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 AND INDUSTRIAL WORLD
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THE NAME OF THE MANUFACTURER
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MANUFACTURE THAT

Vol. 43. TORONTO, JULY 19, 1901. No. 2.

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We manufacture all grades of oils, greases, soap stocks, candles, wool stocks, leather and tanners' oils, fuel gas, machinery, cylinder oils, &c. And solicit opportunity to compete against any oil on the market. Write for prices and samples.

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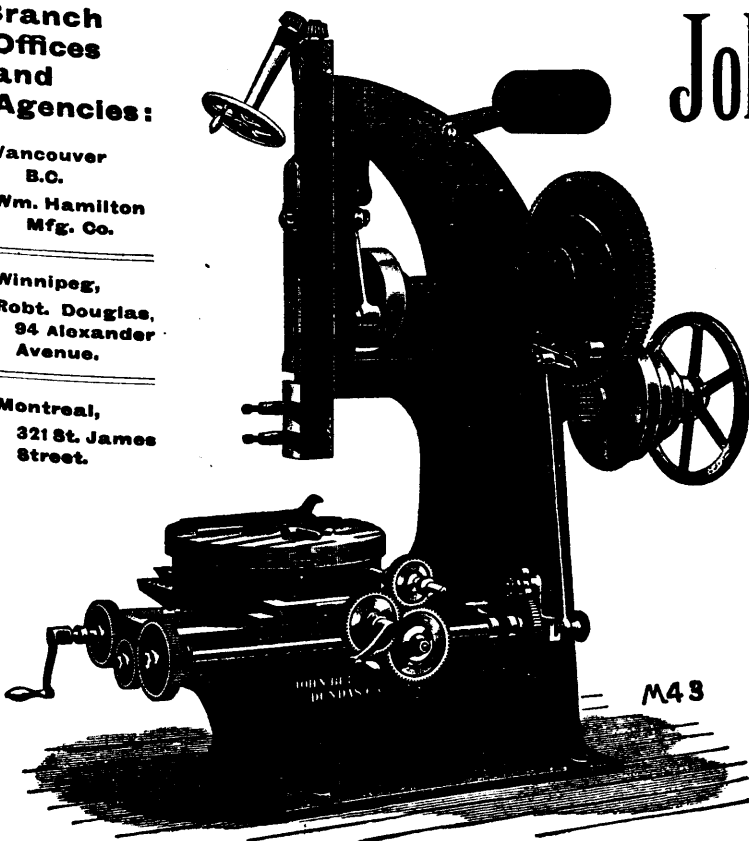
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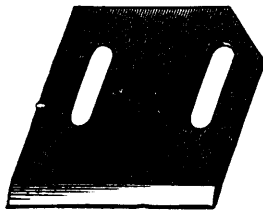
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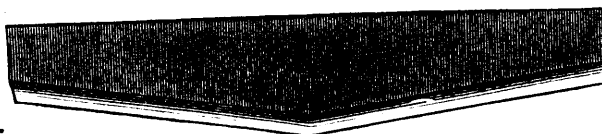
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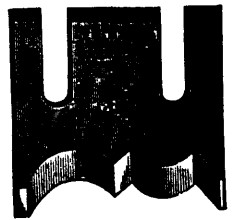
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Steel Bridges for Railways and Highways,
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Calcined Plaster

AND

Patent Rock Wall Plaster

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HOT PRESSED NUTS.

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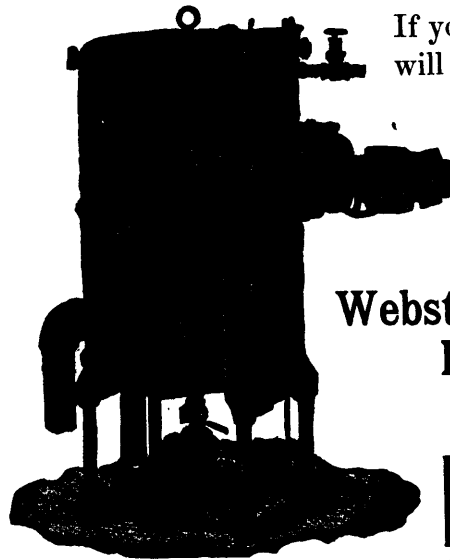
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Mfrs. of Set, Cap and Special
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ASK ESPECIALLY ABOUT OUR

WEBSTER SYSTEM OF STEAM HEATING

FOR HEATING BUILDINGS
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—AND THE—

Webster Vacuum Feed Water Heater and Purifier

And we will explain HOW
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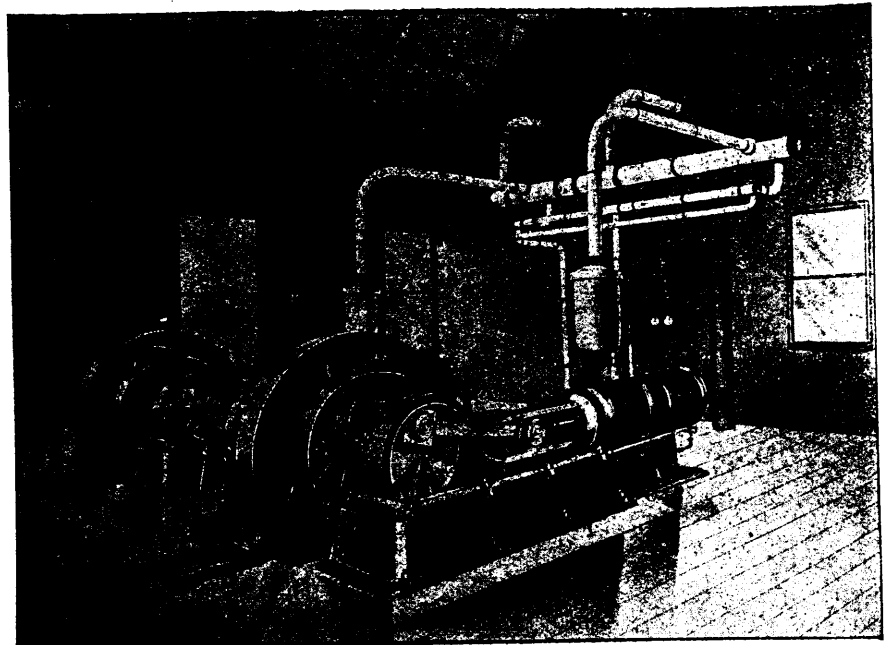
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ROBB ENGINEERING CO., LIMITED, Amherst, N.S.

Agents { WILLIAM McKAY, - 19 McKenzie Crescent, Toronto
WATSON JACK & CO., - 7 St. Helen Street, Montreal

Lighting, Heating and Motive Power

. . BY GAS . .

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

RICHE GAS GENERATOR

at a mere nominal cost per thousand cubic feet.

The Generator is simple in construction, and does not require skilled labor to work it. **No Purifiers required. Products being a Rich Permanent Gas and Charcoal.**

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

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ROOM 501 CARLAW BUILDING, 30 Wellington St. W., Toronto

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MANUFACTURER OF

Acetylene GAS Generators

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THE
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MONTREAL * TORONTO
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ROSSENDALE, M.A.Y. WOVEN BELTING

*Twice the strength of Leather
Used by all the large manufacturers*

Very much cheaper

Lasts longer

Every Belt Guaranteed

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*Specially suitable for Damp Work
All sizes up to 20 inches in stock for
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Write for our quotations before buying your belts

Shafting-Hangers-Pulleys

THIS IS OUR SPECIALTY

We also manufacture Friction Clutch Pulleys, Clutch Couplings, Belt Tighteners, Self-Oiling Bearings, Iron Rope Drive Wheels,

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Power Transmission Machinery

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Pumping Machinery

"For all Duties"

THE
 NORTHEY
 GAS AND
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Canadian Manufacturers and Engineers will find it to their interest to refer to us when in need of anything in the shape of Pumping Machinery.

CATALOGUES AND SPECIFICATIONS SENT ON REQUEST

Supplies a cheap, simple, easily applicable form of power that is filling the necessity for such a motor very extensively and satisfactorily. The running expenses are very light. It requires no experience to handle, and runs for hour without attention. Well adapted for running independent electric lighting plants or pumping and elevator plants.

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THE *Northey*
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THE MASON REGULATOR CO.

ESTABLISHED 1883

Standard Steam Specialties

Reducing Valves, Damper Regulators, Pump Governors and Automatic Appliances of all Descriptions for the Regulation and Control of Steam, Water and Air Pressures.

158 Summer St., Boston, Mass.

Works at MILTON, MASS., U.S.A.

RODERICK J. PARKE, CONSULTING ENGINEER TO MANUFACTURERS:—Competent and impartial advice on Industrial Electrical Systems of Lighting, Power Distribution, Heating and Welding, Etc. Plans, Specifications, Tests, Reports, Valuations.

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Reflectors, Shades, Lamps

We Stock a Large Variety of SHADES and REFLECTORS in

ALUMINUM, MIRROR, CELLULOID, PAPER, PORCELAIN,
 FOR FACTORY AND OFFICE.

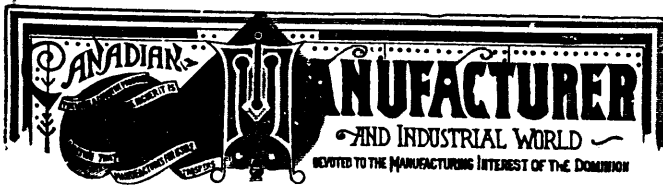
Imperial Lamps and Helios Upton Enclosed Arcs Give BEST LIGHT with LEAST CURRENT

ELBRIDGE Sparking Dynamos, SAMSON Batteries and IMPERIAL Salts, for Gas or Oil Engines.

Write us about Lighting your Factory or Office.

JOHN FORMAN, 708 and 710 Craig St., MONTREAL

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ESTABLISHED IN 1880.

PUBLISHED ON THE FIRST AND THIRD FRIDAYS OF EACH MONTH

The Canadian Manufacturer Publishing Co., Limited.McKinnon Building, Cor. Melinda and Jordan Sts., Toronto.
Cable address: "CANAMAN." Western Union Telegraphic Code used.**MESSRS. DAVISON & CO.,**
164 Federal Street, Boston, Mass.
AGENTS FOR UNITED STATES.

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J. J. CASSIDY, Editor and Manager

OUR CURRENT MARKET QUOTATIONS.

THE CANADIAN MANUFACTURER has pleasure in directing attention to the current market quotations of prices of hardware, metals, paints, oils and many specialties such as are usually found on sale in hardware stores in Canada, and handled by jobbers of hardware, metals, etc., now first presented in these pages.

Without question there is a strong demand for such a feature in an up-to-date trade journal devoted to such interests, and we give the assurance that the prices quoted are those given by the most reliable manufacturers, jobbers and wholesale dealers in the trade to their Canadian customers.

A most valuable feature of these quotations consists in affixing the Canadian duty to each article upon which a duty is levied. This feature has never before been observed by any trade journal, and the utility of it consists in the ability of the reader to learn just what the duty upon such articles is when imported, always bearing in mind that should the article be of British manufacture and imported from Great Britain, one-third the amount of the duty is rebated under the operation of the preferential tariff.

The circulation of THE CANADIAN MANUFACTURER extends to every hardware dealer in the Dominion.

ELECTRIC POWER IN TEXTILE FACTORIES.

In Fielder's Magazine of recent date was an article of much interest to owners of textile factories, showing the utility of electrically driven machinery in such works, written by Mr. E. Kilburn Scott, A. M. Inst. C. E., from which we collate the following:—

In England all textile factories have their own steam-engine plant, but in America and on the Continent it is becoming quite a common practice to buy current from an electric power supply company. It happens that in the United States, Mr. W. B. Smith Whalley, of Columbia, has been in the fortunate position of being able to make a comparative test of a cotton-spinning mill supplied with electric power and a similar mill driven by a Corliss engine and ropes in the usual way. The electrically-driven factory had four 150-h.p. motors bolted to the ceiling of the various rooms. The test was made between April 1 and June 25, 1897, and the results were given in a paper read at the New York meeting, December, 1897, of the American Society of Mechanical Engineers. The writer has tabulated the leading particulars,

The Canadian Manufacturer

Reaches all the Blast Furnaces, Iron and Steel Works, Rolling Mills, Manufacturers of Iron and Wood-Working Machinery, Steam Engines and Boilers, Pumping and Mining Machinery, Electric Machinery and Appliances, Machinery Dealers and Steam Fitters' Supplies, all Hardware Dealers, Cotton, Woolen, Knitting and Yarn Mills, Pulp and Paper Mills, etc., in Canada.

which show that whereas the power required to drive the shafting, ropes, etc., of the steam mill was 226-h.p., the power required by the four motors of the electric mill, working under the same conditions, was only 149-h.p., which shows a saving of 77-h.p. in favor of electricity. The electric motors required no attention whatever (the oil in the bearings being only renewed once in six months, and then only as a precaution, not because it was necessary), whereas the steam engine and main shafting required the usual attendance and much oiling, the main driving ropes requiring sizing, etc. Efficiency is an important matter, but it is only one of the many advantages which electric driving offers. For example, the turning moment on the spindle of an electric motor being constant, there is less wear and tear, and superior work can be turned out, whilst the absence of vibration enables the motors to be bolted to the roof or wall or to machines direct. The speeds at which they can be run and the ease with which the direction of rotation is reversed enable them to drive by gear-wheels, or if belting is used only a minimum amount is required (crossed belts not being necessary); there is thus more head room, greater safety, less noise, better lighting, and greater cleanliness—features which, reacting on the employes, cannot fail to improve the quality and quantity of the work turned out. The possibility of running one room—say the finishing machinery—on special overtime work without the terrible waste of power required when the whole of a heavy system of shafting and belting has to be moved is a great advantage. An interesting feature is that, by merely putting an ammeter in a motor circuit, it is possible to measure the power consumption when the motor is running loaded and unloaded, thus indicating at once the care with which the machinery is maintained, and the suitability of its construction for the work in hand. One peculiarity which differentiates the electric motor from any other method of driving is that it automatically takes energy in proportion to the load put upon it. It is also essentially a high-speed piece of apparatus, and can therefore operate machines at higher speeds than when they are driven by counter-shafting. There can be no doubt that, by transmitting the power electrically, it is possible to exercise much greater freedom in designing and organizing the modern factory. As there is no heavy line shafting or vibration troubles, the walls and roof may be of lighter construction, and as belt-holes between floors are entirely avoided there is a much lessened fire risk. In connection with this matter it may be mentioned that the electric motor may be entirely or semi-enclosed, and thus can be operated harmlessly (particularly the multiphase type) in the presence of inflammable and even explosive material. Perhaps one of the greatest advantages incidental to the introduction of electrical machinery into manufactories is the improved conditions for the employes. Not only is there ample light furnished at all hours—the same generator usually supplies light as well as power—but the absence of dust, dirt and lint, which is being continually stirred up by belts, and the notable reduction in the noise of the factory, afford conditions which favorably affect both the quality and quantity of the output.

THE MINING INDUSTRY OF ONTARIO.

We have received from the Provincial Bureau of Mines the annual report for the year 1900, just issued, which comprises a great deal of useful and practical information in regard to our growing mining interests and metallurgical industries. The record of the twelve month's progress is an extremely gratifying one, as it shows that the enlightened constructive policy of the Ross administration is having a tangible result in the rapid advancement of a too long neglected industry. The report, in addition to presenting a comprehensive view of the existing situation, with carefully prepared statistics in regard to every form of mineral production, contains several special reports of interest both from a practical and scientific point of view embodying the results of investigations as to the character of newly discovered mineral deposits. The researches of the experts connected with the bureau, the details of which are set forth with much clearness and precision, furnish a useful guide to prospectors and capitalists looking for new fields for exploitation.

The substantial advance made by our mining and metallurgical industries during 1900 is evinced by a comparison of the value of the total mineral output amounting to \$9,298,624, with that of the previous year when the yield was valued at \$8,416,083. This is an increase of \$882,541 or about ten per cent. Upon these industries are dependent 10,934 workmen who received in wage, \$3,366,601, the number of employees being nine per cent. and the amount spent for wages fifteen per cent. greater than in 1899. Three new products have been added to the list since the last report was issued including steel, the output of which was 2,819 tons of the value of \$46,380, corundum and felspar.

The most notable feature of the year's progress was the extensive development of the iron mining and smelting industries, largely owing to the opening of the famous Helen mine in the Michipicoten district, concerning which very full information is given. The total number of iron mines in operation was twelve, the product of which, during the year, was 90,302 tons of ore valued at \$111,805, representing an increase in quantity and value of 73,391 tons and \$80,854. The workmen employed numbered 438, who received \$107,583 in wages, as against 100 men drawing \$26,700 in 1899.

The total quantity of pig iron produced at the blast furnaces was 62,386 tons, showing a slight decrease in volume from the previous year; but owing to the very considerable advance in prices the value of the output, \$936,066, was \$127,909 in excess of the figures for 1899. A particularly gratifying feature of this industry is that the proportion of native ore smelted into pig iron is rapidly increasing. The number of tons smelted from Ontario mines was 22,887, being twenty-three per cent. of the whole, the remainder being imported from the United States. But with the development of the Michipicoten mines, which afford an ample supply of hematite, this is rapidly changing. Statistics given for the first three months of 1901 show that during that period the proportion of Ontario ore used in the manufacture of pig iron had risen to forty-three per cent. In the near future the mines of the Province will probably furnish by far the larger portion of the supply. The blast furnaces have increased their working force from 200 to 439 men, whose wage bills for 1900 amounted to \$97,915.

The production of nickel and copper matte shows a satisfactory growth. The nickel output was 3,540 tons, value \$756,626, as against 2,872 tons, value \$526,104 for the former year. The yield of copper in 1900 was 3,364 tons, valued at \$319,-

681; in 1899, 2,834 tons, valued at \$176,236. These values represent the worth of the unrefined metals as exported in the form of matte. If the refining process were conducted here the value of the industry to the Province would be vastly increased. The number of workmen employed in the industry has risen from 839 to 1,444.

Owing to several causes the yield of gold has fallen off, a number of mines having been closed, some of which may again be in operation. The year's output of 18,767 ounces, value \$297,861 came from eighteen properties. In 1899 the production was 27,594 ounces and the value \$424,568. Workmen to the number of 750 were engaged in gold mining, the wages paid being \$350,694, which was considerably more than the income. The decline in this item is partly compensated by the increase in the output of silver, which amounted to 160,612 ounces, valued at \$96,367, as against 105,467 ounces, worth \$65,575 in the previous year.

The most noteworthy features of the statistics dealing with non-metallic products are the greatly increased output of cement and mica. Several new cement plants are in course of establishment, and the yield last year was valued at \$698,015 or \$136,749 over that of 1899. Extensive deposits of mica have been found in Frontenac and Lanark counties which are being actively operated, the output being given at 643 tons of the value of \$91,750 though it is believed to be in reality considerably larger. The product of 1899 was valued at \$38,000.

The returns of petroleum products show an increase in the value, while the natural gas is diminishing owing to the exhaustion of the supply although eleven new wells were sunk.

The report is one of the most valuable documents issued by the Ontario government, which has in many ways done a great deal to forward the mining industry and awaken Canadian and foreign capitalists to the great advantages offered by our undeveloped mineral resources for profitable investment. The facilities afforded by the Provincial assay office for determining the value of sample ores concerning which full details are given, are a great advantage to prospectors, and the work of exploration and geological research which is steadily being pushed forward has done much to reveal the extent and character of the mineral wealth which awaits development. Mr. Thomas W. Gibson, Director of the Bureau of Mines, has shown excellent capacities for the position and the useful character and excellent arrangement of this, his first, report is greatly to be commended.

THE MANUFACTURERS' COLONNADE.

[The Toronto daily papers announce that the Canadian Manufacturers' Association will erect a colonnade at a cost of \$10,000, to celebrate the occasion of the visit of His Royal Highness, the Duke of York to this city.]

THE CANADIAN MANUFACTURER gives its most hearty support to the idea of thus commemorating the event of the forthcoming visit of the son of our beloved King, and heir to the British throne, and reasons are wanted why it should not be carried out.

Naturally the first matter to be considered in this programme is the raising of the necessary ten thousand dollars, but this amount is a mere trifle to the "Robber Barons" as The Globe and other free trade papers and orators have always delighted to call the manufacturers. An assessment of one dollar more or less on each man, woman, boy and girl employed in the manufacturing establishments in Toronto would be sufficient to pay for a very handsome colonnade, by which the Association, particularly the officers, and the committee which will have the matter in hand, would derive

great advertising advantages. As a matter of mere detail, the columns should be made to correspond in height and other proportions to the sums obtained from each factory contributor. Thus, appropriate reading matter displayed upon the columns would indicate the fervor and patriotism of the industrial establishment they represent.

At first sight the arrangement might seem to preclude any profit accruing to members of the Association whose places of business are not in Toronto, but it can plainly be seen that the plan can be applied to all members throughout the Dominion, from Halifax to Vancouver, including Hamilton, thus allowing all to share in the great demonstration.

A correspondent very properly scores the narrow-mindedness of those who say that the welcome to our Royal guests should come from the whole body of the citizens, and be under the direction of the Mayor and City Council—that the credit of the erection of such an imposing structure as the colonnade is to be, should not be confined to a particular class; and another suggestion that comes to us is that instead of the Association expending the ten thousand dollars upon a manufacturers' colonnade, the contributors to the fund might effect more good with their money by dividing it among their respective employees, or assist the Toronto Industrial Exhibition Association to enlarge and improve the Manufacturers' Building on the Fair Grounds.

Of course, all such suggestions and objections come from "kickers;" and our observation is that some persons are so constituted that they cannot refrain from kicking an old hat on sight, although it contained a brick. Should such creatures deprive the Association of the opportunity of demonstrating their Imperial enthusiasm? Certainly not. By all means, let the colonnade be erected. But it should be a colonnade, as an arch, as some have suggested, would give the promoters no fair opportunity to advertise themselves.

CANADA AT THE PAN-AMERICAN.

The Dominion of Canada has erected at the Pan-American Exposition what is in many respects the finest and best furnished of the foreign buildings at that great assemblage of the achievements of Pan-America. The dedication of this building on July 1, Dominion Day, was a notable event and will do much to draw closer the relations between Canada and the United States and other portions of the three Americas.

The Canadian Building is a handsome structure, 60x180 feet in dimensions, and two stories high. The style of architecture is Elizabethan, and staff work representing stone in the first and timber in the second story. The shingled roof is stained with creosote. There are two wings extending from the front at the sides of the main entrance to the building and between these a veranda and a balcony. Over the north wing is an octagonal tower. In this corner are the ladies' reception room, and a meeting room for the Canadian exhibitors. In the south wing are the offices of the Commissioners of the Dominion Government and the Province of Ontario and their staffs. In the rear of these quarters is an exhibit room 40x60 feet. Here are shown the natural resources of Canada only, the individual exhibits being shown in their respective divisions in the various exhibit buildings of the Exposition.

The staff covered walls of the building are beautified with color in pleasing tints, the harmony of the color scheme of the Exposition being maintained here. The interior decorations are rich and in the best of taste.

The building has been opened for some two weeks previous to its dedication. The ceremonies in connection with the

dedication afforded opportunity for a most imposing military display which was participated in by the 48th Highlanders of Toronto and officers of other Canadian military organizations, the Governor-General being represented by the Minister of Militia and Defence, Hon. F. W. Borden.

The construction of the building and the arrangement of its exhibits were authorized and arranged for by the Department of Agriculture of the Dominion, of which Hon. Sidney A. Fisher is Minister. The building is located on the north of the Mall to the east of the Agriculture Building, and near the great Stadium for athletic sports. The Grand Canal of the Exposition, with its avenue of poplar trees, runs along in front of it. It is convenient of access from the big live stock barns to the south of the Mall. The building resembles somewhat the British Building at the Chicago World's Fair, of 1893, although it is by no means a copy of this building. Flowers and fruits are used to brighten the appearance of the building. The interior presents a most effective appearance, arranged as it is with the exhibits of Canada in a most attractive manner.

Although Canadian exhibits are seen in the various exhibit buildings in greater extent and variety, the notable productions of the Dominion have been arranged so as to give on the whole a most interesting presentation of the products of this vast country. The cereal products of the Canadian farms are woven into figures and patterns suitable for the decoration of the walls of the building. Conspicuous in the display are the specimens of game, animals and birds. The New Brunswick Legislature has loaned to the Intercolonial Railway for exhibition in this building some of the most interesting articles in its collection. One of the features of the decoration of the building upon the interior is a splendid buffalo. This stuffed buffalo is one of the largest specimens to be seen. There are also fine specimens of the musk ox. The bison shown was the giant of a herd in the Canadian Northwest territory, and was killed by Warburton Pike, an American writer, who had it stuffed and mounted and presented to the Dominion Government. Other stuffed animals shown are moose, elk, caribou, beaver, links, wild cat, mink, seal, merten, fox, bear, wolf and different varieties of birds and fish.

There is a splendid moose head with antlers spreading sixty-eight inches, loaned by Col. Charles E. Turner, United States Counsel-General at Ottawa, who shot it 150 miles north of the Dominion capital. It is said to be the most perfect specimen in existence.

The building has apartments for visitors and for the officers of the Commission, and these are handsomely furnished throughout. Just off the main court is the office of Commissioner J. Hutchinson and his Secretary, Wm. A. Burns, and here there is a register where Canadian visitors are requested to inscribe their names.

The building is illuminated at night in harmony with the other Exposition buildings, so that it is a beautiful sight in the evening as well as under the sunlight of the day.

THE SUGAR BEET INDUSTRY.

A Bay City, Michigan, correspondent writes an interesting letter to The Sugar Beet regarding the beet sugar industry in that State, in which he says:—

Another large Michigan sugar factory is to be established. The new plant is to be built at Caseville, at the junction of Pigeon river with Saginaw bay. The company has sixty acres of ground at this place, where a plant with a capacity of 650 tons a day is to be built. Contracts have already been made for beets from over 4,000 acres of neighboring land, which

experts say is excellent for the rising of sugar beets. The crop of 1902 is provided for, and it is expected that the factory will be running in the fall of that year. The new company is called the Caseville Sugar Co., with a capital stock of \$450,000, divided into 45,000 shares of a par value of \$10 each. Most of the heavy investors are Detroit capitalists. A proposition was made to the business people of Monroe that may result in the location of a sugar beet factory there. The offer is to build a 600-ton factory and pay \$4.50 per ton for twelve per cent. beets, and 33½ cents for each additional per cent. of sugar, if the city gets contracts for 5,000 acres of beets. To prove their good faith the proposed company will give a bond of \$100,000 to insure the construction of a factory if the city will guarantee to get the necessary acreage. The Mayor and a committee of business men will hold a meeting to arrange for securing the acreage. The company asks no money from the city, and this, coupled with the fact that there are several good locations within the city limits, makes the proposition look good. The expense of securing the acreage will be defrayed by the city and if the deal goes through, the work of constructing the factory will begin next fall. The Lapeer Sugar Beet Co. has been incorporated, and will build a factory having a capacity of 600 tons of beets a day. It is now an assured fact that Mt. Clemens is to have a beet sugar factory, and the citizens are greatly pleased that the new project is a sure thing.

Correspondents of The Sugar Beet in other States, report:—

Iowa.—The Iowa Beet Sugar Co. has been incorporated with \$1,000,000 capital and will build a factory in Hamson county. All the mills, buildings and appliances used in the manufacture of sugar in Iowa, including the land on which the buildings are located, all the personal property used in connection with the business, and certificates of stock of the company are exempt from taxation until the year 1910.

Wisconsin.—Michigan parties have made a proposition to the citizens of the town of Burlington to build a beet sugar factory at that place to cost, complete and ready for operation, \$700,000. The people are asked to give assurance that 8,000 acres of beets will be grown each year. The factory at Menominee Falls pays \$4 per ton for standard beets. It will require about twenty factories like this to furnish all the sugar consumed in Wisconsin. That State consumes between \$5,000,000 and \$6,000,000 worth of sugar annually.

Illinois.—The average cost to the Illinois Sugar Refining Co. for all labor in producing 378 acres of beets at Bloomington during 1900, was \$29.71 per acre.

Referring to the industry in France, The Sugar Beet says:

Some recent arguments point out that the low consumption of sugar in the country is due to its high selling price. The people are taxed 12.8 cents a kilo for all the sugar they consume and the actual manufacturers' selling price on the market is eight cents, meaning that the local population has to pay 20.8 cents per kilo for their sugar (9.4 cents per pound). If the price upon the market is compared with that in London and Magdebourg, the difference is comparatively slight, it being 0.06 cents per kilo less than London 0.30 cents less than Germany. But in England there is no local taxation, while in Germany it is five cents instead of 12.8 per kilo. Agitation against the use of saccharine in any form continues to be agitated in every centre of the country. It is urged that if, for one reason or another, it should be mixed with sugar, the product shall be considered a fraud and punished accordingly. In discussing the questions of bounties on home production and exportation, some interesting data has come to light. From 1884 to 1900 the sugar manufacturers have received a total of \$152,800,000 in the way of bounties. There are 339 factories working, slicing 8,000,000 tons of beets; the capital invested in these factories is \$64,000,000, consequently the total government bounty during the past sixteen years represents a total of \$88,000,000 in excess of the original cost of the plant. This system tends to encourage excessive production. During the current year the total sugar output is estimated at 1,000,000 tons refined, and this means an increase of 171,000 over previous campaign. The sugar consumption was 380,000 tons refined in 1884; it rose, in 1899, to 439,000 tons, and, in 1900, to 455,000 tons. As this quantity is sixty per cent. in excess of the home consumption, the remainder has

to be exported, but the problem that now presents itself is to what country can the product be shipped? Leading authorities on the question of local sugar legislation recommend that the home tax be reduced from \$12 to \$6, and that the refiners' tax be done away with entirely, under which circumstances there would be a considerable increase in the average consumption per capita.

EDITORIAL NOTES.

Chicago as a seaport commences to attract the attention of Europe. A Rotterdam ship-broker firm advertises in the local papers, for the first time in maritime history, that it will accept freight to go through with bulk unbroken to Chicago.

The first steps for the inauguration of a fast steamship service between Sydney, C.B., and Southampton, England, have been taken. Mr. H. M. Whitney, of Boston, who is so largely interested in Sydney, has given the contract for three very fast steamships, which will be put on the service as soon as ready. The vessels are intended to make the passage from Southampton to Sydney in four days, and it is claimed that by the new service it will be possible to land passengers in Chicago in the same time as it now takes to get to New York. It is also the intention of the capitalists who are interested with Mr. Whitney to establish an extensive steel ship-building plant at Sydney.

The action of the United States Treasury Department in applying article 626 of the existing tariff law to Russian petroleum has led the Russian Ministry of Finance to advance the rate of duty upon the following American products when imported into Russia: (1) White rosin or colophon, galipot, brewers' pitch, and (2) bicycles. This measure went into effect yesterday June 21. The present duty on rosin is 30.8 cents per pood (36.112 pounds), while the duty on bicycles is at present \$9.26 each. The imposition of the maximum tariff would increase each of these thirty per cent. Although the volume of trade affected by these increases is small, it is naturally feared that the incident may increase the difficulty of adjusting the more important sugar controversy.—Dun's Review.

Bearing in mind that within a month the Toronto Industrial Exposition will blossom out in all its pristine loveliness, or words to that effect, and that even King Solomon of old with all his grandeur will not be in it with H. J. Hill and all the attractions he will present to his old time friends, we have pleasure in reproducing an article having reference to the Yorkville Fair, as published in The Toronto Globe of July 8, 1851, now quite fifty years ago. Since that date Yorkville became absorbed into what was known as Muddy York, which later became Toronto. The Globe says:—

Upon the authority of letters patent from his Excellency the Governor-General a monthly Fair has been established at the Village of Yorkville for the sale, purchase or exchange of farm stock and produce—horses, cattle, sheep, swine, poultry, butter, eggs, grain, vegetables, etc. The first Fair comes off on Wednesday, the 16th inst., and will be opened by Sheriff Jarvis, the steward of the Fair. Any person requiring a plot of ground on which to erect a booth or place for the sale of wares or merchandise must make application to George Dupont Wells, Esq., of Davenport, Secretary of said Fair, on or before eight o'clock on the morning of the said Fair, which will take place on the vacant space south-west of Yonge street toll gate No. 1, in the Village of Yorkville. At three o'clock on the day of the Fair a dinner will be provided by Mr. Elgie at the Red Lion Tavern, tickets three York shillings—refreshments included.

CAPTAINS OF INDUSTRY.

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

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

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

The town of Delorimier, Que., will spend \$15,000 on a new town hall.

The T. A. Lytle Co., Toronto, has been incorporated with a capital stock of \$100,000 to manufacture vinegar, acids, pickles, sauces, etc. The provisional directors include T. A. Lytle, Samuel Crane and James Crane, all of Toronto.

Mr. C. R. Somerville, London, Ont., manufacturer of paper boxes and gum, will erect a five-storey factory 100x80 feet.

The works of the Montreal Car Wheel Co., Lachine, Que., were destroyed by fire recently. Loss about \$10,000.

The Peninsula Portland Cement Co., Toronto, has been incorporated with a capital stock of \$1,000,000. The provisional directors include Gilbert McKeechie, Durham, Ont., and T. W. Stanhope and Barlow Cumberland, both of Toronto.

Building permits issued in Toronto, up to June 30, amounted to \$1,154,265, exclusive of the new hotel, as compared with \$942,194 for same period last year.

The River-du-Loup Pulp Co., Toronto, has been incorporated with a capital stock of \$500,000, to manufacture pulp, pulp-wood and paper of all kinds, etc. The provisional directors include J. W. Hutt, Liverpool, N.S., J. R. Stratton, Peterborough, Ont., and A. G. Ross, Toronto.

The corporate name of the Cramp-Ontario Steel Co., Toronto, has been changed to the Cramp Steel Co.

The Sackville Freestone Co., Sackville, N.B., has been incorporated with a capital stock of \$24,000. The provisional directors include F. P. Thompson, Frederickton, N.B.; A. M. Bell, Halifax, N.S.; and Charles Pickard, Sackville, N.B.

The Wire & Cable Co., Montreal, has increased its capital stock to \$1,000,000.

Baker & Reid's elevator, Indian Head, N.W.T., was destroyed by fire June 27.

The Radford Paper Co., Montreal, will apply for incorporation with a capital stock of \$2,000 to manufacture pulp, paper, etc. The applicants include T. H. Radford, E. M. Roberts and David Yuile, all of Montreal.

United States Consul Hughes, of Coburg, calls attention to Professor Koechlin's method for the bleaching of cotton and other vegetable fibres by passing them through a bath of 100 litres (26.4 gals.) of water, 10 kilogs. (22 lb.) of lime and 50 kilogs. (110 lbs.) of bisulphite of soda. They are then steamed for an hour or two under a pressure of from one to two atmospheres, rinsed again and dried. The bisulphite can be replaced by hydrosulphite of lime. The cotton or other fibre may be boiled in the bath for a few hours instead of being steamed. Another process is to subject the goods for six hours under a pressure of two-thirds of an atmosphere to a liquid composed of 1,000 litres (264 gals.) of water, 10 kilogs. of dry caustic soda, 10 kilogs. of soap, 1 kilog. (2.2 lbs) of calcined magnesia, and 30 litres (7.9 gals.) of peroxide of hydrogen; then rinse, souse, rinse

again and dry. The white obtained is said to be much better than can be had with hypochlorite, and, best of all, does no damage to the fibres or fabric.

It will be seen by the advertising columns that the Government of Ontario proposes holding a timber sale by public auction September 17 next. Some of the berths are those which were intended to be sold on March 15 last, but were withdrawn as the prevalence of smallpox prevented prospective buyers from examining and estimating. Several townships in the vicinity of Sault Ste. Marie are also offered. These townships have been surveyed for a great many years, but being inaccessible were not required for settlement. Now, owing to the good land in the vicinity of Sault Ste. Marie all being taken up, and the construction of the Algoma Central Railway giving miners and settlers easy access to these townships, a number are going in, and the timber is exposed to danger from fire. It is, therefore, considered expedient to dispose of the pine timber so that the townships can be thrown open for sale or settlement and that the Province may get the benefit of the value of the timber.

The Cramp Steel Co., are calling for subscriptions to one issue of \$1,000,000 7 per cent. cumulative preferred stock, the entire capital being \$2,000,000 of preferred stock and \$3,000,000 of common stock. Subscribers to the preferred receive as a bonus one share of common stock, payments to be made 25 per cent. on application, 25 per cent. on August 1 and 50 per cent. on September 1. The proceeds of the sale of the preferred stock are to be used to build a blast furnace and an open hearth steel plant at Collingwood, Ont., the town having granted a cash bonus of \$115,000 and eighty acres of land. The company own iron lands in Ontario which are said to carry Bessemer ore and own coal mines in Wise and Dickenson counties, Virginia, which have been reported on by A. S. McCreath, of Harrisburg, Pa.; E. V. D'Invilliers, of Philadelphia; and P. L. McCully, of Pittsburgh. It is estimated that the bounties during their existence will aggregate \$1,755,000. The Board of Directors includes William M. Cramp, of Philadelphia; Dr. W. Seward Webb, Chas. D. Cramp, Col. A. B. Chandler, H. L. Burrage, J. Wesley Allison, Sir Chas. Tupper and J. A. Currie.

INGERSOLL-SERGEANT Rock Drills

FOR MINES, TUNNELS AND QUARRIES

PISTON INLET Air Compressors

STRAIGHT LINE
DUPLIX and
COMPOUND.

FOR ALL DUTIES.

... COMPLETE MINE EQUIPMENT ...

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

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

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

The large three-storey brick building of the Woodburn-Sarven Wheel Co., St. Catharines, Ont., was destroyed by fire July 9. Loss about \$10,000.

The bolt-making department of the forging works at Gananoque, Ont., have been moved to the Swansea Forging Co's works, Swansea, Ont.

The Wm. Davies Co., Toronto, have taken out a permit for improvements to their packing house to cost \$25,000. A dining hall for the employes will be erected at a cost of about \$5,000.

The foundry of D. J. Barker & Co., Picton, Ont., was damaged by fire July 4 to the extent of about \$2,000.

The Toronto Electric Railway Co's receipts continue to grow. The company's gross revenue and the city's share of the same for the following months were:

	Receipts.	Percentage.
June, 1901....	\$139,063 40	\$13,906 34
June, 1900....	123,388 13	9,871 05
June, 1899....	109,616 18	9,721 41
June, 1898....	93,708 63	7,496 69
May, 1901....	127,919 30	12,791 93

The Ontario Portland Cement Co., Brantford, Ont., has applied for incorporation with a capital stock of \$450,000. The applicants include Harry Cockshutt,

W. S. Wisner and E. L. Goold, all of Brantford.

The Syracuse Smelting Co., Montreal, inform us that they are allowing special prices on their Columbia phosphor tin, various grades of babbitt metals, solder and aluminium, etc., owing to just getting in large quantities of raw material.

The large cheese factory and feed mill of I. H. Fifield, Brockville, Ont., were damaged by fire July 8 to the extent of about \$2,500.

The lumber mill of Alfred Dickie, Stewiacke, N.S., was destroyed by fire July 4.

Mr. James Dunbar's sawmill at Sundridge, Ont., was destroyed by fire July 11. Loss about \$3,000.

The Richardson Gold Mining Co. has ordered a 100 h. p. Mumford Standard boiler from the Robb Engineering Co., Amherst, N.S., for their mine at Isaac's Harbor, N.S. This is the second of these boilers bought by them within a few months.

The Ontario Wind Engine & Pump Co., Toronto, are in receipt of an enquiry for their well-known "Canadian Airmotors" from the Imperial Government of Central India. Outfits are required for pumping

water from a lake at Mount Abu, and the fact that Canadian goods are being sought after from such distant quarters of the globe speaks volumes not only for their excellence but also for the future export trade of Canada. This company boasts that the sun never sets on their "Airmotor," and undoubtedly this is true, as their goods are distributed in all quarters of the earth, and a large increase of foreign trade is expected as a result of the Exhibition at Glasgow.

The Leitch & Turnbull Co., Hamilton, Ont., inform us that some of their recent placements of elevators include one in the Court House at Victoria, B.C.; a hydraulic elevator in the Hotel Dieu Hospital, Cornwall, Ont.; and one electric and two hydraulic elevators for the Na-smith Co., Toronto. This concern are manufacturers of high-class electric, hydraulic, steam and hand power elevators for all purposes, dumb waiters, ornamental iron work, folding gates, motors, etc.

The plans for the new fortress at the mouth of Halifax, N.S., harbor have been completed by the Imperial authorities and work will commence at once. The fortress will be much larger than that at York Redoubt, and will be armed

Transfer Ornaments, AMERICAN MADE.

Guaranteed Quality.

TRADE MARKS, DECORATIONS, NAME PLATES, ETC.

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

Sketches and samples submitted free of charge. Being American manufacturers enables us to make prompt delivery. Write us.

—MAIN OFFICE—

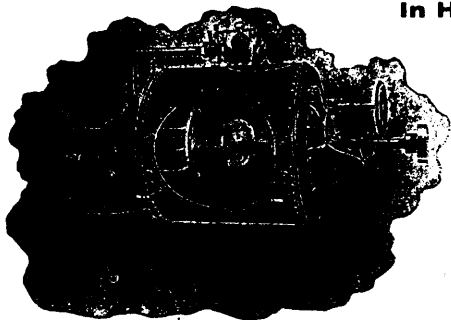
THE MEYERCORD CO., Inc., CHAMBER OF COMMERCE, - CHICAGO,

Canadian Travelling Representative,
CHAS. H. JAGGER, Hamilton, Ont.

Largest Makers in the World of Guaranteed Decalcomania Transfers.

THE Crocker Patent Turbine

In Horizontal Setting, with Quarter Turn Elbow.



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

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

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

The JENCKES MACHINE CO.,
42 Lansdowne St., Sherbrooke, Que.

with the most powerful weapons. It was the intention of the authorities to erect a fort out of the water on the principle adopted in ports in England, but, after consideration, it was decided to have it constructed out of the solid rock. The site selected is three miles west of Herring Cove, immediately facing the water. The Imperial authorities selected a large granite cliff which has a hollow in the centre. The main part of the fort will be located in this hollow, with works to be constructed of cement, giving the appearance, when completed, of a solid cliff. Steam drills for dynamite blasting and a stone-crusher were transported to the site for the fort to-day, and work will be commenced at once. The fort will have as its principal armament sixteen of the latest kind of guns, which will be of the disappearing type. These guns will be fired by instructions from a conning tower, and will be worked on the system used in modern war vessels. The men handling the guns will not be exposed. They will work the guns from below, getting the sight and other directions from the conning tower. The fort will be the largest this side of the Atlantic. The work will be rushed.

TORONTO EXHIBITION PROSPECTS.

Toronto Industrial Exhibition prospects are most flattering. So far the applications for space, all of which should be in by August 3, are in excess of last year, while Mr. F. W. Unitt, the superintendent

of the Main Building and Annex, who has been on a tour of Ontario, has received promises to make entry this year from a number of manufacturers who have never shown before. Mr. Unitt states that everywhere he was well received, and that the general feeling was that the Toronto Exhibition was the greatest possible credit to the city and the country. Of course, the close proximity of the Pan-American will greatly help Toronto, as at very little extra cost it will be possible to take in both. Apart from that, however, the Toronto management have succeeded in making very favorable rates with the railways for extension of excursions, of which an exceptional number will be run this year. A fact not too largely known is that each year at the Toronto Exhibition some two hundred gold and silver medals and diplomas are awarded, and these medals are recognized the world over as true awards of merit. While it is too early to go into details it can be said that the display of furniture will be one of the best ever seen in Canada, the whole of the Annex being already taken up for that purpose. The exhibit of machinery of all sorts will also be far ahead of previous years, while of general manufactures, there will be sufficient not to allow an unoccupied inch of space. For this reason it is advisable to make early application to Mr. Unitt, who is in constant attention at the offices, 82 King street east, Toronto, to receive entries, allot space and to furnish any information desired. Another fact worth bearing in mind is that no charge what-

ever is made for space unless devised purely for advertising purposes. Not only are an extra number of visitors bound to be on hand from the States this year, but many foreigners are coming over and an exceptional number of conventions and meetings are to be held. To provide for this superabundance of prosperity the Toronto Exhibition executive have increased their premium list and made special arrangements for attractions. The Manufacturing Committee include the following, any of whom, as well as Mr. H. J. Hill or Mr. F. W. Unitt, will be pleased to furnish information on any point desired and to see that exhibitors have every courtesy extended to them:

IMPLEMENTS.—Messrs. J. K. Leslie (Chairman), J. N. Shenstone, George Edwards, J. O. Thorn, George Booth, S. E. Briggs, Ald. Thos. Urquhart.

MACHINERY.—Messrs. George Booth (Chairman), J. O. Thorn, F. Nicholls, Ald. Jos. Oliver, T. L. Moffat, jr., Henry Martin, F. B. Featherstonhaugh, Thos. Izzard, M. C. Ellis and Ald. James Crane.

MISCELLANEOUS MANUFACTURES.—Messrs. W. K. McNaught (Chairman), George Booth, J. O. Thorn, R. E. Menzies, O. Newcombe, R. B. Andrew, Wm. Dineen, G. J. St. Leger, James Wilson, Michael Carmody, R. W. Elliot, Dr. J. O. Orr, Dr. E. E. King, Eugene O'Keefe and R. Y. Ellis.

CHEMICALS.—Messrs. R. W. Elliot, (Chairman), Isaac T. Lewis, Dr. A. Y. Scott, Dr. H. J. Hamilton, Dr. W. H. B. Aikens, Ald. Dr. Lynd and Ald. Dr. Fraleigh.

W. A. FLEMING & CO.,

771 CRAIG STREET, - - MONTREAL.

THE STRONGEST AND MOST DURABLE



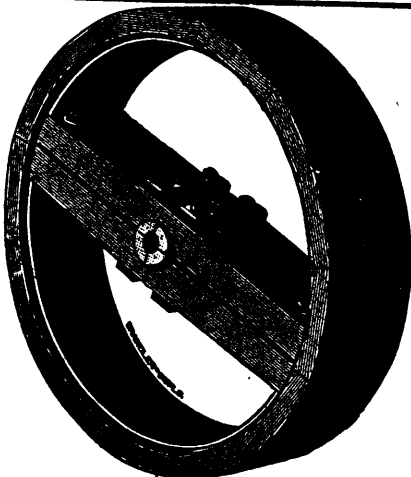
NOT AFFECTED BY DAMPNSS, HEAT OR STEAM
MOST DURABLE THE BEST FOR MAIN DRIVES

"REDDAWAY"

BALATA BELTING

STRONG, DURABLE AND NOT AFFECTED BY DAMPNSS.

WRITE FOR SAMPLES AND PRICES



"The Reeves"

A HIGH GRADE

Wood-Split

PULLEY

BUILT HONESTLY
BUILT RIGHT

It Does the Work. No Trouble. No Worry.

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REEVES PULLEY MANUFACTURING CO., Limited

14 Pearl Street, - Toronto, Ont.

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HEATING APPARATUS.—Ald. Jos. Oliver (Chairman), Messrs. T. L. Moffat, jr., John Tilden, John Laxton, H. Munro and Ald. W. T. Stewart.

CARRIAGES.—Messrs. B. Saunders (Chairman), James E. Tudhope, J. N. Shenstone, Ald. Joseph Oliver, Ald. James Frame, John Laxton, Ald. James Crane, John Dunn, C. E. Kyle, R. J. Orr and Ald. J. J. Graham.

FINE ARTS.—Messrs. R. Y. Ellis (Chairman), the Mayor, R. T. Coady, Ald. Dr. Lynd, Dr. S. P. May, F. McG. Knowles, E. Wyly Grier, James Bain, jr., George Edwards, John A. Cooper, John Lewis, Ald. J. R. L. Starr and John A. McGillivray.

Entries, it should be added, should all be in by August 3, and should be addressed to Mr. H. J. Hill, 82 King street east, Toronto.

THE CANADIAN NIAGARA POWER CO.

The Canadian Niagara Power Co. have commenced the task of developing the power of Niagara Falls on the Canadian side. This will be done by means of an inlet canal, a wheel pit and a tailrace tunnel on lines somewhat similar to the extensive development on the American side at Niagara. The contract has been awarded to Anthony C. Douglas, and the work of sinking the first shaft has been

begun. The first installation of the works of the company will comprise a tunnel of 100,000 h.p. capacity, an inlet canal, and a wheel pit, the latter of 50,000 h.p. capacity, together with the necessary electrical and hydraulic machinery to produce 25,000 h.p.

The first section of wheel pit to be excavated on the Canadian side will be about 250 feet long and 200 feet in depth. The length of the Canadian tunnel will be about 2,200 feet, as compared with a tunnel length on the American side of 7,000 feet. The Canadian tunnel will be built in the form of a horseshoe, the same as on the New York side, but the section will be larger. Its minimum capacity will be 100,000 h.p., and it will be lined with brick without, as will also the wheel pit.

A supplemental agreement has been entered into by the Canadian Niagara Power Co., whereby the power company have agreed to expend the sum of \$1,500,000 within two years, the fact being that they are prepared to spend this amount much sooner if it is possible. For many years the opponents of the Ross government have antagonized the Canadian Niagara power development to that extent that American capital was rendered timid about investing in a project where certain forces in politics were continually calling for a forfeiture of the franchise rights. Now, however, the skies seem

clear, and the work will go forward with all possible speed. Prospects are that within two years there will be a splendid power development in operation on the Canadian side at the Falls, ready to supply electric power to Hamilton, Toronto and other places.

All of the power developed on the Canadian side must be used outside of the boundaries of Queen Victoria Park, and for this reason the development will aid in rendering the large tracts of vacant land about the Falls on the Canadian side of increased value. However, there has been no marked boom yet, the residents of the locality profiting by what they have seen occur on the New York side, which has taught them that growth as a result of a power development is necessarily very slow.

New officers of the Canadian Niagara Power Co. are as follows: President, William H. Beatty; vice-president and treasurer, William B. Rankine; secretary, A. Monro Grier; assistant secretary and assistant treasurer, W. Paxton Little; executive committee, William B. Rankine, William H. Beatty and Wallace Nesbitt.

GERMAN WOOLEN DRESS GOODS.

United States Consular Agent Neur at Gera, Germany, writes:—

There is probably no German enterprise which has undergone within a compara-

GEORGE W. CHAPIN, AMERICAN, EGYPTIAN, SEA ISLAND COTTON
Plain, Combed, Mercerised, Knitting
229 and 231 CHURCH ST., PHILADELPHIA. Weaving, Splicing

YARN

COWAN & CO.

GALT, - ONT.

Wood-Working Machinery

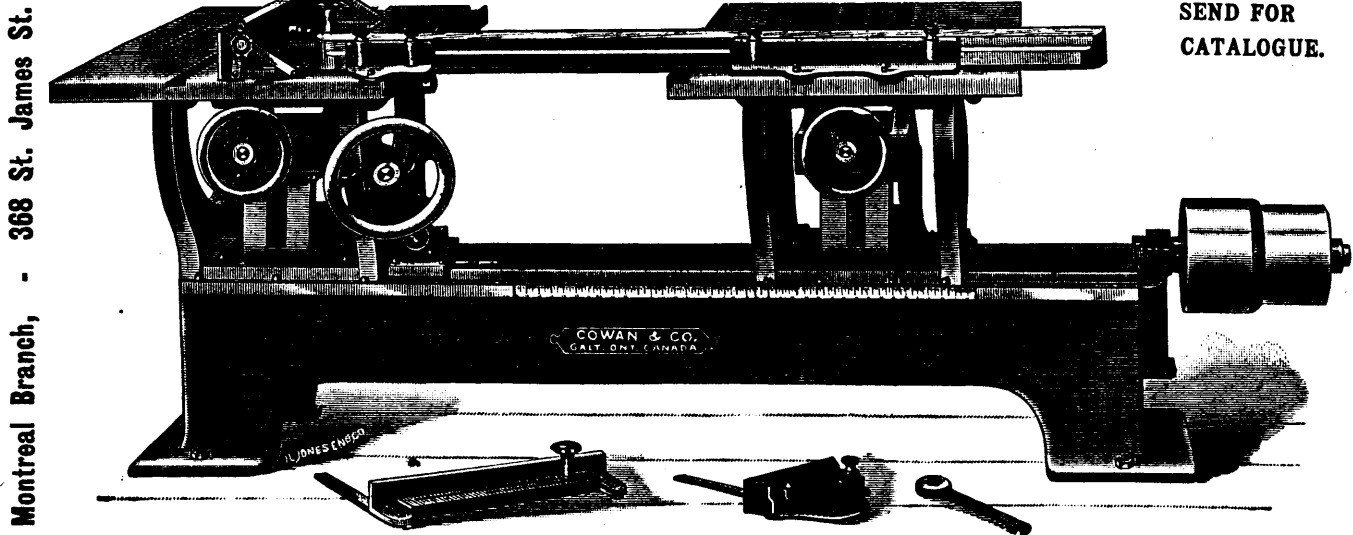
Patent Feed Water Heaters and Purifiers

Engines AND Boilers

SAW MILL MACHINERY.

Etc., Etc.

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NEW IMPROVED PATENT RIP AND CROSS-CUT SAW.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

Montreal Branch, - 368 St. James St.

tively short time such a marked change as the woolen dress-goods industry of this and neighboring districts. Until 1900, prosperous conditions prevailed, but early in that year there was a falling off in the values of wool and woolen yarns of from 50 to 60 per cent. Enormous financial sacrifices followed. The high tariff of Russia and the establishment of factories on a large scale at Lodz and other places in that country, the loss of the valuable United States market, and the decrease in exports to Austria, England, and Scandinavia are among the causes of depression. Last year, two-thirds of the looms were idle, nor is there any prospect of improvement. Of the many manufacturers previously engaged in the dress-goods trade with our country, only seven or eight are still left, and these ship less each season.

Some of the prominent manufacturers of this and other German cities have established branch factories in Passaic and Philadelphia, and, it is said with great success. I am convinced that more would follow, if in possession of the necessary capital. Many communications have been received by this office from real-estate agents, railroad companies, and private persons in all parts of the United States, wishing to sell property for woolen mills; but, while I may claim the merit of having been the mediator in the partial transplantation of one of the largest Gera factories to our shores, my further endeavors were, on account of the lack of capital, in vain. In my opinion, this is an excellent opportunity for some of our large capitalists

to combine with intelligent and reliable European manufacturers in the promotion of home industry. That such an undertaking will prove a first class investment is shown by existing establishments.

MESSRS. COWAN & CO.

Messrs Cowan & Co., Galt, Ont., write us as follows:—

We have recently added to our own plant six of the most improved and up-to-date machines, heavy milling machine, gear cutter, screw cutting machines, besides making extensive additions to our works, and if business continues the way it has been for the past year it will be necessary for us at an early day to add a number of other tools to enable us to keep up with our orders.

We have recently shipped to Manitou Milling Co., Manitou, Man., an improved Corliss engine, 75 h.p.; R. McDougall Co., Galt, Ont., a 75 h.p. Corliss engine, a 100 h.p. boiler, and a Dakin feed water heater and purifier. Hespeler Furniture Co., Hespeler, Ont., have placed their order with us for a 75 h.p. Corliss engine, 125 h.p. boiler, a Dakin feed water heater and purifier and fourteen wood working machines. We have supplied John Piggot & Sons, Chatham, Ont., with an Ideal band re-saw and two smoothing planers. Martin Frere & Co., Montreal, have placed their order with us for the second large double surface revolving bed planer. The Northern Pacific Railway Co., at Winnipeg, Man., have placed an order

for one heavy double surface revolving bed planer and a heavy tenon machine. We have shipped to J. S. Findlay, Owen Sound, Ont., a heavy Invincible planer and matcher and inside moulder; also several wood-working machines to the Brantford Carriage Co., Brantford, Ont.; also to Mickle, Dymont & Son, Brantford, Ont., a large moulder; mortice machine to A. Mills, Merrickville, Ont.; a 500 h.p. Dakin feed water heater and purifier to A. S. Johnson, Black Lake, Que., and a heavy planer and matcher to their mills at Theford Mines, Que.; revolving bed surface planer to Kilgour Shives, Campbellton, N.B.; four wood-working machines to C. A. Paquet, Quebec; heavy swing saw to Lequime & Powers, Midway, B.C.; 60 h.p. boiler to Jos. Empey, The Brook, Ont.; large moulder to McCormick & Ludlow, Winnipeg, Man.; to Leigh & Sons, Victoria, B.C., some six wood-working machines; planer and matcher to N. J. McDonald & Sons, Montague Bridge, P.E.I.; moulder to J. A. & E. Reeb, Port Colborne, Ont.; planer and matcher and sand papering machine to Wm. Boivin, Sorel, Que.; shaper to R. S. Porteous, Stratford, Ont.; heavy double surface planer, revolving bed, to Robt. Stewart, Guelph, Ont.; and a heavy moulder, band saw, wood lathe, shaper, etc. to W. J. Martin, Hillsdale, Ont.

ALWAYS GET A RECEIPT.

The incident which recently occurred at the Toronto post office by which one of the employees was detected in stealing

THE REFINED BORAX COMPANY

Nr. STOCKPORT, ENGLAND.

The advantages of using BORAX BOILER COMPOSITION are:—

- 1.—The removal of all scale or incrustation from the surface of the boiler plates and tubes and the prevention of further deposits.
- 2.—The prevention of all corrosion and burning of the boiler plates.
- 3.—The economization of fuel. When it is taken into consideration that $\frac{1}{4}$ of an inch thickness of scale in a steam boiler causes a waste of 60 per cent. in fuel the necessity of keeping the boiler free from scale will at once be apparent to all steam users. The BORAX BOILER COMPOSITION will remove the scale formed by any class of water, converting it in some cases into loose mud which can be blown off, and in others penetrating between the scale and the plates, thus loosening and bringing off the scale in lumps. Unlike many of the preparations now being offered for sale as disincurants this composition cannot possibly injure the boiler, on the contrary its effect is to preserve it. It is absolutely harmless in its effect upon all metal. The BORAX BOILER COMPOSITION can be used with impunity by Bleachers, Dyers, Printers, Hat Manufacturers, etc., as it does not injuriously affect the steam used in these trades. It will also be found in actual use to compare favorably in cost with any other article.

Directions for use. If the boilers are thickly incrustated with scale 1 lb. per nominal horse power per week should be used for say two months, or until the scale is softened and begins to come off, when the quantity may be reduced to half and leave it to the discretion of the Engineer.

A Trial Order is respectfully solicited.



A cordial invitation is extended to manufacturers in all lines to exhibit this year.

FREE SPACE AND POWER

Entries Close September 11th.

FOR ALL INFORMATION WRITE

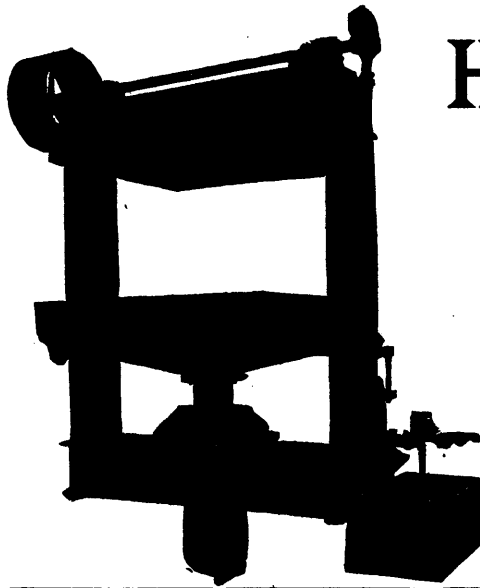
WM. HUTCHISON,

President.

E. McMAHON,

Secretary.

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Hydraulic PRESESS

We Build Presses
for...

**PRESSING VENEERS
TANNERS' USES
BALING, Etc.**

SEND FOR
CATALOGUE
AND PRICES

William R. Perrin & Company

TORONTO, - CANADA

letters containing money, should furnish a warning not only to post office employees, but to the public as well. From the published report it would appear that the employee, who was a letter sorter, had been in the habit of stealing registered letters containing money, and that although these letters bore the usual registration stamp they had simply been dropped into the post office but without any receipt having been obtained for them by the sender. As a consequence, no record was made of them in the office and the thief was therefore able to go on in safety until the increasing number of missing letters of this kind aroused the postal authorities to these thefts, when they at once put a detective on the case. Decoy letters bearing registration stamps and containing marked money were posted every day, and the detective placed in hiding where he could watch the suspected employee, the result being that he de-

tected him in the act and arrested him with the decoy letters in his pocket.

From what we can learn of our postal system, it is easy to understand that these thefts would hardly have been attempted had not these registered letters supposedly containing money been posted without being properly entered in the books of the post office. As our readers probably know, every registered letter or parcel is, or should be, entered in a report by the person receiving it, and every employee into whose keeping it may be subsequently transferred has to give a written receipt therefor to the one from whom he receives it.

For many reasons, we think it would be well for all of our readers to see that they always get a receipt for all registered letters and parcels, and in that event they may rest contented that they reach their destination with absolute safety. The Canadian registration system is so tho-

rough, that it is almost impossible for a letter or parcel once properly entered to be lost or stolen, and in cases where no receipt is taken the fault of losing such a letter or parcel would rest entirely with the sender who failed to comply with the rules.—The Trader.

CANADIAN TELEGRAPHS AND TELEPHONES.

Mr. George Johnson, Dominion Statistician has furnished a statement to the British Board of Trade regarding telegraphs and telephones in Canada, in which he says:—

The telegraph system of Canada includes 3,906 miles of land and cable telegraph lines owned by the Government of Canada, and 30,717 miles owned by companies, making a total of 34,623 miles of lines and 84,510 miles of wire. The messages of the signal quarantine and meteorological services, and also the bulletins giving the movements of the fish in the waters of the Gulf of St. Lawrence and other shore lines, are transmitted free of toll. Since 1895 the mileage of the lines under Government control has increased by 1,182 miles, the total sum voted for construction, operation and maintenance of telegraph lines last year amounting to \$527,400.

In 1891 the average number of messages carried annually per office was 1,700, and in 1900 it was 1,850, the number of offices increasing in the period by 198. Per mile of line the number of messages sent annually increased from 151 in 1891 to 161 in 1900.

The number of instruments in use in 1900 was 52,417, an increase of 18,917 over 1895.

Returns show that there were sixty-two companies in the Dominion, many of them doing private business chiefly and taking no account of the number of messages transmitted. Some of these are in process of absorption. There are thirty-eight companies which may be deemed to be distinct and to be doing a public telephone business. These despatched 156,217,627 messages, which is equal to 8 2-10 messages per diem for each subscriber. In 1895 the average was 5 9-10 messages.

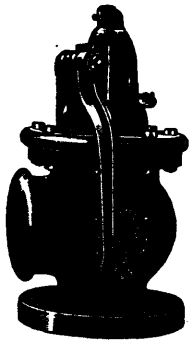
SMALL ROILER FEEDER
HYDRAULIC PRESSURE PUMP
LARGE BOILER FEEDER
MARSH
MARSH
MANUFACTURED BY
AMERICAN STEAM PUMP CO.
BATTLE CREEK MICH.
AIR COMPRESSOR
FOR DEEP WELLS
35 000
MAXIMUM
STRENGTH
SIMPLICITY
AND
SERVICE
LARGE TANK
WRITE FOR NO. 10 CATALOGUE

Canadian Agents **The A. R. WILLIAMS MACHINERY CO. LIMITED**

Head Office, - - - TORONTO

Branch Office—MONTREAL

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A VALVE YOU CAN RELY ON
SEND FOR PRICES

CROSBY STEAM APPLIANCES EXCEL

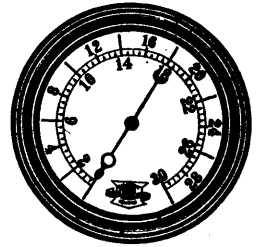
Steam Engine indicators.
Recording Gages.
Revolution Counters.
Pressure and Vacuum Gages.
Lubricators, etc.



Stationary and Marine Valves.
Water Relief Valves.
Blow-off Valves.
Globe and Angle Valves.
Single Bell Chime Whistles.

SEND FOR CATALOGUE

A TRUTHFUL GAGE IS THE ONLY GOOD GAGE



CROSBY STEAM GAGE and VALVE CO.
BOSTON, NEW YORK, CHICAGO, LONDON

WHAT TO DO WITH TRADE PAPERS.

One of the most common sights in the office of a manufacturer, is a disorderly, dusty, crumpled pile of mechanical papers. They have the appearance, in most cases, of having been thrown together from across the office, and their handsomely printed pages and illuminated covers appeal mutely and helplessly against the base, neglectful position they are thus forced to occupy in the office of the very one to whose benefit and pleasure and edification they are devoted. "To what base use have we fallen," seems their mute protest.

Occasionally, in the office of a thrifty, orderly manufacturer, they are piled each paper by itself, in neat piles, sometimes behind glass doors, or curtains, and while

this latter treatment is more in keeping with the high mission of these indefatigable and indispensable disseminators of mechanical knowledge and genius, yet even thus they are bearing the same relation to their real and possible mission in the mechanical world that a locomotive locked up in a roundhouse bears to its designed mission.

Mechanical papers are published to be read. Of what avail is their wealth of information, their helpful suggestions to artisans and workmen if they are, even carefully piled away?

Every shop is filled with workmen, and the fact that they find employment in a machine shop is evidence to the fact that they occupy a position in the great thinking, ingenious world, one step at least, removed from the level of day labor. Every manufacturer knows the value of

an ingenious, thoughtful mechanic, one whose mind works in sympathy with his hands. And he knows also that nothing tends more surely to this end than that the workman be constantly informed of the developments and discussions in his own line of occupation. And he knows equally well that there is nothing to be compared, in value, with mechanical journals to this accomplishment, and that if his workmen should regularly read the mechanical papers, which lie in dirty confusion in his office, their value to him, as workmen, would be directly enhanced, that every evening hour spent in reading, means that many hours less in the corner saloon or in some equally useless or hurtful pastime. And yet, though possessed of this information, he rarely thinks of passing out these papers among his workmen. It would cost him but a trifle to

"Our Country's Welfare is Our First Concern."

MANUFACTURERS'

WILL MISS A

GRAND OPPORTUNITY

IF THEY FAIL TO EXHIBIT

This Year

AT.....

CANADA'S GREAT EXPOSITION, TORONTO
August 26th to Sept. 7th, 1901

Increased Accommodation

VISITORS FROM ALL PARTS of the WORLD

APPLICATIONS FOR SPACE

SHOULD BE MADE

AT ONCE.

ENTRIES CLOSE AUGUST 3rd

FOR PRIZE LISTS, ENTRY FORMS, AND ALL PARTICULARS, ADDRESS

ANDREW SMITH, F.R.C.V.S.,
PRESIDENT.

W. K. McNAUGHT,

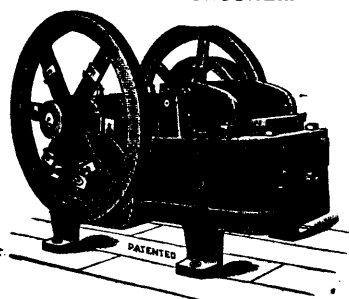
Chairman Manufacturers' Committee.

H. J. HILL,

MANAGER, TORONTO.

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ROLL JAW CRUSHER.



Crushes

Large Rock

to

4 inch.

Send for Circular.

STURTEVANT MILL CO.,

104 Clayton St.
Boston, - Mass.

provide a place where these papers could be gotten by the workmen and to pass around word to that effect.

A simple list of rules regulating the use of these papers by the workmen, rules as to the length of time that one was allowed to keep out a paper, and as to neatness in their use, etc., would not cost but a few cents and would cause respect, both for the journals and for their employer.

In a very few cases this practice has already been put into successful operation. In some cases an important step farther has been taken and a free reading room has been provided, lighted and heated and kept open of evenings for the free use of the workmen. In at least one case, a large circulating library has been provided for the free use of the men. It is needless to say that the workmen, in this shop, are of the highest order of skilled artisans; men who, by dint of study and intelligent

application, have raised themselves to their present honorable position as skilled mechanics. Had their ambition and genius never been awakened to a vision of better things, they would not now occupy their present lucrative and honored position.

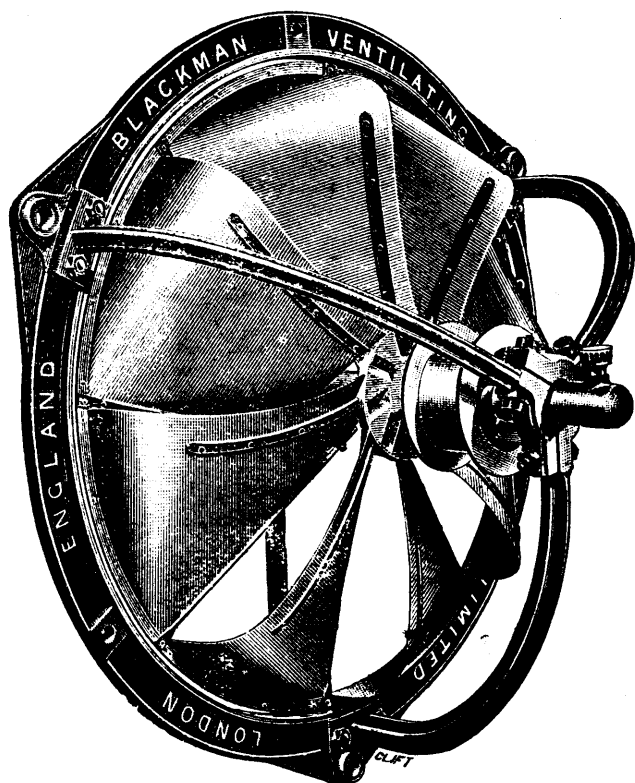
Very little would be gained along the line here advocated, if only a dirty shelf be provided, and the disorderly, uninviting pile we have referred to be transferred to this shelf. Neither the employer nor the papers would gain much in the estimation of the workmen. Anything that is worth doing, is worth doing well. Far better to provide a neat, painted rack, or pigeon-hole case, with each apartment labeled with the name of the paper it contains, and with a tablet provided on which the man writes his name when he takes out a paper. He will be more likely to return it if his name, inscribed there, indicates that he has a paper out. His name inscribed there also serves as an incentive

to others to take out papers, for the reason that the more intelligent and thoughtful ones will be the first to take out the papers, and such ones are the more influential among the force of workmen.

The mechanical papers of to-day are reflexes of the best thoughts and practices in applied mechanics, new kinks in shop practice are published and simple designs by the means of which a tool or a workman may do more or better work, all of which are of real value to the workman, and if so, then to the employer, and how is this desideratum to be accomplished if the workman be left in ignorance of them as they are published to the world.

Every year lifts the mechanical press up into a higher realm of practical usefulness. The mechanical papers of even ten years ago, were nothing like as complete and practical, either in point of reading matter or practical illustration, as they are to-day. They are weekly text-books

BLACKMAN FANS



30 HIGHEST AWARDS

Gold Medal, Paris, 1900

MORE THAN 60,000 IN USE

**For Ventilating, Drying, Steam and Dust
Removing, etc., in**

TEXTILE FACTORIES

BLACKMAN EXPORT CO.

LIMITED

70 FINSBURY PAVEMENT

LONDON, E.C.

Cables: "ACULLA, LONDON," A B C Code.

of all that is most new, most helpful and most suggestive to a practical workman. Brought in studious contact with these practical ideas, the workman becomes involuntarily a better workman. And yet, in the case of nearly every manufacturer the country over, these valuable helps to efficiency on the part of his operatives, are left to cumber and disorder the office, when they should be a source of direct profit to both employer and employed.

Publishers also would be benefitted were the plan here suggested carried out, for once give a man a taste for reading and he will very likely become a subscriber. Advertisers would also be equally benefitted, for, in not a small proportion of cases, the workman is the first to see the advantage this or that tool, or appliance, would be in the shop. And a wise employer will consult his best workmen as to the best and most serviceable tools to purchase.

From every point of view, this simple and inexpensive practise must appeal to a practical, progressive employer as sensible, practical and beneficial.—The Age of Steel.

The papers cannot do more than half the work in making a success of any business. The paper will bring the enquiry, but the advertiser must do the real selling. Just there is where he is inclined to shirk. He sends a circular, or catalogue and then sits down with folded hands to wait for orders. He should do more. He should follow up his catalogue with letters, not one or two, but many, until he

finally gets his order. He goes to considerable expense to get a prospective customer, and then lets him get away through not "keeping everlastingly at him." If all advertisers had a systematic plan of following up enquiries, successes would be many more than they are now.—Judd's.

CATALOGUES WITHOUT PRICES.

We continue to receive numerous catalogues, especially of machinery, without the slightest indication as to prices. In many cases, doubtless this is unavoidable, but when catalogues are transmitted to probable buyers at a great distance some indication of approximate value should always be given. Such prices need not necessarily be printed in the body of the book, or even near the machines described, provided that each is numbered or clearly named and that a separate sheet be inserted by the aid of which the prices can be traced. The importance of this is very clearly brought out in a recent report from an official in one of the French possessions abroad. He remarks: Several months ago, I called for catalogues of steam engines and fittings, and scores of catalogues were sent in reply; but only a very small percentage gave prices. The result was that while a number of orders were placed, the goods were in several instances ordered from people who had quoted prices, although articles shown in catalogues without prices would have been preferred. The merchants here understand perfectly that prices are liable

to variation as the price of iron and metals varies, but they very properly want some price quoted so that they can make calculations. It may not be the most businesslike way in the world, but the way of these people is to want to have all the information in their hands for a long time; then, when they are ready to order, they wish to have no delay whatever. They simply will not write saying exactly what they want and wait for a price. They will study out that the article wanted will cost about so much and then order it. Continental manufacturers understand this, and if people want this business they must conform to the ways of their prospective clients. In any case, a catalogue without prices is much like a gun without a lock—pretty to look at, maybe, but it does not bring down any game. Further, manufacturers should be prepared to carry on their correspondence in the French language and to use the metric system throughout for weights and sizes.—British Trade Journal.

ONTARIO'S MINING EXHIBITORS AT BUFFALO.

There seems to be no doubt that the Ontario mineral exhibit is the finest of that class at the Pan-American Exhibition. Premier Ross, Hon. E. J. Davis, Commissioner of Crown Lands; and F. W. Gibson, of Toronto, director of the Bureau of Mines of Ontario, decided to show the economic ores and minerals of Ontario on a scale that would convince visitors of the real importance and abundance of those re-

WE MANUFACTURE ONLY

HIGH GRADE

STEAM AND WATER GOODS



Headquarters for the Celebrated.... **J. M. C. Valves**

—AND—

Heintz Steam Saver

INTERESTING BOOKLET MAILED TO ALL STEAM USERS UPON REQUEST.

The Jas. Morrison Brass Mfg. Co. LIMITED, TORONTO

The Filter Does the Rest

THE BURT MFG. CO., Akron, Ohio.

GENTLEMEN.—Yours of the 6th and 7th insts. received. After trying several oil filters at our Power Station, we find that the Cross Filter gave us the best results and I am entirely satisfied with its work.

In fact after the engineer has placed the oil in the filter, the filter does the rest.

Yours truly,

THE WEST SIDE RAILROAD CO.,
WM. W. COLE, Gen. Supt.



The Cross Oil Filter

Is always reliable — its world-wide reputation together with our guaranteed saving of 50% on your oil bills makes it a safe investment.

Try it for 30 days. You can return it at our expense if not satisfactory.

THE BURT MFG. CO., AKRON, OHIO

Largest Manufacturers of Oil Filters in the world. } { We also make the BURT EXHAUST HEAD.

PERSISTENCE IN ADVERTISING..

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in past years have been notable in reaping the rewards of persistent publicity by advertising in

The Canadian Manufacturer.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

Why Not Use the Best?

WE MAKE IT IN ONLY ONE GRADE

Shultz Patent Sable Rawhide Belting is stronger, more pliable, will transmit more power and last far longer, than any oak-tanned belting made. Main driving belts, and belts for high speed a specialty.

SHULTZ BELTING CO., - 114 High St., Boston, Mass.

sources of the province. All the ores have been taken from working mines and represent the ordinary run of ore from those mines. Mr. Frank W. Speller, B.A., secretary, Toronto, was appointed superintendent in charge of the collection and installation of this notable exhibit. Mr. Speller is the right man in the right place, he understands his work thoroughly, and deserves to be congratulated in results attained. The exhibits are well displayed and artistically grouped.

Occupying a prominent place is a large map of Ontario, 18x20 feet. It is geologically colored and was prepared by the Bureau of Mines and executed by Elliott & Sons, Toronto. The map shows the location of the principal mineral deposits of the province, and has been pronounced by artists the finest piece of artistic decorative work in the building.

A second map of Ontario, 10x15, shows in particular the mineral and forest resources about the region of Sault Ste. Marie. The lines of communication are shown by colored incandescent lights. The map was prepared by order of F. H. Clergue, general manager of the Lake Superior Power Co., Sault Ste. Marie.

The nickel-copper exhibit shows the ore from the Sudbury region. Every working mine is represented here. The

weight ranges from 1,000 to 10,000 pounds per specimen. The entire pile contains about seventeen tons of ore. Every stage of the operation of the reduction of nickel and copper from the ore is illustrated by samples. The final operation of the reduction process is shown from samples from the Oxford Copper Co., New York, thus illustrating completely the manner in which the nickel and copper are extracted from the ore. The Nickel-Copper Co., of Ontario, have attractive exhibits, showing the new French process in detail. The average visitor appreciates the details by the lucid manner in which it is illustrated.

Copper ores of the north shore of Lake Superior are shown on a similar scale, every mine being represented. The pieces weigh from 1,000 to 8,000 pounds, the pile weighing twelve tons in all. It is evident that modern machinery must be used in these mines to raise and transport such great masses.

The Lake Superior Power Co. have collective exhibits of iron ore from Michipicoten. Copper and nickel ore are also shown, besides building and ornamental stone and pig iron, also a large assortment of enlarged photographs showing the work and mills of this company.

Ferro nickel made by the new electro-

lytic process is shown in the form of bars, and is attracting the attention of steel men, who know the value of nickel steel.

As a central point in the display stands the most remarkable feature of the Mines Building in the form of a column of solid graphite from the Black Donald mine, Renfrew county. It is made up of three large blocks, the lower one being 3x3x4½ feet in size. A base three feet high of limestone of excellent quality from Queenstown quarry, St. Davids, Ont., was provided by that company. On this pedestal is placed a statue of Canada, executed by J. W. Banks, Toronto. Its dignity of pose and excellent treatment have created universal admiration amongst exhibition sculptors and artists.

The Canadian Corundum Co. have the largest display of this material ever made, and have also a complete line of abrasive material made from Canadian corundum. The fine exhibit of the Crown Corundum Co. and Imperial Corundum Co., demonstrates the increased importance of this industry to Canada.

The other and more prominent of the divisions represented are the gold, silver, and iron ores, building and ornamental stones, and mica. The use to which this latter material is put in coppering steam pipes and boilers is well shown on a prac-

HOLDSWORTH & CO.

Phone, Main 3754

Cloth Finishers

MEASURING, EXAMINING, SPONGEING and SHRINKING WORKS

Examinations of Woolen and Cotton Goods and Adjusting of Claims
promptly attended to.

Refinishing a Specialty



Improved Cloth Shrinking

73 Adelaide Street West, - TORONTO

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

tical scale by the Mica Boiler Covering Co., Montreal. The contract for covering the boilers of H.M.S. Blake, one of the most modern battleships under construction, was awarded to this firm. There is a great field for mica in this and for electrical purposes.

Those interested in Ontario mineral resources can obtain copies of the latest reports of the Bureau of Mines, the descriptive catalogue of the exhibit, and any further information, by applying to the superintendent, Mr. F. W. Speller, at his office in the Mines Building.

NEW DYESTUFFS.

Acid Cyanine B and R. These two new colors are dyed in the same manner as other acid wool colors, with the addition of Glauber's salt and sulphuric acid. The B brand when dyed a dark shade closely approaches our Sulfon Cyanine G R extra. The R brand, however, is of a somewhat more reddish tone down and over-hand, possessing at the same time more brightness of shade. Both these new products are easily soluble. The chief features of Acid Cyanine B and R are their considerable resistance to light and steaming, their fastness to rubbing and perspiration being also good. Their fastness to milling, however, is not as good as that of the Sulfon Cyanines. Both brands are specially adapted for the dyeing of piece goods, particularly for the production of very fast navy blues.

Toluylene Orange R. This new dyestuff is dyed in the usual manner with Glauber's salt and soda, but dyed direct it is of little use in cotton dyeing owing to its being not sufficiently fast to storing. However, developed with benzo nitrol or paramtraniline it produces very bright chestnut shades of considerable fastness to washing. It is well adapted for com-



ECO MAGNETO WATCHMAN'S CLOCK

It has no chemical batteries.
is approved by all insurance companies.
cannot be tampered with.
is guaranteed for five years.

MONTREAL ELECTRIC CO.,
AGENTS,
1898 Notre Dame St., Montreal.

ECO MAGNETO CLOCK CO.
620 Atlantic Ave., BOSTON.

binning with or shading brown developing colors such as benzo nitrol brown, pluto brown, etc. Toluylene Orange R developed with benzo nitrol will undoubtedly be principally employed for the dyeing of cotton yarn and fancy woven goods. Dyed direct it also produces very useful shades on half-silk. Dyed direct the color can be discharged a very good white with tin crystals or zinc powder, and sulpho-cyanide of zinc discharges it a cream color. Shades which have been afterwards treated with benzo nitrol can only be discharged a white with zinc powder.

Katigen Chrome Blue 5 G. This color when dyed direct produces a green shade very similar in tone to our Katigen Black 2 B, and when afterwards treated with bichrome and copper sulphate is changed into a very bright and fine greenish blue, which is extremely fast to light, washing and boiling. The methods of dyeing and after-treating are exactly the same as employed in working with other Katigen colors. Katigen Chrome Blue 5 G is very well adapted for the dyeing of loose-cotton, cotton hanks and pieces, and owing to its excellent fastness to light

can be used to advantage in dyeing curtain and upholstering material. It can also be employed, on account of its bright shade, for mercerized goods.

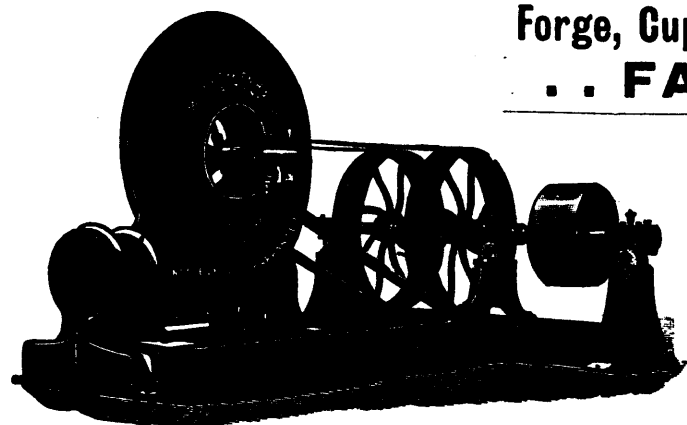
Tartrazin. The patent for this well-known dyestuff has now expired, and we have taken up the manufacture of the article and are putting it on the market under the same name. Our product is quite identical with that of the Badische's color. It is very fast to acids, light and washing. It dyes wool in the ordinary manner with Glauber's salt and sulphuric acid, producing fine chrome yellow shades extremely fast to light and washing. It also dyes silk from acid baths; but the shades produced are somewhat inferior to those on wool.

Samples, instruction circulars and shade cards will be mailed gratis to interested dyers upon application to the Dominion Dyewood & Chemical Co., Toronto, Sole Agents in Canada for Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany.

The Wabash Railway Co., will erect its Canadian shops at St. Thomas, Ont., at a cost of about \$100,000.

GEORGE W. CHAPIN, COMMON, TWILLED and SUPERFINE Plain, on Spools.
229 and 231 CHURCH ST., PHILADELPHIA Guaranteed 1,000 Yards, all Nos.

TAPES



Cupola Fan and Counter Shaft on Adjustable Bed

Forge, Cupola and Disc .. FANS ..

Electric Fans

**HEATERS
and FANS**

FOR
Drying any Material

**Mechanical Induced
DRAFT FANS
WITH or WITHOUT
ENGINES**

**HEATING CONTRACTS TAKEN
WITH GUARANTEED SATISFACTION**

McEACHREN HEATING & VENTILATING CO., Galt, Ont.

We also Make STEAM TRAPS, OIL SEPARATORS, BACK PRESSURE VALVES
AND OTHER STEAM SPECIALTIES

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MARINE Engines

FROM 1 TO 200 H.P.

HYDRAULIC RAMS

—AND—

FORCE PUMPS

**STEAM and HAND POWER CAPSTANS
AND STEERING GEARS.**

Sole Agents in Canada for the Hoff-
man Detachable Screen Door Hinge
and Bronzite Anti-Friction metal.

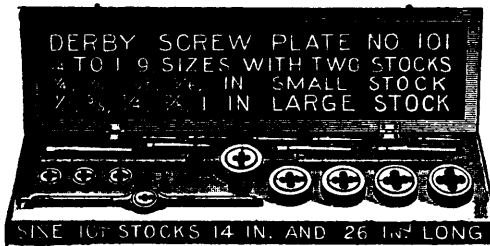
A TRIAL ORDER IS SOLICITED

Raneys Specialty Mfg. Co.

33 PRINCESS STREET

KINGSTON, ONT.

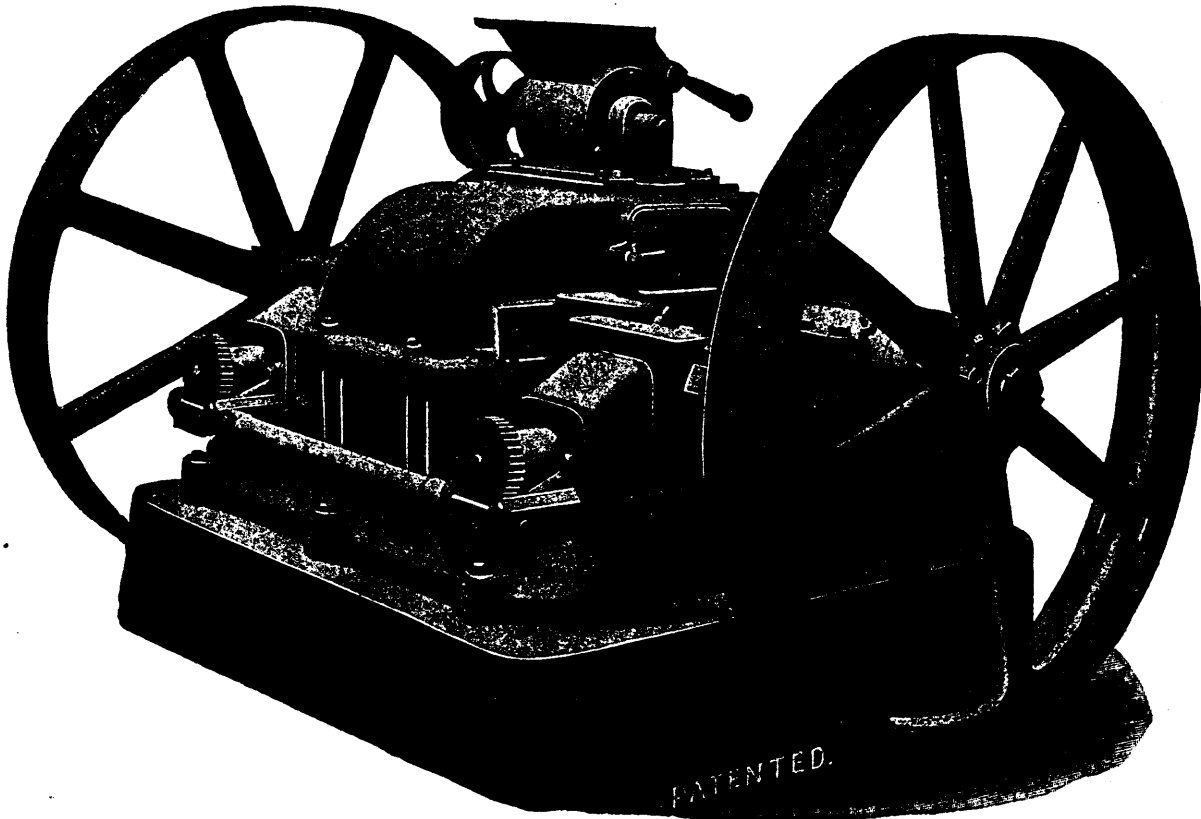
The universal satisfaction given by our **DERBY** and **REECE SCREW PLATES**, cutting from 1/16 to 1/2 inch, including all the machine screw sizes, has created a demand for a plate made on the same principle, to cut bolts to 1 inch in diameter. To meet this demand we have brought out these sizes.



BICYCLE SCREW PLATES, REECE SCREW PLATES, DERBY SCREW PLATES, BLACKSMITH'S STOCKS AND DIES, BLACKSMITH'S IMPROVED SCREW PLATES, HAND TAPS, MACHINE TAPS, PIPE TAPS, EVERY KIND OF TAPS AND DIES.



BUTTERFIELD & CO., - Rock Island, Que.



THE STURTEVANT CENTRIFUGAL SPRING ROLL.

The Sturtevant Mill Co., Boston, Mass., have sent us their new illustrated catalogue having reference to the crushing and grinding machinery manufactured by them. Some of the illustrations are of their Roll Jaw Crusher, one of which crushes to one-quarter inch at one operation, another to five-eighths inch and another one-half inch, a sectional cut of which is shown, with full description. Another representation is of a laboratory roll jaw machine, which reduces the

THE BEST PIPE THREADING and CUTTING-OFF MACHINES

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

Also Manufacturers of a FULL LINE of **ADJUSTABLE STOCKS and DIES** and Water, Gas and Steam Fitters' Tools.

Send for Catalogue 27.

Factory: BRIDGEPORT, CONN.

New York Office: 139 CENTRE STREET.

RICE LEWIS & SON, LIMITED,

Hardware and Metal

MACHINIST TOOLS, PIPE FITTINGS,

Bar Iron, Steel, Boiler Plate Tubes

COMPLETE STOCK OF STOCKS AND DIES.

PIPE VICES.

STILLSON AND TRIMO WRENCHES.

STEAM PIPE.

CORNER KING AND VICTORIA STREETS,

TORONTO.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

COLONIAL BLACK

The Fastest Black for Cotton

Dyes direct in one operation with the addition of common or Glaubers' Salt, a perfect Black on Unions can be produced with this product.

EMPIRE BLACK

for

WOOL

An Alizarine Black, dyeing in one operation, adding to the dye bath 4% of Acetic Acid, and by adding 1½ to 3% Bichromate Potash after the dye bath is exhausted, and then run for 15 minutes. Absolutely fast blacks are produced that will stand milling beside of white without bleeding.

Dyewood Extracts Solid, Pastes and Powders.

Aniline Colors, Dye Woods, Chemicals.

ALIZARINES

F. E. Atteaux & Co.

BOSTON, U.S.A.

TORONTO, ONT.—53 Colborne St.

MONTREAL—15 Lemoine St.

New York—Cloversville, N.Y. Philadelphia. Chicago. Works—South Boston.

The Wm. Hamilton Mfg. Co.

Peterboro, Ont., Can.

Acting as the Patentee's Licensee

Are prepared to manufacture and supply

SAVERY'S PATENT SHAKE FRAMES

—FOR—

Fourdrinier Paper Machines,

AS DESCRIBED IN

Canadian Patent No. 57,819.

—ALSO—

SAVERY'S PATENT COMBINED DRYER STEAM JOINT AND SAFETY VALVE

AS DESCRIBED IN

CANADIAN PATENT No. 68,093.

ABOUT 2,000 NOW IN USE.

BALE'S FIRE CEMENT

For Lining and Repairing
STOVES, FURNACES, RETORTS,
and all work where great heat is used.

BALE & CO., Newgate St., LONDON, ENG.

GAS PURIFICATION and GENERAL
IRON MERCHANTS



Auction Sale of Timber Berths.

PUBLIC NOTICE is hereby given that pursuant to authority of Orders in Council, the Red and White PINE TIMBER in the following townships in the DISTRICT OF ALGOMA, namely:—The Townships of GRAHAM (part), HART, CARTIER, LEVACK, JARVIS, ANDERSON, CHESLEY, GILLMOR, WHITMAN, CURTIS and RUTHERFORD (part), and certain areas between the PIGEON RIVER and the ARROW RIVER waters in the District of THUNDER BAY, will be offered for sale by Public Auction at the Parliament Buildings, in the City of Toronto, on TUESDAY, the SEVENTEENTH day of SEPTEMBER next, at the hour of ONE o'clock in the afternoon.

At the same time and place certain forfeited and abandoned Berths in the Townships of DIGBY, SHERBOURNE and LUTTERWORTH, in the District of HALIBURTON and County of VICTORIA, will be offered for sale, the purchasers of these latter Berths to have the right to cut all kinds of timber.

Sheets containing terms and conditions of Sale and information as to Areas and Lots and Concessions comprised in each Berth will be furnished on application, either personal or by letter, to the Department of Crown Lands, Toronto, or the Crown Timber Agencies at OTTAWA, SAULT STE. MARIE and PORT ARTHUR.

E. J. DAVIS,

Commissioner Crown Lands.

DEPARTMENT OF CROWN LANDS,
TORONTO, June 1, 1901.

N.B.—No unauthorized publication of this advertisement will be paid for.

rock one-eighth and one-sixteenth inch sand. Other illustrations are of rotary fine crushers; Champion rock crushers; crushers for road work; a practical, up-to-date portable machine; Columbian separators; elevators, conveyors and screens; centrifugal rolls; rock emery millstones; rock emery mills, horizontal and vertical, etc. A list of some seventy-five articles is included in the book, which can be ground and pulverized to great advantage by the use of this Sturtevant machinery. A table is given, showing the weights and measurements when boxed and ready for delivery of all the various parts of these Sturtevant crushers. Further particulars and the pamphlet may be obtained by application to the Sturtevant Mill Co., Boston, Mass.

The following interesting article from the Sturtevant Mill Co., describes their new centrifugal spring roll:

Centrifugal rolls have many friends. They met immediate approval, not merely because of their comparatively low cost and small size; but they quickly demonstrated the ability of a small centrifugal roll to do more work than a large common roll.

This, at first, seems not too credible, yet it is a fact. When it is remembered that all roll work is done by the tires, and that the output for equal tire widths is for all rolls in proportion to their speeds and pressures; that a small, fast roll does do more than a large, slow one, is less surprising.

Small centrifugal rolls attain easily higher peripheral speeds than the largest, narrow tired, high speed common rolls that can be built, and as the tire pressures are greater, they are in no way inferior to the large rolls, except in size and cost.

Centrifugal rolls, as formerly constructed, were all necessarily fast running, for it was by peripheral speed that their great centrifugal crushing pressures were attained; but, for some hard and coarsely-crushed ores, too high speed was found not always an advantage, for while much higher velocities than can be given common rolls is nearly always desirable, yet, some very hard rocks, coarsely crushed, wear the tires rapidly if the rotations are excessive.

A considerable experience soon demonstrated that for each ore, there is an economical tire speed, and generally far above that of common rolls, and this is always indicated by tire endurance. When this fails, the rolls are running too fast and the speed must be reduced. To attain correct running is manifestly of high advantage. It is obvious that a perfect roll would be able to run at any speed that the conditions of crushing require.

A realization of this fact led to the invention of such centrifugal rolls, i.e., a roll that can be run at any number of revolutions, fast or slow that practical conditions require; and with uncommon crushing pressures.

With these good reasons for its production, the centrifugal spring roll was introduced. It can run just as stated, and is curiously simple. To each of the weights in the plain centrifugal roll has been added

a set of powerful springs. These constantly press the weights out and hold the tire, even when the roll is at rest, with a force equalling the pressures given to common rolls by their outside springs.

Centrifugal spring rolls, therefore, exert at the slowest speeds at least common roll pressures. As in plain centrifugals, neither roll, shaft or bearing moves back

Trimo Giant



This Chain Pipe Wrench

has interchangeable jaws. Improved method of holding and releasing chain. No locking. Send for catalog.

TRIMONT MFG. CO., Roxbury, Mass., U.S.A.

HAVE YOU HEARD

ABOUT OUR

STEEL POINTED CORE DRILL?

CUTS ANY ROCK. NO DIAMONDS.

Davis Calyx Drill Co.

Canadian Rand Drill Co.

Agents.

18 VICTORIA SQ.

MONTREAL.

at all. They, therefore, run without any of the tremendous common roll shocks, and speed as steadily as other centrifugals.

It is clear that as soon as spring rolls begin to run at all, the centrifugal forces generated add their own to the spring pressures, and soon enormous crushing power is attained. This roll offers ideal conditions, in that its speed can be suited to any ore, thus attaining the highest possible working economy.

The cut illustrates a thirty-two inch centrifugal spring roll, the largest made, or that will probably be required. It has capacity enough. To those who need a fast-running roll, this machine of moderate size, it is safe to say, will give a larger output than any common roll ever constructed. To propositions requiring moderate tire velocities, this offers a simpler, cheaper and easier-running machine of greater capacity than can be bought elsewhere. Even at common roll speeds, the centrifugal spring roll is superior because it runs easily, and does its work with far less wear and tear, escaping common roll shocks and the tires are not difficult to replace.

Only to slow and ultra conservative millmen will the centrifugal spring rolls, if running even at low speed, prove a disappointment, for centrifugals do not need Cornish foundations, and they do not shake the dust off of all the mill timbers.

Centrifugal rolls neither cost nor weigh as much as common rolls, nor do they wear as fast. It is far more trouble to feed them, for the superintendent is sure to run them fast to see if they won't make the usual racket, and then, they do a lot of work.

The tires are put on with little delay, they are instantly adjusted, while running, by a hand screw, and nobody gets any long waits.

The Sturtevant Mill Co. have issued an eighty-page circular fully describing these machines and others of their manufacture.

AMERICAN SUBSTITUTE FOR SAND-PAPER.

Steel wool, introduced five or six years ago, is a machine-produced material that is used as a substitute for sandpaper. It is composed of sharp-edged threads of steel, which curl up together like wool, or somewhat as the wood fibres of the familiar material known as excelsior curl up together, though the steel wool is very much finer, the finest of it being not much coarser than the coarsest of natural wools. The steel wool is put up in packages containing one pound each. These are something like rolls of cotton batting, but smaller; one pound of steel wool, loosely packed, making, rolled in paper and open at the ends, a package perhaps fifteen inches long and two inches or three inches in diameter.

Made in various degrees of coarseness, steel wool is put to a variety of uses, the finer wools for polishing wood and metal and the coarser for rubbing down paint and varnish. It is often used on special parts of work. While, for example, on the flat surface of a door a man would use

Toronto Elevator Co.

MILLWRIGHTS AND ELEVATOR SPECIALISTS

Estimates Given and Losses Adjusted

OUT-OF-TOWN WORK PROMPTLY ATTENDED TO.

PHONE **JOHN H. SHALES,**
1535 **Manager**

AGENTS FOR...
Miller Bros. & Toms,
Elevators
Leitch & Turnbull Co.
Limited, Elevators.
Greening's Wire Ropes.

74 ADELAIDE ST. WEST
TORONTO

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

GARTSHORE-THOMSON PIPE & FOUNDRY CO.
Limited

CAST IRON PIPE

3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers

Special Castings and all kinds of

FLEXIBLE AND FLANGE PIPE.

WATER WORKS SUPPLIES

HAMILTON, ONT.

PACKARD

ELECTRIC COMPANY LIMITED

MAKERS OF

LAMPS AND TRANSFORMERS

SOLE AGENTS FOR CANADA

SCHEEFFER RECORDING WATT METERS

ST. CATHARINES, - CANADA

DON'T BURN YOUR BOILER

Save it by removing the incrustation. Give a long life to your steam boiler, valves, engine, steam pipes, etc., which is sure to be done by the use of

SUTTON BOILER COMPOUND . . .

Every up-to-date steam user is alive to its many good qualities. For everything in the mill supply line ask

THE WM. SUTTON COMPOUND CO., OF TORONTO LIMITED.

186 Queen Street East.

Established 1834.

Incorporated 1900.

**THE J. A. GOWDEY
REED AND HARNESS MFG. CO.**

P.O. Box 707.

PROVIDENCE, R.I.

MANUFACTURERS OF

All Kinds of Loom Reeds, also Dealers
in Harnesses and Mill Supplies

Special claim on Woolen Reeds.

sandpaper with a block back for it, for the mouldings he would use steel wool, which fits into the crevices and conforms into irregular shapes. Such work can be done with steel wool far more readily and quickly than with sandpaper, and it is used with this advantage on irregular and small surfaces and on carved work.

Besides the steel wool there is coarser material of the same kind called steel shavings, which is put to various uses; as in taking off old paint or varnish, and in polishing wood before painting, and it is used on bowling alleys and an floors for smoothing and cleaning them. Sandpaper clogs in use; steel wool breaks down. The wool is commonly used with gloves to keep the ends from sticking into the fingers.—Woodworker.

R. H. BUCHANAN & CO.

We have pleasure in advising our readers that R. H. Buchanan & Co., 692 Craig street, Montreal, have closed agreements whereby they represent the Rossendale Belting Co., of Manchester, England. The Rossendale Co's reliable productions are already doing good service for some of our largest firms. To those who may be interested we may say that

their "May" Brand woven belting has a good hold, and is doing some of the heaviest work in Canada. The Rossendale Co's representative, Mr. W. E. Pilkington, Manchester, England, is in Montreal, and anyone interested in belting would do well to communicate with him, either personally or by letter. His address is, in care of R. H. Buchanan & Co., 692 Craig street, Montreal. We are indebted to him for their current price list just issued.

A NEW VOTING MACHINE.

Dr. A. A. Farwell, of Oshawa, Ont., had on view at the office of W. H. Banfield & Sons, Adelaide street west, Toronto, last week, an improved voting machine, which, he claims, is the most accurate and durable of its kind yet produced. It is built upon similar lines to other voting machines, to the extent that the voter records his preference for any number of candidates by simply pushing the button beneath the name of the respective candidate or candidates for whom he desires to vote. This machine is so constructed that by means of a set screw the maximum number of candidates for whom the voter may record

his votes can be varied at will to suit the election being held, but once the machine has been set at the maximum number to be voted for, and sealed, it cannot be changed until it is re-opened, and the voter cannot vote for more than the proper number. A special feature of the machine is a check record showing the total number of votes polled, which, of course, must agree with the sum total of votes found to be recorded for all the candidates when the machine is opened at the close of the poll. This register of total votes polled is visible to the voter, who, by observing the number recorded when he enters the compartment to vote, may by the indicator see at once when he has exhausted his vote, or if anything has gone wrong with the machine. When the voter pushes in the button the votes are not immediately recorded, but as he leaves the compartment, on the opposite side to which he enters it, he passes through a turnstile, which, as it revolves, by two distinct actions, releases first the push-bars, which spring back to their place, ready for use again, and next credits each of the candidates voted for with one vote.

In case of an error in voting, Dr. Farwell says that by means of a check

J. H. RILEY & CO.
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button either one of the bars may be released before the voter leaves the compartment, he may then vote for the candidate he originally intended to support.

The advantages claimed for the machine by its inventor are perfect accuracy, simplicity of mechanism, durability and cheapness, it being calculated that with one voting machine as many votes can be recorded as at present in three polling booths. Therefore, Dr. Farwell contends, the cost of the machine in practice will not exceed the expenditure for ballot boxes under the existing system.

OPPORTUNITIES.

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

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

517. A Johannesburg house asks for names of Canadian producers of evaporated vegetables.

518. A firm of manufacturing chemists asks to be placed in communication with Canadian shippers of talc and mica schist, and also of mica in sheets, not split as it comes from the mine.

519. A Liverpool house wishes for names of Canadian producers of asbestos.

520. A German firm having experience of the trade, is open to negotiate with Canadian wood pulp manufacturers with a view to represent them on the continent.

521. A correspondent asks for addresses of some large hog killing firms in Canada.

522. A gentleman recently from Canada, well acquainted with the requirements of the country, would like to recommend a very well established agent there to handle draperies, etc.

523. Enquiry is made by an agent established at Ghent for names of Canadian firms desiring representation in Belgium.

524. Another inquiry has been received for names of Canadian shippers of box wood, shipped in the flat, ready to be put together by the purchaser.

525. A Nova Scotian exporter of hardwoods such as birch, beech, maple, etc., is open to ship large quantities cut to any dimensions desired. He can also supply chair seats, etc.

526. THE CANADIAN MANUFACTURER is in receipt of a letter from a valued correspondent in the United States, in which he says:—

We are in receipt of an enquiry from Liverpool, England, relative to placing an order for several thousand ash boat oars. As our English friends, would, no doubt, be pleased to deal with their Canadian cousins, we write to ask if you

will furnish us with the addresses of Canadian boat oar manufactures so that we may submit same to our correspondents with a view to placing an order.

For further particulars apply to THE CANADIAN MANUFACTURER.

527. The proprietors of several kinds of sheep remedies, sheep dips, etc., ask to be referred to some Canadian firms with good connections among sheep farmers in the Dominion who would act as their agents.

528. A London firm who contemplate doing a freight business between Cape Breton and the United Kingdom desire to get into communication with firms there requiring representation in Great Britain.

529. Enquiry is made for firms in Canada of good standing, who require a commission house to act as agents for any kind of Canadian produce and to look after their interests in London.

530. A Glasgow house ask for names of a few exporters of Ontario hay in pressed bales.

531. A wholesale and export firm of stationers, booksellers, etc., desire to communicate with Canadian buyers of books, stationery, toys, confectionery, druggists' sundries, etc.

532. THE CANADIAN MANUFACTURER is in receipt of an enquiry for the names of firms in Canada making boots and shoes suitable for export to the eastern markets (India, Burmah, etc.)

N.Y. & Boston Limited Kniekerboeker Special South-Western Limited

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 CINCINNATI.

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 Awnings, Shirtings,
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 Cotton Blankets,
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MECHANICAL EXPERT, ETC.

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MARKETS.

Following are reports and observations relating to the markets of Canada and elsewhere, having reference to hardware, metals, paints, oils and such specialties as are usually handled by jobbers and dealers in such goods. Following these items will be found current market quotations of such goods, and the trade are requested to suggest to the publishers any improvements by which it is believed the quotations may be rendered as correct and valuable as possible.

TORONTO, July 19, 1901.

Business in many lines is not as flourishing as we would be pleased to report, still there is nothing in the general situation discouraging, and between-season dullness must be looked for. Remittances are highly satisfactory to the majority of wholesalers, and few extensions are reported. The money market is steady with call loans quoted at 5 per cent. and commercial paper discount rates 6 to 7 per cent. A great deal of interest is taken in the course of the share markets, and brokers with New York and Chicago connections state that never before in the history of Toronto has local trading in American securities been so heavy for the midsummer season.

Naturally the iron and steel properties are the centre of attraction, the "street" watching anxiously the progress that is being made toward settling the labor troubles in these industries. An indication that the big trades anticipate an amicable adjustment of the difficulties is the good demand for steel stocks, particularly the preferred, on every decline in value.

From Youngstown, Ohio, comes the report that the mills of the Republic Iron & Steel Co., the bar iron combine, have resumed, after a week's shut-down, and 25,000 iron workers in twenty-eight mills return to work, the men getting an advance of about 5 per cent.

There is an unprecedented demand for labor in Wheeling, W. Va., the glass factories there being unable to keep up with their orders.

The local trade in hardware and metals shows considerable activity, and prices all along the line are steady. Not only in the city, but throughout the province, there is a good demand from builders, and orders continue up to expectations. Bar iron, common, is quoted at from \$1.85 to \$1.90 per 100 lbs.; Canada plates, \$3 per box; half polished, \$3.15; all bright, \$3.50 to \$3.75; ingot-copper, 19c. per lb.; cut nails, \$2.45 per keg for small lots, \$2.35 for car lots, f.o.b. Toronto, Hamilton and London; English galvanized iron, \$4.50 per 100 lbs. There are no material changes in the entire list, and the market indicates a continuance of the present range of prices.

Bradstreet's report of business failures in Canada for the first half of the year shows a total of 717 against 678 for the corresponding period last year. There is a noticeable decline in the number in Ontario with an unusually large increase in New Brunswick and Nova Scotia. In New Brunswick the total for the six

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months was thirty-six, against nine last year, while in Nova Scotia the total was fifty-three compared with twenty-six a year ago. The total assets of the estates surrendered this year amounted to \$2,850,556, as against \$2,064,184 last year. The total liabilities amounted to \$6,412,518, against \$5,173,418.

TRANSFERRED TO FREE LIST.—Some important customs regulations have been issued by the department recently, a few of which are interesting to manufacturers. When imported by manufacturers of piano keys, actions, hammers and organ keys the following materials will be entered free of duty, the materials, of course, to be used exclusively for the manufacture of articles in their own factories: Key pins, damper springs, jack springs, rail springs, regulating screws, spoons, bridle wires, damper wires, back check wires, dowel wires, German centre pins, brass pins, rail hooks, brass brackets, plates, damper rod nuts, damper sockets and screws, hammer wires, fly felt, butt felt, damper felt, hammer rail cloth, back check felt, catch felt, thin damper felt, whip cloth, bushing cloth, hammer felt, back hammer felt, bridle leather and buckskin.

Another regulation transfers certain lines of yarn used in Canadian manufactures to the free list. The regulation reads: "Botany yarn, single, in number 30 and finer, on mule cope, dry spun or what is known as French or Belgian system, not doubled or twisted, in white only, when imported by manufacturers of cashmere socks and stockings, to be used exclusively for the manufacture of such articles in their own factories.

CHANGES IN CUSTOMS PORTS.—The collectors of customs have been notified of the following changes in the customs ports, outports and preventive stations:

Westport, under survey of port of Digby, N.S., to be a warehousing port.

Outport of New Brandon, under survey of port of Bathurst, N.B., abolished.

Outport of Byng Inlet, now under the survey of the port of Collingwood, and the preventive station of French River, now under the survey of the port of Owen Sound, to be detached and placed under the survey of the port of Parry Sound.

English Bay, on the Island of Anticosti,

to be a customs outport and warehousing port under the survey of the port of Quebec.

Thetford Mines, in the Province of Quebec, to be an outport of customs and a warehousing port, under the survey of the port of Sherbrooke, P.Q.

Mine Centre, now an outport of Port

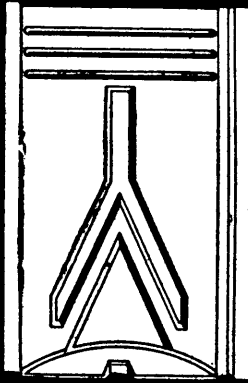
Arthur, to be detached and placed under survey of Rat Portage.

Glencoe, to be an outport and warehousing port, under the survey of Chatham, Ont.

St. Mary's, Alberta, an outport and warehousing port under port of Lethbridge, is closed.

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Cardston, Alberta, to be an outport and warehousing port under survey of port of Lethbridge.

Medicine Hat has been erected into an outport and warehousing port under the survey of Calgary.

TANNERS ADVANCE PRICES.—At a representative meeting of Ontario tanners, held in Toronto July 3, it was decided to materially advance prices in all lines of leather. An influential committee was appointed for the purpose of revising prices and taking such steps as may be deemed necessary to put a stop to the present unprofitable state of the trade. The Committee will meet in Toronto on July 19.

W. J. Bickell presided, and among those present were:—Hon. E. J. Davis, L. J. Breithaupt, M.P.P., Berlin; F. T. Daville, Aurora; A. R. Clarke, Toronto, J. J. Lamb, Omeme; Geo. Beal, Uxbridge; J. Sinclair, Barrie; George McQuay, Owen Sound; Alf. Beardmore, Toronto; George H. C. Lang, Berlin; C. J. Miller, Orillia; James Newton, Richmond Hill; S. R. Wickett, Toronto.

The chairman briefly stated the object of the meeting, and called upon Geo. C. H. Lang, of the Lang Tanning Co., Berlin, who said that he had recently visited the American Packer Hide Market and the Country Hide Market in Chicago, and had also studied the Canadian hide market and the English hide market, and saw nothing in these markets to indicate anything but dear hides for a considerable time to come. There were very few steer

hides in Canada suitable for harness or belting leather, and the requirements of the trade must, therefore, be supplied from outside. Then, again, there were very small stocks of leather on hand, as many tanners had been curtailing their production during the last twelve months.

It appeared early in the year as if hides would be on a lower basis than they were, and, anticipating this, leather was reduced in price. The anticipations were not realized, and the tanners, in their eagerness for trade, had suffered loss in selling their leather at less than it cost to produce it. Tanners must prepare themselves to face a continued dear hide market, and in order to protect themselves against certain loss they must advance their prices.

Mr. C. J. Miller, Orillia, endorsed all that Mr. Lang had said, and pointed out that a year ago, when hides were one and a half cent cheaper and leather from one cent to two cent dearer, harness leather tanners did not any more than hold their own, whilst during the past few months those who had been doing the largest business have been losing the most money.

Mr. George P. Beal, Toronto and Uxbridge, said that the harness leather business was in a deplorable condition. They knew that the wholesale harness manufacturers were all doing well and buying their leather very cheap. The tanners could not afford to give them their profit.

Mr. George McQuay, Owen Sound said that small tanners, using local hides and cheap bark, and selling to the retail

trade, were in some respects in a better position than the larger tanners, who imported hides, but even to these tanners higher prices were a necessity.

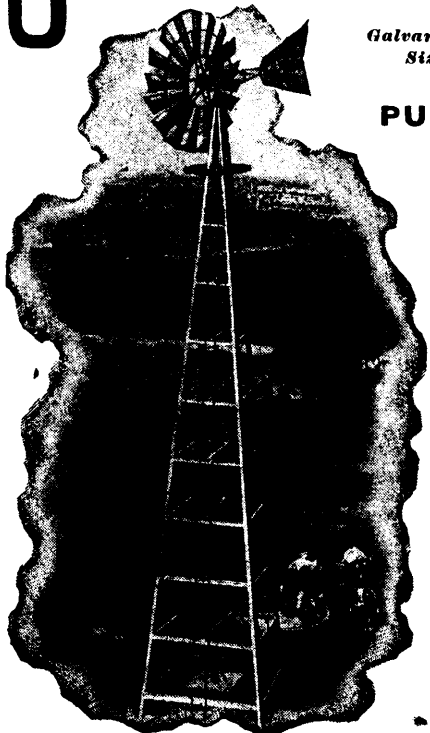
Mr. A. O. Beardmore, of Beardmore & Co., Toronto, said that country harness-makers were being told by the local butchers that, with hides selling at six cents or seven cents per pound, leather should be a proportionate price, but they forgot that only a very small percentage of country hides were fit for harness leather. Eighty per cent. of their harness leather was made from packer hide. Bark was dearer this year than ever; labor cost from ten to twenty per cent. more than it did, and, men being in demand elsewhere, caused frequent changes, and consequently disorganization. They could not get cheaper hides, because the American market ruled the prices.

Short speeches were made by F. T. Daville, Mayor of Aurora; the Hon. E. J. Davis, Commissioner of Crown Lands; Mr. S. H. Wickett, Toronto, and J. Sinclair, Barrie, showing that the light leather tanners were suffering equally with the harness leather tanners.

THE TRADE SITUATION.—The recent hot weather and rains tended to check the movement in some departments of wholesale trade, but the buying to sort stocks for present requirements has been quite large, showing that retail trade conditions in the country are better, and that the business at the closing days of June and opening days of July shows a marked improvement. There has been a

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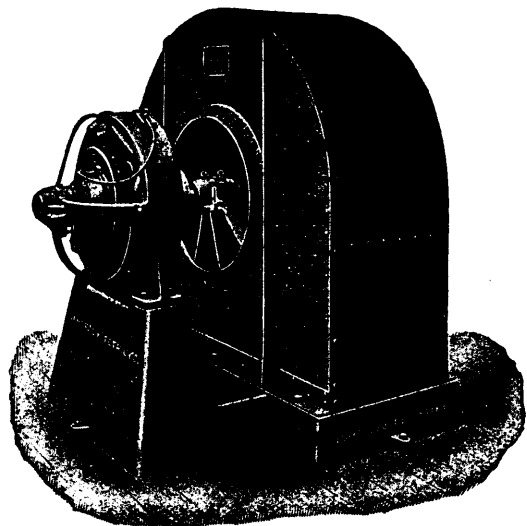
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fair number of orders for the fall coming forward, the continued favorable crop prospects having stimulated business. Reports from many centres of trade show a marked improvement now over the conditions existing early in June. In Manitoba, where money was tight and collections were slow, payments are reported as showing considerable improvement. These reports are very encouraging to eastern houses doing business with the west, and there is the greatest confidence now among eastern firms concerning the outlook for trade in the west the coming season. The crops in Ontario are progressing well, and other industries, such as cheese and butter-making, cattle and hog raising, all give promise of profitable results this year. Labor is well employed and toward the close of the summer there will be a greatly increased demand for men in many lines. The masses have more money now to spend than for many years at this season. The increased traffic on the railways, electric and steam, and on the steamboat lines proves that fact.

The bank note circulation in Canada is over \$16,000,000 greater than it was five years ago.

The number of failures in Canada for the first half of the present year is slightly in excess of the corresponding period of 1900, but, considering the great expansion in business, the large increase in mercantile operations and the larger number of concerns now in business, the comparatively small increase is a striking feature of the mercantile reports being issued. Dun's Review says: Canadian failures for the first half of 1901 numbered 672, against 700 last year and 587 in 1899. Aggregate liabilities were \$5,530,926, against \$5,012,042 in 1900, and \$5,636,340 two years ago. Aside from the entire absence of banking defaults, there was nothing noteworthy in the half year's record. A few large failures swell the total amount of manufacturing indebtedness considerably above last year's, although fewer failures occurred. Quebec exceeded the other provinces in commercial disasters, owing to the large losses in trading concerns.

Provinces.	No. Failures.	Commercial Assets.	Liabilities.
Ontario.....	234	\$1,597,291	\$1,900,103
Quebec.....	245	1,688,398	2,446,942
British Columbia.....	43	671,950	538,250
Nova Scotia.....	50	73,400	209,450
Manitoba.....	63	269,056	240,736
New Brunswick.....	29	84,006	143,945
P. E. Island.....	8	26,100	51,500
Total.....	672	\$4,407,201	\$5,630,926
Total 1900.....	700	3,715,630	5,012,042

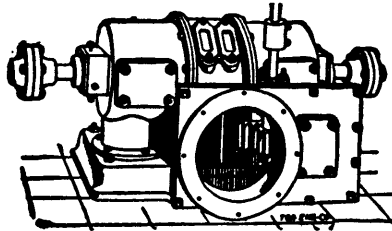
The contrast between the situation for Ontario wool this season and that of other seasons at this time is striking. The present price quoted by local exporters for this season's clip of washed fleece is 13c., against 17c. a year ago, 14c. in 1889, and 17c. in 1898.

The cause of the drop in wool values can only be discovered by a survey of the conditions affecting values of wool in the outside markets. These conditions are concisely stated in a circular received here from a London, Eng., firm which says:—The first half year, now drawing to a close, has not proved to be a period of either conspicuous or growing

activity in trade. The severe depression developed for coarse qualities of colonial wools during the past six months, each successive series having witnessed a further fall, until prices have now receded to a point never previously imagined, has naturally occasioned a good deal of misgiving, both as to the immediate cause of such a collapse and the relative status of colonial and other coarse grades.

AMERICAN PIG IRON.—Messrs. Rogers, Brown & Co., in their weekly Market Review, speaking of the Buffalo, N. Y. market, say:—

There is an unprecedented demand for shipments of pig iron from local furnaces. Foundries through the entire territory are clamoring for faster deliveries on existing contracts and producers are straining every energy to take care of these wants.



Horizontal Type.

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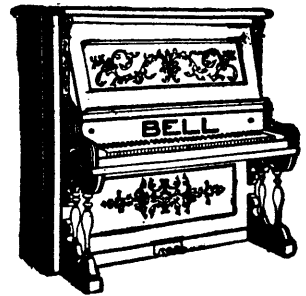
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GENUINE EMERY**

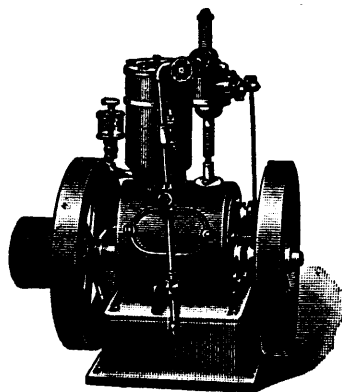
Oakey's Flexible Twilled Emery Cloth. Oakey's Flint Paper and Glass Paper.
Oakey's Emery Paper, Black Lead, Etc.

Prize Medal and Highest Award Philadelphia, 1876, for Superiority of Quality,
Skilful Manufacture, Sharpness, Durability, and Uniformity of Grain.

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They are built in sizes from 1 to 20 h. p., upright and horizontal, for pleasure yachts, boats, shops, farm work and any purpose where light power is required. Tell us to what use you want to put the engine, and what power you require, and we will name you prices.

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CRANES

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The market itself remains about the same as reported last week. Considerable interest in buying is shown among consumers, and sales of varying amounts are daily reports. This existing activity is conservative, both on the part of sellers and buyers, and the situation in general has a cheerful aspect.

We quote below on the cash basis, f.o.b. cars Toronto, in bond:—

No. 1, X. Tonawanda Scotch iron.	\$16 50
" 2, " " " "	16 00
" 1, " Niagara Iron.....	16 50
" 2, " " " " " "	16 00
5% Silicon Mannie Charcoal softener	17 00
3% Silicon Mannie Charcoal softener	16 50
Connellsville 72 hour Foundry Coke	4 95

AMERICAN POSTAL CONVENTION.—The postal convention recently concluded between the United States and Canada brings into operation a number of excellent reforms. The increase in the maximum sum which can be transmitted from one country to the other in the form of a money order and the great reduction in the scale of commission charges have

already been alluded to. The sending of money in this form is probably the cheapest and safest mode of transmission that can be devised. To be able to forward as large an amount as \$100 for so small a charge as thirty cents must be a great boon to business men; and for smaller sums the commission continues to decline, until it really becomes infinitesimal. Perhaps the greatest advantage of the new convention, however, is the fact that money orders sent from either the United States or Canada can be cashed in any office of the other country. The advantage of this arrangement is not to be overrated. Previous to July 1 only a small proportion of the money offices in the United States could be drawn upon for money orders issued in Canada. Up to that time the money order advice had to pass through what were known as exchange offices, which resulted in great delay before it reached the paying office, and caused the public untold inconvenience. Under the new arrangement with Washington, Canadians can draw on 30,000 money order offices in the United States instead of only 3,000 as formerly. The exchange offices in the two countries are abolished, and from this time forward the money

order advice will travel direct from the issuing office to the paying office, thus avoiding the delay formerly caused by the intervention of the exchange office. The abolition of exchange offices has greatly simplified the bookkeeping in connection with money orders in the two countries, and renders it possible for the United States and Canada to render accounts and settle them more promptly than before. Washington now sends weekly to Ottawa a list of the money orders issued in Canada and paid in the United States, and is credited with the total. The same procedure is followed with respect to money orders issued in the United States and paid in Canada. At the end of a certain period a balance is struck, and each country accounts to the other for the commission due it.

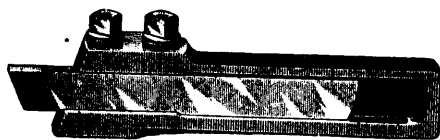
CANADIAN FINANCES.—The predictions made by the Dominion Finance Minister in his budget speech, with respect to the probable outcome of the financial transactions of the year which with June 30, closed, are likely to be verified. The statement of the revenue and expenditure for the fiscal year 1900-1 has been issued, according to which the revenue on account of consolidated fund was \$50,735,-

GEORGE W. CHAPIN, COTTON, MERCERISED WORSTED, SPUN SILK and TRAM SILK, ALL WIDTHS

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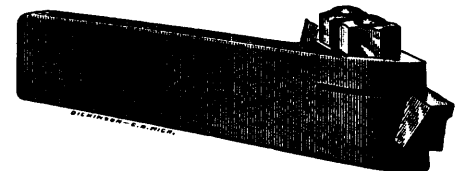
HILL TOOL HOLDERS



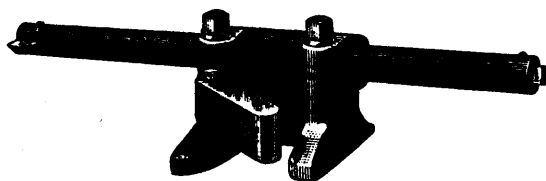
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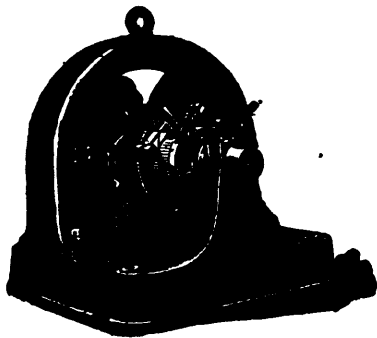
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948, the ordinary expenditure \$38,574,508, and the capital expenditure \$9,556,169. This statement, however, does not contain all the moneys which were paid into the treasury in the shape of ordinary revenue during the fiscal year, nor all the disbursements which were made. It is simply a statement of the receipts and expenditures of which the finance department is cognizant up to the evening of June 30. Before the accounts are finally closed many thousands of dollars, received or disbursed in the last month of the year, but not reported at the finance department until after the issues of the interim financial statement, will be added to each side of the ledger. Between the accounts as made up on June 30 of each year, and the accounts as they appear when the books are closed a month or two later, there is always a very material difference. For example, on June 30, 1900, the revenue was returned as \$49,034,597, but the sum was swelled by later receipts to \$51,029,994. In the same way the expenditure was given at the same date as \$34,826,401, but when all the accounts were in it proved to be \$42,975,279. The capital expenditure also was stated at \$7,799,467, but the correct sum was \$9,742,187. Taking it for granted that the ratio of increase between the financial statement as revealed on June 30 last and as disclosed when all the accounts are in, will be the same last year as in the year preceding, the result will be very nearly as Mr. Fielding figured it on March 14. The revenue on consolidated account will amount to \$52,800,000, and the expenditure to \$46,700,000, giving a surplus of \$6,100,000. Mr. Fielding's estimate was that the surplus would be about \$6,350,000. The capital expenditure still remains to be reckoned with. The finance minister assumed that it would be \$10,700,000, and, deducting from this the surplus and sinking fund, he anticipated a slight addition of \$1,800,000 to the public debt. Mr. Fielding is probably a little under the mark in his estimate of the capital expenditure, as on June 30 it had already reached \$9,556,169. Accepting his prediction, however, as correct, there must be placed against the capital expenditure a surplus amounting to \$6,100,000 and sinking funds amounting to \$2,400,000, leaving the small sum of \$2,200,000 to be added to the public debt. The ordinary revenue, according to the figures obtainable, is \$1,701,350 ahead of last year. The expenditure also increased by \$3,748,108. Deducting the increase of expenditure, it leaves a net growth in the outlay of ordinary expenditure of \$2,047,758. The figures for the year show an increase from all the accustomed sources of revenue. Customs gives an advance of only \$35,248 over the year preceding, but the tariff reduction of 33½ per cent. on British imports accounts for this seemingly small showing. Excise gives the handsome increase of \$477,524; post office, \$528,686; public works, \$528,915, and miscellaneous, \$400,977.

The revenue in detail for the two years is as follows:—

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"International" tions of either the
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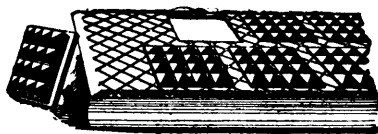
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Silent Non-Slip
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For Public Institutions, Warehouses, Offices, etc.
The Treads consist of a metallic keeper, fitted with
pieces of rubber (specially prepared), which form
the wearing surface, and can be renewed when
worn, by anyone in a few minutes.

WILLIAM GOODING, Manufacturer,
North Road Works, Holloway, London, N. Eng.

	Total to June 30, 1900.	Total to June 30, 1901.
Customs	\$28,102,751	\$28,137,999
Excise	9,817,121	10,294,645
Post Office ...	3,098,410	3,357,096
Public Works, inc. Rys ...	5,173,544	5,702,459
Miscellaneous	2,842,770	3,243,747
Total	\$49,034,597	\$50,735,947

The expenditure for capital account
was:—For public works, \$5,917,635, as
against \$5,328,908 for the previous twelve
months; for railway subsidies, \$2,486,-
358, as against \$724,388; militia, \$41,186,
as against \$183,419; South African
contingents, \$874,571, as against, \$1,372,-
707. The total for the year was \$9,556,-
169, as compared with \$7,799,467 in
1899-1900.

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MANAGING DIRECTOR.

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MAKE Gas or Gasoline Engines from 1 h.p. to 6 h.p.
Stationary or Marine and Electric Motors from ½ h.p. up.
Motor Carriages for Pleasure or Business. One cent spent for a postal
will bring you any informa-
tion you wish.

"GENUINE OAK" BELTING

More SOLID LEATHER to the Foot than any Belt made.

"LANCASHIRE" HAIR BELTING

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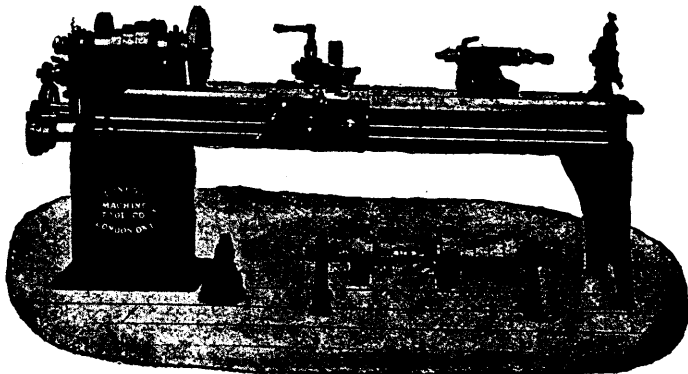
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Western Trade, - TORONTO STOCK DEPOT, 88 Bay Street.

The London Machine Tool Co., LONDON, ONT.



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**General
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PLANERS,
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BULL DOZERS,
PUNCHES,
PRESSES.

THE ONTARIO EXTRA-PROVINCIAL COR-
PORATIONS' ACT.—Within the last few
days the big American railway corpora-
tions doing business in Ontario have been
shocked by a circular notice, sent out
from the Attorney-General's Department,
which notified the companies of the
operation of the "Act Respecting Lic-
ensing of Extra-Provincial Corporations,"
passed in 1900, and which is now in
effect.

Special attention is drawn to a clause
which provides that the corporations
doing business in Ontario not covered by
special charter under the old Upper
Canada law or an Act of the Dominion of
Canada, are subject to license fee.

There are many of these corporations
doing business in Ontario. Of the big
railway corporations there are the New
York Central lines, Lehigh Valley, Penn-
sylvania, Lackawanna, Erie, Wabash,
Chicago, Milwaukee and St. Paul, Chi-
cago and Northwestern, Great Northern,
and Northern Pacific. They have offices
in Toronto and the business transacted is
largely in the way of supplying informa-
tion, advertising and arranging for car-
rying freight and passengers, but none of
the companies have any revenue in Can-
ada as the initial lines. The Grand
Trunk and Canadian Pacific sell all
tickets, way-bill all freight and collect
all revenues.

The Ontario Act stipulates that these
corporations shall pay a license fee. The
tax, when the capital of the corporation
is \$1,000,000, will be \$385, and \$2.50 for
every \$10,000 of the capital, or fractional
part thereof, in excess of \$1,000,000.

Figure this out and some interesting
results are obtained. For instance, many
of the big railway corporations are capi-
talized at \$100,000,000, or even more. A
company with a capital of \$100,000,000
will have to pay to the treasury of the
Province of Ontario, as a license fee for
doing business in Ontario, no smaller a
sum than \$25,000.

If the license is not paid forthwith, the
companies are subject to a fine of \$50 a
day, and agents of the companies to a
fine of \$20 a day.

A NEW FACTORY INSPECTOR.—Mr.
James T. Burke, of Stratford, the recently
appointed Ontario factory inspector, has
entered upon his duties. His territory is

comprised of that portion of the city of Toronto lying west of Yonge street, and the following counties:—Peel, Halton, Wentworth, Lincoln, Welland, Simcoe, Dufferin, Wellington, Waterloo, Brant, Haldimand, Grey, Bruce, Huron, Perth, Oxford, Norfolk, Middlesex, Elgin, Lambton, Kent and Essex.

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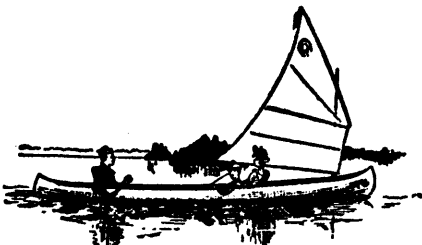
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BEST QUALITY LOWEST PRICES
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THE UNITED STATES CORDAGE INDUSTRY.—Before a recent session of the Industrial Commission in Washington, H. W. Grimwood, Secretary of the Cordage Association, gave some facts of interest concerning the manufacture of rope and binder twine in the United States and the concerns by which they are made. He said that the annual consumption of binder twine in the United States amounts to about 80,000 tons and of rope to about 60,000 tons. Speaking of the difficulty of naming an average price for these products, he said it depends entirely upon the cost of fibre, and to illustrate the variability of this cost he said that manila fibre had advanced from 3½ to 14½ cents during the past three years. He said that manila could be grown outside the Philippines, but that the fibre was without strength, and, therefore, comparatively useless. Mr. Grimwood said that at present most of the manila fibre comes to the United States through England, and is controlled by a syndicate. He sketched briefly the careers of the National and the United States cordage companies, saying that the failure in each case was due to bad business. He said that at present there is no cordage company which does more than twenty per cent. of the business, and that there is no understanding concerning prices between the leading manufacturers. Mr. Grimwood also said that there is not now and has not for years been any great profit in the business. His own association was, he said, a concern for mutual interest, and the Secretary is the only officer of it. He said that at present the capacity of the cordage factories in the United States is thirty per cent. in excess of the consumption and that the competition is very strong among manufacturers.

CARBIDE.—The Willson Carbide Works inform us that Carbide of Calcium is packed and sold as follows:—

The standard package is a sheet steel can with screw cap top which contains 100 pounds of carbide.

The following styles will be furnished, if desired: Granulated, Bicycle, Small Lump, Large Lump, without extra charge.

Prices:—\$3.25 per 100 pounds, which includes packages and packing, free on board cars at works.

No allowance for empty packages.

THINGS TO REMEMBER.—When office work is slack it is well to overhaul price lists and catalogues, to discard those out of date, and procure copies of the latest patterns and revised prices.

There is a steady sale for cast-iron garden vases and terra-cotta plant receptacles in districts where they have been properly introduced. It is worth every merchant's while to consider whether it would not be well to introduce them in his own district, and so create a demand for these attractive goods.

Outdoor recreations are in full swing, and those who sell the various appliances required in the pursuit of sport of this character should be well prepared with

**ELECTRIC WORK
WHICH LASTS**

We do work which proves a lasting testimonial to us.

No matter what the job is, whether the installing of Electric Bells, or the equipping of a factory for Light or Power, the material used is right, and the important little details closely watched.

Let us quote you on your next job.

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85 YORK ST., TORONTO.



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JAS. R. BROWN, Parliament Buildings, Toronto.
MARGARET CARLYLE, Parliament Buildings, Toronto.

O. A. ROCQUE, Orleans, Ont.

Persons having business with any of the Inspectors will find them at the above address.

JOHN DRYDEN, Minister of Agriculture.

W. G. McNEILL THOMPSON
CONSULTING ENGINEER
 M. Inst. C. E.,
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 59 JAMES ST., - ST. CATHARINES, ONT.

Manufacturing Concerns will find it to their interest to correspond with
ULRICH PETERS, M.E.
 3527 N. 17th St.
 FOR PHILADELPHIA, PA.
DESIGNS OF PULP and PAPER MACHINERY

tennis nets, racquets, balls, etc. Cricket goods are in good demand, and small chairs and seats may be regarded as essential adjuncts to the cricket field and tennis ground.

Among the more prominent features connected with a country hardware store, the question of attending agricultural shows and pushing the sale of farmers' requisites is of the utmost importance.

Garden hose, watering cans, and other preventatives against the drying-up effects of a hot scorching sun are in demand and the stock should be kept full and ready.

Of course garden furniture is now a prominent feature in every furnishing store window and there appears to be an increasing demand for tents, seat awnings and outdoor garden appointments.

Hot weather is the time to push sales of refrigerators, ice boxes, meat safes, etc.

A NEW TELEGRAPHIC INVENTION.—Some important experiments in connection with a new telegraph system, which is said to cheapen considerably the cost of telegrams, have recently been conducted by the postal engineers between London and Glasgow. The new apparatus is the invention of a French engineer of the name of Mercadier, and by its means, it is possible to send separate messages over one wire at the same time. The system is also capable of being duplexed, by which twenty-four separate messages can be sent at one time over a single wire.

The details of the apparatus are comparatively simple. The wire is attached at either end to twelve sending wires, and, in another case, to twelve receivers. At the sending end, the currents are interrupted by twelve rapidly-vibrating metal reeds, each reed vibrating at a different speed. At the receiving end are twelve telephone receivers, with membranes of different thicknesses, capable of vibrating at a certain rate, but at no other. The different rates of these receivers are identical with the rates of the reeds at the sending station.

When a message is sent, or when twelve separate messages are sent, what happens is this: The twelve currents enter the wire, each impressed with a different vibration rate. At the receiving station, they pass through a microphonic receiver, which gives them added strength. They are then discharged through the twelve receivers. As each of these receivers only responds to vibrations of a certain rate, they select each the currents belonging to its particular message, but are impervious to all the others. By this means, the messages are accurately sorted out and kept distinct.

HIRING OUT GOODS.—A considerable business is done during the summer months in hiring out such goods as perambulators, baths, chairs, tents, etc., says an English contemporary. Ironmongers at seaside places, it says, naturally provide for the requirements of visitors and temporary residents, and many of our readers do good business in these goods. We are, however, satisfied that a far larger business may be done in

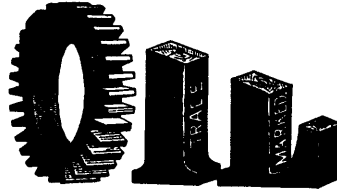
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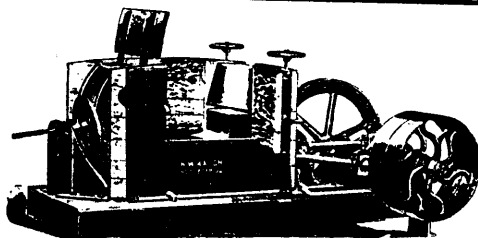
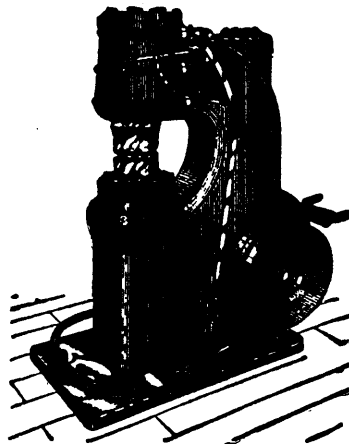
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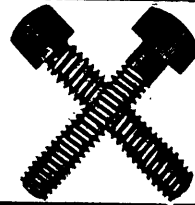
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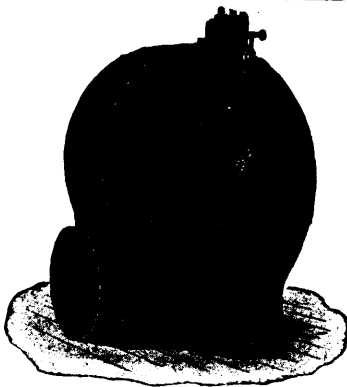
this way, and that the inhabitants of inland towns would gladly avail themselves of greater facilities for procuring these summer luxuries had they the opportunity for doing so. The use of garden furniture is steadily increasing, and tents, seats with awnings, swing hammocks and the like are now largely employed in increasing the enjoyment of outdoor exercise and recreation. Many persons are not in a position to purchase summer luxuries of this type, but would gladly hire them for the few months they are required. Again, others who could find the "needful" have not the convenience for housing these somewhat cumbersome articles during the winter. The outlay need not be great, but we fancy the hire money would be remunerative and a paying investment.

ABOUT HAMMOCKS.—It is astonishing what a large and growing trade is done in hammocks during the summer months. America is undoubtedly the home of hammocks, and where they are most generally used, but their use has been steadily growing for some years, and now

during the summer months they may be seen suspended from the trees in many English gardens. At the seaside they are frequently seen suspended from poles or portable supports. Bathing and summer tents are growing in popularity, and in many of these provision is made for the suspension of a hammock. Iron-mongers find a ready sale for these goods wherever they have been introduced, and it is difficult to imagine a more attractive feature in a garden furniture show-window than a few of these pleasing indications of summer, suspended in such a position as to demonstrate their utility. Hammocks are made in all sizes and of varying qualities. In America they are very popular for quite young children, indeed, quite tiny infants, enjoy their swaying hammocks far more than the olden type of cradle. In the earlier days hammocks were made of cord or twine or of Mexican grass, but the smart and attractive woven cotton hammocks now so much in use are much handsomer. Many of these goods are beautifully colored in various combinations. Some are fringed, others of a more elaborate

character have canopies. Most of these hammocks are made in America, but many of the more expensive goods are made in France. Some of these are woven in silk, and fancy art shades are introduced with pleasing effect. The Mauritius grass from that island is a fibre something like the finest grass of Mexico, and it is woven into delicate hammocks with delightful effect. Wherever a trade is done in garden furniture or horticultural appliances there is a decided opening for the sale of these goods.—Iron-mongers' Chronicle.

KRUGER AND CANIBALISM.—Asked to explain the cause of the Transvaal disturbance, a boy of ten wrote this:—"Kruger and Kannerbulism is one. He is a man of blud. Mr. Chamberling has wrote to him sayin' come out and fite or else give up the blud of the English you have took. He is a boardutchman and a wicked heethin. Lord Kitchener has sent for his goary blud and to bring back his scanderlus hed dedor alive." Another boy's essay described Mr. Gladstone as having "loved everybody. He loved



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PULLEY FANS, FORGES
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**THE
STURTEVANT
SYSTEM**

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Removing Steam from Dye Houses
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Heating and Ventilating Textile Mills

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Plants

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pers, etc.

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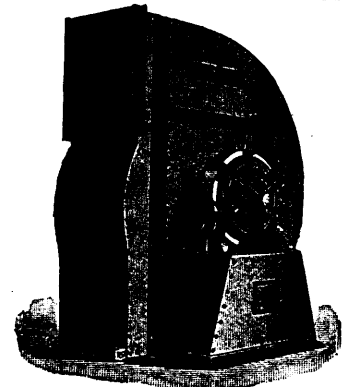
New York, 131 Liberty St.

Philadelphia, 135 No. Third St.

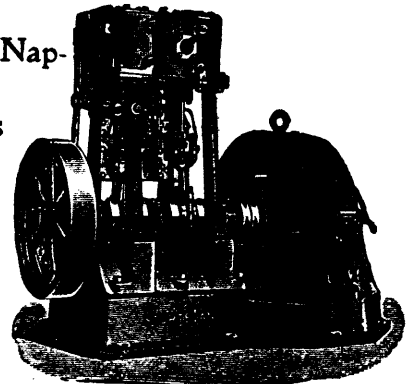
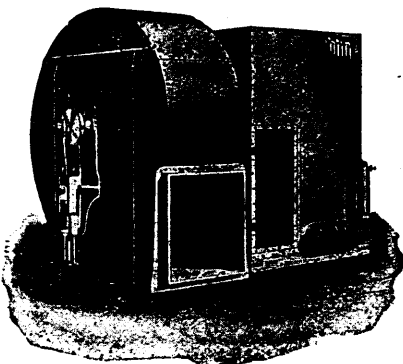
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publicans and cinnners and irishmen. he wanted the irish to come to England and have home rule, but Mr. Chamberlain says no, no. so alars he got his blud up and killed Mr. Parnel. Mr. Gladstone died with great respect, and is burrid in Westminster with pieceful ashes."

Compared with these versions of modern history, the following on Queen Elizabeth is faithful: "Queen Elizabeth was a vurgin queen, and she was never marrid. she was so fond of dresses that she was never seen without one on. she was beautiful and clever with a red hed and freckles."—Chambers' Journal.

WINDOW GLASS TRUST.—The American Window Glass Co., Pittsburg, Pa., has brought up the stock of the United Glass Co., Syracuse, N.Y. The Pittsburg Co. now controls the manufacture of glass in the United States. The united capital is \$23,000,000.

BUSINESS CHARGES.

FROM BRADSTREETS.

ONTARIO.

BARTONVILLE—F. G. Munnery, general store, succeeded by N. Sinclair.
BLYTH—A. McNally, carriage maker, adv. business for sale.
ELORA—Bain & Co., woolen mills, burned out, partially insured.
EXETER—Dyer & Howard, planing mill, burnt out.
FALLOWFIELD—Isaac Villeneuve, carriage maker, giving up business.
GODERICH—A. B. Cornell, furniture and undertaker, succeeded by Cornell & Rhynas.
HAMILTON—J. F. Foster, plumber, etc., bailiff's sale of stock, etc.
INGERSOLL—A. J. Clarke & Son, agrl. implts, etc., meeting of creditors.
A. J. Clark & Son, agrl. implts., etc., assigned to David G. Cuthbertson.
JASPER—Ira Fifield, cheese factory, burnt out.
KINGSTON—Ontario Powder Co., applied for charter.
LONDON—P. M. Lawrason, mfr. soap, succeeded by Smith & Lawrason.
Littleproud & Somerville, millers, burnt out, partially insured.
London Sugar Refining Co., obtained charter.
MILLBROOK—Albert Payne, coal, junk, etc., assigned.
OTTAWA—Ottawa Saw Co., obtained charter.
Geo. W. Perkins, lumber, meeting of creditors.
Shepherd & Co., paints, etc., bailiff in possession.
PICTON—D. J. Barker & Co., foundry, loss by fire.
RENFREW—Moffatt & Co., sash and door factory, dissolved partnership.
ST. CATHARINES—Woodburn Sarven Wheel Co., loss by fire.
SAULT STE. MARIE—Manxman Gold Mining Co., obtained charter.
STURGEON FALLS—A. Marchildon, saw mill, loss by fire.
SUNDRIDGE—James Dunlop, saw mill, burned out.
TORONTO—Bryce Lumber Co., assigned to G. M. Gardner, Toronto.
Consolidated Pulp & Paper Co., stock and accounts sold.
C. H. Hubbard Co., obtained charter.
Leader Mfg. Co., mfrs. bicycles, etc., meeting of creditors.
Mussion Book Co., obtained charter.
River Du Loup Pulp Co., obtained charter.
Imperial Produce Co., in liquidation.
Marshall Rutherford, Jones Co., obtained charter.
T. A. Lytle Co., obtained charter.
York Laundry Machinery & Supply Co., assets sold.
C. W. Thomson, mfr. paper boxes, assigned to Provincial Trust Co.
Taylor Bros., mfrs. paper and brick, estate to be wound up.

QUEBEC.

COATICOOK—Imperial Laundry Co., registered.
DISRAELI—Gilbert, Louis & Co., mfrs. cheese boxes, etc., dissolved.
DUDSWELL CENTRE—Salmon Willard, saw mill, deceased.
EMBERTON—Fowler & St. Laurent, lumber, registered.
HULL—G. M. Dalglish, mfr. matches, meeting of creditors.
G. M. Dalglish, mfr. matches, assets sold.
LEVIS—La Compagnie Manufacturiere Royal Canadien, registered.
LONGUE POINTE—Thomas M. Morgan, cement mfr., burnt out, partially insured.

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"WEBER" VALVES

ARE THE GENUINE VALVES OF THAT NAME.

ALL OTHERS ARE IMITATIONS.

BE SURE AND GET THOSE MADE BY

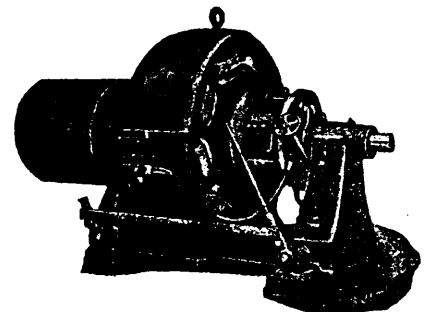
THE KERR ENGINE CO.

LIMITED

WALKERVILLE, - ONTARIO

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ELECTRICAL CONTRACTORS



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

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

20 and 22 ADELAIDE W., TORONTO.

CHARLES F. CLARK, President. **JARED CHITTENDEN, Treasurer.**

Established 1849.

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

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Heating and Ventilating Engineers,

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EXHAUST FANS
TOOL GRINDING
MACHINERY
NICKEL AND BRONZE
PLATING
PATENT HANGERS
AND COUPLINGS
MODEL AND PATENT
MACHINERY

WRITE FOR QUOTATIONS

MONTREAL—Ampere Electric Mfg. Co., applied for charter.
Calumet & Red River Mica Mining Co., obtained charter.
Canadian Spool Cotton Co., obtained charter.
Imperial Clothing Mfg. Co., branch at Ottawa damaged by smoke and water, partially insured.
Quintal & Ethier, carriage makers, dissolved.
Tetraut Sewing Machine Co., obtained charter.
J. & G. H. Young, importers yarns, etc., assets to be sold.
La Compagnie D'Imprimerie Electrique, registered.
Norcross Bros., contractors, Orlando W. Norcross registered.
V. E. Traversy & Co., lumber, etc., assets sold.
Clarke & Clarke, registered as incorporated.
J. B. Coulon & Co., mirror mfrs., dissolved.
Henri Hatton, registered.
E. A. Small & Co., wholesale mfrs. clothing.
E. A. Small, deceased.
J. H. Superior Phonograph & Music Co. Jos. Hiram Superior, registered.
New Warren Seale Co., stock slightly damaged by fire.
Montreal Car Wheel Co., factory damaged by fire.
Montreal Chrome Iron Co., obtained charter.
Montreal Pipe & Foundry Co., factory damaged by fire.
Nafashquan Iron Co., applied for charter.
Wire Cable Co., supplementary letters issued, increasing capital to \$1,000,000.
J. T. Marchand & Co., lumber, Joseph Marchand registered.
Montreal Malleable Iron Works, W. J. Bellingham registered.
Parke, Davis & Co., mfg. chemists, registered.
Riopol & Vaillancourt, carriage makers, dissolved.
St. Lawrence Canoe & Boat Co., Robert Laing registered.
Couture Lock and Latch Co., Edwige Viens registered.
D. K. McLaren, leather belting, etc., demand of assignment contested.
Merchants Warehousing Co., dissolved.

Montreal Solar Printing Co., Mrs. Ludger Sequin registered.
St. Lawrence Wagon Co., registered.
Scranton Coal Co., Herbert Evans registered.
P. Collins Scale Co., P. J. A. Collins registered.
C. P. Co., mfrs. electric supplies, applied for charter.
Albert Bryce Co., typewriters, etc., demand of assignment.
American Silk Waist Mfg. Co., obtained charter.
Canada Horse Nail Co., obtained charter.
NOTRE DAME DU LAC—Jos. Morneau, sawmill, offering to compromise.
QUEBEC—La Compagnie de Marble et de Granite de Quebec, registered.
Quebec Hoisting Engine Association, registered.
National Corset Mfg. Co., assigned.
STE. CUNEGONDE—Wm. Rutherford Sons & Co., lumber and sawmill, portion lumber pile burned.
ST. CYVILLE DE WENDOVER—Pierre Dauplaise, saw mill, assets sold.
ST. JOHNS—Richelieu Cordage Co., applied for charter.
J. E. Molleur & Fils, underwear factory.
J. E. Molleur registered.
SHERBROOKE—Lake Side Wood Co., obtained charter.
THREE RIVERS—J. E. Gingras & Co., general store Dame Auselie Scott registered.
La Cie De Meubles Des Trois Rivieres, registered.
Three Rivers Gas Heating & Power Co., applied for charter.
TROI PISTOLES—Wilfrid Renouf, foundry, assets sold.
VALLEYFIELD—Northrop Iron Works, capital stock increased to \$200,000.
WATERLOO—W. R. Lefebvre & Co., lumber, etc., Mrs. W. R. Lefebvre registered.
NORTH-WEST TERRITORIES.
FORT SASKATCHEWAN Fort Saskatchewan Milling Co., sold out to John N. Varty who has leased mill to J. W. Spera from Aug. 1st.
STRATHCONA—Stratheona Electric Light Co., applying for incorporation.

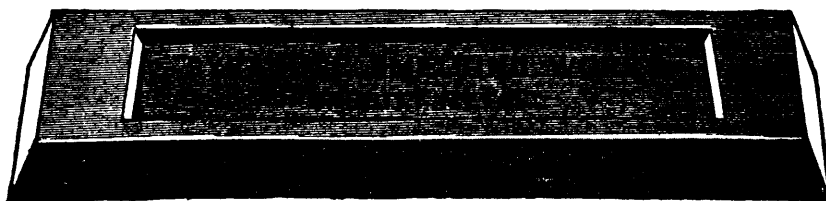
NEWFOUNDLAND.
GLENWOOD—Miller, Lewis & Co., lumber, burned out.
NOVA SCOTIA.
LOWER STEWACK -- Alfred Dickie, saw mill, burned out.
MIDDLETON—Middleton Woodworking Co., plant sold to A. W. Allan.
NEW GLASGOW—Nova Scotia Steel Co., business transferred to Nova Scotia Steel & Coal Co.
WOLFVILLE—Harvey & Fells, millers, co-partnership registered.
BRITISH COLUMBIA.
EAGLE HARBOR—Berkman & Whiteside, Eagle Harbor Cannery, adv. for sale.
NANAIMO—Pacific Fish & Cold Storage Co., incorporated.
ROSSLAND—Daniel & Chambers, paints, etc., partially burned out.
VANCOUVER—Storey & Carson, mfrs. harness, etc., succeeded by Storey & Campbell.
VICTORIA—Cassiar Power & Industrial Co., incorporated.
Lama Lake Lumber Co., incorporated.
MANITOBA.
BRANDON—Manitoba Pump Co., dissolved.
CARMAN—Pritchard & Bell, agri. impts., dissolved.
DAUPHIN—Dauphin Milling Co., dissolved.
DELORAINÉ—Ontario Milling & Mfg. Co., obtained charter.
MORDEN—McMillan & Lane, lumber, dissolved.
RATHWELL—Rathwell Farmers Elevator Co., applying for incorporation.
WINKLER—H. Fitzsimmons, butcher, sold to Robt. Smith.
WINNIPEG—Dominion Elevator Co., elevator at Morden burned.
F. O. Maber Co., applying for incorporation.
Western Packing Co., incorporated.
Western Elevator Co., limited, obtained charter.

THE BEST IS NONE TOO GOOD.

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

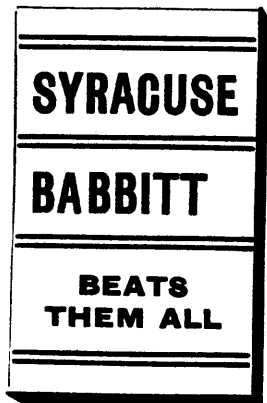
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INGOT COPPER
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NICKEL, BISMUTH
IRON AND STEEL
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**BABBITT METALS, SOLDER
TYPE METALS
COLUMBIA PHOSPHOR TIN
AND
ALL OTHER WHITE METAL MIXTURES**



SYRACUSE SMELTING WORKS

WILLIAM AND ST. THOMAS STREETS, - - MONTREAL

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HARDWARE, METALS, PAINTS and OILS

Current Prices, Revised July 5, 1901.

The following quotations represent the prices current in the market, as obtainable by the trade, whether from the manufacturers or the jobbers. Small orders and broken packages usually command higher prices, while lower prices are usually given to larger buyers.

The Canadian Customs Duties imposed upon all imported articles enumerated in these lists are published in full in the 1900 Tariff Edition of THE CANADIAN MANUFACTURER. Price 50 cents per copy.

The publishers request the trade to suggest any changes and improvements which might be made in these lists, with a view to rendering quotations as correct and useful as possible.

ADZES.—Duty 30%.
\$13 to \$20.

AMMUNITION.—Duty 30%.
B.B. Cap Cartridges, Dom., 50 & 5 discount.
Brass Shot Shells, 55% discount.
Rim Fire Cartridges, Dom., 50 & 5% discount.
Central Fire Cartridges, Military and Sporting, Amer., add 5% to list. B.B. Caps, 40% discount, Amer.
Central Fire Cartridges, pistol sizes, Dom., 30% discount, Amer.
Central Fire Cartridges, Sporting and Military, Dom., 15 & 5% discount.
Rim Fire Pistol Cartridges, 40% discount, Amer.
Central Fire Pistol and Rifle Cartridges, 10% discount, Amer.
Loaded and Empty Shells, "Trap" and "Dominion" grades, 25% discount. Rival and Nitro, net.
Primers, Dom., 30% discount.

SHOT.—Duty 35%.
Buck, Seal and Ball, \$7.50 per 100 lb.; 15% dis.
Chilled, \$7 per 100 lb.; 15% discount.
Common, \$6.50 per 100 lb.; 15% discount.
Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms 3% cash, freights equalized.

ANCHORS.—Duty 20%.
Small, 30 to 50 lbs., \$7.00 per 100 lbs).
100 lbs. larger, \$5.00 per 100 lbs).

ANVILS.—Duty 30%.

Boker & Co., 12 to 15 cents per lb.
Brook's, 10 to 13 cents per lb.
Peter Wright's, 12 to 15 cents per lb.

AUGERS.—Duty 30%.

Eye Augers, 60% discount.
Forstner's, 20
Gilmore's, 50
Irwin's, 30
Jenning's, 30
Nut Augers, 60
Ship Augers, 10

AXES.—Duty 25%.

Bench, \$6.50 to \$14 per doz.
Broad, \$26.25 to \$40 per doz.
Double-bitted, \$11 to \$13 per doz.
Handled, \$8.50 to \$12 per doz.
Regular, \$6 to \$10 per doz.
Ship Carpenters, \$22 to 25 per doz.

AXLE GREASE.—Duty 25%.

Ordinary, \$5.75 to \$6 per gross.

AXLES.—Duty 20%.

Half patent, short beds, 60% discount per set.
long 60%

BAGS.—Duty 20%.

Cotton, seamless, \$14 @ \$24.50 per 100.
Jute, \$7.75 @ \$9 per 100;

BANDS.—Duty 30%.

Carriage Hub, 2" x 1 1/2"	\$13.00 per set.
" " 2 1/2" x 1 1/2"	14.00 "
" " 2 1/2" x 1 3/4"	15.00 "
" " 2 3/4" x 1 1/2"	16.00 "
" " 2 3/4" x 1 3/4"	17.00 "
" " 2 3/4" x 1 1/2"	18.00 "
" " 2 3/4" x 1 3/4"	19.00 "
" " 2 3/4" x 1 1/2"	20.00 "
" " 3" x 1 1/2"	21.00 "
" " 3 1/2" x 1 1/2"	24.00 "
" " 3 1/2" x 1 3/4"	25.00 "
" " 3 1/2" x 1 1/2"	26.00 "
" " 3 1/2" x 1 3/4"	27.00 "
" " 3 1/2" x 1 1/2"	28.00 "
" " 3 1/2" x 1 3/4"	29.00 "
" " 3 1/2" x 1 1/2"	30.00 "
" " 4" x 1 1/2"	31.00 "

BARROWS.—Duty 30%.

See Wheelbarrows.

BELLS.—Duty 30%.

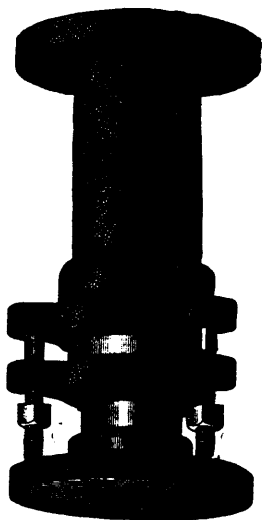
Church, 35 cents per lb.
Cow, Western, 60% discount.
Door, \$5.50 to \$12 per doz.
Farm, \$1.75 to \$4.50 each.

BELLOWS.—Duty 25%.

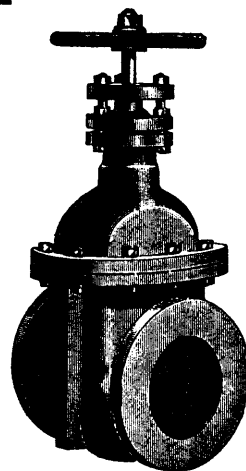
Blacksmiths', Canadian, 10% discount; Amer., 50% discount.
Moulders', \$9.50 to \$15 per doz.

STEAM AND WATER FITTINGS

WE CARRY A COMPLETE LINE OF ENGINEERS' SUPPLIES.



Safford's Steam and Hot Water } **RADIATORS.**
Steam Traps. Wrought Iron Pipe.
Cast and Malleable Fittings, ALSO
Galvanized Pipe and Fittings,
Brass and Iron Body Valves, etc.,
Boilers for Steam and Water,
Expansion Joints, Brass and Iron Check Valves.



Can Ship Goods same Day as we receive Order. Write for Price List and Discounts.

THE **DOMINION RADIATOR CO.** Limited, TORONTO, ONT.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

BELTING (Leather).—Duty 20%. Amer., Hoyt's, regular, 35% discount. Canadian, 5½% discount.

BELTING (Rubber).—Duty 20%. 50 to 60% discount.

BITS.—Duty 30%. Boker's Center, 75 cents to \$2.60 per doz. Countersink, \$1.50 per doz. Gimlet, U.S., \$1 per doz. Marple's Centre, \$1.30 to \$1.50 per doz. Reamer, \$1.50 per doz.

BITS, DRILL.—Duty 30%. Morse, blacksmiths', 45% discount. Morse, straight shank, 45 " Morse, taper shank, 45 " Morse Bit Stock, 50 "

BLANKETS.—Duty 35%. Horse, \$18 to \$36 per doz.

BLOCKS.—Duty 30%. Gin, \$3.50 to \$5 each. Hyper Acme, 15% discount. Weston Chain, 25 " Wood Pulley, 60% discount. Wrought Iron, 25 "

BLUE STONE. Casks, for spraying, 7 cents per lb. 100-lb. lots, for spraying, 7½ cents per lb.

BOLTS.—Duty ¼ cents lb., & 25%. Bolt Ends, 62½% discount. Carriage, 60 " Coach Screws, 70 " Elevator Bolts, 45% discount. Machine, 60 " Plow, 60 " Shaft, 45 " Sink, 50 " Sleigh Shoe, 72½ " Stove, 60 " Tire, 55 "

BOOT CAULKS.—Duty 20%. Small or Medium ball, \$4.25 per M. Heel, \$4.50 per M.

BOOT HEELS & TAPS (Leather).—Duty 25%.

BORAX. Lump, 8 cents per lb. Powdered, 10 cents per lb.

BRICK (Fire).—Duty 20%. Circular, \$35 per M. Square, \$30 per M.

BRUSHES.—Duty 25%. Canadian list, 50% discount.

BUCKLES.—Duty 30%. Double Grip Trace, three loop, tinned and japanned, put up a dozen in a box, 14½, 55 cents per doz.; 13½, 65 cents per doz. Harness, japanned or tinned, 12 cents per lb. Shoe, japanned or tinned, 12 cents per lb.

BUTTS.—Duty 30%. Cast Butts, 60% discount. Loose Pin, Bronze, 60 cents to \$2 per pair. Loose Pin, B. Bronze, 30 cents to \$1 per pair. Wrought Brass, 50 " Wrought Iron, 60 "

CANT DOGS.—Duty 30%. \$10 per doz.

CARBIDE, Bicycle.—Duty 25%. In Cases containing 2 doz. 1 lb. cans, \$1.75. " " 2 " 2 " 2.75. " " 1 " 5 " 3.00. In Cans " 100 lbs., \$3.25.

CASTINGS.—Duty 30%. Carriage, in 5 ton lots, 5 cents per lb.: " 3 " 5½ " " " " 2 " 5½ " " " " 1 " 5½ " " " " ½ " 5½ " " " " ¼ " 5½ " " " "

CASTORS.—Duty 30%. Bed, 55% discount. Plate, 55 " Truck, Payson's, 60% discount.

CEMENT.—Duty 12½ cents per 100 lbs. Belgian, Portland, \$2.50 to \$2.75. Canadian, hydraulic, \$1.25 to \$1.50. Canadian, Portland, \$2.50 to \$2.80. English, Portland, \$3.

CHALK. Carpenters', colored, 45 to 75 cents per gross. Crayon, 14 to 18 cents per gross. Red, 5 to 6 cents per lb. White Lump, 60 to 65 cents per 100 lbs.

CHAIN.—Duty 5%. Brass, Jack, 30% discount. Coil, 3-16, \$11.00 per 100 lb.; ½, \$8.75 per 100 lbs.; 5-16, \$5.50 per 100 lbs.; ¾, \$4.90 per 100 lbs.; 1, \$4.40 per 100 lbs.; 1½, \$3.90 per 100 lbs. Iron, Jack, 25% discount. Safety, 55 "

CHISELS.—Duty 30%. Calking, Socket, Framing and Firmer. P.S. & W. Extra, 60, 10 & 5% discount. Warnock's, 70% discount.

CLEAVISES.—Duty 30%. Screw, \$2.50 per doz.

COLORS.—In oil, see Paints. —Dry, see Paints.

CORD.—Duty 25%. Sash, Silver Lake (A), 50 cents per lb.; (B), 40 cents per lb. Baltic, 25 cents per lb. Hercules, 30 cents per lb.

CROW BARS.—Duty 30%. 5 cents per lb.

CRUCIBLES. Dixon's, 7 cents per number.

DRILLS.—Duty 30%. Blacksmiths', \$6 to \$15 each.

DUCK COTTON.—Duty 22½%. 36 in. wide, 38 cents per yd. 48 in. wide, 45 cents per yd. 60 in. wide, 57 cents per yd.

DYES (Aniline).

DYNAMITE. 30 to 50 cents per lb.

EMERY. Coarse, 7 cents per lb. Fine, 5 cents per lb.

EMERY CLOTH.—Duty 25%. Beader & Adamson, 40% discount.

EMERY HONES.—Duty 25%. \$3 to \$5 per doz.

EMERY STEELS.—Duty 25%. \$2 per doz.

EMERY WHEELS.—Duty 25%. 65% discount.

EXPANDERS.—Duty 30%. Tube, Dudgeon, 33½% discount.

FAUCETS.—Duty 30%. Brass, \$2.50 to \$5 per doz. Iron. Wood, 60c. to \$1.00 per doz.

FENCING. Barb Wire, \$3.05 per 100 lbs.

FENCING (Wire).—Duty 15%. Galvanized, barb, f.o.b. Toronto, \$3.05. Galvanized, plain twist, f.o.b. Toronto, \$3.05. Galvanized, barb, f.o.b. Cleveland, \$2.82½ in less than car lots, and \$2.70 in car lots. Mesh, 5½x10½, 20 rod rolls 55% discount, Can. list. " 4 x8, 20 " 50 & 5 " " " 3 x6, 20 " 55 & 5 " " "

FERRULES.—Duty 30%. Tool handle, 5c. & 6c. per lb.

FILES.—Duty 30%. Black Diamond, 50 to 10% discount. Globe, 65 to 70% discount. Grobet, net. Jowitt's, 25% discount. Nicholson, 50 & 10% discount. Stubbs', 15% discount.

FITTINGS (Pipe).—Duty 30%. Bushings, 55% discount. Cast Iron, 55% discount. Cocks, 55 " Elbows, tees, crosses, couplings, lock nuts, return bends, 50% discount. Flanges, 55% discount. Nipples, 55 " Plugs, 55 " Unions, 55 " Wrought Iron, 50% discount.

FLUE SCRAPERS.—Duty 30%. Engineers' Favorite, 40% discount. Inglis, 20% discount. Wire, 50 "

FORKS, HOES AND RAKES.—Duty 25%. 50, 10 and 5% discount.

FUSE. Blasting, Single tape, \$3.75 per M ft. Double tape, \$5 per M ft.

GASKETS.—Duty 35%. Rubber Insertion, 60 cents lb.

GAUGE GLASSES.—Duty 30%. Water, 25% discount.

GAUGES.—Duty 30%. Steam, 50% discount.

GLASS.—Duty 20%. (Window—Box Price). Star, under 26 in., \$2.15 per 50 ft., \$4.15 per 100 ft.; 26 to 40 in., \$2.30 per 50 ft., \$4.45 per 100 ft.; 41 to 50 in., \$4.85 per 100 ft.; 51 to 60 in., \$5.15 per 100 ft.; 61 to 70 in., \$5.50 per 100 ft.; 71 to 80 in., \$6 per 100 ft.; 81 to 85 in., \$6.50 per 100 ft. D. Diamond, under 26 in., \$6 per 100 ft.; 26 to 40 in., \$6.65 per 100 ft.; 41 to 50 in., \$7.50 per 100 ft.; 51 to 60 in., \$8.50 per 100 ft.; 61 to 70 in., \$9.50 per 100 ft.; 71 to 80 in., \$10.50 per 100 ft.; 81 to 85 in., \$11.70 per 100 ft.; 86 to 90 in., \$14 per 100 ft.; 91 to 95 in., \$15.50 per 100 ft.; 96 to 100 in., \$18 per 100 ft.

GLUE.—Duty 25%. Cabinet, sheet, 12 to 13 cents per lb. Common, 8½ to 9 cents per lb. Coopers', 19 to 20 cents per lb. French Medal, 14 to 14½ cents per lb. Gelatine, 22 to 30 cents per lb. Huttner, 18 cents per lb. Strip, 18 to 20 cents per lb. White, extra, 18 to 20 cents per lb.

GLUE (Liquid).—Duty 25%. LaPage's, 25% discount. Progressive, 25 "

GOVERNORS.—Duty 25%. Gardners', 25% discount.

GRANITEWARE.—Duty 35%. Firsts, 50% discount.

GRAIN CRADLES.—Duty 25%. With Scythes complete \$33. Without \$18.50.

GRINDSTONES.—Duty 25%. Large, \$1.75 per 100 lbs. Mounted, \$3 to \$3.50 each. Small, \$1.50 per 100 lbs.

HALTER MOUNTINGS.—Duty 30%. 1 & 1¼ inch, 10c. per lb. (Evans), 1 & 1¼ in., doz. set packages, \$3.00 per gross.

HALTERS.—Duty 30%. Leather, 1 in., \$3.87½ to \$4 per doz. Leather, 1¼ in., \$5.15 to \$5.20 per doz. Rope, ½, \$9 per gross. Rope, ¾ to 1, \$14 per gross. Web, \$1.87 to \$2.45 per doz.

HAMMERS.—Duty 30%. Blacksmiths', 10 cents per lb. Carpenters', Madoles', \$6.40 to \$8.75 per doz. Carpenters', Warnock's, \$4 to \$7.50 per doz. Machinists', 22 cents per lb. Sledge, 10 cents per lb. Tack, 60 cents to \$1.20 per doz. Tinnors', \$4 to \$6.50 per doz.

HANDLES.—Duty 25%. Axe, \$1.50 to \$2.50 per doz. Chisel, \$3.50 to \$5 per gross. Cross-cut saw, \$2 to \$3 per doz. File, \$2 to \$2.50 per gross. Hammer, 50 cents to \$2 per doz. Pick, \$1.50 to \$2.50 per doz. Plane, \$3.50 per gross.

HANGERS.—Duty 30%. Barn Door, round groove, \$4.50 to \$6.50 per doz. Lanes, \$6.75 to \$12 per doz. Parlor door, \$3 to \$6 per set. Stearns, \$5.50 to \$6.50 per doz.

HARVEST TOOLS.—Duty 25%. Forks, 50 & 10% discount. Rakes, 50 & 10 " Hoes, etc., 50 & 10 "

HATCHETS.—Duty 30%. Canadian, 40 to 42½% discount.

HAY KNIVES.—Duty 25%. 50, 10 and 5% discount.

HINGES.—Duty ¼ cents per lb., & 25%. Blind, Parker's, 50 & 10 to 60% discount. Heavy T and strap, 4 in., 6½ cents per lb. " " 5 in., 6½ " " " " 6 in., 6 " " " " 8 in., 8 " " " " 10 in., 5½ " " "

Light T and strap, 65 & 5 off. Screw hook and hinge, 6 to 12 in., \$4.50 per 100 lbs.; 14 in.-up, \$5.50. Spring, \$12 per gross pairs.

HOES.—Duty 25%. Grub, \$5 to \$6.

HOOKS.—Duty 30%. Brush, \$7.50 to \$9. Reaping, 50, 10 and 5% discount. Chain, wrought, round or grab, \$3 & \$4.50 per doz. Lumber Piling, \$7 to \$19 per doz. Malleable, wardrobe, \$1.50 to \$2.50 per gross. Wire, \$1.25 to \$2.

HORSE NAILS.—Duty 30%. C brand, 50 & 7½% discount. M brand, 50 & 10 "

HORSE SHOES.—Duty 30%. L. Med. & H., \$3.70 per keg. Snow, \$3.95 per keg. Steel, \$3.80 to \$5.25 per keg. Toe weight steel, \$6.15 per keg.

HOSE.—Duty 35%. City Standard, 70% discount. Phoenix, 60% discount.

INJECTORS.—Duty 30%. Pemberthy, 65% discount. I. J. C., 65% discount.

IRON.—See Metals.

JACKS.—Duty 30%. Lifting, 40% discount.

KEYS.—Duty 30%. Carpenter, 50 cents to \$1.25 per doz. Desk, 25 to 35 cents per doz. Mortise Lock, 25 cents to \$1 per doz. Padlock, 25 to 35 cents per doz. Rim Lock, 25 cents to \$1 per doz.

KNIVES.—Duty 30%. Butcher, \$2 to \$5 per doz. Pocket, \$1 to \$5 per doz.

KNOBS.—Duty 30%. Door, Bronze, \$7 to \$12 per doz. " White Porcelain, 90 cents per doz. " Wood, \$4.50 per doz.

LACING.—Duty 15%. Belt cuts, \$1 per lb., Raw Hide. Sides, 75 cents per lb., Leather.

LADDERS.—Duty 25%. Step, 10 cents per foot. Rung, 10 cents per foot.

LAND ROLLERS.—Duty 20%. \$12 to \$15 each.

<p>LANTERNS.—Duty 30%. Cold Blast, \$7 per doz. Dashboard, cold blast, \$9 per doz. Japanning, 50 cents per doz. extra. No. 0, \$5.75 per doz. No. 3 "Wright's," \$8.50 per doz. Ordinary, with O burner, \$4 per doz.</p> <p>LAWN MOWERS.—Duty 35%. Pennsylvania, 50% discount. Stearns, 50 " " Woodyatt, 40 " "</p> <p>LEAD (Bar and Strip).—Duty 25%.—See Metals.</p> <p>LEAD.—Duty 5%. Red and White, dry.—See Paints.</p> <p>LINES (Cotton).—Duty 25%. Chalk, \$2 to \$3.50 per gross. Wire, clothes, \$2.50 to \$4.50 per M ft.</p> <p>LOCKS.—Duty 30%. Cupboard, \$1.50 per doz. up. Desk, \$1.50 per doz. up. Drawer, \$1 per doz. up. Padlocks, 75 cents per doz. up. Rim and Mortise, Peterboro, \$1.50 per doz. up. Amer., \$1.50 per doz. up.</p> <p>MALLEABLES.—Duty 30%. See Castings.</p> <p>MALLETS.—Duty 30%. Carpenters', hickory, \$1.25 to \$3.75 per doz. Caulking, 60 cents to \$2 each. Lignum Vitae, \$3.85 to \$5 per doz. Tinsmiths', \$1.25 to \$1.50 per doz.</p> <p>MATTOCKS.—Duty 30%. Canadian, \$5.50 to \$6.50 per doz.</p> <p>MEAT CUTTERS.—Duty 30%. Amer., 25 to 30% discount. German, 15% discount.</p> <p>METALS. Ingots.—Aluminium, 35 to 50 cents per lb. Antimony (Cookson's) 10½ to 11 cents per lb. " " Copper, " English," 18 cents per lb. " " Bar, 25 cents per lb. " " Tin, " Lamb & Flag," 32 cents per lb. " " Straits, 32 cents per lb. " " Bar, 33 cents per lb. " " Zinc, 6 to 6½ cents per lb.; sheets, 7 cents per lb. Babbit Metal (duty 10%).—Lewis, 7 to 10 cents per lb.; Magnolia, 25 cents per lb.; Post's Zero, 25 cents per lb.; Spooner's Copperine No. 2, 12½ cents per lb.; No. 2, 16 cents per lb.; finest, 25 cents per lb. Syracuse Smelting Works, dynamo, 29 cents per lb.; special, 25 cents per lb. Sheets, Black (Steel), Duty 5%. " 10—\$2.50, 100 lbs. " 12—\$2.60, " " " 14—\$2.70, " " " 17—\$2.75, " " " 18—\$3.00, " " " 20—\$3.15, " " " 22—\$3.25, " " " 26—\$3.40, " " " 28—\$3.65, " " Sheets, Tinned—7½ cents per lb., Base price. Sheets, Galvanized Iron. " 18—\$4.40 per 100 lb. " 18 to 24—\$4.50 per 100 lb. " 26—\$4.75 per 100 lb. " 28—\$5.00, " " " 16—(Queen Head), \$3.90 per 100 lb. " 18-22-24—(Queen's Head), \$4.15 per 100 lb. " 26—\$4.40 per 100 lb. " 28—\$4.65, " " Sheets, Corrugated—Galv., \$4.50 per 100 sq. ft. Steel, Cultivator.—\$4.50 per 100 lb. " " Firths.—12 cents per lb. " " Crescent.—9 cents per lb. " " Mushets.—55 cents per lb. " " Cant Hook.—7½ cents per lb. " " Machinery.—\$2.75 per 100 lb. " " Sleigh Shoe.—\$1.90 per 100 lb. " " Spring.—\$3.00 per 100. " " Tire.—\$2.05 per lb. " " Toe Caulk.—\$2.20 per 100 lb. " " Mild.—\$1.90 per 100 lb. Iron (duty \$7 per ton). " Angle.—\$2.75 per 100 lb. " Bar (Common).—\$1.75 per 100 lb. " Bar, "Swedes."—\$4.50 per 100 lb. " " Lowmoor.—\$6.50 per 100 lb. " " Refined Bar.—\$2.60 per 100 lb. Iron, Planished Sheet (duty 5%) " " A"—\$6.00 per 100. " " B"—\$5.00, " " " Russia—\$10.00 per 100 lb. Iron, Galv. Sheet, see Sheets. Rods.—Brass, 24 cents per lb., base price; hard sheets, 20 to 30 cents per lb.; soft sheets, 20 to 30 cents per lb. Pig Lead (duty 15%).—Domestic, \$3.75 per 100 lb; pigs, imported, \$4.25 per 100 lb.; bars, \$5 per 100 lb; sheets, \$5.50 per 100 lb. Soldier bar (duty 25%).—1st, refined, 18 cents per lb.; half-and-half, 18 cents per lb. Iron, Pig (duty \$2.50 per net ton).—Ranges about \$16.50 per ton. Iron, English Horse Shoe.—\$2.85 per 100 lb. Iron, Band.—\$2.05 per 100 lb. Iron, Hoop.—\$2.90 per 100 lb. Channel, Steel.—\$3 to \$4 per 100 lb. Beams, Steel.—\$3 per 100 lb.</p>	<p>METALS.—Continued. Rails, Small Steel.—\$3 per 100 lb. Steel, Rough Machinery.—\$2.25 per 100 lb. Shafting, Bright Steel.—\$3.50 per 100 lb. Steel, Cast.—Firths, 12 cents per lb.; Jessop's, 14 cents per lb.; Black Diamond, 12 cents per lb.; Silver, 15 cents per lb.; Crescent, 9 cents per lb.; Mushet's, 55 cents per lb. Steel, Blister.—12 cents per lb. Steel, Hammer.—7 cents per lb. Steel, Sheet Cast.—Firths, 12 cents per lb., base. Steel, Decarbonized Sheet.—7 cents per lb., base. Steel, Black Sheet (duty 5%)—10, \$2.50 per 100 lb.; 12, \$2.60 per 100 lb.; 14, \$2.70 per 100 lb.; 17, \$2.75 per 100 lb.; 18, \$3 per 100 lb.; 20, \$3.15 per 100 lb.; 22, \$3.25 per 100 lb.; 24, \$3.35 per 100 lb.; 26, \$3.40 per 100 lb.; 28, \$3.65 per 100 lb. Tank Steel Plate (duty 10%). 3-16, \$2.50 per 100 lb. Plates, Steel Boiler (duty 10%).—4 and larger, \$2.50 per 100 lb. Steel Boiler Heads (duty 10%)—\$2.50 per 100 lb. Canadian Plates.—All dull, 52 sheets, \$2.90 half polished, \$3.</p> <p>SHINGLES.—Duty 25%. Galvanized, ordinary, \$4.90 per sq.; medium, \$5.45 per sq.; best, \$5.80 per sq. Steel, Painted, ordinary, \$3.15 per sq.; medium, \$3.35 per sq.; best, \$3.90 per sq.</p> <p>MOPS.—\$1 per doz.</p> <p>NAIL PULLERS.—Duty 30%. German and American, \$1.85 to \$3.50 each.</p> <p>NAILS.—Duty, cut, ½ cent per lb.; wire, 3-5 cent per lb. Chair nails, 35% discount. Clout nails, blued, 65 and 5% discount. Coopers', 25% discount. Copper nails, 50% discount. Cut, 2d \$3.35; 3d, \$3; 4 & 5d, \$2.75; 6 & 7d, \$2.65; 8 & 9d, \$2.50; 10 & 12d, \$2.45; 16 & 20d, \$2.40; 30, 40, 50 & 60d (base), \$2.35. Flour barrel nails, 25% discount. Galvanizing, 2 cents per lb. net, extra. Steel cut nails, 10 cents extra. Trunk nails, black, 65 and 5% discount. Trunk nails, tinned, 65 and 10% discount. Wire, 2d \$3.85; 3d, \$3.50; 4 & 5d, \$3.25; 6 & 7d, \$3.15; 8 & 9d, \$3; 10 & 12d, \$2.95; 16 & 20d, \$2.90; 30, 40, 50 & 60d (base), \$2.85; fine, 3d, \$3.85. Wire nails in car lots, \$2.77½. Miscellaneous wire nails, 70 & 10% discount.</p> <p>NETTING.—Wire.—Duty 30%. Galvanized, 50% discount. Green wire, \$1.50 per 100 sq. ft. Poultry, 2x2 mesh, 150 ft. roll, 55 off Canadian List.</p> <p>NOZZLES.—Duty 30%. Hose Brass, \$3.50 to \$5 per doz.</p> <p>NUTS.—Duty ½ cent per lb. & 25%. Finished, tapped, 25% discount. Rough, square head, 4 cents per lb. from list. Rough, hexagon head, 4½ cents per lb. from list. Semi-finished, tapped, 25% discount.</p> <p>OAKUM. Navy, \$7.80 per 100 lb. Spun, \$9.30 per 100 lb.</p> <p>OIL.—Duty 25%. Boiled Lined Oil, bbls., 86 cents per gal. Cylinder Oil, from 40 cents up. Lard Oil, bbls., 90 cents per gal. Machine. Prime White (Can.), 14 cents per gal. Prime White (U.S.), 15½ cents per gal. Raw Lined Oil, bbls., 83 cents per gal. Sperm Oil, bbls., \$1.75 per gal. Water White (Can.), 15 cents per gal. Water White (U.S.), 16½ cents per gal.</p> <p>OILERS.—Duty 30%. \$1 per doz. up.</p> <p>PACKING.—Duty 35%. Rubber Insertion, 60 cents per lb. Rubber Sheet, 22 cents per lb.</p> <p>PACKINGS.—Duty 25%. Asbestos, 35 cents per lb. Flax, 35 cents per lb. Hemp, 12½ cents per lb. Jute, 8 cents per lb. Rubber sheet, 22 cents per lb.</p> <p>PAISLS.—Duty 25%. Galvanized, \$2.50 to \$3.50 per doz.</p> <p>PAINT, WHITE ZINC.—Duty 25%. Elephant Snow White, 8 to 9 cents per lb. Pure White Zinc, 8 to 9 cents per lb. No. 1, 6 to 7½ cents per lb. No. 2, 5 to 6½ cents per lb.</p> <p>PAINTS, PREPARED.—Duty 25%. In ¼, ½ and 1-gallon tins. Barn, in barrels, 75 to 85 cents per gal. Canada Paint Co's Pure, \$1.25 per gal. Pure, \$1.25 per gal. Second qualities, \$1.10 per gal. Sherwin-Williams Paints, \$1.45 per gal. Toronto Lead & Color Co's Pure, \$1.25 per gal. Zanzibar.</p> <p>PAINTS.—Duty 30%. Copper, \$3.50 per gal.</p> <p>LEAD, DRY WHITE.—Duty 5%. Pure, casks, \$5.75 per cwt. Pure, kegs, \$6.25 per cwt. No. 1, casks, \$5.50 per cwt. No. 1, kegs, \$5 per cwt.</p>	<p>LEAD, WHITE. Pure, \$6.37 per 100 lb. No. 1, pure, \$6 per 100 lb. No. 2, pure, \$5.625 per 100 lb. No. 3, pure, \$5.25 per 100 lb. No. 4, pure, \$4.875 per 100 lb. Elephant and Decorators' Pure, \$7.125 per 100 lb. Brandram's B.B. Genuine, \$9 per 100 lb. " " Decorative, \$7.55 per 100 lb. " " No. 1, \$6.85 per 100 lb. " " No. 2, \$6 per 100 lb.</p> <p>LEAD, RED.—Duty 5%. Genuine, 500 lb. casks, \$5.50 per cwt. Genuine, 100 lb. kegs, \$5.75 per cwt. No. 1, 500 lb. casks, \$5.25 per cwt. No. 1, 100 lb. kegs, \$5 per cwt.</p> <p>COLOURS (Dry).—Duty 25%. American Oxides, \$1.75 to \$2 per 100 lb. Brussels Ochre, \$2 per 100 lb. Burnt Sienna, pure, 10 cents per lb. " " Umber, pure, 10 cents per lb. Raw, 9 cents per lb. Canadian Oxides, \$1.75 to \$2 per 100 lb. Chrome Greens, pure, 12 cents per lb. Chrome Yellows, pure, 18 cents per lb. Drop Black, pure, 9 cents per lb. English Oxides, \$3 to \$3.25 per 100 lb. English Vermillion, 80 cents. Fire Proof Mineral, \$1 per 100 lb. Genuine English Litharge, 7 cents per lb. Golden Ochre, 3½ cents per lb. Mortar Color, \$1.25 per 100 lb. Pure Indian Red, No. 45, 90 cents per lb. Super Magnetic Oxides, \$2 to \$2.25 per 100 lb. Ultramarine Blue, in 28-lb. boxes, 8 to 24 cents per lb. Venetian Red (best), \$1.80 to \$1.90 per 100 lb. Whiting, 12 cents. Yellow Ochre (J. F. L. S.), bbls., \$1.35 to \$1.40 per 100 lb. Yellow Ochre (J. F. L. S.), bbls., \$2.75 per 100 lb. Yellow Ochre (Royal), \$1.10 to \$1.15 per 100 lb.</p> <p>COLOURS (In Oil).—Duty 25%. 25 lb. tins, Standard Quality. Chrome Green, 8 cents per lb. Chrome Yellow, 11 cents per lb. French Imperial Green, 10½ cents per lb. French Ochre, 5 cents per lb. Golden Ochre, 6 cents per lb. Marine Black, 9 cents per lb. Marine Green, 9 cents per lb. Venetian Red, 5 cents per lb.</p> <p>PAPER.—Duty 25%. Brown Wrapping, 2½ to 4 cents per lb. Manilla Wrapping, No. 1, 4 cents per lb. " " No. 2, 5½ " "</p> <p>PAPER, BUILDING.—Duty 25%. Carpet Felt, \$45 per ton. Plain building, 35 cents per roll. Tarred lining, 45 cents per roll. Tarred roofing, \$1.65 per 100 lbs.</p> <p>PEAVEYS.—Duty 30%. Round and Duck bill, \$2.50 and \$13 per doz.</p> <p>PIKE POLES.—Duty 30%. \$10.50 per doz.</p> <p>PICKS.—Duty 30%. \$4.50 to \$7 per doz.</p> <p>PITCH. 85 cents to \$1 per lb.</p> <p>PIPE.—Duty, \$8 per ton. Cast Iron Soil, Medium and Heavy, 65% dis. " " Light, 60% discount.</p> <p>PIPE. Brass, 25 to 35 cents per lb., base price. Copper, 25 cents per lb., base price.</p> <p>PIPE.—Duty 30%. Galvanized Iron. ½, \$5.15 per 100 ft.; ¾, \$5.50 per 100 ft.; 1, \$7.95 per 100 ft.; 1¼, \$10.30 per 100 ft.; 1½, \$12.95 per 100 ft.; 2, \$16.25 per 100 ft.</p> <p>PIPE, BLACK IRON.—Duty 30%. ½, \$4.65 per 100 ft.; ¾, \$3.40 per 100 ft.; 1, \$3.45 per 100 ft.; 1¼, \$3.70 per 100 ft.; 1½, \$3.85 per 100 ft.; 1¾, \$4.10 per 100 ft.; 2, \$4.25 per 100 ft.; 2½, \$4.90 per 100 ft.; 3, \$5.25 per 100 ft.; 3½, \$5.75 per 100 ft.; 4, \$5.90 per 100 ft.; 4½, \$41.80 per 100 ft.; 5, \$47.35 per 100 ft.; 6, \$62.10 per 100 ft.</p> <p>PIPE.—Duty 30%. Wrought Iron, 1 inch, per ft. 16½ cents.</p> <p>PIPES.—Duty 30%. Stove, 5 and 6 in., \$7 per 100 lengths. " " 7 in., \$7.50 per 100 lengths.</p> <p>PLANES.—Duty 30%. Bailey's, 40% discount. Canadian wood, 25% discount Mathieson wood, 20 "</p> <p>PLUMBERS' BRASS GOODS.—Duty 30%. Check Valves, 60% discount. Compression Cocks, 50% discount. Gate Valves, 55% discount. Genuine Jenkins' Valves, 45 " " Imitation Jenkins' Valves, 55 " " Radiator Valves, 55% discount. Standard Angle Valves, 65% discount. Standard Globe Valves, 65 " " Stop Cocks, 55% discount.</p> <p>POLISH.—Duty 25%. Liquid Stove, \$5 per gross. Paste, \$5 per gross.</p>
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POWDER (Sporting).
 Canadian, \$4.50 per keg 25 lbs.
 English, " " "
 American, \$5.50 " " "

POWDER (Blasting).
 \$2.50 per keg.

PULLEYS.—Duty 25%.
 Awning, 25 to 60 cents per doz.
 Clothes Line, 50 cents per doz.
 Dodge wood, 50% discount.
 Sash, 25 to 27 cents per doz.

PUMP CYLINDERS.—Duty 25%.
 Regular patterns, 65% discount.

PUMPS.—Duty 25%.
 Cistern, 50% discount.
 Force, 50

PUTTY.—Duty 20%.
 Bladders, in bbls., \$2.10 per cwt.
 " in kegs, boxes or loose, \$2.25 per cwt.
 " in 25-lb. tins, \$2.35 per cwt.
 " in 12½-lb. tins, \$2.65 per cwt.
 " in bulk or tins less than 100 lb., \$2.90 per cwt.
 Bulk, in bbls., \$1.90 per cwt.
 " in less quantity, \$2.05 per cwt.

RASPS.—Duty 30%.
 Blacksmiths, Woodworkers, etc., see Files.

REGISTERS.—Duty 30%, 50% discount.
 Floor and Wall.

RIVET SETS.—Duty 30%.
 Canadian, 35 to 37½ discount.

RIVETS AND BURRS.—Duty 30%.
 Copper Rivets and Burrs, 35 & 5 off; cartoons, 1 cent per lb. extra.
 Extras on Iron Rivets in 1-lb. cartoons, ½ cent per lb.
 Extras on Iron Rivets in ½-lb. cartoons, 1 cent per lb.
 Extras on Tinned or Coppered Rivets, ½-lb. cartoons, 1 cent per lb.
 Iron Rivets, black and tinned, 60 & 10% discount
 Iron Burrs, 55% discount.

ROPE, ETC.—Duty 25%.
 Cotton, 3-16 in. and larger, 16 cents per lb.
 " 5-32 in., 21 cents per lb.
 " ¼ in., 22½ cents per lb.
 Crucible Steel Rope, 25% discount.
 Galvanized Wire Rope, 25% discount.
 Jute, 8 cents per lb.
 Lath Yarn, 9½ cents per lb.
 Manila, 7-16 in. and larger, 13½ cents per lb.
 " ¼ in., 14½ cents per lb.
 " ½ and 5-16 in., 15½ cents per lb.
 New Zealand Rope, 10 cents per lb.
 Russia Deep Sea, 15½ cents per lb.
 Sisal, 7-16 in. and larger, 10 cents per lb.
 " ¼ in., 11 cents per lb.

RUBBER.
 Reclaimed.

RULES.—Duty 30%.
 Boxwood, 75 and 10% discount.
 Ivory, 37½ to 40% discount.
 Lumbermans'.

SAD IRONS.—Duty 30%.
 Mrs. Potts', No. 55, polished, 62½ cents per set.
 No. 50, nickle-plated, 67½ cents set.
 "Sensible," 55 and 60 cents set.
 "Toy," \$13.00 gross.

SAND AND EMERY PAPER.—Duty 25%.
 B. & A. Sand, 40 & 5% discount.
 Garnet, 5 to 10% advance.

SAP SPOUTS.—Duty 30%.
 Bronzed iron, with hooks, \$9.50 per 1,000.

SASH WEIGHTS.—Duty 25%.
 Sectional, \$2.75 to \$3 per 100 lb.
 Solid, \$1.25 to \$2.25 per 100 lb.

SAWS.—Duty 30%.
 Crosscut, Disston's, 35 to 55 cents per foot.
 Hack, complete, 75 cents to \$2.75 each.
 Hack, frame only, 75 cents each.
 Hand, Disston's, 12½ discount.
 S. & D., 40% discount.
 S. & D., 35 off on Nos. 2 and 3.

SCALES.—Duty 30%.
 Champion, 60% discount.
 Gurney's, 40 " "
 Troenmer's, 30 " Canadian list.

SCREENS.—Duty 30%.
 Door, \$7.50 to \$12 doz.
 Window, \$1.75 to \$2.75 doz.

SCREWS.—Duty 35%.
 Bench, iron, \$4.25 to \$5.75 per doz.
 " wood, \$3.25 to \$4 per doz.
 Drive Screws, 87½ & 10% discount.
 Hexagon Cap, 45 " "
 Set, case-hardened, 60 " "
 Square Cap, 50 & 5 " "
 Wood, F. H., bright and steel, 87½ & 10% discount.
 " R. H., bright, 82½ & 10% discount.
 " F. H., brass, 80 & 10 " "
 " R. H., brass, 75 & 10 " "
 " F. H., bronze, 75 " "
 " R. H., bronze, 70 " "

SCREWS, MACHINE (Iron and Brass)—Duty 35%.
 Flat head, 25% discount.
 Round head, 20 " "

SCYTHES.—Duty 25%.
 Grass, \$3 to \$10.
 Grain, \$12 to \$14.

SHEARS.—Duty 30%.
 Tailors, 30% discount Amer. list.

SHOT. See Ammunition.

SHOVELS AND SPADES.—Duty 35%.
 Burns', 40% discount.
 Ely's, 40 " "
 Gray's, 40 " "
 Jones', 40 " "
 Steel, Snow, " "
 Wood, " "

SKATES.—Duty 35%.
 American Hockey, " "
 Canadian " 40 cents to \$2.50 pair.

SNAPS.—Duty 30%.
 Harness, 40% discount.

SNATHS.—Duty 25%.
 \$5.25 to \$8.

SOLDER (Plumbers').—See Metals.

SOLDERING IRONS.—Duty 30%.
 20 to 90 cents each.

SPIKES.—Duty ½ cent per lb.
 Rail, 20% discount.
 Ship, \$5 per 100 lb.

SPRINGS.—Duty 30%.
 Bright Carriage, 6½ per lb. net.

STAPLES.—Duty 3%.
 Barb wire, \$3.75 per 100 lb.
 Bed, 50% discount.
 Blind, 25 " "
 Wrought iron, 75% discount.

STEEL.—see Metals.

STOCKS AND DIES.—Duty 30%.
 Blacksmiths', Lightening, 25% discount.
 " Green River, 25 " "
 " Reece, 30% discount.
 " Jardine, 25 " "
 " 20% discount.
 Pipe, Solid, 70 & 10% discount.
 " Duplex, 33½ discount.
 " Jarecki, 33½ " "
 " Oster, 30% " "
 " Armstrong, 35% " "
 Wiley & Russell's, 25% discount, Canadian list.

STONES.—Duty 30%.
 Arkansas, \$1.50 per lb.
 Hindostan, 6 to 7 cents per lb.
 " slip, 9 cents per lb.
 Labrador, 13 cents per lb.
 " axe, 15 cents per lb.
 Seythe, \$3.50 to \$5 per gross.
 Turkey, 50 cents per lb.
 Washita, 28 to 60 cents per lb.
 Water-of-Ayr, 10 cents per lb.

TACKS, BRADS, ETC.—Duty 35%.
 Carpet tacks, blued, 80 & 15% discount.
 " tinned, 80 & 20 " "
 " in kegs, 40% discount.
 Cheese-box tacks, blued, 80 & 12½ discount.
 Copper tacks, 50% discount.
 Cut tacks, blued, in dozens only, 80% discount.
 " ½ weights, 60% discount.
 Fine finishing, 40% discount.
 Leather carpet tacks, 55% discount.
 Lining tacks, in papers, 10% discount.
 Patent brads, 40% discount.
 Picture frame points, 10% discount.
 Strawberry box tacks, bulk, 75 & 10% discount.
 Swedes, cut tacks, blued and tinned, in bulk, 80 & 10% discount; in dozens, 75% discount.
 Swedes, upholsterers', bulk, 85, 12½ & 12½ dis.
 " brush, blued and tinned, bulk, 70% dis.
 " gimps, blued, tinned and japanned, 75 & 12½ discount.
 Trunk tack, black and tinned, 85% discount
 Zinc tacks, 35% discount.

TAGS.—Duty 25%.
 Shipping, 50 @ 70 cents per M.

TAR.
 Coal \$2.75 bbl.
 Refined, \$4 per bbl.

TENTS.—Duty 30%.
 Canadian list, 20% discount.

TONGS.—Duty 30%.
 Ice, \$9 per doz.
 Pipe, Browns, net.
 " Brock's, 25% discount.
 " Trimo, 25 " "

TRAPS.—Duty 30%.
 Hawley & Norton's, 65% discount.
 Newhouse, 45% discount.
 Victor, 75% discount.

TRUCKS.—Duty 30%.
 1, \$3.75; 2, \$5; 3, \$6.75 each.
 " Handy " Canadian, \$16 to \$18.

TURNBUCKLES.—Duty, ½ cent per lb., 25%; 33½% discount.

TURPENTINE.—Duty 5%.
 55 cents per gal.

TWINES.—Duty 25%.
 Bag twine, 3-ply, 20 cents per lb.
 " 4-ply, 20 cents per lb.
 Binding, 12½ cents per lb.
 Colored, 27 cents per lb.
 Cotton bag, 30 cents per lb.
 Cotton, White, 20 to 30 cents per lb.
 " Colored, 30 to 40 " "
 Hemp, 20 cents per lb.
 Jute, 20 cents per lb.
 Mattress, 45 cents per lb.
 Sewing, 45 cents per lb.
 Stone, " "
 Tarr'd Lath, " "
 Wrapping, " "

VARNISHES.—Duty 20 cents per gal.
 20% off 5-gal. lots.
 Black Japan, \$2 per gal.
 " No. 1, 75 cents to \$1.50 per gal.
 Brown Japan, \$1.50 to \$2.50 per gal.
 Carriage, No. 1, \$2 to \$3 per gal.
 " body, \$4 to \$6 per gal.
 " rubbing, \$2.50 to \$4 per gal.
 Demar, \$2 to \$2.50 per gal.
 Elastic Oak, \$1.50 to \$2.50 per gal.
 Furniture Brown Japan, \$1.25 to \$2 per gal.
 Furniture, extra, \$2 to \$2.50 per gal.
 " No. 1, 75 cents to \$1.50 per gal.
 Gold Size, Japan, \$1.50 to \$2.50 per gal.
 Hard Oil Finish, \$1.50 to \$2.50 per gal.
 Light Oil Finish, \$1.50 to \$2.50 per gal.
 Shellac, orange, \$2 to \$2.50 per gal.
 " white, \$2 to \$2.50 per gal.

VICES.—Duty 30%.
 Amer., 13½ cents per lb.
 Brooks', 13½ cents per lb.
 Peter Wright's, 15 cents per lb.

WASHERS (Clothes).—Duty 35%.
 Downswell, \$3.75 each.
 Re-acting, \$5 each.

WASHERS.—Duty ½ cent per lb., 25%.
 Buggy, 75% discount.
 Wrought iron, 40% discount.

WASHING MACHINES.—Duty 35%.
 Re-acting square, \$51.00 per doz.
 " Round, \$48.00
 Rocker, \$48.00 per doz.
 Popular Brand, \$50.00 to \$42.00 per doz.

WIRE.
 Barbed Wire, see Fencing.
 Brass Wire, (duty 10%), 50 to 50 & 24% discount.
 Copper Wire, (duty 15%), 45 & 10% discount net cash 30 days, f.o.b. factory.
 Smooth Steel Wire, (duty 20%), is quoted at the following net selling prices:
 No. 6 to 8 guage, \$2.90 per 100 lbs.
 " 9 " 2.80 " "
 " 10 " 2.87 " "
 " 11 " 2.90 " "
 " 12 " 2.95 " "
 " 13 " 3.15 " "
 " 14 " 3.37 " "
 " 15 " 3.50 " "
 " 16 " 3.65 " "

Other sizes of plain wire outside of Nos. 9, 10, 11, 12 and 13, and other varieties of plain wire remain at \$2.80, base, with extras as before. The prices for Nos. 9 to 13 include the charge of 10 cents for oiling. Extras net per 100 lb.: coppered wire, 60 cents; tinned wire, \$2; oiling, 10 cents; special hay-baling wire, 30 cents; spring wire, \$1; best steel wire, 75 cents; bright soft drawn, 15 cents; in 50 and 100-lb. bundles net, 10 cents; in 25-lb. bundles net, 15 cents; packed in casks or cases, 15 cents; bagging or papering, 10 cents.

Fine Steel Wire, 17½ off. List of extras, in 100 lb. lots, No. 17, \$5; No. 18, \$5.50; No. 19, \$6; No. 20, \$6.65; No. 21, \$7; No. 22, \$7.30; No. 23, \$7.65; No. 24, \$8; No. 25, \$9; No. 26, \$9.50; No. 27, \$10; No. 28, \$11; No. 29, \$12; No. 30, \$13; No. 31, \$14; No. 32, \$15; No. 33, \$16; No. 34, \$17. Extras net: tinned wire, Nos. 17-25, \$2; Nos. 26-31, \$4; Nos. 32-34, \$6; coppered, 5 cents; oiling, 10 cents; in 25-lb. bundles, 15 cents; in 5 and 10-lb. bundles, 25 cents; in 1-lb. hanks, 50 cents; in ½-lb. hanks, 75 cents; in ¼-lb. hanks, \$1; packed in casks or cases, 15 cents; bagging or papering, 10 cents.

Galvanized Wire, per 100 lb.: Nos. 6, 7, 8, \$3.50 to \$3.85; No. 9, \$2.85 to \$3.15; No. 10, \$3.60 to \$3.95; No. 11, \$3.70 to \$4.10; No. 12, \$5 to \$3.30; No. 13, \$3.10 to \$3.40; No. 14, \$4.10 to \$4.50; No. 15, \$4.60 to \$5.05; No. 16, \$4.85 to \$5.35. Base sizes, Nos. 6 to 9, \$2.57½ f.o.b. Cleveland.

Clothes Line Wire, solid 7 strand, No. 17, \$4.25; No. 18, \$2.65; No. 19, \$2.35; f.o.b. Toronto, Hamilton and Montreal.

WASTE (Cotton).
 Colored, \$5.50 to \$6 per 100 lb.
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 " extra, \$8 per 100 lb.

WHEELBARROWS.—Duty 30%.
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 Navy, \$19 per doz.
 " Iron wheel, \$22.50 per doz.
 Steel tubular, \$7.50 to \$10.50 each.

WRENCHES.—Duty 30%.
 Agricultural, 60% discount.
 Alligator, 50 " "
 Coes', 30 " "
 P.S. & W., 30 " "
 Stillson's, 25 " "
 Trimo, pipe, 25 " "

WRINGERS (Clothes).—Duty 35%.
 Ajax, \$66 per doz.
 Canadian, \$26 to \$30 per doz.
 Crescent, \$17.50 to \$20 per doz.
 Leader, \$30 per doz.
 Novelty, \$23 to \$27 per doz.
 Popular Brands, \$16.50 to \$22 per doz.
 Royal American, \$26 to \$30 per doz.
 Royal Canadian, \$26 to \$30 per doz.

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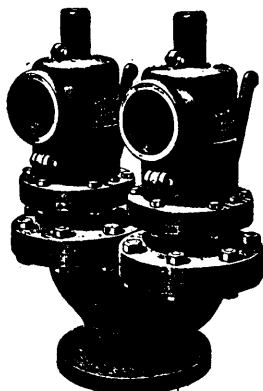
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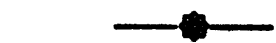
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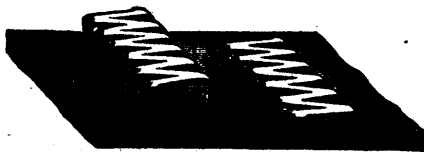
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