. The quality of the paper consumed by the Italian dailies is far inferior in texture to the most common material used in the United States and Canada. This is only possible owing to the total disuse of fine type and high-class illustrative work. The wholesale paper trade centres chiefly in Milan, Genoa, Turin, Florence and Naples, in any of which places connections could be established.

VINE SHEARS IN PORTUGAL.

Whilst port wine is justly celebrated all over the world, relatively few people are aware of the fact that in proportion to its area Portugal is one of the most important wine-producing countries of Europe. It may be said that the cultivation of the vine and the manufactures of its products form the chief source of the country's welfare. The iron industry is undeveloped, and the country is dependent in this line upon importation from abroad. One of the articles which gives rise to a most extensive trade is the shear used in the vineyards. Hitherto these shears have been procured exclusively from Sheffield, England, and Solingen, Germany.

SELL PLOWS IN GREECE.

There is a good opening for agricultural implements in Greece, as the native made goods are too expensive, one of the items, viz, wood, being very costly, while the manufacturers have not the facilities for turning out quantities of goods at a cheap rate. The Greek plows are made entirely of iron and steel, handles included. Curiously enough, there is a high duty on iron, but farm implements are admitted duty free; and it is generally cheaper to buy a foreign plow than to have one made in Greece. The Oliver plow has given very general satisfaction to the committee appointed by the Greek government in connection with the agricultural station near Athens.

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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 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, and drying apparatus; pumps, valves, packing, dynamos, motors, wire, arc and incandescent lamps, and an infinite variety of electrical supplies, chemicals, acids, alkalies, etc. It is well worth the while of every reader of the Canadian Manufacturer to closely inspect all items under the head of Captains of Industry.

The Turner Lumber Co., has been incorporated with a capital stock of \$10,000 with head office at Midland, Ont., to operate saw mills and do a general lumbering business. C. A. Turner, D. J. Turner, and Joseph Turner, are provisional directors. Another result of Premier Ross' policy. The parties are from Bay City, Mich.

The Laurentide Pulp Co., whose extensive works are at Grand Mere, Que., informs us that their mills are now turning out per day, forty tons of newspaper, twenty-five tons, cardboard, sixty tons of sulphite or chemical pulp, and 100 tons of ground wood or mechanical pulp, in addition to which they operate a saw mill with annual capacity of 30,000,000 feet of lumber. This is the concern of which Sir Wm. C. VanHorne is president; R. B. Angus, of Montreal, vice-president; and Russell A. Alger, jr., secretary-treasurer.

The Montreal Rolling Mills Co., recently purchased a high speed "Ideal" engine from The Goldie & McCulloch Co. of Galt, Ont.

The Dominion Government has undertaken the improvement of St. Andrew's Rapids in the Red River of the North, in Manitoba, to facilitate the navigation of that river. These rapids obstruct the river about eighteen miles from its outlet into Lake Winnipeg. They are about eight miles in extent, and are the only serious obstruction to navigation between the international boundary and the lake. It is proposed to construct a system of dams and locks, with a lift of about eighteen feet. The estimated

cost of the work is \$700,000 to \$800,000. An appropriation of \$150,000 has been made and is now available. The necessary surveying has been done and plans and specifications are now being prepared. A call for tenders for the construction will soon be made, and it is expected to have the work under way in the early spring.

The Depew Mfg. Co., is an American concern who manufacture agricultural implements at Depew, near Buffalo, N.Y. They propose to establish a branch works in Canada, and the town of Dunnville, Ont., is endeavoring to have them locate there, and are offering free land, free water, and exemption from taxation for a term of years. It is proposed that the Canadian works will give employment to about 300 hands.

A company is being formed to carry on the oil-boring business at Gaspé Basin, Que., in place of the old company--the Petroleum Oil Trust Company. The name of the new enterprise is the Canadian Petroleum Company, and it has commenced business on a very large scale. The managers have laid a pipe line for a distance of about twelve miles and have had landed all the material for building and equipping an oil refinery, which they intend putting up in the spring. They are now engaged in building several large oil tanks, some of iron and some of wood. This company has four wells under way, and it intends to drill ten or fifteen more during the current year.

The town council of Morrisburgh have obtained a lease from the Government for twenty-five years of 250 horse water power,

to be used for the development of electric power for manufacturing industries, furnishing light for streets, houses, etc. This development will cost about \$30,000, as per estimate of hydraulic engineer in charge. This power can and will be materially increased as necessities may require. The council is using every means to get manufacturers to establish here, offering free water, light taxes, and a bonus.

Messrs. J. & T. Charlton, Tonawanda, N.Y., have bought the Christy, Korr & Co. mill, at Collingwood, Ont., and will immediately put in new and up-to-date machinery. They intend to be ready for this season's cut, and will employ 150 men all season. This mill has been out of commission for a long time.

It is announced that the McCormack Co. of Chicago, the well-known builders of agricultural machinery, have purchased the factory and premises of the John Abell Engine Co., Toronto, and will go extensively into the manufacture of these special lines. The premises front on Queen and Abell streets and there are excellent switching facilities.

The North River Lumber and Pulp Co., Valmorin, Que., will apply for incorporation with a capital stock of \$50,000, to manufacture timber, pulp wood, lumber, paper, etc.

The Canadian Tanners' Glue Co., Quebec, Que., will apply for incorporation with a capital stock of \$300,000 to manufacture glue, glue stock, etc.

The Letang Hardware Co., Montreal, will apply for incorporation with a capital stock of \$99,900.

The Electric Fire Proofing Co., Montreal, will apply for incorporation with a capital stock of \$300,000 to manufacture fire-proof materials, etc.

The Paisley Pork Packing Co., Paisley, Ont., has been incorporated with a capital stock of \$8,000, to deal in a general packing business.

The Southern Ontario Peat Co., Brantford, Ont., has been incorporated with a capital stock of \$100,000, to manufacture peat, aluminum, etc.

The town of Dartmouth, N.S., will establish an electric light system to cost \$40,000.

Port Hope, Ont., will ask permission to spend \$20,000 on its water service.

The Stuart Machinery Co., Winnipeg, Man., will erect a large new warehouse.

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.C. RAT PORTAGE, ONT. HALIFAX, N.S.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

The Stratford, Ont., council will call for tenders for sewer construction, granolithic walks and macadam roads.

The Ontario Starch Co., Kingston, Ont., has been incorporated with a capital stock of \$200,000 to manufacture starch.

The Searle Varnish Works, Brantford, Ont., was partly destroyed by fire January 23rd. Loss about \$200.

A few days ago the new works of the Abbott-Mitchell Iron and Steel Co., at Belleville, Ont., were put into operation, the occasion being marked by festivities and congratulatory speeches. A large number of prominent citizens were present, among them Sir Mackenzie Bowell, Harry Corby, Esq., M.P., W. J. Hurley, Esq., M.P., Mayor Johnson, the members of the City Council, and many others. The works were put in operation and the first iron was rolled. After the visitors had viewed the operation of the different machinery an adjournment was made to the storehouse, where refreshments were served. Mayor Johnson congratulated the company on their splendid establishment and excellent prospects, and Messrs. Abbott and Mitchell replied. Speeches were also made by Sir Mackenzie Bowell, Mr. J. Hurley, and other gentlemen, congratulating the company and the citizens of Belleville on the bright prospects.

The milling interests of the late W. W. Ogilvie, are to be consolidated as the W. W. Ogilvie Milling Company, which will be incorporated shortly. The president of the new company will be Mr. Albert E. Ogilvie, oldest son of the late Mr. Ogilvie. Mr. F. W. Thompson, General Manager of the Ogilvie Milling Company of Winnipeg, states that the capital of the new company will not be less than \$1,500,000. Included in the new corporation will be the Ogilvie Milling Company of Winnipeg, which up to this time has stood as a separate organization, though Mr. W. W. Ogilvie was the largest shareholder.

Mr. Alexander Roy, of Toronto, contemplates the establishment of a large plant at Toronto Junction for the manufacture of mining machinery, stamp mills, etc. His proposition is at the start to erect a building 100x50 feet to be equipped with most modern tools and appliances, at a cost of about \$10,000.

John Patterson, John Moodie, Wm. Southam, A. T. Wood, J. T. Glassco, J. H.

Tilden, John Milne, G. F. Tuckett, H. D. Witton, and J. W. Sutherland, of Hamilton; and J. A. Kammerer, of Toronto, have been incorporated as a mining and reduction company, to be known as the Nickel-Copper Company of Ontario, Limited, Hamilton, Ont., with an authorized capital of \$1,000,000.

James Douglas, of New York, and Benjamin A. C. Craig, W. M. Boulthbee, Herbert L. Dunn, and Donald C. Craig, of Toronto, have been incorporated as the Port Arthur Iron Company, Limited, with a share capital of \$20,000.

John Mann, D. B. Wood, W. D. Schultz, W. F. Cockshutt, and J. M. Shuttleworth, of Brantford, Ont., have been incorporated as the Southern Ontario Peat Company, Limited, with a share capital of \$100,000.

W. R. Mack, H. Turner, R. J. Pitts, John McIntyre, and associates, of Cornwall, Ont., have been incorporated as the Saint Lawrence Motor Company, Limited, with a share capital of \$25,000.

The Demerara Electric Company is the name of an organization that has been formed in Montreal, for the purpose of building an electric system in the city of Georgetown, Demerara. B. G. Frank Bros., of Montreal, are to superintend the construction. Fourteen miles of track are to be laid, and it is expected that the entire road will be in operation within eight months. All the requirements are yet to be bought.

The Beardmore Belting Co., Toronto, Ont., have sent us a very beautiful calendar for the year 1900. It contains some very useful information regarding the horse-power of leather belts, of both extra quality single and double, showing the necessary width of belt and speed in feet per minute with the resulting horse-power. The table gives the information that the transmitting power of "Standard" belting is about ten per cent. less than "Extra"; and that the power of light double belts is about seventeen per cent. more than "Extra Single."

A Burritt & Co., Mitchell, Ont., have installed an incandescent dynamo for lighting their mills, furnished by the United Electric Co., Toronto.

The directors of the Great Northern Railway recently met in Montreal with some American friends, and discussed the matter of an elevator at Quebec, which, when erected, will have a capacity of 1,000,000 bushels.

A deputation composed of Mayor Olivier, Alex. Houlston, and Thomas Bowmirel, of Three Rivers, were in Montreal recently, and had an interview with the directors of the Shawinigan Water and Power Company. Three Rivers believes that since the establishment of the Shawinigan Company power can be obtained cheaper than at any other place in the world, and the Three Rivers authorities have agreed to give free sites and to grant ten years' exemption from taxation to all manufacturers who locate at Three Rivers and use the company's power. It is confidently expected that under this liberal arrangement Three Rivers has a great future before her as an industrial centre, and the object of the deputation's visit was to take steps to secure the location of leading manufacturing concerns at Three Rivers.

Barnett & Record, the big elevator builders of Chicago, who have built some of the largest elevators in the States, have received the contract for the building of the mammoth steel elevator which the Connors Syndicate intends to erect at Montreal. Mr. Record is now in Montreal superintending the plans, and the work of construction will be commenced as soon as possible. The elevator will have a capacity of a million bushels of wheat, and will have two annexes capable of storing two million bushels. The steel will have to be imported from the United States, but the other material will be purchased in Canada, and Canadian labor will be used. The construction of the elevator will involve an expenditure of nearly a million dollars.

The Ontario Crown Lands Department has received a statement from an official in Rat Portage to the effect that the lumber season of 1899 has been at least twenty-five per cent. better than any previous year. During the season the amount of lumber cut in Northern Minnesota and floated down the Rainy River was 37,000,000 feet, and on the Canadian side 45,000,000 feet. All this was dressed in Rat Portage, and of the whole 82,000,000 feet, 77,000,000 have been disposed of.

The Norton Manufacturing Co., Hamilton, Ontario, the manufacturers, are soliciting orders from the trade for Bower's detachable picture frames, a patent advertising novelty very desirable for show cards, premium pictures, street car advertising, etc. It is very attractive and inexpensive, and is mailed in tubes or on safety cards. The device is patented in both Canada and the United States.

JOHN HANCOCK BLDG., BOSTON, November 6, 1899.

N. ENG. BRANCH CLING-SURFACE MFG. CO.

We have been using Cling-Surface for seven months and are now running our dynamo and other belts slack. We take pleasure in saying that Cling-Surface is giving the best satisfaction. JAMES STACKHOUSE, SR.

Cling-Surface Does These Four Things :

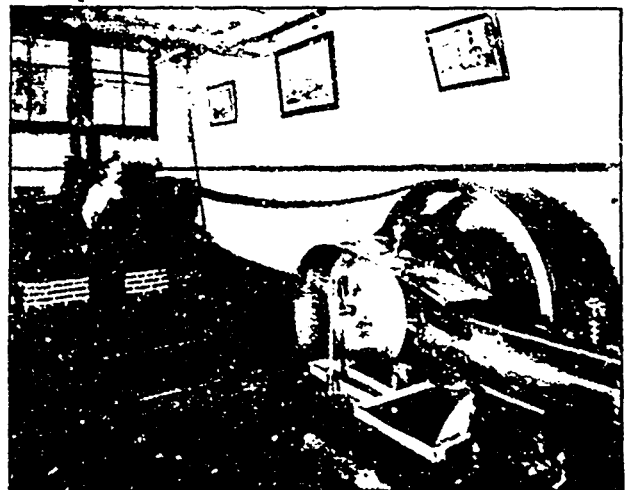
- 1.—STOPS SLIPPING.
- 2.—INCREASES POWER.
- 3.—RELIEVES INITIAL TENSION.
- 4.—PRESERVES THE BELT.

If it fails to do these you Pay Us Nothing.

CLING-SURFACE MFG. CO.

N. Eng and E. Can. Branch: 120-126 Virginia Street,
170 Summer St., Boston. BUFFALO, N.Y.

New York Branch: 253 Broadway. Chicago Branch: 225 Dearborn St.



When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

The town of Oshawa, Ont., will make application to the next Ontario Legislature to legalize by-laws recently passed to aid Smith & Co. in the erection of a canning and preserving factory by a money grant, and to grant \$50,000 by way of a loan to the McLaughlin Carriage Co. to re-establish their works there recently destroyed by fire.

A license has been issued by the Ontario Government by which the Pratt and Letchworth Company, a company incorporated under the laws of the State of New York, is authorized to carry on, within the Province of Ontario, the manufacture and sale of steel and steel-castings of every form; the manufacture of steel and malleable-iron and the products thereof and articles of every kind made of malleable-iron; the manufacture and sale of hames and saddlery-ware of all kinds and such other business of a manufacturing nature as shall be naturally incident thereto or connected therewith.

Scholey Brothers, Limited, of Toronto, has been incorporated with a capital stock of \$30,000 to manufacture lumber, building materials, mouldings, etc.

The Cobourg Woolen Mills, at Cobourg, Ont., were damaged by fire on January 24th, to the extent of about \$3,000. The flames were confined to the printing department. These mills are owned and operated by Messrs. Dick, Ridout & Co., Toronto.

The Compensating Pipe Organ Co. is a new addition to the manufacturing industries of Toronto. Its presence here is a distinct tribute to the policy of tariff protection that is doing so much in producing the "growing time" now so prevalent in Canada. The company are now occupying a temporary factory building 100x40 feet, five stories high on Niagara street, but as soon

as the season permits, will begin the construction of a more commodious factory on King street near Dufferin. The officers of the company are: President, David Carlyle; vice-presidents, Wm. M. Grey, J. A. McIntosh; manager and treasurer, W. McIntosh. The company is protected in the manufacture of this instrument by foundation patents.

The Massey-Harris Co., Toronto, have recently purchased the land fronting on King street, lying between their works and the subway railway bridge, formerly occupied by the Dominion Bridge Co. and later by the Graham Nail Works.

The furniture factory of R. S. Porteous at Stratford, Ont., was badly damaged by fire Jan. 15th, loss about \$5,000. It is expected that the works will be in operation again at an early day.

The capital stock of the Rat Portage, Ont., Hardware Co., has been increased from \$15,000 to \$25,000.

One of the largest belts for machinery that has ever been produced was recently finished by the Gutta Percha & Rubber Mfg. Company of Toronto. The belt was of rubber, and measured 3,529 feet in length, over two-thirds of a mile. Its weight was nine tons. This mammoth belt was made for the grain elevator of the Intercolonial Railway at St. John, N.B., and is now in use there. Another immense main drive belt, fifty-eight inches wide, and 338 feet long, with a weight of two and one-half tons, was recently completed for one of the Canadian Pacific Railway elevators at Fort William by the same company. Rubber belting has been proved to be much superior to any other kind for grain elevators, and with the erection of many new elevators in the near

future it is possible that many more belts of equal size will be required. That Canada should not only use but manufacture the largest belt of this kind in the world is an indication of the country's progress and the importance of the concern manufacturing it. That this is the growing time is shown by the fact that the Gutta Percha & Rubber Manufacturing Company has enlarged its factory to three times its original size during the past couple of years.

The Montreal Street Railway Co. have decided to obtain all their power from the Chambly Power Co.'s works in the Richelieu River as soon as they are sufficiently enlarged. As the Chambly Company is controlled by the Royal Electric, and as Mr. Rodolph Forget is president of the latter and Senator Forget is president of the Montreal Street Railway, this virtually means the amalgamation of those companies.

Engineer Barrow was occupied recently in ascertaining the cost of iron pipe during past years, in view of the probable purchase of pipe for the third main. He found that the cost has greatly varied. In 1874, when it was customary to buy by the hundred-weight, it was as high as \$54.60 a ton, while in 1897 the price was as low as \$25 a ton. In 1898 and 1899, \$27 a ton was paid, and on this basis the cost of the new main was computed. It is estimated that at least 3,200 tons will be required, which at \$27 a ton, as at first figured, would mean \$86,400. But the price will be \$34, and not \$27, and the cost will be, at least, \$108,800.—Hamilton Spectator.

The Goldie Milling Co., Highgate, Ont., have recently put in a Moffatt feed water heater made by the Goldie & McCulloch Co., Galt, Ont., who are the sole Canadian makers of this heater.

W. A. FLEMING & CO.

MILL SUPPLIES **CAMEL BRAND BELTING**
HOSE of all kinds
DRIVING ROPE
BELTING of all kinds



57 St. Francois-Xavier St., Montreal.

The Stratford Mill Building Co.,

STRATFORD, ONTARIO.

STEEL BOILERS—all Sizes,

THE BROWN AUTOMATIC ENGINE,

FLOUR MILL MACHINERY, CORN MILL MACHINERY

GRAIN CHOPPERS OF ALL KINDS.

Manufacturers
of....

We keep a Full Stock of Chain, Leather and Cotton Belting, Sprockets,
Pulleys and Iron Work of all kinds.

We have one of the Most Complete Boiler Plants in Canada.

Write for
Prices.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

A syndicate of Torontonians have applied to the Ontario Government for a pulpwood concession on the Montecal River, in the Temiscamingue district, upon which they propose to erect a mill for the manufacture of pulpwood, and will spend \$100,000 upon buildings and plant. Among those interested are Dr. Lynd, E. F. B. Johnston, W. C. Phillips, Robert Davies, Wm. Korr, Peter McArthur, John Grey, John Ferguson, all of Toronto, and W. R. White, Pembroke.

The Gyrator System of Flour Milling, manufactured by the Goldie & McCulloch Co., is meeting with great favor in the milling world. They have supplied this system to mills all over Canada from coast to coast and this month have shipped a car load of such machinery to the Farmers' Milling Co. at Fort Saskatchewan, N.W.T.

R. & W. Conroy of Deschenes, Que., have contracted with the E. B. Eddy Co., to deliver 2,000 horse-power to their mills at Hull, Que. The contract is for ten years, renewable after a further period if desired. The price per horse-power is \$15, making a \$30,000 a year contract. Conroy Bros. will

put up the necessary power house and other buildings at Deschenes. Mr. Eddy will use the power for running his pulp mills and other factories to which the power has to be delivered.

The Goldie & McCulloch Co., Galt, Ont., have just supplied a car load of machinery to the Hamilton Iron and Steel Co., Hamilton, Ont.

The ratepayers of Oshawa, Ont., have voted favorably on a by-law granting a loan of \$50,000 to the McLaughlin Carriage Co., for the purpose of assisting them in the re-erection of their factory, which was lately destroyed by fire. The vote was almost unanimous.

The Toronto Bedding Co., has been incorporated with a capital stock of \$15,000 to manufacture metal bedsteads, springs, bedding supplies, etc., and to do a general upholstering business. L. W. Manchec, W. S. Foster, and O. S. Foster, are provisional directors. This is an American concern and Canadian tariff policy is the cause of their coming.

The grain traffic of the Canada Atlantic Railway Company has increased to such proportions that the present elevator at Depot Harbor has been found to be inadequate, and the company has decided to erect a second one. The new elevator will have a capacity of a million and a half bushels, and will cost between \$250,000 and \$300,000.

The annual convention of the International Cannery Association of the United States and Canada, will be held in Detroit, Mich., on February 13th. It is probable the convention will be in session for about three days, and that a very large delegation of Canadian canners will be present.

The Government of New South Wales has offered a prize of £1,000 for the best competitive design submitted before August 1st for a bridge across Sydney harbor. The estimated cost of the bridge is £500,000.

William Purdy, James Lawson, Alexander Dunlop and associates, of Montreal, are applying for incorporation as the Canadian Food Supply Co., with a capital stock of \$50,000 to can and otherwise preserve meats, fruits and vegetables.



FOR Mechanically Drying Everything

THE F. D. CUMMER & SON CO.,

HUNDREDS IN OPERATION.

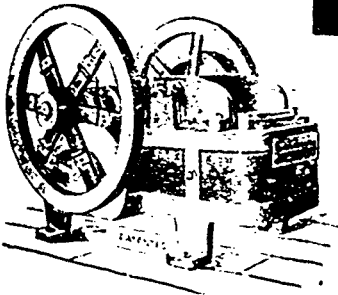
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FINE CRUSHER

FOR QUARTZ and ORES

DOES WORK OF CRUSHER AND ROLLS COMBINED.



ROLL JAW CRUSHER.

STURTEVANT MILL CO.

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BOSTON, MASS.

Shafting—Hangers—Pulleys

FRICITION 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 Dowd Milling Co. of Quyon, Que., are applying for incorporation with a capital stock of \$100,000 to do a general flour milling business.

The Shawinigan Falls Hotel Co., of Shawinigan Falls, Que., are applying for incorporation with a capital stock of \$25,000 to erect and operate a hotel at that place.

J. Oliver & Sons, Limited, Ottawa, have been incorporated with a capital stock of \$90,000, to manufacture furniture of all kinds.

Clarke & Clarke, Limited, Toronto, have been incorporated with a capital stock of \$100,000, to manufacture gloves, moccasins, etc.

The A. F. McLaren Imperial Cheese Co., Toronto, has been incorporated with a capital stock of \$100,000 to manufacture cheese.

The British American Furniture Co., Toronto, has been incorporated with a capital stock of \$3,000,000, to manufacture all kinds of furniture, etc.

Messrs. Ahearn & Soper, manufacturers of electrical machinery, etc., and Canadian agents for the Westinghouse Electrical Co., have sent us an exceedingly useful and handsome letter opener for desk use. It is just the sort of a convenience the busy man appreciates when his mail is piled high upon his desk.

The Goldie & McCulloch Co., Galt, Ont., have shipped an "Ideal" high speed engine to Sarnia, Ont., for the Canadian General Electric Co.

The Alice Specialty Mfg. Co., Toronto, have sent us a beautiful graduated desk ruler by which measurements may be taken for such articles of office furniture as vault fittings, Shannon filing cabinets, desks, etc., as are manufactured by this concern. Their extensive factory at Newmarket, Ont., has recently been completed, and they are now prepared to supply all demands for their lines of goods.

Messrs. Butterfield & Co., Rock Island, Que., manufacturers of stocks and dies, die plates, Reeve's screw plates, etc., have sent in their 1900 catalogue having reference to

these and other lines of tools made by them, and which include axle cutters, bit brace die holders, collets, counterbores, counter-sinks, cutter wheels, die holders, dies for all purposes, drills of all sizes for machine screw taps, gunner cutters, lath die holders, pipe cutters, pipe stocks, and dies, seamers, screw plates for all purposes, stocks and dies for all purposes, taps for all purposes, vises, wrenches, etc. Every line mentioned is nicely illustrated, showing the style of the article, and the trade prices are also given. The book is gotten up in excellent manner, and should be in the hands of every manufacturer, machine shop office and hardware stores.

The Canada Ladder Co., of Leamington, Ont., has been incorporated with a capital stock of \$10,000, to manufacture ladders, handles, etc., and to operate a planing mill and lumber business.

The Crown Clothing Co., Toronto, Ont., has been incorporated with a capital stock of \$40,000, to manufacture clothing, etc. The provisional directors are George Anderson, J. C. Thorn and W. J. Brandham.

BELTING
E Leather Belting,
L Lancashire Hair,
I English
T Card Clothing,
I
N **D. K. McLAREN**
 Head Office and Factory—
MONTREAL
G **OAK** **E**
WESTERN TRADE—TORONTO STOCK DEPOT,
 'Phone 374 **88 BAY STREET.**

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THE CANADIAN MANUFACTURER.

SEND FOR RATES.



HORIZONTAL
VERTICAL

IF YOUR COAL MAN SHOULD QUOTE YOU
A Confidential Price
 of ten per cent. below the market value, he would be pretty sure to get your order because
YOU ARE IN BUSINESS FOR PROFIT
 and that discount means profit.
 Yet there are thousands of manufacturers who are running power plants without a steam or oil separator when we can easily convince them they would be equally as profitable as the initial discount on coal bills.
 But leaving out altogether the question of fuel economy, the use of an Austin Separator for oil or live steam means a saving through the increased efficiency of the engine and the cleansing of your exhaust for boiler or other uses. We have recently brought out several new patterns covering the whole field of steam usage and are prepared to ship machines to responsible concerns in any part of the United States on 30 days' trial, paying freight both ways if our claims are not substantiated. Results are best arguments and we guarantee the most satisfactory service.
AUSTIN SEPARATOR CO.
 38-40 Woodbridge St. **DETROIT, MICH., U.S.A.**



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 Miners' Requirements.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

The Hull Boot and Shoe Company, Hull, Que., is applying for incorporation, with a capital stock of \$60,000, to manufacture footwear of all kinds.

The leather warehouse of F. C. McIndoe, Montreal, was destroyed by fire January 24. Loss about \$4,000.

The Port Arthur Iron Co., Toronto, Ont., has been incorporated with a capital stock of \$20,000, to carry on the business of a raiming, milling, reduction and developing company.

The Heinz pickle manufacturers of Pittsburg, Pa., have decided to locate a Canadian branch of their business in Toronto. They have tested the local crops of a couple of years, and have found the quality up to their requirements in all respects. Assessment Commissioner Fleming, who has just returned from a visit to their place in Pittsburg, says the firm have given instructions to their representative to lease a block of 400 acres for growing their stuff. They will also put up a building. Their intention is to serve the English as well as the Canadian market, from Toronto. Mr. Fleming found them greatly impressed with the idea that the prevailing English sentiment in favor of

Canada is going to help Canadian trade, and by coming here they will be able to take advantage of it. They ask no inducements from the city.

Mayor F. J. Ramsay, Ald. John Brown and John Corcoran, of Dunnville, Ont., were in Buffalo, N. Y., recently, and inspected the shops of the Depow Manufacturing Company. The company is anxious to establish a branch in Canada for the manufacture of agricultural implements. The Dunnville deputation was most favorably received, and it is thought probable that the branch establishment will be located at Dunnville. About 300 hands are to be employed.

The furniture factory of R. Porteous & Co., Stratford, Ont., was destroyed by fire January 15th. Loss about \$30,000.

Toronto capitalists, as well as a few Nova Scotians, have taken up the stock—\$750,000—of the Port Hood Coal Company, and bonds to the amount of \$750,000 have also been issued. The company, which owns sixteen miles of ores, quite near Port Hood, have the assurance of their engineers that the coal, amounting to 100,000,000 tons, is as good as the Sydney coal for steam and even better for domestic purposes. Work

will begin in the early spring, and shipping will be made from Port Hood, 100 miles nearer the St. Lawrence ports than Sydney.

The St. Lawrence Motor Co., Cornwall, Ont., has been incorporated with a capital stock of \$25,000, to manufacture marine motors, boats, launches, etc.

The corporation of Barrio, Ont., has been asked by the Barrio Tanning Co. to guarantee their debentures for \$30,000 to assist in remodelling their plant.

Messrs. Thompson, of Dugald, Man., will erect a large machine shop at that place.

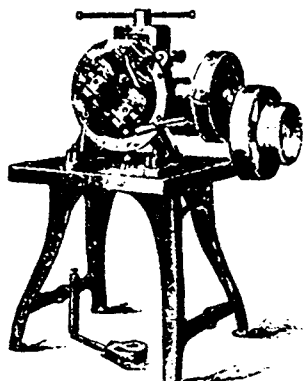
The governors of the School of Agriculture, Kingston, Ont., are moving for the establishment of a cold storage warehouse on their premises at a cost of \$25,000 for the plant.

D. Huntley will erect a large sawmill at Parrsboro, N.S.

The Merchant's Cotton Co. will erect a large addition to their factory at St. Henri, Que.

The Ottawa Paper Co., with head office at Ottawa, Ont., has been incorporated with a capital stock of \$40,000, to manufacture pulp, paper, etc.

THE BEST PIPE THREADING and CUTTING-OFF MACHINES



No. 60 Machine, Power Attachment.

ARE MADE BY THE ARMSTRONG MFG. CO. BRIDGEPORT, CONN.

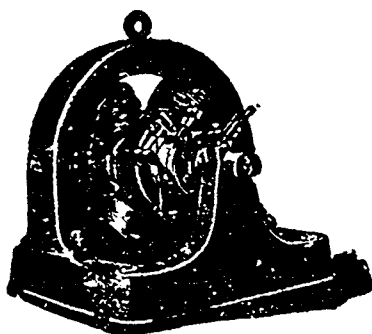
Also Manufacturers of a FULL LINE of **ADJUSTABLE STOCKS and DIES** And **WATER, GAS and STEAM FITTERS' TOOLS.**

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Factory: BRIDGEPORT, CONN.

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Toronto and Hamilton ELECTRIC CO.



Motors and Dynamos COMMUTATORS REFILLED.

99-103 McNab St. N., Hamilton 'Phone 958.

RICE LEWIS & SON, LIMITED

HARDWARE and METAL

Bar Iron, Steel, Boiler Plate Tubes.

MACHINIST TOOLS, PIPE FITTINGS.

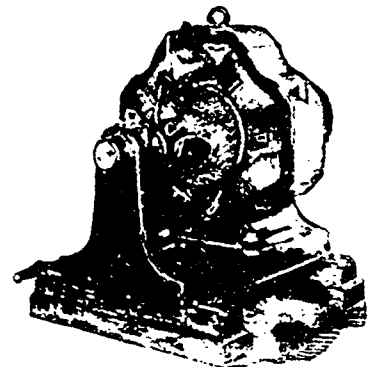
STOCKS and DIES. PIPE VICES.

STILLSON & TRIMO WRENCHES.

STEAM PIPE.

Cor. King and Victoria, TORONTO

THE Electrical Construction Co. of London, Limited.



MULTIPOLAR MOTORS & DYNAMOS

And Direct Connected Plants for Isolated Lighting. Repair Work a Specialty.

HEAD OFFICE and FACTORY: No. 90 YORK STREET, London, Canada. 760 Main St. Winnipeg. 12 York St., Toronto. 134 Cranville St., Halifax.

A new industry which will greatly benefit Walkerville, Ont., is fast reaching its completion. Large and adequate buildings are in course of construction, and the finest machinery is already on the way from Sweden for the manufacture of matches. The owners expect to offer their product to the trade about March 1st, and are independent of the trust.

Toronto manufacturers are feeling the pinch of the scarcity of all kinds of steam coal. The famine has existed since September last, but the circumstances were not as noticeable until after Christmas. The generally prosperous conditions of business have attracted coal miners to other occupations, and the operators have had to face a scarcity of men, following the serious trouble

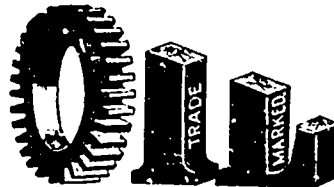
over scarcity of cars. Within a few weeks the price of coal from the Pennsylvania mines has more than doubled at the pit's mouth. Dealers have for some time had troubles of their own in supplying coal to fill their contracts in Toronto, but now the difficulty promises to assume large proportions. One large city firm is said to be ten thousand tons behind in its orders.

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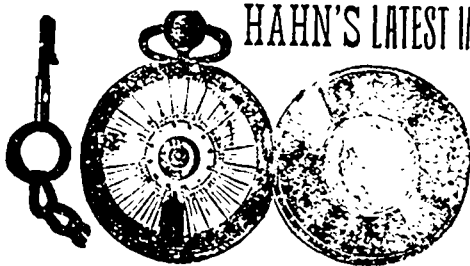
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DEPRECIATION IN MACHINERY.

In fixing the amount set aside for depreciation, we are at once met with a bono of contention. Shall the fixed amount be deducted yearly from the original or depreciated value? In other words, shall the life of the machine be taken as the period during which its cost shall be provided for, or shall there be at the expiration of that time a residual value which is equivalent to an extended life? It is quite certain that every

machine which is replaced has some residual value. The material of which it is composed is worth something, and to that extent the absolute wiping out of its value in a given period is unjust. Generally speaking, however, the amount is not large and may, in any case, be allowed for in making the calculation of the yearly allowance.

It may be fairly argued that the plan of deducting equal yearly instalments tells very heavily when the machine is worn and is less

effective, while the deduction of a diminishing yearly sum depreciates sufficiently at the beginning, when the machine is at its best, and less after its working value is decreased. While this is true, it is purely a matter of account; and it is permissible to adopt the plan named only when the residual value at the expiration of the fixed period is only equal to that of the material.

For instance, if a machine be valued at £100, and is depreciated at 5 per cent. per

John R. Barber, President.

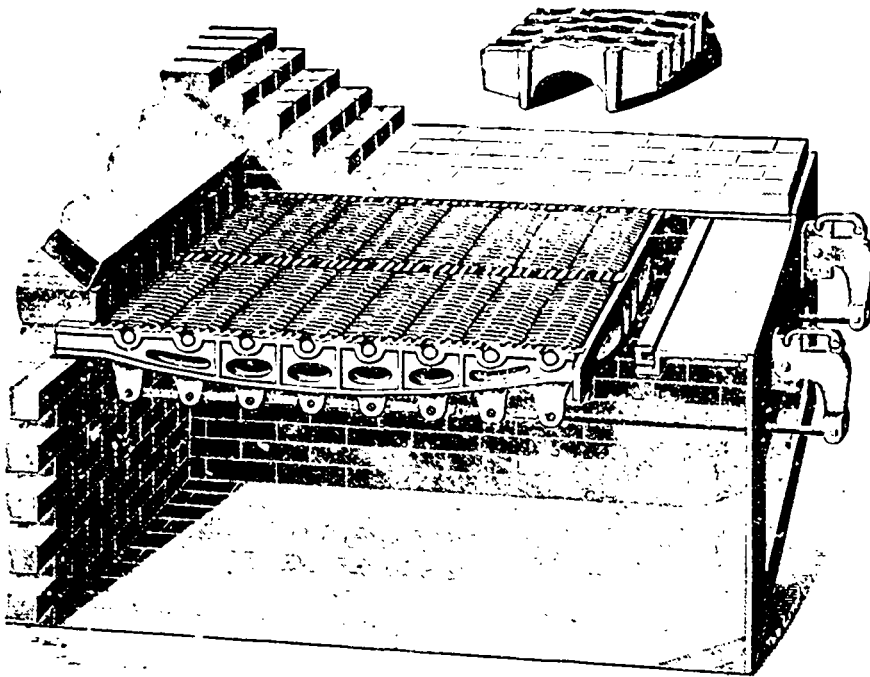
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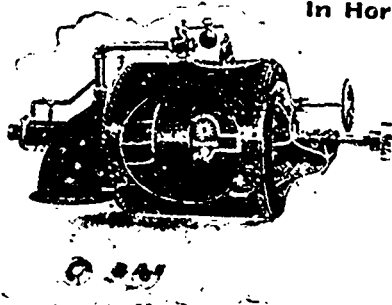
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annum on that amount, then, at the end of twenty years the cost is wiped out. If now the percentage be deducted only from the diminished value annually, then at the end of the time named there will be still 36 per cent. of the original value remaining. Now, it is obvious that no machine is worth at the expiration of such a term 36 per cent. of its original value, so that the method of computation named is of no value. If, therefore, the allowance is to be deducted from the depreciated amount yearly, then the rate must be higher at the beginning of the term than at any later period, and must, indeed, be on a diminishing scale throughout the whole period, in order to reduce the value to its proper level. On the whole, it is better and simpler, considering the purpose of depreciation, to deduct annually a fixed sum from the original cost, so that there may be some period when the account will close.—*Cassier's Magazine.*

APPLICATIONS TO THE ONTARIO LEGISLATURE.

The following applications have been made to the Ontario Legislature for the purposes indicated:—

The village of Tottenham, Ont., to assist James Steele, of Montreal, in building and equipping a furniture factory by a loan of \$15,000 cash, debentures \$16,000, and exemption from taxation for ten years.

The town of Dunnville, Ont., to assist F. R. Lalor, in the construction of a canning factory by a loan of \$10,000.

The town of Harriston, Ont., for authority to guarantee the bond of the Harriston Pork Packing Co., to the amount of \$20,000, and to pay for the site of the factory and yards of said company.

The town of Goderich, Ont., to grant aid to F. G. Rumball, successor to the Kensington Furniture Co., to the amount of \$10,000.

To increase the capital stock of the Nickel-Copper Co., of Hamilton, Ont., to \$10,000,000.

The town of Lindsay, Ont., to validate a by-law granting the Lindsay Water Works Co., \$75,000 for their property, rights and privileges.

Permission has been granted to the Canada Corundum Company, to increase its share capital from \$250,000 to \$1,500,000.

A SUBSTITUTE FOR RUBBER.

Velvril is the name by which a new substitute for rubber and gutta percha is to be known. It is to be used largely for deep-sea cable insulation to take the place of rubber. The desirability of such a substitute being found is seen in the fact that one cable recently laid required over 500 tons of rubber, or one-fifth the annual output, for its insulation. The insulator is a mixture of nitrated linseed or castor oil with nitro-cellulose. This gives a homogeneous mass, the elastic and other properties of which can be modified by changes in the proportions of the constituents. A good imitation of Para rubber is secured by mixing two pints of nitrated oil with one pint of nitro-cellulose. Castor oil yields better results than linseed oil. The elasticity of the product is twenty-five per cent. It is said to be more durable than rubber, and it can be moulded under heat and pressure, or worked by dissolving in any suitable solvent, and then evaporating the solvent. Velvril is claimed to be superior to vulcanized rubber in that it is without action on copper. It appears to possess many advantages, but satisfactory information as to its cost of production is not yet forthcoming. The purposes for which

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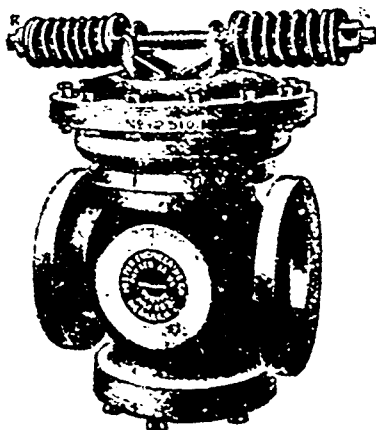
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it is expected to be specially adapted for machine belting, the manufacture of portmanteaus, camping-out sheets, loin cloths for horses, balloon materials, hose and tubing, carding, wire foundations for spinning rollers, floor coverings, paints, enamelled leather, and fishing lines. It is non-explosive and not more inflammable than other kindred organic products.

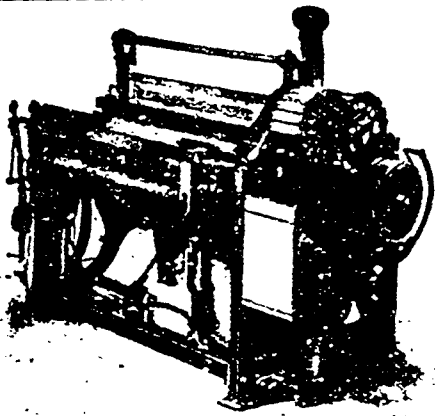
FRENCH RIVER NAVIGATION.

In connection with the proposed opening up of French River to North Bay so as to allow the Canadian Pacific Railway to carry by boat western Canadian grain from Fort William to North Bay, Mr. Tarte, the Minister of Public Works, said a few days ago: "I have been giving my attention to this matter for several months, so much so that

I will ask my colleagues to allow me to place in the estimates a pretty large amount of money to improve the French River from its mouth on Georgian Bay to Lake Nipissing. The distance is about fifty miles. It is already a navigable river, and we will only have to improve parts of it to make it a first-class waterway for ships drawing eighteen feet. We will require to build dams and a couple of locks, and the balance of the work will be dredging. Just look at the facts," continued the Minister of Public Works. "Up to this day the Canadian Pacific Railway has carried our Canadian wheat to Fort William, where it has been left to its fate, or, in other words, has been taken by American barges to Buffalo. Out of ten bushels of Canadian grain I do not think I am exaggerating in saying that nine have gone to American ports. All that will be changed

by the project we have now on hand. The distance from Fort William to North Bay is 650 miles. From North Bay to Montreal it is 360 miles. The Canadian Pacific will undertake to carry with a fleet of their own our Canadian grain from Fort William to North Bay, where it will be transhipped to Canadian Pacific cars, en route to Montreal. In other words, the Canadian Pacific will do what the Canada Atlantic Railway is now doing for Parry Sound. If this enterprise is carried out, as I have no doubt it will be, it will bring twenty-five million or thirty million bushels of Canadian grain to the St. Lawrence route and the port of Montreal."

The Paisley, Ont., Pork Packing Company, Limited, has been organized with a share capital of \$8,000.



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RAPID WORK IN BRITISH RAILWAY SHOPS.

An instance of how rapidly English manufacturers can work when occasion requires, is the recent order for narrow gauge railway material placed with Kerr, Stuart & Co., of London, for immediate shipment to South Africa.

The order included two locomotives, five miles of railway, one mile of curved railway, thirty sets of points and crossings, twenty-four ballast cars, each to carry 2½ tons; fifteen eight-wheeled bogie cars, each to carry guns and gun carriages weighing six tons; and two special bogie brake cars. All were of special design. The time for the work was fixed at ten working days, and the order was telephoned to the works at Stoke-on-Trent on November 18th. A small portion

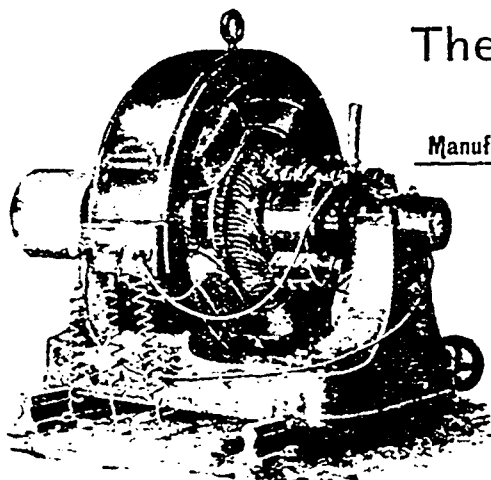
only of the material required for the purpose of the order was in stock at the works, with the exception of the locomotives. These had been put down in the erecting shop on November 15th and were intended for the Egyptian government. They would have been finished in the ordinary course in four or five weeks from that date. The extreme urgency, however, demanded that every effort should be used, and they were completed and tested in steam before the Inspector of Iron Structures and two other inspectors from the War Office within three days from order.

Five miles of railway with steel sleepers, two locomotives, and twenty-four ballast cars, with steel underframes and drop sides, were manufactured, painted, packed and loaded into trucks at the works of Messrs Kerr, Stuart & Co., on November 22nd, the time occupied being from Saturday to Wednesday, inclusive, or four working days.

AN ALCOHOL MOTOR.

Another claimant for popular favor among the various kinds of motive power suitable for automobiles is an alcohol motor, which is said to be popular in Russia. Says the Philadelphia Evening Telegraph:—

“Heavy trucks carrying loads of four and five tons are in large use in St. Petersburg and Moscow, with power derived from alcohol motors, and the Russians contend that as compared with products of petroleum this fuel, while giving as great power as any that have been used, has the advantages of cleanliness and absence of odor. Petroleum is the favorite fuel of Paris, another great automobile centre, though there is much complaint of the fumes accompanying its use. But its advantages are, so far, held to offset its drawbacks. It is cheap and it is easily applied; therefore it holds its own. It is contended by St. Petersburg, however, that alcohol by the Villon process can be produced even more cheaply, while it is a safer thing to handle than petroleum. In this country, we fancy, the question of expense cannot be dismissed as easily as it is in Russia, for unless radical changes are made in our internal revenue laws alcohol would here run up a heavier bill than coal oil. Crude ethyl alcohol could be made very cheaply here, perhaps as cheaply as the Russian, eight cents a gallon, if the law did not stand in the way; but under the law it costs over \$2 a gallon, which would appear to be prohibitive. But there is no telling what may be the outcome of this reform. At present, probably, electricity, in one or another of its applications, is the favorite fuel in America, but we are quite unprejudiced and stand ready to welcome anything that is found to be better.”



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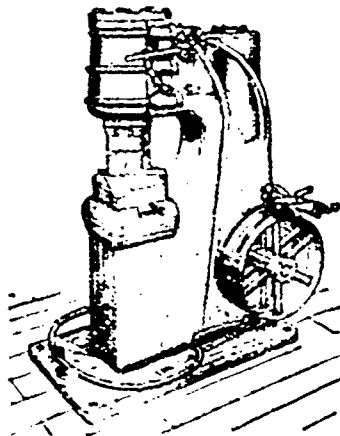
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Canadian Patent November 9, 1895.

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\$2.40 per dozen, \$20.00 per gross.

FOUR LIGHT CLUSTER—\$2.00 each. Larger sizes on application.

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Office and Works
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JUDGMENT IN SAW LOG CASE.

Following is a very comprehensive synopsis of the decision rendered by Judge Street of the High Court of Justice in Toronto, a few days ago, in the case of Smylie vs. the Queen in which certain American holders of rights to cut pine timber on Crown lands in Ontario considered themselves damaged by the restrictions placed upon them by

the Ontario Government. Judge Street said:—

The rights claimed by the supplicants had their origin in three licenses to cut timber upon certain public lands of the province, the first bearing date of April 10th, 1873, and the other two of October 2nd, 1888, issued by the Commissioner of Crown Lands for the Province of Ontario acting under authority of certain statutes and orders in-

Council. These licenses have been from time to time renewed by the Commissioner in the names of the persons who obtained them originally, or their transferees. After April 29th, 1898, the supplicants applied to the Commissioner for a renewal for the year 1898-9 of their licenses without the insertion of the provision in the regulations of December 17th, 1897, called "the manufacturing condition," but the Commis-

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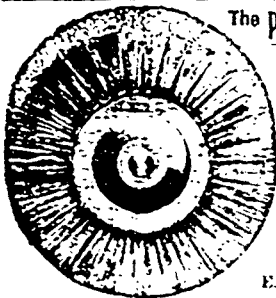
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sioner refused to issue the licenses without this condition. The petition of right prayed for a declaration of the right of the applicants to a renewal of their licenses without the manufacturing condition, and damages for the loss sustained by reason of the refusal of this right. Their claim was placed upon the ground that they, or their predecessors, had purchased the right to the timber upon the limits from the Crown upon a contract for perpetual renewal of the yearly license, so long as they should comply with the regulations in force at the time they purchased, and that, in the absence of the clearest provisions to that effect in the writings forming their contract, it would be unreasonable to hold their rights to be subject to alteration from year to year, to their prejudice, by order-in-Council made without their consent. Held, that not only the terms of the original licenses themselves, which, prima facie, at all events, must be taken to show the rights of the licensees, but everything surrounding the transaction, before and since, is opposed to the contention of the applicants. The statute under which the Commissioner acts, empowers him to issue licenses, but only upon the terms prescribed from time to time by order-in-Council, and he is forbidden to grant any license for a longer period than

a year. The applicants contended that the language of the Act, 61 Vic., ch. 9, applied only to license issued upon sales made after it was passed, and not to renewals of licenses issued upon sales made before it was passed. The 4th section of the Act brings into force on April 29th, 1898, the order-in-Council of December 17th, 1897, the first section of which requires "the manufacturing condition" to be made a condition of every license or permit to cut pine timber, which should be issued after April 30th, 1898. It was urged that the injustice of interfering with the vested rights of existing licensees obliges the court to place the strictest possible construction against the Crown upon the Act and the order-in-Council as being ex post facto legislation. Held, that in regard to this legislation the ordinary rules of construction should be applied; it is not ex post facto legislation, but a simple application to the undoubted rights of the applicants of the undoubted rights of the Crown. The rights of the applicants are to have their licenses renewed according to the conditions which at the time of the renewal have been generally imposed upon license holders, and so long as renewals are offered them which the Crown has the power to impose, no breach of their rights is committed. The applicants also contended

that the Act, 61 Vic., ch. 9, was ultra vires of the Provincial Legislature, as being an encroachment upon the legislative authority reserved to the Dominion by the British North America Act, that the Act and regulations of which the applicants were complaining were in contravention of that part of the R.N.A. Act, which reserved to the Dominion Legislature the exclusive right of making laws for the regulation of trade and commerce. Held, that the Provincial Legislature in passing this Act were dealing with property belonging to the province, over which they have the fullest power of control, they are entitled to sell it, or to refuse to sell it, and if they sell, they have the right to impose upon the purchaser such conditions as they deem proper, with regard to the destination of the timber after it is cut, including the state in which it shall be exported, just as they have the right in selling cattle from the farm at their Agricultural College to stipulate that the purchaser shall not export them alive. The condition that the timber shall be sawn into lumber before exportation in the one case reduces the quantity of logs exported, just as the supposed stipulation in the other case reduces the quantity of live cattle exported, but in each case the matter is one purely of internal regulation and management by the province of its own property for the benefit of its own inhabitants. It could not be contended that the Dominion Legislature, under their power of passing Acts for the regulation of trade and commerce, could enact that every license to cut timber upon lands owned by the Province of Ontario should contain a condition that the timber should be sawn into boards before being exported, and the power to so legislate must therefore be in the province. For these reasons the applicants are not entitled to have their licenses renewed except upon the condition offered by the commissioner of Crown Lands, as set forth in the order-in-Council in force on April 30th, 1898. Petition dismissed with costs.

ESTABLISHED 1823.

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Plans have been prepared for the erection of a new wharf, freight and baggage sheds, offices and waiting-rooms, for the Richelieu and Ontario Navigation Co., and the Hamilton Steamboat Co., and tenders will be called for in a few days. The laying of the crib-work has been entrusted to Medler & Arnott, and already that part of the work has been commenced.

The new structure will be known as the Richelieu wharf. It will extend into the bay 357 feet from the foot of Scott street.

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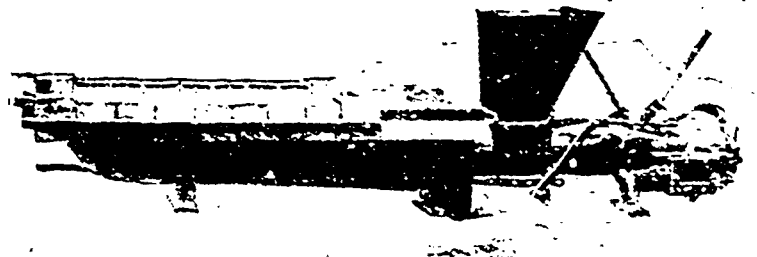
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Montreal—A. TREVETHICK, - Box 1123.

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and will occupy 54 feet of the slip between Milloy's wharf and the Toronto Electric Light Company's wharf. It will support a shed 264 feet long by 24 feet wide, divided into two sections—a freight shed, offices, waiting room, ladies' toilet room and passage-way, for the Hamilton Steamboat Company, and likewise waiting-rooms, conveniences, etc., somewhat larger, for the R. and O. Nav. Co.

On the west side of the new wharf there will be a slip 124 feet wide, and on the east side one 114 feet wide. The berth of the steamer Toronto will be on the east side, and the gangways for the Hamilton steamers on the west. The driveway and walk will be quite spacious, and one feature that will be appreciated by passengers will be the walk, separated by posts, to protect pedestrians from vehicles, while walking from the boats to the Esplanade. The freight offices of the R. and O. N. Co. will be the same as at present. The work is to be completed by April 1, and Mr. P. McIntyre, local manager of the R. and O. N. Co., says that the comfort and convenience to passengers is the main point considered in the undertaking. The total cost is estimated at \$22,000.

W. and R. Freeland, the owners of the property, say that the old and somewhat unsightly coal sheds that stand to the east of the Yonge street wharf are to be torn down and others erected, and that negotiations are pending with the Canadian Pacific Railway Company for the erection of an elevator upon the same site.

The Niagara Navigation Company purpose making general alterations and improvements to their present quarters at the Yonge street wharf.

By the time navigation re-opens in the spring the wharves at the foot of Yonge and Scott streets should have a decidedly improved appearance.

The Goldie & McCulloch Co., Galt, Ont., have recently shipped some heavy special machinery to the St. Charles Condensing Co., Ingersoll, Ont.

The International Broker.

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INVESTORS, MERCHANTS,
FINANCIAL MEN.

Proprietors, and Private People having to buy or sell any valuable properties, as houses, estates, land, mines, factories, businesses, patents, or parcels of general goods, machines, etc., in any part of the world, further people wanting or offering partnerships, or wishing to finance, forming syndicates, companies, or having any other business to transact in any part of the world, should read, subscribe to, and advertise in, or apply confidentially to the journal: **THE INTERNATIONAL JOURNAL** (patent, property, commercial) **BROKER**, 11 Southampton Row, London, W.C.

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COMMERCIAL DEPARTMENT

H. HAACKE & CO.,

11 Southampton Row,

LONDON, W.C., ENG.

THE ONTARIO LUMBERING INDUSTRY.

The regulation requiring all pine sawlogs cut on Crown Lands in Ontario under timber license was made by Order in Council, December, 17th 1897, and was ratified by the Legislature then in session. It came into effect on April, 30th 1898, when the existing timber licenses expired, but as lumbermen were free to export in the summer of 1898 the logs cut during the previous winter, the actual exportation of logs could not be stopped until the close of that season, so that the effect of the regulation did not begin to be felt until the winter of 1898-99. The full results of the action of the Government and the Legislature says the Globe, have not yet had time to make themselves apparent, but it is already clear that so far as the interests of labor and capital are concerned they are most beneficial. The raw material is no longer leaving the country, but is being manufactured on the spot, and finished lumber is being sent out, instead of sawlogs, to the great advantage of the Canadian

sawmillowner and workman. The change has been brought about quickly, and with very little dislocation of business.

The quantity of pine sawlogs cut on Crown lands under license and exported from Ontario in 1898 was 232,000,000 feet board measure. In 1899 the quantity was practically nil, there being only 27,000,000 feet taken out, which belonged to the cut of 1897-98, previous to the regulation coming into effect. What became of the quantity cut in 1898-99 corresponding to the export of 1898, and which, in the absence of the regulation, would doubtless have been exported? American firms owning mills in Michigan cut about 27,000,000 feet, which they stored in the water on this side, hoping for some relaxation of the regulation, and that they might eventually be permitted to take their logs across the lake. Two or three Canadian firms have also stored a portion of their cut, say, 15,000,000 feet, but the latter are making provision now to convert their logs into lumber in Ontario, and no doubt all the logs thus stored, both by American

DAYLIGHT DISCOUNTED.

ACETYLENE GAS

Does it when made by the

"SAFETY"

220 MACHINES IN OPERATION AND NO ACCIDENTS
SPEAKS VOLUMES.

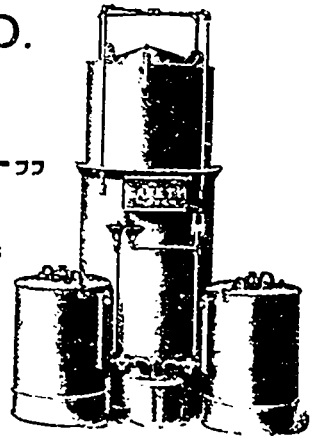
SIMPLICITY—SAFETY—ECONOMY the Leading Features.

Manufactured by

THE SAFETY LIGHT AND HEAT CO.,

Send for Booklet.

DUNDAS, ONT.



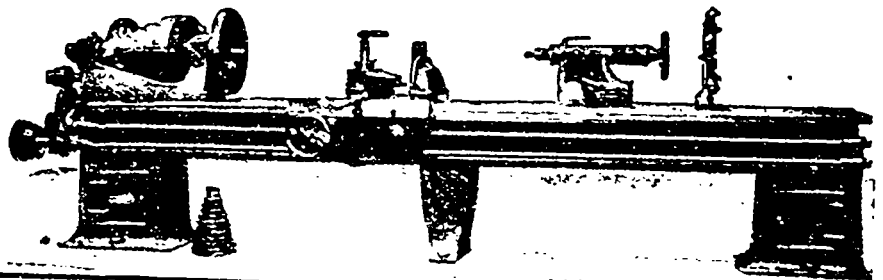
The London Machine Tool Co., LONDON, ONT.

LATHES,
PLANERS,
DRILLS,
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MANUFACTURERS OF

General Machinery

HAMMERS,
BULL DOZERS
PUNCHES,
PRESSES.



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

THE CARTSHORE-THOMSON PIPE & FOUNDRY CO.

Limited



3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers

Special Castings and all kinds of
WATER WORKS SUPPLIES

FLEXIBLE AND FLANGE PIPE.

HAMILTON, ONT.

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and Canadian firms, will shortly be sawn here. On the other hand, a dozen or more lumbering firms who for a number of years previous to the passing of the regulation steadily exported their logs have had them cut up at Ontario mills, either their own or those of other firms, to the extent of about 117,000,000 feet. The remainder of the quantity which would have been exported is represented by the increased operations of firms who own sawmills on this side of the line and always saw their logs here.

Figures of actual cost procured from a large and well-managed mill on the Georgian Bay place the cost of sawing logs and piling and shipping the lumber at \$1 31½ per thousand feet, and if shipped in Canadian vessels the freight would be about \$1.12½ per thousand, or, say, a total of \$2.50 per thousand feet. Applying this rate to the quantity

exported in 1898, we have the sum of \$580,000 per annum, which, as a direct consequence of the manufacturing regulation, is now disbursed to Canadian workmen, or paid as freights to Canadian vessel-owners or railways, but which formerly went to Americans and helped to build up American towns and American industries.

That the enforcement of the regulation has stimulated the sawmilling and lumbering industry in Ontario in a very marked degree is borne out by the record of new sawmills which have been put up, old ones repaired and enlarged, and mills long standing idle once more refitted and put in shape for a vigorous campaign. Here are a few facts:—

The following sawmills are now being built:—

One at Victoria Harbor by Mr. John

Waldio, with a capacity of 25,000,000 feet per annum.

One at Midland by Mr. J. S. Playfair at a cost of \$25,000, capable of cutting 15,000,000 feet a year.

Another at Midland by Mr. Chew at a cost of \$15,000, which will cut 10,000,000 feet per annum.

Mr. T. M. Kirkwood has under consideration the building of a new mill at the mouth of the Spanish River of large capacity.

Following are old mills, some of them long idle, now being overhauled to cut next summer:—

The Walsh mill at Little Current, which has been idle for eight years. It will cut about 15,000,000 feet per annum.

Conlon & Co.'s mill near Little Current, which has not sawed for three years. It is

JOHN J. KELLER & CO.

104 and 106 MURRAY ST.
NEW YORK

220 Church St., Philadelphia.
135 Pearl St., Boston.
18 Pryor St., Atlanta, Ga.

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

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

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JOHN R. GEIGY & CO.
BASLE, SWITZERLAND

**LIGHT YOUR
FACTORY WITH**

LUXFER PRISMS

The latest device for

LIGHTING

dark rooms and
offices

By Daylight

For catalogue
and estimates
write to

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

58 Yonge Street, - TORONTO.

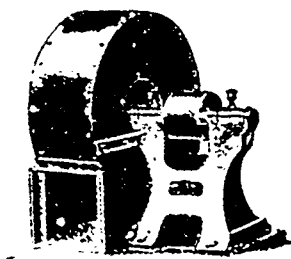
**The
Best
of
Everything**

Is not a bit too good for us.
It is the kind of material we
use in the manufacture of
Shafting, Pulleys, Hangers,
Tube Cutters, Pipe Cutting
Machines, Swing Saws, Wood
Lathes, Dough Mixers, and
Paper Box Machinery.

For catalogue
on application.

G. T. PENDRITH & CO.,

73 to 81
Adelaide St. West, 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 50 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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HAEMOTOL

For Wool

Dyed over a Chrome and Tartar
Mordant produces a black on
wool equal to Alizarine
Black for fastness,
but at a much
lower cost.

Sole Manufacturers

F. E. ATTEAUX & CO.

53 Colborne St. 13 Lemoino St.
TORONTO, ONT. MONTREAL.

Main Office and Works

BOSTON, MASS., U.S.A.

being fitted up at a cost of \$10,000 and will cut 20,000,000 feet.

The John's Island mill has not run for two or three years. It is being overhauled and will saw about 20,000,000 feet per annum.

Cutler and Savidge's mill at Kenabutch. It has not run for two years, but is being put in shape again and will cut about \$25,000,000 feet per annum.

The Parry Sound Lumber Company's mill at Parry Sound had stood idle for three or four years. The company is spending \$25,000 in refitting it, and it will cut 20,000,000 feet.

The Conger Lumber Company's mill, also at Parry Sound, has not run for four or five years. It is being put in shape at a cost of about \$15,000 and will cut 15,000,000 feet.

Mr. Wm. Peter owns a third mill at Parry Sound, which has continued to run, notwithstanding the temptation to export logs. The owner is spending \$10,000 in repairing and enlarging it.

The statement that was frequently heard up to a year ago that the sawmilling industry in the Georgian Bay district and the north shore of Lake Huron was in a stagnant, if not a decaying, condition, that mills in those localities were standing idle and rotting down, while once busy towns were comparatively deserted, can no longer be made with any truth. On the contrary, fresh vitality has been imparted to the lumbering and sawmilling industry, and employment afforded to many hundreds of additional workmen in the sawmills, lumber docks and freight yards of our Province.

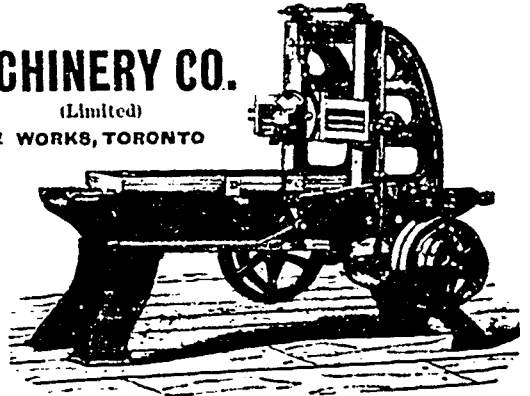
THE ...
A. R. WILLIAMS MACHINERY CO.

(Limited)

Head Office, - SOHO MACHINE WORKS, TORONTO

Manufacturers of and Dealers in

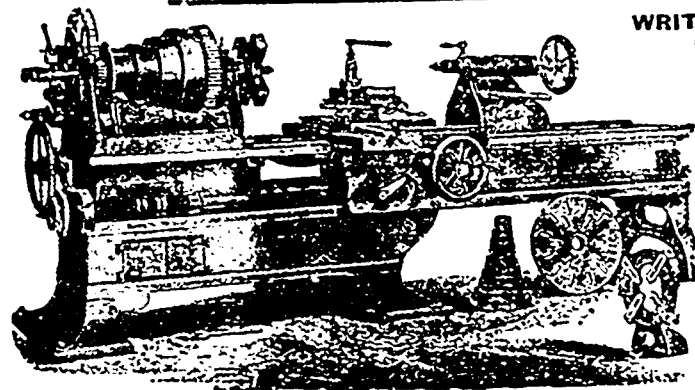
- High Class Iron Tools,
- Wood-working Machinery,
- Engines, Boilers,
- Motors, Water Wheels,
- General Machinery
- and Supplies.



WE ARE THE EXCLUSIVE AGENTS OF THE

McGregor-Gourlay Co. Limited, G. A. L. T. O. N. T.

IRON WORKING MACHINERY.



WRITE TO US FOR PRICES.

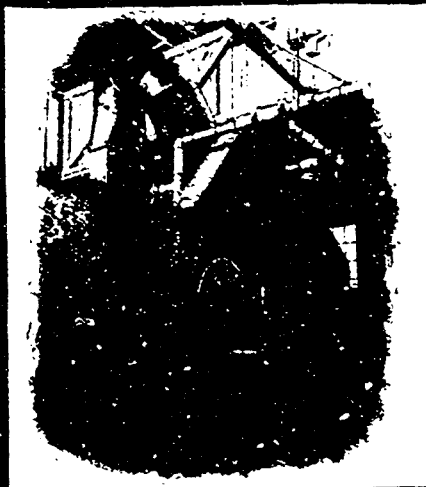
BRANCHES

193 Colborne St.,
BRANTFORD

345 and 347
St. James St.,
MONTREAL

Send for Circulars,
Referring
to this Advt.

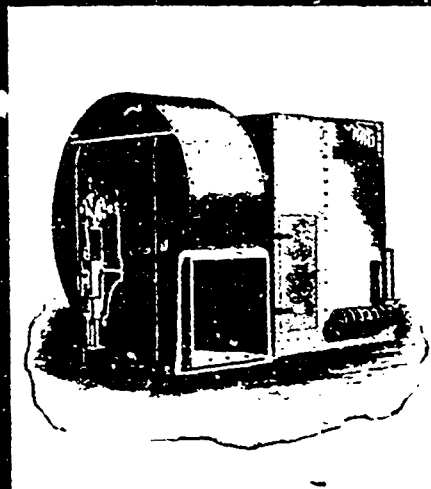
**STURTEVANT SYSTEM
OF
MECHANICAL DRAFT.**



18 *Saves cost of chimney.
Burns cheap fuel.
Increases boiler capacity.
Send for Catalogue^{no} 110.*

B.F. STURTEVANT & CO. BOSTON,
NEW YORK · PHILADELPHIA · CHICAGO · LONDON

**STURTEVANT SYSTEM
OF
HEATING & VENTILATION**



19 *Centralized plant.
No scattered steam piping.
Utilizes exhaust steam.
Send for Catalogue^{no} 84*

B.F. STURTEVANT & CO. BOSTON,
NEW YORK · PHILADELPHIA · CHICAGO · LONDON

NEW IDEAS.

There is a fortune awaiting the inventor who can discover a successful method for the preservation of eggs. The long severe winter in this region renders it absolutely essential to preserve eggs, if they are to be had during this season.

The principle involved in preserving eggs is the preservation of the mucilaginous coating, which naturally covers the shell, and which prevents the entrance of the germs of decomposition. When this coating is removed, the egg begins to become "stale," and the process of decay actually begins. The use of lime and salt as means of preservation, never entirely successful, does not preserve the protecting covering on the shell and no process can be successful unless it does this. Experiments have

shown that water glass comes more nearly being a perfect preservative than anything that has hitherto been employed. There is always danger of the bursting of the shell of an egg that is thus preserved, when in hot water, but this disadvantage may be overcome by carefully piercing it with a needle. The question will naturally arise, if the preservation of the surface of the shell in its natural condition is all that is necessary to preserve the egg, why could it not be coated with some preparation that would answer that purpose. It could be. Vaseline will preserve it and might be used on a small scale, but it would require too much time, and consequently expense, to use this means extensively.

It should be within the power of some inventor to discover some simple and cheap method of preserving eggs, and thereby not only gain a fortune but also bestow an inestimable benefit upon the human race by placing within the reach of all a necessary article of food.

NEW ANILINE COLORS.

Benzo Fast Violet R. The distinguishing feature of this new dyestuff is its superior fastness to light over any of the older qualities. It produces a very bright shade, the light tones of which yield nice Heliotropes and Lilacs so much now in vogue.

Benzo Violet R is adapted for the production of self shades, and on account of its fastness to light, and washing, should prove of value, especially for yarns and piece goods.

In dyeing mixed fabrics the cotton dyes a deeper shade.

Celestine Blue B is a new color which dyes fine Navy Blue shades on cotton cloth previously treated with alumina and tannic acid. Such shades are considerably faster than, for instance, a combination of Methyl Violet with Brilliant Green.

Fast Light Yellow G. This color is a clear yellow of reddish tone, which appears greenish overhand. It is possessed of extreme fastness to light, being faster than any hitherto known acid yellow, with the exception of Alizarine Yellow 3 G. It is, however, brighter in shade than the Alizarine Yellow 3 G. It is somewhat clearer and dyes easily level. In tinctorial power it is

also stronger, and is well adapted for dyeing slubbing, yarn and piece goods.

Naphthaline Acid Black S produces a full deep black. The properties and method of dyeing are identical with the older 4 B brand. It is possessed of good penetration, is fast to washing, rubbing, steaming and light, answering all the ordinary requirements as regards the above. Naphthaline Acid Black S is extremely well adapted for the dyeing of woolen yarns, pieces, dress-material and felt.

Diazo Black 3 B and G. Both of these new Diazo Black homogeneous dyestuffs, just brought out by the Farbenfabriken of Elberfeld, are adapted for the dyeing of cotton. They resemble the former brands of Diazo Blacks in fastness, the diazotised and developed shades being very fast to light and washing. With developer A full Navy Blues are obtainable, whereas developer H yields deep and bloomy black shades. A black so produced is indisputably the finest diazotised black obtainable.

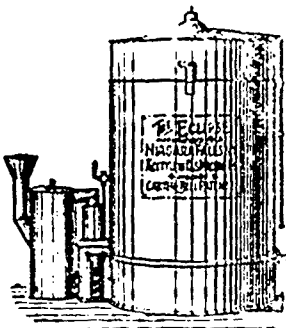
Dyed in the ordinary manner with common salt, good shades, uniformly dyed, on half-wool, may be obtained.

Dyed patterns, samples and circulars, about new color products, promptly mailed gratis from the Dominion Dyewood and Chemical Co., sole agents in Canada for the Farbenfabriken, vorm. Friedr. Bayer & Co., Elberfeld, Germany.

A pleasant evidence of the growing time in Hamilton was given at the Ontario Lantorn Company's new factory, where a complimentary supper was given to the eighty-five employees by the company. In this happy manner the three story brick addition to the factory, ninety-five feet by thirty-two feet was opened, and the new machinery that has been purchased for it will be started up at once. It is the intention to employ over 100 hands and to branch out into the manufacture of lines of goods now imported from foreign countries, as well as continuing the manufacture of the present lines of sheet metal. Messrs. Walter Grose of Montreal, and Ernest Schultz of Hamilton, are the owners of the rapidly extending business, they having begun manufacturing lanterns, etc., ten or twelve years ago with less than a dozen employees.—Spectator.

The ECLIPSE

ACETYLENE



GENERATOR

BUILT ESPECIALLY

For Private Residences,
Offices or Small Stores.

PRICE COMPLETE, - \$25.00

Write for particulars.

**NIAGARA FALLS ACETYLENE
GAS MACHINE CO., Limited,
Niagara Falls, Ont. or N.Y.**

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.

McLachlan Electric & Gasoline Motor Co., LIMITED.

94 ADELAIDE
T. 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 stamp for a postal will bring you any information you wish.

The Packard Electric Co., Limited.

MAKERS OF

**Lamps and
Transformers**

Sole Agents for SCHEEFFER RECORDING WATT METERS
ST. CATHARINES, ONT.

THE BOOM AT SYDNEY, N.S.

Sydney, N.S., is rapidly forging ahead. It is confidently believed that it will not be long till it is a city of 50,000 inhabitants. The Dominion Iron and Steel Company already have 2,500 men employed. The company's works will cover almost a square mile of territory. One can form an idea of the magnitude of the undertaking from the fact that no less than thirty-five steamers, a good many of which are employed in the St. Lawrence trade, have been chartered to carry from Philadelphia to Sydney all the machinery that cannot be made in the com-

pany's own foundry and machine shops. Good progress is being made in the coke ovens, and 200 out of the total of 400 that are to be built will be ready by Dominion Day. The fourteen blast and steel furnaces, built, as they will be, in a line along the railway siding, are one of the most important features of the place. Six months ago the Merchants' Bank of Halifax was the only institution of the kind doing business in the town, while to-day the Bank of Montreal, the Merchants' Bank of Halifax, the Bank of British North America, the Commercial Bank of Windsor, the Union Bank of Halifax and the Halifax Banking Company have all opened their doors, and two or three banks have bought building lots, and will begin business at an early day.

Contracts have been given out for the building of 1,000 houses during the year 1900, all of which will rent from \$15 to \$25 a month. Some of the new houses will be of brick, but most of wood, as brick is very hard to obtain. The company's foundry is no less than 680 feet in length. Altogether the town of Homestead, the location of the Carnegie Steel Works, will not be in it alongside of what is being built up in Sydney Harbor by the Dominion Iron and Steel Company.—The World.

Their Canadian office is in Montreal, and they also maintain offices in London, Paris, Berlin and St. Petersburg.

A GROWING YEAR FOR TORONTO.

During the past seven years permits for the construction and alteration of buildings in the city of Toronto were valued as follows.

1893.....	\$1,361,850
1894.....	1,020,885
1895.....	1,246,810
1896.....	657,168
1897.....	951,130
1898.....	1,701,630
1899.....	2,011,000

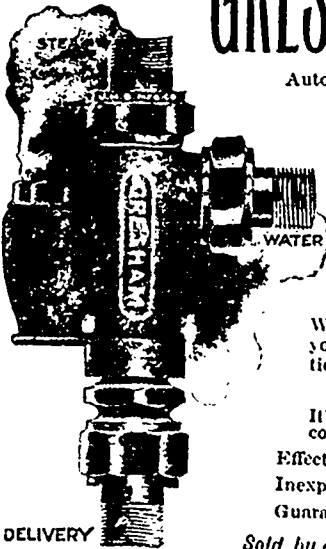
The year 1899 was an exceptionally prosperous one in the building trades. There were altogether 710 building permits issued from the office of the City Commissioner, against but 562 the previous year, or an increase of 148 permits. Extra factory facilities and a greater demand for dwelling

GALVANIZING

We are prepared to attend to all orders **Promptly and Economically.**
WINDMILLS, PUMPS, TANKS, Etc.
ONTARIO WIND ENGINE and PUMP CO.
 LIMITED,
95 ATLANTIC AVE., TORONTO.

THE IMPROVED

GRESHAM



Automatic Re-starting

INJECTOR.

Would give you satisfaction.

Because

It's simple in construction.

Effective.

Inexpensive and Guaranteed.

Sold by all Dealers.

DELIVERY

We manufacture and handle everything for..

ENGINEERS and PLUMBERS

THE JAMES MORRISON BRASS MANUFACTURING CO., Limited,

89 to 97 Adelaide St. West, Toronto.

A MANUFACTURING FIRM IN Toronto wants agents who visit Machine Shops and Iron Manufacturers in Canada to take a line on commission. Enquire of
CANADIAN MANUFACTURER.

SPORTSMEN

NOTE
The ABBEY IMPROVED CHILLED SHOT
 NEWCASTLE-ON-TYNE, ENGLAND.

Is made by a New Process, and is highly spoken of by sporting papers and sportsmen. Kills at greater distance than soft shot. Send to your Gunmaker for Samples.

The Magnolia Metal Co., manufacturers of Magnolia metal, Magnolia lined and solid journal bearings, Camelia bronzo and brass, etc., whose head office is at 266 West Street, New York, have, in addition to their many other branch offices in the United States, just established another at 421 Anstell Building, Atlanta, Ga., and are about establishing others in St. Louis, Mo., San Francisco, Cal., and Philadelphia, Penn.

Canadian Advertising is best done by The E. DESBARATS ADVERTISING AGENCY, Montreal.

MARINE BOILER

8 feet long, 4 feet 8 inches wide; 86 2/3 inch tubes 6 feet long, allowed 115 lbs. steam; been used four years; condition good; price \$650.

Davis Dry Dock Co.,
 Kingston, Ont.

F. W. Hore's Sons, HAMILTON, ONT.

Manufacturers of
Wheels, Wheel Materials, Shafts, etc.

Patent Advertising Novelty.

BOWER'S DETACHABLE PICTURE FRAMES

(Patented in United States and Canada).

Very Desirable for SHOW CARDS, PREMIUM PICTURES, STREET CAR ADVERTISING, Etc.

Mailable in Tubes or on Safety Cards. Very attractive and inexpensive.

Order solicited by the manufacturers or Canada.

THE NORTON MFG. CO., HAMILTON, Ont.

Shuttles,

BOBBINS, SPOOLS, PICKER STICKS, CLOTH ROLLS, Etc.

JOHN HOPE & CO., - - LACHUTE, QUE.

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For Manufacturers of Oil Cans, Filters, etc.



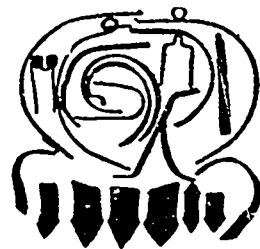
OIL CAN FAUCET—NICKELLED.

PRICE, per Gross of 1/2 inch, \$6.00. Size 1/2 or 3/4 inch.

Also for **Filters,** with Shank plain or threaded. Send for Free Sample.

CHEAPEST IN THE WORLD.

J. M. LITCHFIELD, 105 BEEKMAN ST., NEW YORK, U.S.A.



HAY TEDDER FORKS, HAY RAKE TEETH, HARROW TEETH,

DOUBLE POINTS, CULTIVATOR SHOVELS, SEAT SPRINGS.
 Steel Teeth of all kinds. Prices Quoted on Application.

ST. JOHNS SPRING CO.,
 St. Johns, Mich.

A. C. NEFF
CHARTERED ACCOUNTANT
 Room 500 McKinnon Bldg.,
 Tol. 1330. — TORONTO.
 Audits and Investigations a Specialty.

CANADA IN NEW ZEALAND.
 We are Importers of Canadian Goods
 and Manufacturers' Agents.
The YEREX & JONES CO.,
 WELLINGTON, - NEW ZEALAND.
 REFERENCES—The Union Bank of Australia,
 Limited, Wellington.

FOR SALE. ABOUT 100 TONS
 OF
56 lb. T Rails,
 INCLUDING FISH PLATES AND
 SPIKES.

Would be good for Sidings and
 for Contractors' use.

APPLY TO
Syracuse Smelting Works,
 MONTREAL.

FIRSTBROOK BROS.
Dovetail and Packing Boxes
 Top-Pins, Slide Blocks and Cross Arms. Wood
 Printers, Etc.
 Cigar Boxes. Shipping Cases.
TORONTO, ONTARIO
 Write for Prices.

CARBONIZER A neutral sub-
 stance, harmless
 to animal fibre
 tissue, while it destroys burrs, etc., as
 efficiently as acid. It leaves the wool in
 fine condition. Manufactured by the
Merrimac Chemical Co., BOSTON.

THE
Toronto Paper Manufacturing Co.,
Cornwall, Ont.
 Manufacturers of Engine Sized Superfine
 Papers, White and Tinted Book Papers, Blue
 and Cream Laid and Wave Fool-caps, Account,
 Envelope and Lithographic Papers, etc.

J. ALEX. CULVERWELL,
Electrical and Hydraulic Broker
 COMMERCIAL ENGINEER.
 (Formerly of Edison Gen. Elec. Co.)
 (Late Dist. Mgr. Royal Victoria Life.)
 6 King Street West - - TORONTO

CANADIAN OFFICE & SCHOOL FURNITURE
 CO. LIMITED
 PRESTON
 ONT.
 FINE BANK OFFICE
 COURT HOUSE &
 DRUG STORE FITTINGS
 OFFICE, SCHOOL,
 CHURCH, RESTAURANT
 SEND FOR CATALOGUE

KIRVAN & BARNARD,
ELECTRICAL ENGINEERS and
CONTRACTORS, Purchasing Agents,
 Complete Electric Light Plants,
 Wiring, Dynamo and Motor Repairing,
 Residential and Factory Work, Telephone,
 Bells and all Electric Fixing. Specifications,
 Plans, Tests and Consultations. Estimates
 furnished free, and all work promptly executed.
 112 Church St., Toronto. Phone 8353.

houses are largely responsible for the additional buildings, for on churches and colleges, on banks and hotels, a decrease in the expenditure is to be noted. From the figures given on the table following, a good idea may be gathered of the character of the expansion, and it is such as to afford satisfaction to the business men of the city, as well as to builders and the working classes.

Toronto as a manufacturing centre gained much during the year. There were altogether thirty-eight new factories established, five more than during the previous year, and at an increased expenditure of \$98,950. For stores and offices the increase was \$118,450, while in the latter for alterations alone \$56,580 more was spent.

There is evidently, too, a movement of population towards Toronto, the increase in the number of brick dwellings erected as compared with 1898 being 105, and in rough-cast twenty-seven, while \$356,025 more was expended on brick and \$30,870 on rough-cast dwellings.

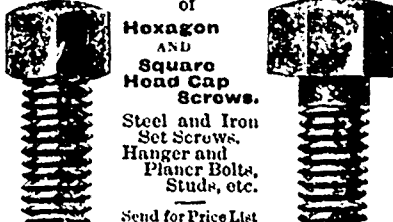
The following is a comparative statement of the building permits issued during 1898 and 1899:

1899	1898	1899	1898
\$845,625	\$489,640	101	206
104,955	83,585	132	103
60,220	29,330	35	62
20,655	15,740	53	78
124,055	211,200	32	27
233,750	115,000	32	33
99,810	43,240	51	43
33,770	34,780	37	37
9,500	23,800	7	2
24,500	181,500	3	3
369,450	207,500	33	38
50,200	92,665	25	12
4,900	13,000	2	2
	27,500		
11,000		1	1
	15,000		
15,000	4,000	1	1
7,000	54,200	2	2
\$2,011,000	\$1,701,630	562	710

Totals... Increase for 1899, \$309,370; increase in permits for 1899, 140.

Real estate dealers notice a decided improvement in the class of dwelling houses that are now going up. They are more solid and cost more than many of the shells that were erected during the time of the boom. The 266 brick dwellings erected cost an average of \$3,180 each, certainly a high average. There are several reasons for the greater expenditure on houses, one, but not the most important, being the increased cost of material. Moreover, with an advance in rents, people are requiring better accommodation, while the loan companies before they will advance money on house property insist that good substantial houses that will last and be a satisfactory security must be erected. Parkdale and Rosedale as residential locations seem to be experiencing the greatest development.

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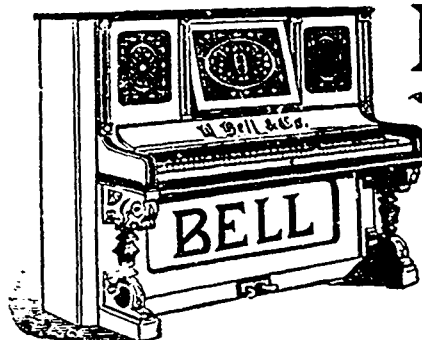
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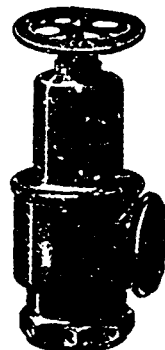
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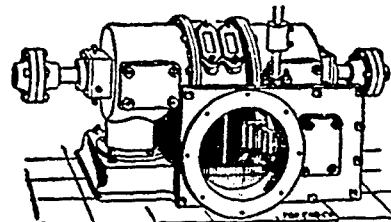
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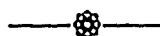
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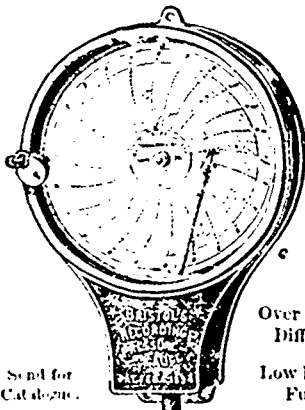
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