

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Coloured covers/
Couverture de couleur | <input type="checkbox"/> Coloured pages/
Pages de couleur |
| <input type="checkbox"/> Covers damaged/
Couverture endommagée | <input type="checkbox"/> Pages damaged/
Pages endommagées |
| <input type="checkbox"/> Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> Pages restored and/or laminated/
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> Cover title missing/
Le titre de couverture manque | <input checked="" type="checkbox"/> Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> Coloured maps/
Cartes géographiques en couleur | <input type="checkbox"/> Pages detached/
Pages détachées |
| <input type="checkbox"/> Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> Showthrough/
Transparence |
| <input type="checkbox"/> Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> Quality of print varies/
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> Bound with other material/
Relié avec d'autres documents | <input type="checkbox"/> Continuous pagination/
Pagination continue |
| <input checked="" type="checkbox"/> Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure | <input type="checkbox"/> Includes index(es)/
Comprend un (des) index |
| <input type="checkbox"/> Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées. | Title on header taken from: /
Le titre de l'en-tête provient: |
| <input type="checkbox"/> Additional comments: /
Commentaires supplémentaires: | <input type="checkbox"/> Title page of issue /
Page de titre de la livraison |
| | <input type="checkbox"/> Caption of issue /
Titre de départ de la livraison |
| | <input type="checkbox"/> Masthead /
Générique (périodiques) de la livraison |

This item is filmed at the reduction ratio checked below /
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
									✓		

The Royal Electric Co'y

MONTREAL, QUE.

Western Office.... TORONTO, ONT.

S.K.C. Two-Phase Alternators

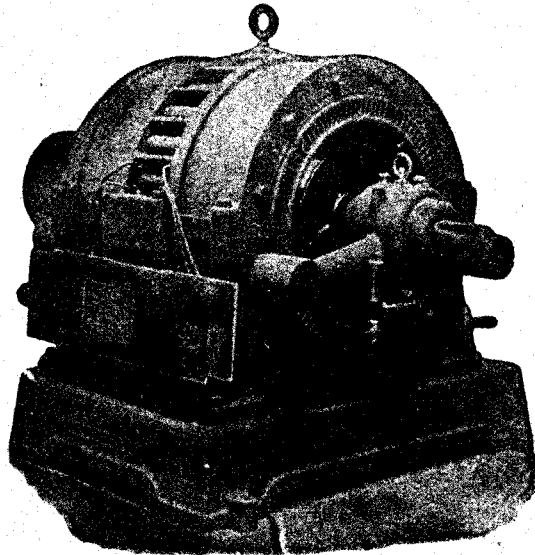
Incandescent Light, Arc Light and Power from same Dynamo and Circuit.

Highest Efficiency

Best Regulation

Slow Speed

Least Attention



No Collector

No Moving Wire

No Exposed Parts

No Compounding

S.K.C. 50 Kilowatt Two-Phase Generator



THE STANDARD DRAIN PIPE COMPANY, ST. JOHN'S, P.Q.

Manufacturers of Salt Glazed Vitrified Sewer Pipes, Double Strength Railway Culvert Pipes, Inverts, Vents, and all kinds of Fire Clay Goods.

The Standard Drain Pipe Co. of St. John's, P.Q., Ltd. W. C. TROTTER President.

FIRE PROTECTION.

INDICATOR VALVES. CHECK VALVES.

INDICATOR POSTS.

FIRE HYDRANTS. CAST IRON PIPE.

For the modern equipment of your Mill with Automatic "Sprinkling System," write us.

We manufacture a full line of these goods.

ST. LAWRENCE FOUNDRY CO.

OF TORONTO (Limited),

TORONTO, - CANADA.

REGISTERED..... BRAND

The Sampson Brand IS A HIGH GRADE OF

Portland Cement.

UNIFORM... FINELY GROUND... RELIABLE..

Quality equal to the best English and German Brands. Manufactured by the

Owen Sound Portland Cement Co., LIMITED
SHALLOW LAKE, - ONTARIO.

The City of Toronto have contracted with us to supply our Sampson Brand Portland Cement for the requirements of the whole City for 1897 and 1898.

For Prices and further information address the Manager at Works, Shallow Lake, Ont., or

JOHN LUCAS, 377 Spadina Ave., Toronto, Ont.
Correspondence Solicited.

The Wellington Mills, LONDON, ENGLAND

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.

Manufacturers....

JOHN OAKEY & SONS, Ltd., Wellington Mills, Westminster Bridge Road, London, Eng.

Inquiries should be addressed to

JOHN FORMAN, 650 CRAIG ST., MONTREAL.

THE PLANSIFTER

This Machine Leads; Others try to Follow!

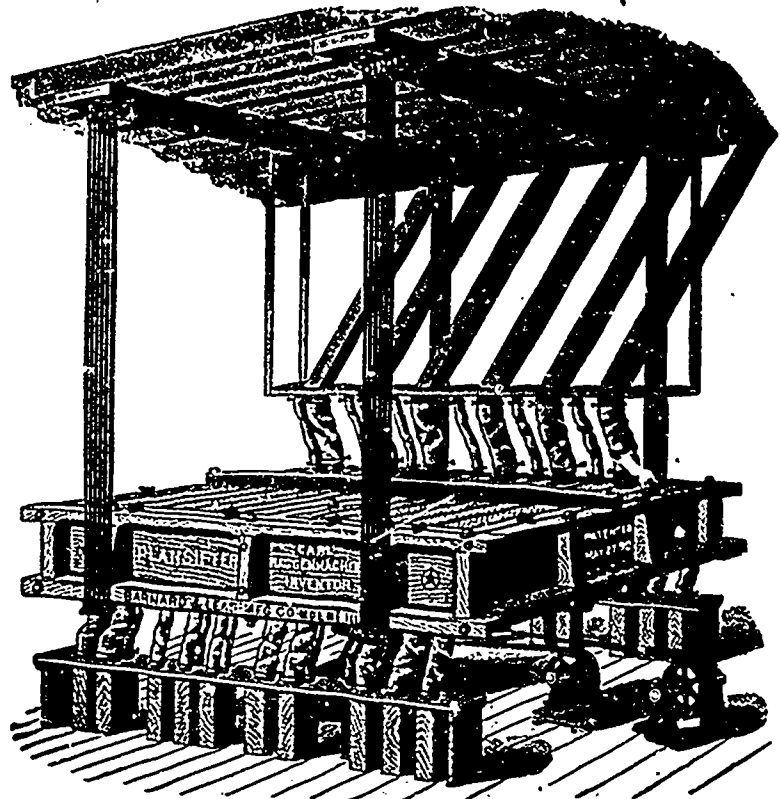
The floor space required is so little that sufficient room can be spared in the smallest mills.

Its form of construction is such that

It is the most convenient to

Spout to.
Spout: m.
Get at.
Regulate.
Examine flour stocks.
Examine separations.
Examine sieves, } Without
Repair sieves, } removing spouts.
Easily Balance.

ABSOLUTELY NO SCOURING ACTION.



Some Advantages are:

Saves spouting, saves elevators, saves conveyors, saves millwrighting.

Displaces 6 to 10 ordinary reels.

All parts are easy of access without leaving the floor.

(No step-ladder required).

All passages for stocks are straight, large, ample, will not choke, and communicate directly from sieves to outside.

There are no joints at edges of sieves for stock to leak through.

Every separation and flour stock is taken independently from the machine, and can be examined before mixing with other stocks.

Each section of machine handles one reduction and can be independently regulated to produce the exact result desired.

Its bolting and results are completely under the control of the miller while running.

The Plansifter is perfectly balanced, so that it imparts no vibration to mill building.

Requires no bracing whatever.

Impurities all floating to the surface, are carried off and never again mixed with pure stock.

The Plansifter will be placed on trial on its merits, and the miller himself left to be the judge as to its performing all that is claimed. If not perfectly satisfactory machine need not be kept.

THE PLANSIFTER MILL has plenty of light, air and room, with easy access to every stock.

THE PLANSIFTER produces results far superior to any other machine or system.

POWER SAVED—The saving in power alone in steam mills will soon pay the cost of a PLANSIFTER.

THE PLANSIFTER makes pure, white, evenly granulated flour, free from specks, without using fine numbers of cloth.

It Saves Space
It Saves Power
It Saves Cloth
Makes Better Separations
Makes Purer Stock
Makes Better Flour

Makes Better Clean-up
Makes Closer Finish
Makes Larger Yield
Makes Milling Easier
No Vibration
No Noise

No Dust
Easily Controlled
Insures Uniform High Grade
Increases Capacity
Must Come into General Use

Big Mills Cannot Afford to do Without them, and they do Charming Work in the Smallest Mills.

SOLE LICENSEES AND MANUFACTURERS FOR CANADA

WM. & J. G. GREY, 2 Church St., TORONTO

To Woolen Cloth Manufacturers
and Wool Dealers

Sykes, Holt & Co.

WOOL BROKERS,

SYDNEY, N.S.W.

WE undertake the buying of Washed and Greasy Wools in all the Australian markets on the lowest terms.

Orders executed strictly to instructions.

Samples and all information will be forwarded on application.

SANKERS—

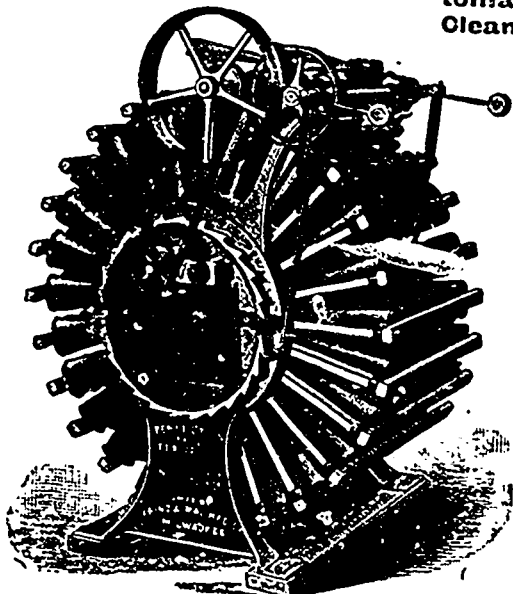
THE UNION BANK OF AUSTRALIA, Limited, - SYDNEY.

REFERENCES—

J. S. LARKE, Esq., Agent Govt. of Canada in Australia.

The Perfection Dust Collector.

The Only Machine with a Perfect Automatic Cloth Cleaning Device



Patented

We guarantee it to collect absolutely all the Dust, and discharge the air free and clean

We guarantee it will not make any backpressure against the Fan

WM. & J. G. GREEY, 2 Church St., TORONTO, ONT.

SOLE LICENSEES FOR CANADA.

CANADA IRON FURNACE CO., LIMITED

Montreal, Radnor and Three Rivers

Manufacturers of the well-known

"C.I.F." Three Rivers Chareoal Pig Iron

Suitable for Car Wheels, Cylinders and Fine Castings, where the utmost strength is required.

UNSURPASSED IN STRENGTH BY SWEDISH, RUSSIAN OR AMERICAN CHARCOAL IRON.

Offices: *Canada Life Insurance Bldg., Montreal.*

CANADA CHEMICAL MANUFACTURING CO.

— MANUFACTURERS OF —

Sulphuric, Nitric, and Muriatic Acids—Commercial and Chemically Pure.

Mixed Acids for Explosives.

Liquid Ammonia, Glauber Salts, Copperas, Muriate Tin, Tin Crystals, Acetic Acid, Nitrate Iron, Bisulphite Soda, Acid Phosphate for Baking Powders and General Chemicals, Fertilizers, etc.

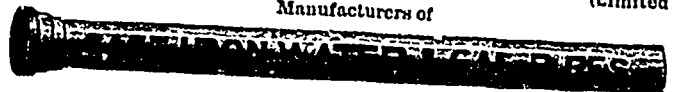
LONDON, - ONTARIO.

MONTREAL PIPE FOUNDRY CO...

SUCCESSORS TO (Limited)

DRUMMOND-McCALL PIPE FOUNDRY CO. (Limited)

Manufacturers of



"Specials," Hydrants, Valves, Etc.

Offices: - - - **Canada Life Building, MONTREAL**

BELTING

W.A. FLEMING.

575 FRs. XAVIER ST. (24 FRONTS ST.) VICTORIA CHAMBERS.
MONTREAL (TORONTO) OTTAWA.



WINN &
HOLLAND,
MONTREAL,
SOLE
AGENTS FOR CANADA.

BRUNNER MOND & CO.'S

Pure Alkali,
Bleaching Powder,
Caustic Soda, ALL STRENGTHS.
Bicarbonate of Soda,
Concentrated Sal Soda,
Soda Crystals.

Wm. J. MATHESON & CO., LIMITED

NEW YORK
BOSTON
PHILADELPHIA
PROVIDENCE
CHARLOTTE, N.C.
MONTREAL, CANADA

DYE . . . STUFFS

The Polson Iron Works, TORONTO CANADA.

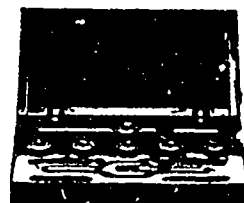
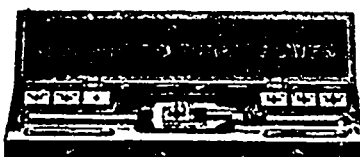
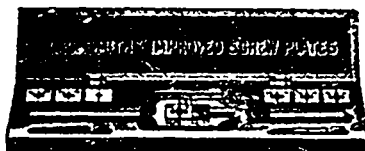
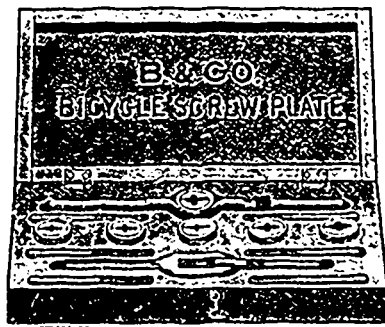
THE BEST EQUIPPED BOILER AND ENGINE WORKS IN CANADA.

We Manufacture—

STEEL BOILERS

The BROWN AUTOMATIC ENGINE, MARINE ENGINES (SINGLE, COMPOUND AND TRIPLE), Hoisting and Mining Engines
STEEL STEAM VESSELS OF EVERY DESCRIPTION. STEAM YACHTS AND LAUNCHES.
GET OUR PRICES BEFORE ORDERING.

ESPLANADE EAST, Foot of Sherbourne St., - - Toronto, Canada



Bicycle Screw Plates, Reece Screw Plates, Derby Screw Plates, Blacksmiths' Stocks and Dies, Blacksmiths' Improved Screw Plates, Hand Taps, Machine Taps, Pipe Taps, every kind of Taps and Dies are manufactured by

BUTTERFIELD & CO., Rock Island, P.Q.

**ALBERT
MANUFACTURING CO.**

Manufacturers of the
well-known

"HAMMER BRAND"

**Calcined
PLASTER**

—AND—

Patent Rock Wall Plaster

HILLSBOROUGH, N.B.,
CANADA.

GET THE BEST

And at Same Time the CHEAPEST
HEARLE'S ANTI-SCALE POWDER
The unequalled Roller Purge.
Send for Circulars with Testimonials.
C. C. HEARLE,
223 Lagacochere St., Montreal, P. Q.

WM. BARBER & BROS.

Georgetown, Ont.
Manufacturers of..... **Book and Fine Papers.**

THE TORONTO PAPER MFG. CO., Cornwall, Ont.,
Manufacturers of Engine Sized Superfine
Papers, White and Tinted Book Papers, Blue
and Cream Laid and Wove Foolscaps, Account,
Envelope and Lithographic Papers, etc.

KEMP MFG. CO.

TORONTO.

Galvanizing

DONE FOR THE TRADE.

GET OUR PRICES.

WELLAND VALE MANUFACTURING CO.

Limited, ST. CATHARINES ONT.
... Manufacturers of...
**Axes, Edge Tools, Saws,
Farming Implements
and Bicycles.**

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

Manufacturers of
Wheels, Wheel Materials, Shafts, etc.

W. H. Storey & Son, ACTON, ONT.,

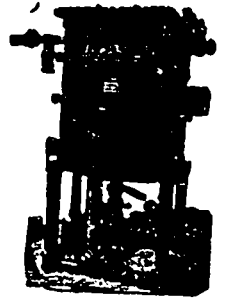
Manufacturers of..... **FINE GLOVES AND MITTS**
In every variety and style. **Moccasins.**

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

THOUSANDS IN USE.
THE WEBSTER FEED-WATER HEATER AND PURIFIER.

Points of Advantage.

- 1—All back pressure from engines dispensed with.
- 2—Simple in construction and most durable.
- 3—All condensation from heating coils, machines, etc., can be returned to the Webster Heater.
- 4—The only heater in the market that the condensation from coils, etc., can be returned to.
- 5—Guaranteed temperature of feed water from 208 to 212 degrees, utilizing the waste exhaust steam.
- 6—We have Webster Heaters in operation for eight years that have never cost one cent for repairs.



110 PAGE CATALOGUE MAILED ON APPLICATION.

DARLING BROS., Queen and Ottawa Sts., MONTREAL

FRANK DARLING, Agent, NELSON, B.C.
J. HERBERT LARMONTH, D.A. Sc., Agent, CENTRAL CHAMBERS, OTTAWA, ONT.

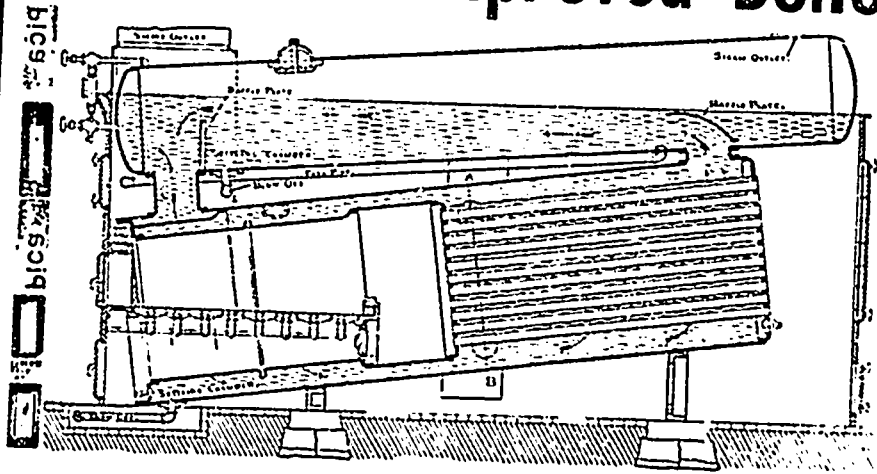
The **Packard Electric Co.,** Limited.

MAKERS OF

**Lamps and
Transformers**

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

Mumford's Improved Boiler.



LARGE HEATING SURFACE.

Adapted to Forced Draft... INCREASING HORSE POWER WITHOUT
FOAMING OR PRIMING.

* Specially arranged for using Bad Water—with little
or no scale formation.

ROBB ENGINEERING CO., LIMITED, AMHERST, N.S.

Wm. McKay, Traveller. - Seaforth, Ont.

DO YOU REQUIRE

Rubber Belting?

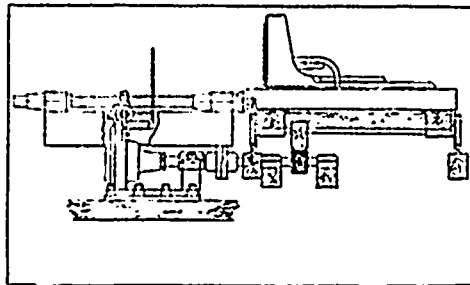
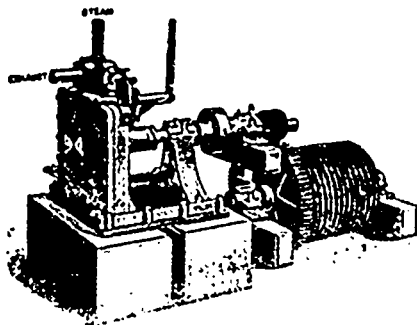
IF SO, BUY THE BRANDS MADE BY

The CANADIAN RUBBER COMPANY of MONTREAL

CAPITAL \$2,000,000.

Manufacturers of all Kinds of Rubber Goods

ONTARIO BRANCH—Cor. Front and Yonge Streets, TORONTO.



THE DAKE STEAM FEED

EMBODIES THE FOLLOWING
ADVANTAGES :

- Simplicity of Construction.
- Small Space Occupied.
- Economical Use of Steam.

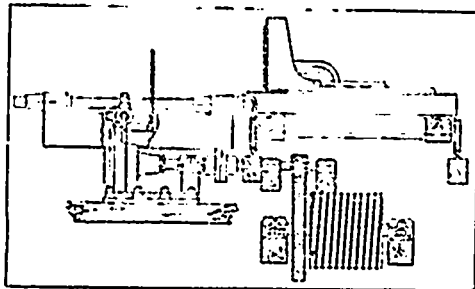
Easy Adaptation to either New Mills or those now in use.

Positive and Easy Control. Cheapness.

The movement of the engine in either direction is under the absolute control of the Sawyer, thus accommodating the speed of the feed to the size of the logs.

Mill men, who have used other makes of Steam Feeds, comment favorably on the economical use of steam of our Feed over others.

Write for Catalogue and full particulars.



THE JENCKES MACHINE CO., SHERBROOKE, QUE.

Succeeding the Phelps Machine Co., Eastman, Que.

The KAY Electrical Manufacturing Co.

HAMILTON, ONT.

Begs to announce that in future it will conduct its business under the name of

The T. & H. Electric Co.

HAMILTON, ONT.,

255-257 James St.

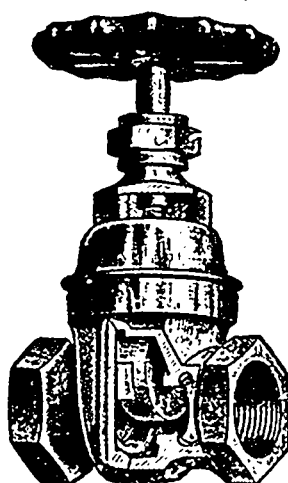
Phone 958.

TORONTO, ONT.,

58 Adelaide St. W.

Phone 1211.

The WEBBER Patent Straitway Valve



FOR.....

Steam,

Water

or

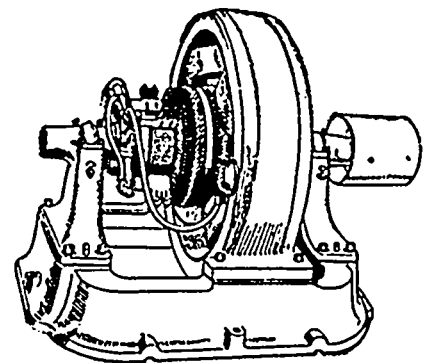
Gas...

EVERY
VALVE
TESTED.

The Kerr Engine Co., (Limited),
WALKERVILLE, ONT.

Sole Manufacturers for Canada. Send for Price List.

TORONTO ELECTRIC MOTOR CO.



From 8 to 100 K. W.

103 105, 107, 109 Adelaide Street West, Toronto
or to

R. E. T. PRINGLE,

216 St. James Street, Montreal.

DOMINION BRIDGE CO., Limited,



MONTREAL AND
LACHINE LOCKS, P.Q.

Steel Bridges for Railways and Highways,
Steel Piers and Trestles, Steel Water Towers and Tanks,
Steel Roofs, Girders, Beams, Columns for Buildings.

A large Stock of **ROLLED STEEL BEAMS, JOISTS, GIRDERS, CHANNELS, ANGLES, TEES, Z BARS and PLATES**

Tables, giving Sizes and Strength of Rolled Beams on application.

ALWAYS ON HAND

IN LENGTHS TO
THIRTY-FIVE FEET.

Post Office Address,
MONTREAL.

GEORGE E. EVANS,

Agent, 38 Canada Life Building,
TORONTO, ONT.

THE NOVA SCOTIA STEEL CO., LIMITED

MANUFACTURERS OF

BRIGHT COMPRESSED STEEL SHAFTING

FROM $\frac{1}{2}$ TO 5 INCHES IN DIAMETER. GUARANTEED STRAIGHT AND TRUE TO WITHIN $\frac{1}{16}$ OF AN INCH.

Spring, Reeled Machinery, Tire, Toe Caulk, Sleigh Shoe, Angles, Special Sections
and all Merchant Bar Steel. Sheet Steel up to 48 Inches wide.

RAILWAY AND ELECTRIC RAILWAY CAR AXLES.

FISH PLATES, SPIKES AND TRACK BOLTS

Tee Rails, 12, 18, 24 and 28 lbs. per yard

HEAVY FORGINGS a SPECIALTY.

"FERRONA" PIG IRON, For Foundry Use.

Works—NEW GLASGOW, N.S., and FERRONA, N.S.

Head Office—NEW GLASGOW, NOVA SCOTIA

GALT Machine Knife Works

PETER HAY,

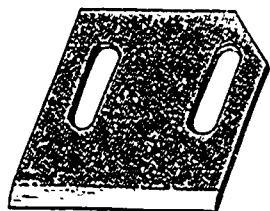


GALT, ONT.

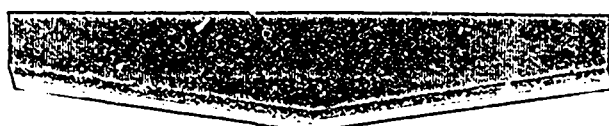
Manufacturers of Every
Description of.....

KNIVES,

For Wood-Working, Paper
Cutting and Leather-
Splitting
Machines



BARK
KNIVES
PULP
KNIVES
RAO
KNIVES
Etc., Et



Shear Blades,
Straw Knives,
Paper Knives,
Etc., Etc.



Quality Guaranteed.

Special Knives Made to Order...

Send for Price List.

The Goldie & McCulloch Co., (Limited)

GALT, - - - ONT.

MANUFACTURERS OF

STEAM ENGINES, BOILERS, WATER WHEELS

Flouring and Saw Mill Machinery, Wood Working Machinery, Wool Machinery.
 Fire and Burglar Proof Safes, Vault Doors. Wood Rim Split Pulleys,
 Friction Pulleys, Friction Clutch, Couplings, etc.

"Dumfries Foundry," - - Galt, Ontario, Canada.

THE IMPERIAL OIL COMPANY, LIMITED

HIGHEST AWARDS AT THE WORLD'S FAIR, CHICAGO, UPON

Lubricating, W. W. Illuminating Oils, Paraffine Wax, etc.

WE MANUFACTURE ALL GRADES OF OILS, GREASES, SOAP STOCKS, CANDLES, WOOL STOCKS, LEATHER AND TANNERS' OILS, FUEL GAS, MACHINERY, CYLINDER OILS, Etc.,

And Solicit opportunity to compete against any Oil on the Market.

Write for Prices and Samples.

THE IMPERIAL OIL COMPANY, (Limited) Head Office, PETROLEA, CAN.

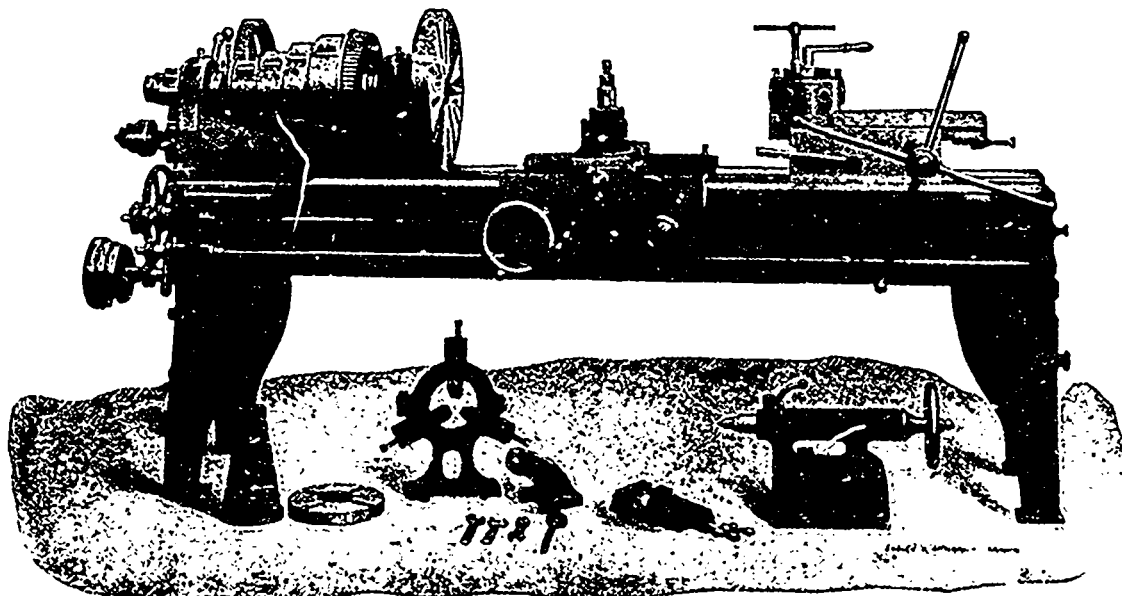
....BRANCHES....

HALIFAX, N.S. HAMILTON, ONT. QUEBEC, QUE. LONDON, ONT. TORONTO, ONT. WINNIPEG, MAN. ST. JOHN, N.B.
 GUELPH, ONT. MONTREAL, QUE. CHATHAM, ONT. PETERBORO', ONT. VANCOUVER, B.C. MONCTON, N.B.
 STRATFORD, ONT. KINGSTON, ONT. WINDSOR, ONT.

JOHN BERTRAM & SONS,

DUNDAS, - - - ONTARIO.

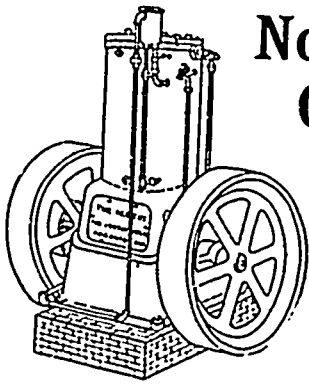
Offer for Sale **A Foundry Cupola, NEW, Complete,**



Shell, 52 in. Diam.,
 14 ft. long.
 Stack, 20 ft. long,
 38 in. Diam.
 Base plate, Columns
 Air Drum and
 Tuyeres.
 No. 7 Sturtevant
 Fan and all Con-
 ducting Pipes.
 Also Complete Fire
 Brick for Lining.

★
**THE ABOVE IS
 OFFERED AT
 A BARGAIN**

Engine Lathe with Turret Attachment.



Northey
Gas and
Gasoline
Engine

"BUILT FOR HARD WORK."

OUR BOOKLET TELLS
ALL ABOUT IT.
WRITE FOR IT.



Steam and Power

Pumps
"FOR ALL DUTIES"

ALL KINDS FOR ALL PURPOSES.

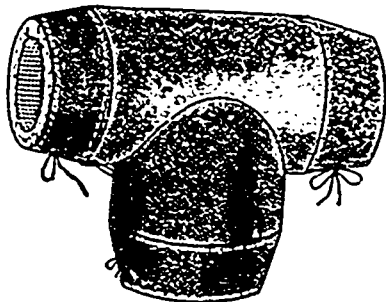
Estimates and Plans Furnished.

Correspondence Invited.

Northey Mnfg. Co., Limited, 1000 King St. W.
Toronto.

MICA BOILER AND STEAM PIPE COVERING.

THE CHEAPEST IN THE MARKET. DURABLE, FLEXIBLE, AND A MAGNIFICENT NON-CONDUCTOR OF HEAT.



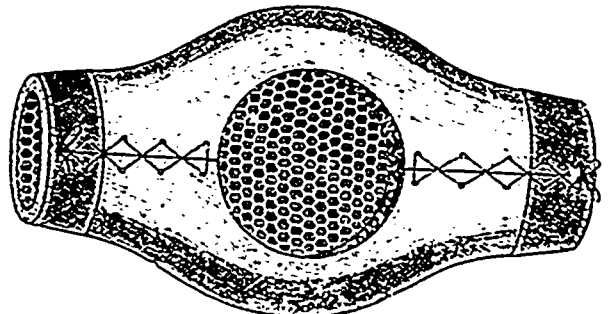
TEE

Made in Sections to fit all sizes of
Pipes, and can be removed and
replaced as often as desired.

Adjustable Mica Coverings for all
kinds of fittings.

Mica Covering cannot be affected
by vibration, and will not shift
or sag.

Write for reports of trials,
testimonials, etc., to



GLOBE VALVE.

THE MICA BOILER COVERING COMPANY, Limited
9 JORDAN STREET, TORONTO.

FETHERSTONHAUGH & CO.

PATENT BARRISTERS AND SOLICITORS

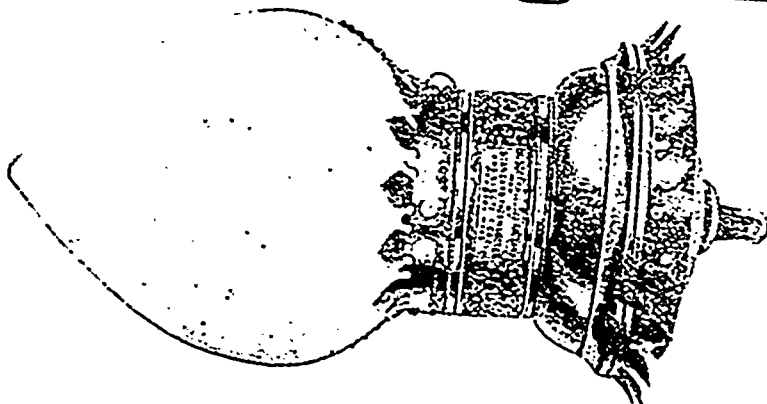
ELECTRICAL AND MECHANICAL EXPERTS AND DRAUGHTSMEN

Head Office: Canadian Bank of Commerce Bldg., Toronto, Ont.

Patents Procured in Canada and all
Foreign Countries.

Offices in Montreal, Que., Ottawa, Ont., and Washington, D.C.

Upton Midget Enclosed Arc.



THIS LAMP BURNS 150 to 200 HOURS WITH
ONE SET OF CARBONS. SIMPLE, RELIABLE
AND EFFECTIVE.

600 to 800 C.P. WITH 5 AMPERES AT 100
VOLT ALTERNATING OR STRAIGHT.

Write for Full Particulars.

JOHN FORMAN

ELECTRICAL SUPPLIES,

HARDTMUTH CARBONS.

644 CRAIG STREET, - MONTREAL.



ESTABLISHED IN 1880.

PUBLISHED ON THE FIRST AND THIRD FRIDAYS OF EACH MONTH

Official Organ of the Canadian Manufacturers' Association.

Subscription, \$1.00 per year.

ADVERTISING RATES:

\$12.00 Per Column inch per year; Thirty inches to Page.

The Canadian Manufacturer Publishing Co., Limited.

McKinnon Building, Cor. Melinda and Jordan Sts., Toronto.

J. J. CASSIDY, Editor

J. C. GARDNER, Business Manager.

THE COTTON INDUSTRY.

The new policy adopted by the Dominion Cotton Mills Company indicates that it intends to keep abreast with the most energetic and progressive concerns in other countries. In a recent issue allusion was made to the fact that this company had made propositions to the municipal authorities of the cities of Kingston and Brantford, Ont., to grant it certain money bonuses and tax exemptions, for which favors the company would very considerably enlarge their productive capacity, giving employment to a largely increased number of operatives, with the alternative of the dismantling of their mills in these cities, and the assembling of them and several others, in a more convenient place.

Regarding the mills at Kingston, the company state that the following conditions prevail:—The mill was built in 1880 and was acquired by the company in 1891. Many improvements have been made in it since it was built, but no replacement of machinery, much of which is now antiquated and not up-to-date, and the output of the mill has consequently been seriously impaired when compared with similar mills equipped with modern machinery. Ever since the company acquired this mill, in 1891, it has been operated at a loss, which, last year was greater than ever. An investigation of the affairs demonstrated that the mill could not be made to pay, and therefore but two courses were open to the company, one to reorganize and re-equip it with the best modern machinery, towards the expense of which the city of Kingston was requested to contribute; the other alternative being to abandon the mill and concentrate the energies of it at another place.

Regarding the Brantford mill, the company say that it is unduly expensive, all the objections prevailing at the Kingston mill applying to this, and to equip it with new machinery and enlarge its capacity would require a large expenditure of money, the burden of which the city is invited to share.

The principal mills of the Dominion Cotton Mills Company are located, two at Hochelaga, near Montreal, one at Magog, Que., and one at Halifax, N.S., other mills of small capacity being at Kingston and Brantford, Ont., Coaticook, Que., Windsor, N.S., and Moncton, N.B. The operations of the

consolidated mills have never, so we are informed, resulted in a payment of a higher dividend than six per cent. It became evident to the company that if the operations of the Kingston and Brantford mills were to be continued it could only be done by the enlargement of their capacity and the introduction of entirely new machinery; and as regards the other mills at Coaticook, Windsor and Moncton, they must of necessity be abandoned and the energy of them concentrated at a more convenient place.

If the Canadian market for cottons, which is already glutted, were alone to be considered, then all these smaller mills might with advantage be closed. But the company has now a large and expanding trade with China and the East Coast of Africa, and it is the policy of the company to push this trade to the utmost, and so establish a large permanent foreign trade. It has been proved, after a number of years of successful trial, that an up-to-date Canadian mill equipped with the latest machinery, can compete to advantage with the world in certain foreign markets. If this fact is once realized and appreciated, there is practically no limit to which the cotton industry could not be pushed.

It is open to the company to consolidate the small capacity mills in one large establishment at Three Rivers, Que., where the large concern could be operated at comparatively small expense by electricity generated at Shawinegan Falls, which are but about twenty-four miles from Three Rivers. The power of these falls is said to be greater than that of any other available on the American continent, with the exception of Niagara Falls. It is obvious that consolidation in the manner suggested means a great saving to the company, and many advantages over the continued operation of the isolated mills.

The proposition of the company to the city of Kingston is, for a consideration, to remodel the mill there at an expense of \$150,000 and increase its capacity to at least 500 looms. This would necessitate the employment of about 350 hands instead of the 260 now engaged, which would double the present pay roll of \$45,000 per annum. The present capacity of the mill is 20,000 pounds of cloth per week, while under the proposed enlargement the output would be 40,000 pounds. The company ask the city to grant it a bonus of \$25,000 and exemption from taxation for twenty years.

The Brantford mill now employs about 200 hands, and the annual amount of wages paid to them is about \$40,000, its capacity with its 296 looms being a weekly output of 20,000 pounds of cotton cloth. If the mill was remodelled the capacity would be increased to 400 looms, involving the employment of about 300 hands, an increase of the annual sum paid for labor to \$75,000 producing 50,000 pounds of cloth per week. The suggested changes would require an expenditure on building and equipment account of at least \$100,000. The company ask that, to insure the carrying out of these changes and improvements, the city of Brantford give it a bonus of \$30,000 and exemption from taxation for ten years.

In both the instances here alluded to, if the assistance asked for is not given, the company will dismantle and abandon their mills at these places. Under existing circumstances it is not possible for the employes of these mills to earn satisfactory wages, and this is due entirely to the fact that the machinery is antiquated and cannot produce as much as mills with modern equipment. At the mills of the Mont-

morency Cotton Company, at Montmorency Falls, Que., where the scale of wages is lower than at the Ontario mills, the hands earn almost double what the employes of these latter mills are getting; and the question that concerns the people of Kingston and Brantford is whether by granting the favors asked by the company they shall have these improved and up-to-date mills with them, or by a refusal see the industry disappear from their midst.

CANADA EMBRACES THE OPPORTUNITY.

A recent report to his Government of the British Consul at Zanzibar deals with the requirements of the people of that and contiguous country for cotton goods, the countries that supply them and the peculiarities of the trade; and he states that of all the imports to Zanzibar, that of piece goods is by far the most important, their value being equal to practically twice as much as any other article. The countries which supply these cotton goods were British India, Holland, America, Great Britain and Germany, in the order named. Perhaps the most important class of piece goods imported into that country is what is known as "grey cloth," an unbleached cotton cloth which is in great demand in the interior of Africa and forms in some parts the only currency. Of this cloth there are two qualities, the better coming very largely from America, and the poorer and less expensive from Bombay. With regard to the former, America was the first to introduce it into East Africa, "and," the Consul tells us, "that country has never lost her hold on the native market, so much so that whatever be the place of origin, the cloth is universally known there as "American."

The Consul also tells us that it is not only because America was the first in the field before Great Britain that her piece goods retain their position, for they are undoubtedly of a better quality than what Manchester had previously produced at the same price; that they were free from sizing, a fact fully appreciated by the natives, who observe that no shrinkage is produced by washing, and who therefore rightly consider that in purchasing them they get better value for them by investing in goods which, when put in water, visibly decrease in bulk and depreciate in appearance. Other reasons for the preference for the America goods are that the cloth is stronger and stouter than the British goods, and that they can be depended upon to be always of uniform weight, and that it can be depended on to be always uniform as to length and width, which is not the case regarding other goods.

We are informed that the Montmorency mills are now sharing this East Africa trade with their American competitors, sending identically the same article, including the magic word "American," properly placed upon each piece of cloth; and it is an open secret that this move of the Dominion Cotton Mills Company to erect new mills at Three Rivers, to enlarge and modernize those at Kingston and Brantford, and also to enlarge their Hochelaga plant is for the purpose of participating in this African trade also. Africa as a market for this line of goods is practically inexhaustible, and the advantages our Canadian mills will enjoy in participating in that trade in the way of cheap labor and exceedingly cheap footing as compared with those of the United States. Another feature of the situation is the fact that extensive works are

now being built at Valleyfield, Que., which are expected to be in operation in the coming August, where the very best and most improved looms will be manufactured expressly for the class of goods here alluded to.

Surely the outlook for Canada as a cotton manufacturing country is exceedingly bright.

RE CLASSIFICATION OF EXPORTS.

In an editorial re Canadian exports in our issue of May 20th was given the values for certain years of the exports of Canadian products as set forth in the Trade and Navigation Returns, and also by a new classification in which some articles in some of the old classifications were transferred to another. Under the old classification the average value of what is described as "Manufactures" for the years alluded to amounted to but about seven per cent. of the entire exports of the Dominion, while under the new classification "Manufactures" is credited with over twenty-seven per cent.

A friendly critic contends that it would not be an advisable act of the Government to abandon the old classification, inasmuch as the people are satisfied with and accustomed to it; and furthermore, the new classification as set forth in our editorial is not scientific, complete and exhaustive in that some of the articles transferred from the old to the new should not be thus changed, and also that if changes must be made, the list should include many more articles than were included by us.

In answer to this we would say that if the old classification is incomplete and misleading it should be changed, even if distasteful to people who do not take any large amount of interest in such affairs, being assured that there are many more people than our critic imagines who are particularly interested in having the exports of the country properly classified, and particularly showing the great value of our exports of manufactured products. Under the old classification no great lustre was shed upon our ability to export products of our factories and workshops, while under the new it is shown that more than twenty-seven per cent. of the value of all our exports had their origin in these industrial establishments. If the old classification is misleading it should be reformed to meet a demand for greater accuracy; and it may be pointed out with much propriety that many articles not embraced in the new classification, as displayed by us, should be changed to Manufactures from where they now are. Thus "The Mines" is credited with pig or ingot copper, and with pig lead, while we all know that no mine ever produced these articles. The ores of them only are taken from the mine but not the refined products; and the same may be said of nickel matte, and also of refined or kerosene oil. So also the same argument prevails regarding "The Fisheries," under which is credited canned fish and lobster, fish oil and the furs of marine animals. So also regarding "The Forest," under which are enumerated leached and unleached ashes, knees and futtocks as well as the other items enumerated in the statement exhibited in our issue of May 20th. Under the old classification "Animals and their Produce" are enumerated butter, cheese, dressed furs, grease, lard, meats, canned meats, lard oil and tallow, all of which, in our opinion, ought to be classified under "Manufactures," while of "Agricultural Products," balsam, bran, cider, flax, dried and canned fruits and vege-

tables, malt, maple sugar and syrup, and perhaps flour of wheat, buckwheat, oatmeal, etc.

From our point of view it is very important that the manufacturing industries of Canada should receive every credit they are entitled to in the exports of their products, and where, even by what our critic intimates is a faulty arrangement of what may be called a new classification, it is shown that more than twenty-seven per cent. of the total exports of Canada should be credited to "Manufactures," we are quite sure that a more scientific and thorough classification, as indicated in our reference to other general divisions, would disclose a condition even more favorable to our exports of manufactured products.

It would be very much in the interest of our manufacturers if the Government were to act on these suggestions and classify the export tables accordingly. The nation that manufactures for itself prospers—the nation that manufactures largely for export should certainly be in a most prosperous condition.

FRAUDULENT ADVERTISING.

We have heretofore taken occasion to congratulate Hon. Mr. Mulock, our Postmaster-General, upon the step he has taken to compel all newspapers going through the Canadian mails to contribute to the support of his department by paying a fair rate of postage; and, having inaugurated this reform, we suggest to him that another step might be taken somewhat in this direction, by excluding fraudulent advertising matter from the mails; or, if that cannot be done, then let there be a law passed prohibiting such advertising being imposed upon the public. The New York legislature has recently passed such a law that reads as follows:—

"Any firm, person, or partnership of persons, or any employee of a firm, person, or partnership of persons, who, either in the newspapers or other periodicals of this State, or in public advertisements, or in communications intended for a large number of persons, knowingly make or disseminate any statements or assertions of facts with respect to his or her or their business affairs, especially concerning the quantity, the quality, the value, the price, the method of production or manufacture, or the fixing of the price of his, her or their merchandise or professional work, or the manner or source of purchase of such merchandise, or the possession of awards, distinctions, or the motive or purpose of a sale, intended to have the appearance of a particularly advantageous offer, which are untrue or calculated to mislead, shall be guilty of a misdemeanor.

Such a law would strike a heavy blow upon many concerns of which we have knowledge, as is evident to readers of the newspapers, but it would be in the interest of the public who are but too ready to swallow the stuff offered of bargain days and cheap goods. Fraudulent advertising has flourished to a wonderful extent in recent years, and if it is abolished these concerns, preying upon the confidence of the public, will be driven from their illegitimate practices. Thousands of innocent people have been made to suffer effects of such advertising and the stamping out of the abuse will be greeted with delight alike by the public and responsible advertisers and publishers. The abuse of the advertising privilege has been carried too far, and it is time that it should be stamped out everywhere.

Mr. Mulock will confer a further favor upon Canadian newspapers and legitimate Canadian advertising by obtaining the enactment of a law similar to that above quoted.

THE WORLD'S WHEAT SUPPLY, 1897-98.

In the last issue of this journal a review of the movement of the wheat crop of the world up to May 1st was given, and the position as then reported appeared to indicate that the importing countries of Europe would require to purchase 125,000,000 bushels of foreign wheat during the thirteen weeks from May 1st to July 31st, and that it was difficult to see where this supply could be obtained.

We have now full returns for the month of May, which show:

	Bushels.
Wheat and flour afloat for Europe, May 1, 1898.....	40,970,000
Stocks in store in principal importing countries May 1, 1898.....	15,880,000
Shipments to Europe, May 1st to May 28th.....	45,048,000
	<hr/>
	101,898,000
Wheat and flour afloat for Europe, June 1, 1898.....	45,040,000
Stocks in store in principal importing countries, June 1, 1898.....	16,320,000
Quantity of foreign wheat taken for consumption during four weeks in May.....	40,533,000
	<hr/>
	101,893,000

The quantity of foreign wheat gone into consumption during May corresponds very closely with our former estimate of requirements, in fact, slightly exceeds it. Mr. F. Hammesfahr, of Antwerp, a recognized authority on the world's grain trade, in a letter to the Liverpool Corn Trade News, dated May 27th, estimates the requirements of Europe for foreign wheat for the ten weeks—May 22nd to August 1st—15,300,000 quarters, made up as follows: France, fresh imports, 5,000,000, United Kingdom, 3,800,000, Belgium, 1,000,000, Holland, 500,000, Germany, 1,500,000, Italy, 1,500,000, other countries, 2,000,000, or a total of 122,400,000 bushels; making average weekly requirements 12,240,000 bushels, or compared with our last issue's estimate, 9,615,000 bushels. It appears probable that during the month of June, France will continue to import very largely during the suspension of the duty on wheat, which suspension expires on June 30th. It is estimated that from May 1st to July 15th France will depend upon foreign wheat for fully one-half of its bread consumption, at which rate its requirements for that period would be about 30,000,000 bushels. In the United Kingdom the supply of wheat, home grown and imported, for the nine months—August 1st to April 30th—amounted to 169,000,000 bushels, which left 60,000,000 to be provided during the three months ending July 31st. During May the great advance in prices brought to market immense deliveries from farmers, amounting in four weeks to 4,400,000 bushels; the imports of flour and wheat during those four weeks were equal to 11,770,000 bushels; there was withdrawn from stocks at ports, 1,000,000 bushels, making apparent consumption a little over 17,000,000 bushels, equal to about 223,000,000 bushels per annum, or a little less than average consumption. This leaves 43,000,000 bushels to be supplied in June and July. During the first two weeks of June the farmers' deliveries only averaged 473,000 bushels per week, and it is not likely that they will exceed 5,000,000 bushels for the two months, June and July. This makes 38,000,000 bushels of foreign wheat required for the United Kingdom in these two months. During the four weeks of May there was shipped to Italy 6,775,000 bushels wheat, to Austria, 1,600,000 bushels, to Greece, 500,000, or nearly 9,000,000 bushels to these three countries, so that our estimate

of 15,000,000 bushels for three months is likely to be exceeded. A like statement might be made for estimates for Germany, Belgium, Holland, etc.

It is in dealing with the surpluses from exporting countries that unexpected results are found. In estimating the surplus likely to be shipped from Russia and the Danube from May 1st, and due to arrive at destination up to July 30th, we only allowed for 20,000,000 bushels. The actual shipments up to June 11th have amounted to 28,500,000 bushels. Judging from the tenor of Russian grain reports, the exports during July and August will be very light, as it is thought that the high prices in May attracted to the ports all the wheat that could be gathered from every hole and corner. However any opinion on this point is of little value. The extent of Russia's wheat crop and the quantity available for export have this season, as in past seasons, upset all the estimates of grain statisticians and dealers. The following are some of the estimates made as to wheat surplus of Russia, in 1897-98:—
Liverpool Corn Trade News, 96,000,000 bushels; London Miller, 88,000,000 bushels; Beerholm, 104,000,000 bushels; Mr. Hammesfahr, Antwerp, 80,000,000 bushels. With seven weeks of the crop year yet to hear from, Russia has shipped nearly 117,000,000 bushels. At a very moderate estimate, the increase in Russian exports, May 1st to July 31st, over the quantity calculated in our issue of the 3rd inst, will wipe out half of the deficiency then assumed as likely to be experienced between the world's wants and probable supply.

A very similar condition is found in comparing actual with estimated shipments from United States and Canada. We only allowed for arrivals in Europe from these sources, 28,000,000 bushels. During the six weeks up to June 11th North America has exported 25,000,000 bushels of which about 3,000,000 bushels shipped from Pacific coast ports will not reach Europe before July 31st. The boom in prices in May and the very promising prospects for the coming crop brought to market during the five weeks ending June 4th, an unprecedentedly large delivery of wheat for that time of year. The quantity of wheat and flour then delivered at primary markets was equal to 27,469,000 bushels as compared with 14,165,000 bushels in same five weeks in 1897, and for the whole country, 46,600,000 bushels, as compared with 27,000,000 bushels in 1897. During the week ending June 11th, the deliveries of wheat and flour at the primary markets were only 1,917,000 bushels as compared with 4,532,000 bushels in week preceding, showing pretty conclusively that reserves are nearly exhausted. It is hardly probable that the exports from North America for next five weeks will average over 2,000,000 bushels per week.

The reports of shipments from South America and British India since May 1st, have been on about a line with our estimate.

In conclusion, the returns so far show that the wants of Europe have proved quite as large as we estimated, but the shipments from Russia and the United States have been largely in excess of estimate. During the six weeks, May 1st to June 11th, the shipments of wheat to Europe have amounted to 70,000,000 bushels as compared with requirements of about 60,000,000 bushels, and have added largely to the quantity afloat. During the next six weeks it is likely that the shipments will average from 3,000,000 to 4,000,000 bushels per week less than in preceding six weeks, but with a

continuance of present splendid prospect for the world's wheat crop of 1898, and low prices for future deliveries as compared with spot wheat, importing countries will allow their stocks to run down to the lowest quantity ever known.

The collapse of the Leter wheat deal has added another complication to the already weak position of the wheat market. Between Saturday 11th inst. and Monday 13th inst., wheat declined ten cents per bushel, both in Chicago and New York markets. The decline appears to have brought large orders to the Atlantic Seaboard for export to Europe, and it is altogether likely that there will be a considerable advance over present low prices, when the markets on this side become more settled.

EDITORIAL NOTES.

Canada supplies about one-fourteenth of the imported food of Great Britain.

A patriotic New Jersey father has named his son and heir, "Walter Sampson Schley Dewey Cullen." He should next have the boy launched, and break a bottle on his forward end. —Mail and Empire.

Why not do as the Jews do, and cut off the end of his bow-sprit?

Speaking of the pork packing industry in the Maritime Provinces, and telling of the exceptional advantages possessed by Prince Edward Island in this direction, the Halifax Maritime Merchant says:—

Both New Brunswick and Nova Scotia are making strong efforts to start the industry on a practical basis, and are meeting with very fair success so far as the preliminary work has gone. As is probably well known, the Middleton, N. S. Co., are almost in a position to announce the completion of their organization and then we have the interesting account of how matters in this connection are progressing in St. John. On the whole it looks as though pork packing instead of being undertaken as at present by individual merchants who have often packed as many barrels as their cellars and capital would permit, would fall into the hands of well-equipped companies who are in a position to develop their field, and work it to the greatest advantage. There is no question as to the demand, a glance at our import figures of American pork will very quickly show the market we have, besides the unlimited necessities of Great Britain, where Canada's products in this line are wanted, and will be paid for at good profitable prices. There is little doubt in The Merchant's opinion, but pork packing is destined in years to come to be a very valuable source of employment to both labor and capital, and on that account an avenue of industry to which too much importance cannot be attached.

The British Admiralty have published annual returns showing the fleets of Great Britain, France, Russia, Germany Italy, the United States and Japan. The fullest particulars are given respecting battleships, cruisers, coast defence vessels and torpedo craft, both built and building, the date of launch, the displacement, and the armaments are reduced to one common scale. A feature of the return is the disclosure of the fact that Great Britain has not completely finished a battleship since September, 1896, though no less than twelve battleships are building at present, half of them being of 12,950 tons displacement and the other half of 15,000 tons. They are also engaged in building no less than twenty-four protected cruisers and forty-eight torpedo boat destroyers. France has at present on the stocks eight battleships and

Russia has ten either building or about to be commenced. There are now fifty-two British battleships in commission, nine building and three ordered—sixty-four in all; armored cruisers eighteen, four building and four ordered—twenty-six in all; protected cruisers in commission ninety-six, twenty-four building—total 119; unprotected cruisers sixteen; coast defence vessels, armored, fifteen, special vessels, three; torpedo vessels, thirty-five; torpedo boat destroyers, fifty; building, forty-six; first-class torpedo boats, three; making a grand total of 377 vessels.

At a recent meeting of the Franklin Institute, Philadelphia, the operations of a new carbon dioxide engine were explained by Wm. F. Roberts. This engine is actuated by carbon dioxides, used expansively upon the piston of the engine in a manner similar to that employed in steam engines, but with the piston area reduced proportionately to the amount of power, as compared with steam. The speaker exhibited two engines, one horizontal and the other vertical, each supplied with 2 by 2 inch cylinders, and each capable of developing twenty-five horse power. The carbon dioxide gas for use in the engine is stored in liquid form in a cylinder prepared for the purpose. From this it is led in small tubes through a heating apparatus where it is brought to a temperature of about 150 to 200 degrees F., at which temperature it is introduced into the engine. By means of a unique system of valves, the gas at this high temperature and pressure is passed into the cylinders of the engine and then withdrawn from the engine at a temperature below thirty-two degrees F. In this way, the speaker said, the gas is made simply a vehicle for carrying heat energy to the engine by means of which it is transformed into energy in such a form that it can be readily utilized as power. The gas in a liquid form is relatively cheap, it being possible to secure it for \$3 per ton, while some firms agree to furnish it as low as \$1 per ton. The gas is a waste product in many lines of manufacturing, and it is said to be less expensive to liquefy it than it is for manufacturers to rid themselves of it in many plants where it is produced in the process of manufacturing other products. It is claimed for the carbon dioxide engine that, being compact, powerful and economical of operation, it can be adopted with success in many places where steam and electricity are now used.

President McKinley is recommending to Congress to make an appropriation for the expenses of a commission, to be appointed under the terms of the protocol signed a few days ago, for the settlement of all differences between the United States and Canada. The commission will consist of ten members, five to be appointed by Great Britain and five by the United States. Under the terms of the protocol, the commissioners will consider all outstanding questions between the British and United States Governments, but as all of these concern Canada, a majority of the British members will be representatives of the Dominion. Two of the United States commissioners will be Messrs. John W. Foster, former Secretary of State, and John A. Kasson, the reciprocity plenipotentiary of the United States. The commission will meet at Quebec instead of in Washington. Among the questions at issue to be brought to the attention of the commission are the Alaskan boundary, the seal fisheries, tariff reciprocity and the coast fisheries.

Immediately after the prorogation of the Dominion Parliament on Monday, Her Excellency the Countess of Aberdeen, was presented with a beautiful token of regard from the Senate and Commons, in the shape of an historical dinner service, decorated by sixteen selected exhibitors of the Woman's Art Association from Toronto, Hamilton, St. Catharines, Simcoe, Galt, Montreal, Yarmouth and Halifax. The service consisted of seventeen dozen pieces, as follows: Two dozen soup plates, two dozen meat plates, decorated with historical landscape views; two dozen game plates, game birds of Canada; two dozen fish plates, fish, shells and seaweed of Canada; two dozen salad plates, ferns of Canada; two dozen dessert plates, fruit and fruit blossoms; two dozen cheese plates, song birds; three dozen after-dinner coffees, wild flowers of Canada. The presentation was accompanied by the reading of an address in which it was stated that the interesting historical dinner service, the work of the Woman's Art Association of Canada, seems to be most suitable for such presentation, both because it is purely Canadian and because it is the result of the efforts of Canadian women.

Orders for seventy-seven locomotives have just been received from the Russian Government by the Baldwin Locomotive Works. In addition to these the Baldwin people have booked orders since April 1st for ten for New Zealand, six for Spain, five for Egypt, two for Argentina and one for Mexico. The Richmond works last week received an order for seventeen locomotives for Japan, making a total of ninety-four export orders in one week. Other orders received by American builders from foreign countries since April 1st bring the grand total up to 172, and still further contracts are pending for delivery of locomotives in Russia and Mexico. Another instance of the triumph of "intelligent labor highly paid." It is the American policy which has made possible this successful invasion of foreign markets with American productions.—American Economist.

Protection and only protection has made it possible for American locomotive manufacturers to successfully compete for this foreign trade against the older and longer established concerns of Europe. Under our present system when, oh, when will Canada be able to enjoy a part of this great demand?

An epoch in the history of Japanese ship building has just been marked by the launching of the Hitachi, a large steel steamer, at the yard of the Mitsubishi Dock Yard Co. The vessel, which has been built for use on the Yokohama-London line of the Japan Mail Steamship Co., is 462 feet in length, forty-nine feet two inches beam, and thirty-three feet six inches depth, with an average draft of twenty-five feet. She has a displacement of 11,600 tons; gross tonnage of 6,150 tons, and freight capacity of 7,150 tons. The engines are twin triple expansion, with four boilers of 3,500 indicated horse power. The vessel has a steel hull with three decks and is expected to attain a speed of fourteen knots. The government mail subsidy requires the company to have the vessel constructed with a view to armored cruiser service if needed. The Mitsubishi company engaged the best talent obtainable for the construction of this vessel, the supervision of work being entrusted to men of long experience in English and American yards. The cost of the vessel was also in excess of what the vessel might be purchased for in any of the leading ship building countries, but the object was to stimulate Japanese ship building, and the extra cost was paid on that account. As compared with Canada, Japan is a new country,

yet under the policy now prevailing here, it will be many long years before any such ship will be built in this country. It should be in Canada as in Japan where the object of the policy is to develop and build up important manufacturing industries.

A few months ago, when it became evident that Canada would like to enter into closer commercial relations with Great Britain, offering the mother country 25 per cent. reduction in tariff duties, England, quite responsive, took steps to denounce certain treaties with Germany and Belgium which, while they lasted, would have prevented the culmination of the British Zollverein scheme. The denounced German treaty expires on July 30th of this year. A bill has now been laid before the Reichstag at Berlin, authorizing the Federal Council or Bundesrath to extend the most-favored-nation treatment to imports from Great Britain and her colonies for one year or until July 30, 1899. This, it is explained, is intended to serve as a provisional arrangement, pending the conclusion of a regular treaty. It is the intention of the German Government when this bill is passed to make the Dominion of Canada pay higher duties on her imports to Germany unless Germany gets the same favors as England gets on the Canadian customs frontier. Of course Germany will get and she expects to get nothing of the kind. The treaty was denounced for a purpose and it will expire for a purpose, and German threats will turn neither Great Britain nor her colony aside. Whether Germany will attempt to put pressure on the English government in respect to exports to Germany from England and other parts of the Empire, barring Canada, remains to be seen. Such a tariff war would scarcely be successful and it would be more costly to Germany than to anybody else, for which reason we may expect that she will have the shrewdness and good sense to avoid bringing the commercial relations of the two countries to such an unfortunate issue.—The Manufacturer, Philadelphia.

The manufacture of machines for the production of acetylene gas from calcium carbide, a Canadian invention, has already assumed gratifying proportions in Canada, and is receiving much attention in other countries. The Council of the Imperial Institute, London, Eng., have authorized the holding of an Exhibition of Acetylene Gas Apparatus in the Grounds of the Institute at an early date, and in order to ensure that no apparatus should be admitted to the Exhibition unless it fulfil the requisite conditions of safety, the Council of the Society of Arts have appointed a Committee to decide upon those conditions, and to lay down rules for the admission of apparatus. The Imperial Orders in Council regulating the use of calcium carbide and of acetylene gas (when the gas is under high pressures or liquefied) do not legislate for apparatus in which gas is generated from the carbide at low initial pressure, and of these, says an English contemporary, there is now an immense variety before the public. Whilst the majority of such generators may be, and doubtless are, absolutely safe with ordinary precautions, yet some of them may, from want of adequate scientific knowledge of the properties of calcium carbide and acetylene gas, be so constructed as to constitute a very serious danger in the hands of unskilled labor, and it is chiefly where unskilled labor is employed that the new illuminant now meets with the largest

demand. Regarding the cost of the article, our contemporary says that acetylene manufactured from calcium carbide at \$16 per ton would be cheaper per unit of light than oil-gas, although the cost would be 0.103d. per burner hour for oil-gas against 0.396d. per burner hour for acetylene. A light of 40 candles is not, however, required in a single compartment, which in fact would, even with the tendency to demand better lighting, be brilliantly lit with 20 candles. To obtain this lighting with acetylene would require a consumption of 0.585 cubic foot, costing 0.231d. per burner hour, whilst it can be obtained with oil-gas burnt in a regenerative lamp burning 1.464 cubic foot per hour for 0.1507d. per hour. Assuming that two reservoirs, each of ten cubic feet capacity, were placed under a five compartment carriage, and charged to 150lbs. per square inch above atmospheric pressure, the reservoirs would require re-charging in 47.8 hours if acetylene were used as against 19.2 hours with oil-gas.

The American consul at Winnipeg, Manitoba, transmits to the State Department some information that will no doubt prove interesting, if not valuable, to contractors and dealers in railroad materials in this country. It is the opinion of the consul, based on present indications, that there will be great activity in railroad building in Manitoba this season, for during the recent session of the Manitoba legislative assembly several important measures were enacted, designed to encourage railroad building, and as a result some 500 miles of road will be constructed in the not distant future. One line to which aid was extended is the Manitoba & Southeastern, running from the city of Winnipeg to the Lake of the Woods, or to the mouth of the Rainy River. This line is located to a point eighty miles southeast of Winnipeg and will be completed that far this summer. From that point it will either cross the Lake of the Woods at the Narrows or pass around the south end of the lake to the mouth of the Rainy River, as may be shown to be most feasible by surveys. If the latter course is adopted the consul says the road will run thirty-five or forty miles through the State of Minnesota. This road is designed to be part of a line connecting Winnipeg with the waters of Lake Superior, and when completed to the Rainy River will, in connection with roads now in operation, lack about sixty miles of making another entire rail route to the lakes. Another line of road to be completed runs from the town of Sifton, on the line of the Lake Manitoba Railway & Canal Company's road, generally known as the Lake Dauphin road, north to the Saskatchewan River, a distance of about 250 miles, being another link added to the long contemplated Hudson Bay road, which will undoubtedly be completed in the near future. Both these lines of roads run through good agricultural lands for the greater part of their course and they will also open up large bodies of timber and mineral lands of immense value. The province of Manitoba guarantees the payment of principal and interest on the first mortgage bonds of both lines to the amount of \$8,000 per mile and exempts the railroad properties from taxation for a period of thirty years. This is in addition to liberal land grants and subsidies heretofore granted by the Dominion government.

The expenditures proposed so far by the Dominion Government for the fiscal year, 1898-99, are the following:

Regular estimates.....	\$44,912,571
Supplementaries.....	3,058,376
Further supplementaries.....	68,500
Judicial salaries, additional.....	27,000
Payable to Manitoba—	
For schools.....	300,000
On account of Parliament buildings.....	475,000
	<u>\$48,841,447</u>

This is twelve million dollars more than was spent in the year 1895-96, the figures for that year being \$36,949,000.

Schedule "D" in the existing tariff was amended by striking out the words "the growth, produce or manufacture of the United Kingdom or of any British colony or possession mentioned in schedule 'D,'" and inserting the words "on articles entitled to the benefit of this preferential tariff." Another resolution provided that the tariff shall be treated as coming into force April 6, 1898.

Mr. Fielding also moved an amendment to the tariff to rectify an error made in printing the tariff act. Rubber belting was placed by the House in the list of rubber goods with a duty of twenty-five per cent. In the act the words "rubber belting" were accidentally omitted, so that this article goes in with other belting on which there is a duty of only twenty per cent. He therefore moved that it be restored to the list so that the duty will henceforth be twenty-five per cent.

WHITE COTTON GOODS AND THE TARIFF.

As heretofore mentioned in these pages, a deputation of manufacturers of white cotton goods waited upon Hon. Mr. Fielding, Minister of Finance, asking relief from an incongruous operation of the tariff. Discussing the event *The Mail and Empire* shows that the raw material used by the manufacturers of shirts, collars, and cuffs consists of cotton fabrics. On white cotton fabrics the duty was allowed to remain at the former rate of twenty-five per cent., but the duty on printed, dyed, or coloured cotton fabrics was increased from thirty to thirty-five per cent. That is, the manufacturer of shirts was taxed five per cent. more on half the material he consumed. On shirts costing more than \$3 per dozen he had formerly the protection of a specific duty of \$1 per dozen, and an ad valorem duty of twenty-five per cent. On other shirts, that is, on shirts costing less than \$3 per dozen, the duty was a straight ad valorem rate of thirty-five per cent. It is easy to see, of course, that the number of shirts put on the market at less than \$3 per dozen would be insignificant, and that for practically all shirts imported the duty would be \$1 per dozen and twenty-five per cent. ad valorem. For this arrangement Mr. Fielding substituted a uniform rate of thirty-five per cent. He struck off the specific duty of \$1 per dozen, and added 10 per cent. ad valorem. That change meant a reduction amounting on the average to probably sixty cents a dozen, or about 12½ per cent. ad valorem. With the duty on the one hand increased on more than half his raw material by five per cent. ad valorem, and with the duty on his manufactured product diminished 12½ per cent. ad valorem on the other, the shirt manufacturer was hemmed in so closely that he had to resort to every economy in order to continue in business. To meet the foreign competition which the change in the duties has made such an opening for, there is serious danger that wages may have to be cut. We most earnestly hope not, and that the inequality between the duty on the raw material and that on the product may not give excuse in any case for sweating. The business of making collars and cuffs is affected in the same way as that of making shirts, the rate on cuffs being changed from four cents per pair and twenty-five per cent. to an ad valorem rate of thirty-five per cent., and that on collars from twenty-four cents per dozen and twenty-five per cent. to a like ad valorem rate. The industry engaged in the manufacture of shirts, collars, and cuffs is one of very great magnitude, more than \$1,500,000 being paid out every year in wages for the making of a product valued at \$2,500,000. To the appeal made in Parliament in behalf of the operatives in this industry Mr. Fielding turned a deaf ear, refusing to act on any suggestion to redress the discrepancy between the duty on the material and that on the product.

In another page will be found a letter from an esteemed correspondent who is one of the most successful manufacturers in Canada. It has reference to a device invented by him,

and which, as he shows most completely and effectively, accomplishes the object for which it was intended. We do not understand that he has applied for a patent for his invention, but in our opinion the exclusive right to manufacture in Canada, United States, Great Britain and all other countries where wide awake men are up betimes and hustling for the almighty dollar, would be worth a modest fortune. Neither do we understand that our correspondent intends embarking in the business himself, but this is probably because he already has a good thing in hand by which he is accumulating wealth. But, as he says, there is no doubt money in the business which has never, to our knowledge, been entered into either in Canada or elsewhere.

A decrease in the importation of manufactures into the United States will probably prove to be one of the striking features of our foreign commerce during the fiscal year about to end. There has been, as already shown in the reports of the Bureau of Statistics, a very great increase in our exports, the manufacturing, as well as other industries, having shared in this growth of our foreign commerce. It now appears that the year's record of importations of manufactures will be quite as striking in the reduction which it will show. That there has been a general reduction in imports during the fiscal year is indicated by the recent statement of the Bureau of Statistics, which shows a falling off of nearly \$90,000,000 in the ten months ending April 30, 1898. The chief reduction, however, is in manufactured articles.—*New York Financial News.*

Some days ago the Government were requested to rectify a clerical error in the tariff, in consequence of which a duty of twenty per cent. instead of twenty-five per cent. was being collected upon boots and shoes, rubber belting, rubber cement, etc. This, it was claimed, was causing considerable loss to an important industry. The matter was brought to the attention of the Minister of Customs last year, and again in April last, when Mr. Fielding promised that the Government would correct the matter, which has been done, as explained in another page.

The prospectus of the new Manchester-Canadian freight line proves that the company is an extremely powerful one. Its capital will be \$5,000,000, and it will operate five steamers sailing direct from Montreal in summer and St. John N.B., in winter to Manchester by way of the canal. Three of the ships now in process of construction for the line have a carrying capacity of 8,500 tons. A probable result of the direct line will be a great increase in our share of the food supply of Lancashire, perhaps the most thickly populated portion of Great Britain outside of the metropolitan district. In estimating the probable increase of trade following upon the establishment of the direct line it must not be supposed that Manchester will receive by the canal route only the supplies that now go to Liverpool from the St. Lawrence. Up till the present time Manchester and the great consuming population of which Manchester is the centre has had no more interest in the consumption of Canadian wheat and cattle than of American. But with ships bringing Canadian food stuffs up its beloved canal, while American food stuffs are still landed at Liverpool, Manchester will eat its fill of Canadian products, knowing that the canal will benefit. The *Syren*, an English shipping paper that has fought the fast mail line tooth and nail, probably in the interest of existing companies, continues its attacks, and is now trying to prevent the public from taking shares in the company formed by Peterson, Tate & Co. With well-known men like Lord Tweedmouth and Sir Bache Cunard on the directorate, the Canadian Royal Mail Line should, despite these attacks, have some standing in the money market. Contracts for the four Canadian ocean flyers have, it is said, been awarded to a Tynu firm of shipbuilders.—*Toronto Globe.*

Mr. C. H. Rust, City Engineer of Toronto, has been considering the matter of imposing charges on manufacturers and others occupying buildings in the city for areas under the sidewalks, and he is submitting to the Committee on Works of the City Council a schedule of charges which he recommends shall be embodied in the tax bills of the current year. Mr. Rust states that he has made a complete record of all the areas and openings in the sidewalks in the city, which he has for the purpose, divided into three districts, with the following result: In district A there are 88,807 square feet of areas with 89 coal chutes, district B, 32,807 feet of areas with 249 chutes, and in district C are 14,754 feet of areas with 94 chutes, a total of 136,447 square feet of areas and 432 coal chutes; and he recommends that the following rentals be charged in the different districts:—District A, for areas four cents per square foot per annum; district B, three cents, and district C, two cents; and for every coal chute fifty cents per annum. The above charges, it is estimated, would produce a revenue to the city of a little over \$5,000 per annum.

The British market requires each year an importation of more than 500,000,000 pounds of bacon, which amount comes almost entirely from the United States, Denmark and Canada. While the part of this entire amount drawn from the United States reaches each year about 300,000,000 pounds, the quantity is gradually decreasing. The "section of foreign markets" of the Department of Agriculture attributes this decline largely to the fact that the United States bacon is chiefly corn fed bacon, and is therefore too fat to suit the taste of the British consumers. By paying attention to this preference on the part of the English customers the Danish and Canadian exporters are making serious inroads on a market which we have heretofore controlled. The Danish and Canadian bacon, moreover, being more to the liking of the Englishmen can secure a higher price on the British markets than the United States bacon, and the loss of even a cent on each pound of the enormous quantity makes a net loss which is very considerable.

Mr. Anderson, Canadian late special trade commissioner to Japan, in his report to the Department of Trade and Commerce, recently published, speaking of the possible expansion of our flour trade with Japan says:—"The quantity of flour imported during 1896 was upwards of 150,000 barrels, and nearly all from the State of California and the Territories of Oregon and Washington. It is shipped in forty-nine-pound bags, four being equal to a barrel. There are certain brands which buyers favor on account of being well-known. The increase during the first six months of 1897 has been enormous, and probably the imports this year will reach 225,000 barrels. There is no reason why Canadian millers should not secure a fair share of the flour trade, unless it be that the long inland railway freight may in some measure handicap them. To properly introduce it I would advise the distribution of samples in half-pound bags to actual consumers, as well as advertising in both the English and Japanese press. The San Francisco market should be a good guide as to prices that can be obtained."

The report of Mr. Anderson, Canadian Trade Commissioner to Japan, which has just been published by the Department of Trade and Commerce at Ottawa, deals in detail with the articles that there is a possibility of selling to Japan, and with those Canada might or does purchase. Of bicycles in Japan, Mr. Anderson says: "British and United States manufacturers are represented, and the sales are quite large, with the sure prospect of a large growth. Japan is certainly an inviting field for our makers, as bicycles are becoming very popular among the Japanese. Wheels to sell at 100 yen, equal to \$50 gold, would find a ready sale. High grade wheels to retail at 150 to 175 yen would also sell freely, as better qualities are much appreciated by the well-to-do Japanese as well as by foreigners. All bicycles should be

light, strong, and handsomely decorated. The Japanese being of small stature the frames would require to be 22 to 23 inches. For foreigners the ordinary sizes of frames in use in Canada would be suitable. There is absolutely no demand for ladies' wheel, except a few for the use of foreigners. The Japanese ladies have not yet adopted the European costume, and it would be impossible for them to ride a wheel wearing their native style of dress. The bicycles manufactured in Japan are considered inferior.

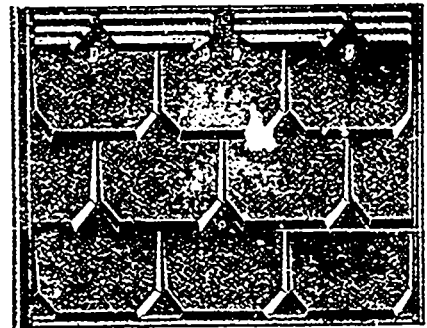
United States Consul Douzelmann, at Prague, Bohemia, writing to the Department of State, speaking of farming machines and implements in that country, says: "Bohemia, I feel warranted in saying, presents a very good field for mowers, binders, seeders, thrashing machines, hay stackers, etc. While at the first glance, a person unacquainted with the ways of the people would believe it would be cheaper to employ laborers here to do all such work, I have it from very good authority that it is becoming absolutely necessary for those engaged in farming on a large scale (of whom there are a great many) to employ all kinds of machinery, because of the scarcity of labor in country districts, the men receiving better pay in the cities.

The Grand Trunk is erecting a large iron bridge in this town, which is being done entirely by American workmen from Harrisburg, Pa., where the bridge is manufactured. We have no special fault to find with the G.T.R. for buying the bridge in the United States, notwithstanding the fact that we have a number of good bridge building firms in this country; but when the workmen are brought from the other side we think it is time to register a kick. The alien labor law is enforced against Canadian workmen, but our very considerate liberal government at Ottawa closes its eyes to all infractions of the law by the United States.—Dundas, Ont., Star

It's the Roof that Counts...

It Protects the Whole Building.

EASTLAKE STEEL SHINGLES



Are the most popular roof covering all over Canada, because of their unvarying reliability.

They are fire, rust and leak proof—look well, and last indefinitely.

The only shingles made with our patent cleat and water gutter—to be had either galvanized or painted.

Our Rock-Faced Stone and Pressed Brick Steel Sidings

are an admirable, economical, and durable covering for the sides of any building—they can hardly be distinguished from the real stone and brick.

Write us for information—all our fire-proof building materials give famous satisfaction.

METALLIC ROOFING CO., Limited
1181 King Street West, Toronto.

United States Consul Jackson writes to his Government as follows, from the city of Cognac, France:—I have to report that several cities in this consular district, which at present have no effective fire department, anticipate purchasing steam fire engines. Cognac already has a fund for this purpose. American manufacturers should address M. E. Jouard, No. 1 rue Louise de Savoie, Cognac, Charente, France.

The opportunities for increasing the bicycle trade with Russia was never better than at present. The Government is modifying many rules and regulations which made the importation of bicycles into Russia difficult. Recently ladies have been allowed to ride through the streets, and this, it is stated, has increased the sale of ladies' wheels considerably in St. Petersburg. The population is discontented with the home-made machines for the reason that the manufacturers cannot turn out a good article either in looks or weight. The makers at present enjoying the best reputations are German and English. American wheels have not yet obtained a footing.

United States Consul General J. G. Stowe, at Cape Town, South Africa, writes as follows to his government:—"I am requested to present to the manufacturers and producers of America the advantages of exhibiting their productions at the exhibition to be held at Grahamstown, Africa, from December 15, 1898, to January 21, 1899. It will be known as the South African Industrial and Art Exhibition, and is guaranteed by the governors of Cape Colony, South African Republic, Orange Free State and Natal, and the high commissioners of Rhodesia and Basutoland. Over \$100,000 have been subscribed, and exhibits from all parts of the world have been asked. There are five classifications of exhibits,

viz.: (a) Raw materials; (b) manufactures; (c) mining and machinery; (d) natural history and science; (e) arts. To the manufacturers of agricultural implements and vehicles, and mining, cotton, woolen, electrical, wood working, brickmaking, sugar, and all other kinds of machinery, this exhibition will be invaluable. Are any Canadian manufacturers proposing to make exhibits at Grahamstown?

The Lake of the Woods Milling Company and several other concerns are making great efforts to introduce their flour into the West India Islands, and so far have met with gratifying success. A communication has been received by the Montreal Board of Trade from Rust, Trowbridge & Co., of Port of Spain, Trinidad, pointing out that the war has led to enhanced prices of breadstuffs, and merchants have been led to look to Canada for their supply.

There is no lack of freight for steamers to the West Indies from this port at present, said Mr. Geo. Hensley, of Pickford & Black, to a reporter of The Halifax Maritime Merchant. We have a boat sailing for Jamaica on the 10th, and another on the 15th, each of which will have quite as much as she can carry. We will also have a boat for the Windward and Leeward Islands and Demerara, on the 16th and she also has a full cargo. The manifest includes large quantities of fish, potatoes, flour, pork, butter, cheese, and a small amount of oats; all of which are the products of Canada. The latest advices that we have had from Trinidad and Barbadoes, state that the best grades of Canadian flour exported are selling equally as well in that market as similar grades from the United States, and that values are keeping pace with the advances recently made, both here and at New York.

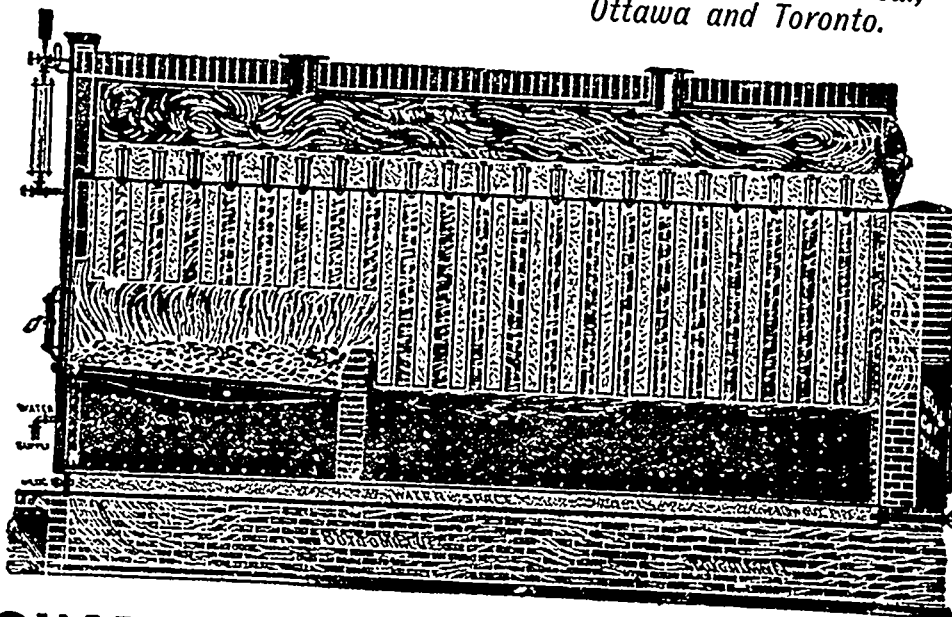
E. A. WALLBERG, C.E.,

Bell Telephone Building, - MONTREAL, QUE.

HEAD CANADIAN OFFICE FOR

KINGSLEY WATER TUBE BOILERS

Manufactured in Montreal,
Ottawa and Toronto.



*For Steam, Power
and Hot Water
Installations...*

*The Most Economical Boiler,
and the Cheapest, when
based on Evaporat-
ing Capacity.*

Can be installed in any Basement,
requiring only 6½ feet in height.

GUARANTEED: A Saving in Fuel of 30 per cent. over Return Tubular Boilers.
A Saving in Fuel of 50 per cent. over any Cast Iron Heater.

...Catalogue Free.

CAPTAINS OF INDUSTRY.

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

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

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

Messrs. Patineau Bros. will establish a sawmill at Dufresne station on the Northern Pacific Railway, near La Salle, Man.

The new flour mill being erected at Souris, Man., by Messrs. McCulloch & Heriot is rapidly nearing completion.

Messrs. W. H. Code and S. Gable were recently in Dauphin, Man., with a view to establishing a flour mill there.

Messrs. Reisterer & Co., Nelson, B.C., will double the capacity of their brewery plant, including the installation of a new ammonia cooler, etc.

Messrs. Gordon and Ironside will erect a large cold storage warehouse at Fort William, Ont.

Messrs. J. I. Flatt, A. Ross and Elton Smith are endeavoring to induce the city council of Hamilton, Ont., to build a grain elevator at that place.

The Alberta Railway & Coal Co., of Lethbridge, N.W.T., has ordered two more Mumford Improved Boilers of 150 h.p. each from the Robb Engineering Co., Amherst, N.S.

Messrs. Sykes & Ainley, Glen Williams, Ont., have purchased the water power at that place formerly used in connection with the Joseph Williams Hosiery Co.

The Mumford patent shingle machine made by the Robb Engineering Co., of Amherst, N.S., is now in use in a number of provincial mills and is giving immense satisfaction.

A ten stamp mill is being erected at Chezzeteoak, N.S., by John H. Anderson, on the site of his old mill which was destroyed by fire a few years ago. The new mill

will be up-to-date in all particulars and should give a good account of itself this year.

H. E. Casslens, of Winnipeg, Man., sent a sample of emery from northeastern Manitoba, to a German emery firm and has received very favorable replies as to its quality. The deposits extend over an area of twenty-five square miles.

The Hugman Window Shade Co., 120 William St., Montreal, have sent us a circular having reference to their business. They inform us that their factory is new and modern in all its equipments, with the latest facilities for turning out superior goods at short notice.

D. La Liberté's foundry and machine shop at St. John's, Que., was badly gutted by fire May 28th, loss about \$6,000.

The shovel shop of the D. F. Jones Manufacturing Company, Gananoque, Ont., suffered disastrously by fire June 7th under curious circumstances. A twelve-ton fly-wheel on the large roller broke, and one large piece struck the dome of the boiler, and another a petroleum tank, sending the oil all directions, which brought fire from the furnace.

T. D. Wardlaw, of Dundas, Ont., has for some months past been experimenting in acetylene lighting in his knitting factory. He now claims to have perfected a plant that, while perfectly safe and very economical, gives a light far superior to any plant of the kind heretofore used. The choir gallery in the Presbyterian church has been lighted by this system, and the result was pronounced exceedingly satisfactory.

Messrs. S. F. Eagle and John Crerar were at Fort William, Ont., a few days ago, negotiating for the establishment of a blast furnace there. Fort William has a standing offer of a \$50,000 bonus for any such enterprise.

Mitchell Bros., of Berkeley, Ont., and Liverpool, Eng., are in correspondence with the Woodstock, N.B., Board of Trade relative to the exportation of maple blocks to England. Very large quantities of these blocks are exported from Ontario via St. John, N.B., in winter, and it is thought the opportunity is now favorable for the opening up of market for the native hardwoods of New Brunswick. The Woodstock board has directed its secretary to continue the correspondence with that end in view.

The total output from the different collieries of the Dominion Coal Co. for April is 23,537 tons. The output of coal from the different mines throughout Cape Breton, it is stated, will probably be something smaller than last year. Owing to the Spanish-American war the shipments of coal to the United States from the Dominion Coal Co. has been stopped.—North Sydney Herald.

A telegram from Thamesville, Ont., states that the largest flow of oil since the Petrolea oil discovery had been struck by Messrs. Trotter & McHugh of Chatham, while boring on the Herbert farm, about two miles from Thamesville. The well is pumping over 1,000 barrels a day, and is one of the largest wells ever struck. It is one of a number of such wells that have been lately discovered in the vicinity of Thamesville, and promises to make this one of the richest oil districts in America. The discovery has caused considerable excitement, and will probably lead to greater activity in oil speculation in this neighborhood. There are at present large number of rigs sinking wells which are meeting with good results.

The Pioneer has received this week an excellent lithograph of the E. B. Eddy Company works at Hull, and coming so close on the heels of our remarks last week about their fine calendar, the gift smacks of a challenge to the correctness of our statement that the Sault has the largest and best pulp mills in the world. If so, we must reiterate the statement that we have watched Mr. Eddy rise from a matchmaker to his present high position as the leading Canadian manufacturer, and we share, in degree, pride at his splendid abilities and success. But, in point of extensive pulp works he is not in the procession with the Sault mills.—Sault Ste. Marie Pioneer.

INGERSOLL-SERGEANT Rock Drills

FOR MINES, TUNNELS AND QUARRIES

PISTON INLET Air Compressors

STRAIGHT LINE
DUPLEX and
COMPOUND.

FOR ALL DUTIES.

... COMPLETE MINE EQUIPMENT ...

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

Other Offices - - - ROSGLAND, B.C. RAT PORTAGE, ONT. HALIFAX, N.S.

The Kemp Manufacturing Company, Toronto, have written to the city authorities that they are desirous of making further additions to their factory premises, but have not any vacant space on the block which they now occupy. They require the extra space in a position where they can get a siding from the railway track into the proposed extension. In order to make the extension, they want the city to grant them the use of the property at the end of Bell street, stretching east to the roadway on the Don flats, and thence northerly towards Gerrard street bridge, a portion of which they now use. This will be the second extension made by this company within a very short period, the business having increased by rapid strides until it is now one of the largest and most flourishing manufacturing concerns in Canada.

The Grand Trunk Railway Co. have laid about forty miles of new track between Niagara Falls and Hamilton, Ont., and there are still eighty miles to be laid in the southern division. Considerable additions will be made to the siding room on the division, and at some of the stations two sidings will be provided where only one now exists. A new double track is under construction just west of St. Catharines. About thirty of the latest style of passenger coaches have been recently commenced in the car shops of the company, half of which will be used on the middle division.

Mr. Thomas Bengough, president of the Canadian Motor Syndicate, has received notification from the Postmaster-General that the syndicate's tender had been accepted for a daily mail service between the Toronto post office and the Don post office, calling at Todmorden and Doncaster. The Don post office is about eight miles from the city. The service will begin on Dominion Day. It is the intention to put a motor mail van on this service. This will be the first case in Amer-

ica of a motor van being utilized for Government mail service. In England a van is running between London and Redditch, but the Canadians are ahead of the Americans and the rest of the world in this matter.

In addition to the order for a freight steamer to replace the wrecked Rosedale, the Bertram Engine Works, of Toronto, has five vessels under way—two for the Prescott Elevator Co., one for the Richelieu & Ontario Navigation Co., and two for the Canadian Pacific Co. Those for the Prescott Elevator Co. are barges of 165 feet 6 inches length over all, 160 feet 10 inches length of keel, 30 feet beam and 13 feet molded depth. The Richelieu & Ontario steamer—a passenger boat—has dimensions of 279 feet 4 inches over all, 270 feet 6 inches keel, 36 feet beam and 14 feet molded depth. Those under construction for the Canadian Pacific Co. are stern wheelers, 162 feet 6 inches over all, 140 feet 6 inches keel, 30 feet beam and 5 feet molded depth, for the Klondike trade.

The Winnipeg Commercial says that a side industry of the Rat Portage Lumber Company is the sash and door factory, yet it has a capacity of 100 doors and 250 windows per day, having almost doubled its output in the last year by the addition of more machinery. The machinery is all specially made, of most approved type, and is constantly being added to. It is in charge of C. A. Moore, formerly of Brandon, Man., and some 20 or 25 men and boys are employed.

The whole of the sawmill plant of the Assiniboine Lumber Co., at Shell River, Man., was destroyed by fire a few days ago.

The Cushing Sulphite Fibre Co., St. John, N.B., has been incorporated with a capital stock of \$500,000. The company expect soon to begin the erection of large works at Fairville, N.B., the capacity of which will be to produce 56 tons of dry pulp per day; but in the meantime machinery for 28 tons per day only, will be put down. The com-

pany have now made satisfactory arrangements with the City of St. John as to water supply, and will be ready to proceed with the work of construction at an early day.

The Hamilton Times learns that Mr. R. M. Wanzer, the veteran manufacturer of that city, had decided to remove to Buffalo, N.Y. In his thirty-eight years residence in Hamilton his extensive manufactures of sewing machines, lamps, etc., made his name a household word, of world wide reputation. He spent fifteen years in travelling in foreign countries, introducing the goods which bear his name and publishing his instruction books in twenty-two different languages; also having received the gold medals at the World's Fair in London, England; the Centennial at Philadelphia; at Paris, France; Moscow, Russia, and Vienna, Austria. At the latter place he was knighted by the Emperor and received the Iron Cross for the superiority of his inventions. This is said to be the only honor that was conferred upon one under the British flag for goods manufactured in his line. Mr. Wanzer shipped very largely the goods of his manufacture to Africa, Australia, Tasmania, New Zealand, India, China, Japan and South America. Mr. Wanzer was the first to manufacture sewing machines in Canada, and also to light the city of Hamilton by electricity. His last and best efforts of invention have culminated in perfecting the Wanzer lamp and cooking appliances, of which he has sold in Canada and foreign countries over thirty thousand. This lamp has been shipped in great quantities abroad, especially to Africa, Jerusalem and the Philippine Islands. Mr. Wanzer now purposes opening out in Buffalo as general manager of the Wanzer Lamp and Cooker Company, for the sale and manufacture of these lamps.

The Crow's Nest Coal Company will at once begin the construction of coke ovens at the mines in the Crow's Nest Pass.

THE Defiance Machine Works,

DEFIANCE, OHIO, U.S.A.

Established 1850

INVENTORS AND BUILDERS OF UP-TO-DATE NINETEENTH CENTURY

AUTOMATIC Wood-Working Machinery

For Making

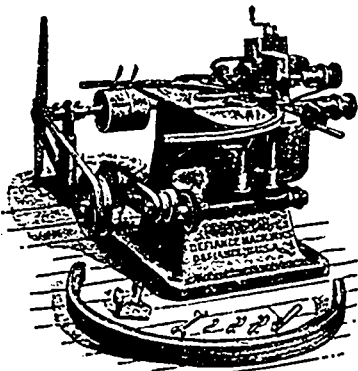
WAGON AND CARRIAGE WHEELS, HUBS, SPOKES, RIMS
FELLOES, SHAFTS, POLES, NECK-YOKES, SINGLE-TREES, BARREL HOOPS, Etc., Etc.

Send for 300-Page Catalogue—FREE

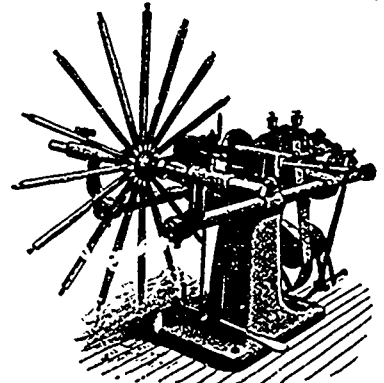
GENERAL CANADIAN AGENTS

ESTATE OF T. T. COLEMAN

SEAFORTH, ONTARIO, CANADA



RIM PLANING MACHINE.



WHEEL TENONING MACHINE



Emery

WRITE FOR LATEST CATALOGUES AND SAMPLES TO

THE LONDON EMERY WORKS CO.,

101/2 VINE ST., CLERKENWELL,
...AGENTS WANTED...

LONDON, E.C.

CLOTH AND PAPER.
GLASS & FLINT PAPER.
"Atlas Brand"

"FLORA" Knife Polish
in 3d. Gd. & 1/ Tins.

Ground, Washed & Flour

WHEELS of highest
quality for general
& special purposes.

Grinding Machinery.



The Brantford, Ont., Carriage Company has been granted exemption from taxation on \$25,000 for five years.

The St. Mary's, Ont., Creamery Company, shipped on Tuesday 16,800 pounds of butter to Great Britain.

A by-law to raise the sum of \$19,700 for purposes of electric light and waterworks will be voted upon by the ratepayers of Listowel, Ont., on July 6th.

The sawmill of G. T. Cooke, Gay's River, N.S., was burned a few days ago.

The Pembroke Navigation Co., have given a contract to the Canadian General Electric Company to light the new steamer Victoria with the electric light, and also to furnish an electric search light.

The Forbes Manufacturing Company, of Hespeler, Ont., and the Waterloo Woollen Company, of Waterloo, Ont., have put in double-bed Gesner presses, and one has been ordered for the Brodie mills, Hespeler, Ont.

S. Salmon & Co. are building a sash and door factory at Avonmore, Ont.

J. W. Barnett and J. E. Green have purchased the machine shop at Brandon, Man., formerly owned by George Thomas, and will operate it under the firm name of Barnett & Green.

Mr. Evenden, of Bournemouth, England, is located on Camp D'Or Island, near Sault Ste. Marie, Ont., preparatory to establishing there an extensive shingle mill.

The McCormick Manufacturing Co., manufacturers of biscuit, confectionery, etc., London, Ont., have established a branch of their concern at Montreal.

Joseph Bourque's planing mill and sash, door and blind factory at Hull, Que., was destroyed by fire June 10th.

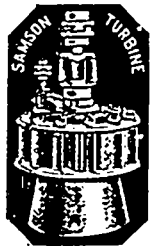
McCulloch & Herriott, millers, of Souris, Man., have completed the arrangements for building a new 300-barrel flour mill at that place during the summer.

Dow & Curry, oatmeal millers of Pilot Mound, Man., are looking for an available site in Winnipeg, and will build a 200-barrel mill at that place.

The Manitoba Grain Co., of Winnipeg, Man., has awarded a contract for the remodelling of their mill at Calgary, N.W.T., and increase the capacity to 150 barrels of flour daily.

An agitation is on foot in Brantford, Ont. to establish a carpet factory to occupy the old wincey mill at that place.

The Columbia Flouring Mills Co., of Enderby and Vernon, B. C., have remodelled their mill at Vernon to the Plansifter system. The capacity of the mill was increased from fifty to seventy-five barrels of flour daily.



WATER WHEELS

For Heads of 3 Feet to 2000 Feet.

ADAPTED TO MILLING AND ALL POWER PURPOSES.

Recent tests at Holyoke enable us to guarantee:

The largest power ever obtained from a wheel of the same diameter. The highest speed ever obtained for the same power. The highest mean efficiency ever obtained when running from half to full gate. We guarantee also: A runner of the greatest possible strength. A gate unequalled in quickness and ease of opening and closing.

Write for pamphlet, stating your head.

JAMES LEFFEL & CO., Springfield, Ohio, U.S.A.

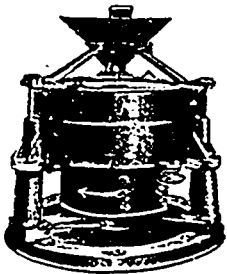
THE TORONTO PATENT AGENCY, (LIMITED) . . . TORONTO, CAN.

Head Office, 79, 80, 81 Confederation Life Building. CAPITAL, \$25,000.00.

Patents obtained. Patents sold on commission. Provincial rights sold. Most actual sales. Best results. Quickest work. Honest Treatment. Oldest company. Reliable references. All patent business promptly attended to. Valuation and prospects of any patent furnished on application.

Pipe and Boiler Coverings, Engine Packings, LUBRICATING OILS, GREASES, AND BOILER COMPOUND, COTTON WASTE, ETC.

EUREKA MINERAL WOOL and ASBESTOS CO., 136 Bay Street, - Toronto.



ROCK CRUSHERS

EMERY

MILLS AND MILLSTONES.

FRENCH BUHR AND ESOPUS STONES. Send for Circular.

STURTEVANT MILL CO. BOSTON, MASS.

THE

Crocker Patent Turbine



This Wheel is to be found in representative plants in nearly all parts of the Dominion. It possesses among its leading features

LARGE POWER FOR THE DIAMETER. SUPERIOR STRENGTH AND DURABILITY. GREAT EFFICIENCY AT ALL DEGREES OF GATE OPENING.

Design prepared for complete plants and the best development of power possible under the peculiar circumstances of head, etc., in any locality.

CIRCULARS AND PRICES ON APPLICATION.

53 inch Crocker Wheel Plant at the works of the Boston Rubber Co., St. Jerome, Que.

The JENCKES MACHINE CO.,

28 LANSDOWNE STREET SHERBROOKE, QUE.

The buildings of the western abattoir, Montreal, were destroyed by fire a few days ago. Loss \$100,000.

A joint stock company is being organized in Leamington, Ont., to go into fruit canning on an extensive scale. It is proposed that all fruits shall be done up in glass bottles.

There are 250 flat cars, 200 box cars, and fifty coal cars in course of construction at the C.P.R. shops at Perth, Ont.

Fort William, Ont., offers a bonus of \$50,000 for the establishment of an iron blast furnace in that town.

Messrs. Dick Ridout & Co., Toronto, have purchased the old woollen mill at Cobourg, Ont., and propose to turn it into a jute factory.

The Guelph Pavement Company have secured from the Corporation of the town of Berlin, Ont., the contract to lay \$18,000 worth of granolithic walks in that town.

Increasing business has compelled the proprietors of the Vulcan Iron Works, Winnipeg, Man., to enlarge their premises. Large orders have recently been received from the city and outside points. A lot of coke frames have also been made for the Crow's Nest Coal Co., and iron work for coal cars for the same company. Another job recently turned out is a new boiler for Caldwell's mill at Rat Portage.

The latest industry in Sherbrooke, Que., is a soda water factory. J. H. Bryant is the proprietor.

The St. Mary's, Ont. creamery is now making 5,000 pounds of creamery butter per day. They have seven separating stations.

H. Marsh's sawmill, at Maple, Ont., was burned a few days ago.

Woodman & Miller, St. John, N.B., purpose building a large mill on the Madawaska river. They will put in shingle mill, planing mill, turning laths, etc.

The Hamilton Bridge Co. have the contract to build the new C.P.R. bridge at Galt, Ont.

Several cars were destroyed by fire at the Quebec Central shops at Newring, Que., a few days ago. Loss about \$8,000.

The Preston Furniture Co., Preston, Ont., have been awarded the contract for the office fittings for the Robinson, Little & Co's new warehouse at London, Ont.

The Ottawa Cord and Tassel Co. have established a factory in Ottawa to manufacture all kinds of cords, passamenterie, etc.

McBurl's furniture factory at Moosomin, Man., was burned a few days ago. Loss about \$5,000.

Messrs. Wm. and J. G. Greay, Toronto, recently fitted up a mill at Moncton, N.B., with a complete outfit of machinery.

A conflagration at Rat Portage, Ont., a few days ago, destroyed, among other buildings, the opera house and high school.

The boiler works of the Goldie & McCulloch Co., Galt, Ont., is exceptionally busy. On one day recently they received orders for five boilers, which, with the orders on hand, will make things lively for several weeks.

Mr. Savoye, of Brompton, Que., purposes to establish a box factory at Sherbrooke, Que., that will give employment to twenty-five hands.

Tenders for the erection in Harriston, Ont., of one of the largest pork-packing establishments in Canada will be asked for in a few weeks. It is understood that the British market will be supplied with fresh beef from this same institution.

The Goldie and McCulloch Company, Galt, Ont., recently shipped a car-load of machinery to the Windsor Furniture Co., Windsor, N.S., with which to equip their new factory.

The A. R. Williams Machinery Company, Toronto, recently shipped two carloads of machinery to the Yukon, being complete outfit for two sawmills. The order was given by the Canadian Yukon Lumber Company, of Montreal.

The Toronto Smelting Company's works at Madoc, Ont., will commence operations at once. Mineral wool will be manufactured as a by-product.

The Messrs. Reid, St. John, Newfoundland, will build a large pulp and paper mill at Grand Lake.

The capacity of the Dominion pulp mills at Chatham, N. B., is to be increased to thirty tons per day.

James Thomson Hamilton, Halifax, N.S., and others, have been incorporated as the Nova Scotia Steamship Company, with a capital stock of \$50,000 to carry on the business indicated by the name.

A. C. NEFF, JAMES WOOD,
Chartered Accountant. Late Sec. The T. Eaton Co., Ltd.

NEFF & WOOD
PUBLIC ACCOUNTANTS, AUDITORS
ASSIGNEES, ETC.
Room 500 McKinnon Bldg., Toronto

GEORGE WHITE-FRASER.
Member Can. Soc. C.E.
Member Am. Inst. Elec. Eng.

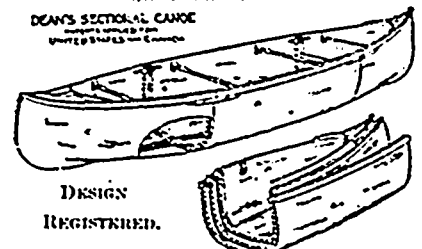
CONSULTING and Electrical Engineer.
CONSTRUCTING
Railways, Lighting, Power Transmissions,
Factory Plants, Reports, Specifications, Tests.
18 Imperial Loan Building,
TORONTO.

H. F. STRICKLAND,
Electrical Contractor.

77 ADELAIDE ST. E., TORONTO.
Telephone 1838.

SPECIALTY:—Electric Wiring, by skilled men.
All work done according to latest methods, at
lowest possible prices. Complete Isolated Plants.

DEAN'S Sectional Canoe.
Patents applied for United
States and Canada.



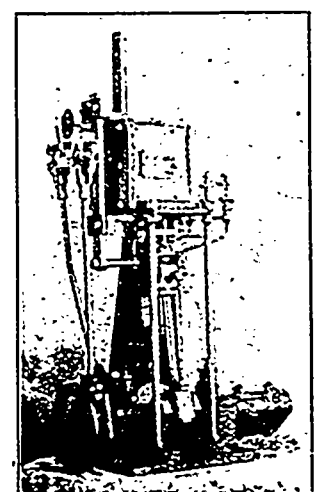
The only Klondike Canoes carried by the Express Companies.
Bulkheads may be placed between the sections when bolted together, making each section a water tight compartment.
The only serviceable Portable Canoe made.
Write for catalogue and prices.
WALTER DEAN, Toronto, Can.

ROBT. A. ROSS, E.E.,
Consultant to Canadian Pacific Ry.
and Boiler Inspection Co.

CONSULTING ENGINEER.
Specifications, plans, advice upon Steam and
Electric Plants, Power transmission and distribution. Special machines designed.
17 St. John Street, MONTREAL.

ALBERT BELL ENGINE WORKS

DUNNVILLE, ONT. Makers of
YACHT ENGINES, 1 H.P. to 50 H.P.
Safety Water Tube BOILERS
PROPELLER WHEELS
Stationary Engines and Boilers



WRITE FOR CIRCULARS

FLEMING & CHAPIN, Cotton Warps
229-231 Church St., Yarns Skeins
PHILADELPHIA. Cones
Agents for HADLEY COMPANY.

CARBONIZER A neutral substance, harmless to animal fibre or tissue, while it destroys burrs, etc., as efficiently as acid. It leaves the wool in fine condition. Manufactured by the Merrimac Chemical Co., 13 PEARL ST. BOSTON.

BOILERS.
YOU WANT THEM. WE MAKE THEM
WRITE FOR PRICES
BANNERMAN & FINDLATER,
Boiler Makers, OTTAWA, ONT.

WANTED
Mechanics, Engineers and Firemen to enclose 20 cents in stamps for Working Model of Valve for Steam Engines.
Address: H. F. LOWE, M.E.,
Patent Solicitor,
Confederation Life Bldg., Toronto, Canada.

PATENT FOR SALE.
Canadian Patent No. 53178, relating to apparatus for rapidly discharging cargo from vessels, whereby the necessity of shovelling grain, coal, etc., in small quantities is avoided.
Apply to
JOHN W. GLAHOLM,
Nanaimo, B.C.

J. ALEX. CULVERWELL,
Electrical and Mechanical
BROKER,
Special Agent Royal Victoria Life,
5 King Street West, - - TORONTO.

The Fraser Hat Cap and Fur Manufacturing Co., London, Ont., has been incorporated with a capital stock of \$20,000.

The Dominion Cotton Mills in Brantford, Ont., are being worked to the utmost capacity at the present time. They are working on home, and not Chinese trade as formerly.

Mr. George Dow, of Dow & Currie, Pilot Mound, Man., will establish an oatmeal mill at Winnipeg.

It is said to be the intention of the Central Ontario Railway Company to at once extend its line to Bancroft. The extension would open up a section rich in timber, fertile lands and minerals.

The Bryan Manufacturing Co., Collingwood, Ont., have been given an order by the Midland Elevator Co., to furnish the necessary dressed plank for the construction of their new elevator at Midland.

The Ogilvie Milling Company have purchased the oatmeal mill of Stephen Nairn at Winnipeg, and will greatly enlarge its capacity.

A by-law to grant a bonus of \$25,000 to the Canadian Pacific Railway Company, on the condition that workshops be established at Calgary, N.W.T., were to have been voted on, on June 13th.

The Canadian Pacific Railway Company are building twenty-seven new engines at their Montreal shops.

The Alberta Roller Mills at Calgary, N.W.T., have been sold to the Manitoba Grain Company who will enlarge the mills and erect an elevator.

Mr. J. H. Beamer, Brampton, Ont., has invented a new bicycle tire. It is made from very fine woven steel, and is said to have all the resilience of the pneumatic.

Another large elevator and freight warehouse are talked of for Parry Sound, Ont., the present large buildings recently furnished already proving too small to accommodate the traffic over the Ottawa and Parry Sound Railway.



Metal Ceilings are now being recognized as the most desirable covering for Private Houses, Club Rooms, Public Buildings, etc. They are very handsome in appearance, will not crack and fall off, and compare favorably in price with any good ceiling.

Fully illustrated catalogues sent on request. Estimates furnished on receipt of plans.

The Pedlar Metal Roofing Co.
OSHAWA, ONT.

MALCOLM MILLS CO.

Manufacturers of
Fancy Twist Yarns, in Worsted, Silk Cotton, etc. Polished Threads.
Silk Nolls Yarns.
Metal Threads and Tinsels.
MILLS—Frankford, Pa.
OFFICE—229 Chestnut Street, Philadelphia

PROGRESSIVE MANUFACTURERS

USE THE

BLACKWELL UP-TO-DATE VARNISHES

For Finishing Pianos, Carriages, and Railway Coaches.

BLACKWELL & CO., TORONTO.

Dominion Oil Cloth Co.

Manufacturers of....

OIL-CLOTHS of Every Description

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

Office and Works

Cor. St. Catharino and Parthonalis Sts.,
MONTREAL, Que.

AN EXPERT ACCOUNTANT AND BOOKKEEPER.

Twelve years practical business experience, systematic, modern methods, good credit man and correspondent, possessing executive ability and competent to assume management of business, seeks engagement as auditor or chief bookkeeper. Is English, married, of good address, and exemplary habits. Address H. K., 107 Edward Street, New Haven, Conn., U.S.A.

JOHN J. GARTSHORE,
19 Front St. West, Toronto.

RAILWAY, TRAMWAY, and

...Contractors' Supplies

METALS and SCRAP IRON
Bought and Sold.

Felts for Pulp Mills

Felts are woven endless, without a splice. Our Felts will last longer and make dryer Pulp. All up-to-date mills use our Felts. New mills, when in need, write for samples and prices.

HAMELIN & AYERS, Lachute Mills, P.Q.

ELECTRIC REPAIR & CONTRACTING CO.

GEO. E. MATTHEWS, Manager. 621 LaGauchetiere St., MONTREAL. TEL. 2177.

COMPLETE ELECTRIC PLANTS INSTALLED.
ELECTRIC APPARATUS OF ALL KINDS REPAIRED ON THE SHORTEST NOTICE.

Armatures Rewound for all Systems. Commutators Reffiled.
Write us, our Prices are reasonable and work good.



The **Diamond Machine & Tool Co.**

TORONTO, ONT.

Manufacturers of

Machine Screws

OF EVERY DESCRIPTION.

SEND FOR CATALOGUE and PRICE LIST.

THE CANADIAN COLORED COTTON MILLS COMPANY.

Cottonades, Tickings, Denims, Awnings, Shirtings, Flannelettes, Gingham, Zephyrs, Skirtings, Dress Goods, Lawns, Cotton Blankets, Angolas, Yarns, etc.

Only Wholesale Trade Supplied.

D. MORRICE, SONS & CO.

AGENTS

MONTREAL and TORONTO.

A new pork packing establishment is talked of for Brockville, Ont. The Brockville Dairymen's Board of Trade has passed a resolution favoring the project and pledging its support.

The Canadian Copper Company is opening up another mine northwest of Copper Cliff, Ont., and known as McArthur No. 2.

The Canadian Pacific Railway proposes to run a fast express between Montreal and the Pacific coast, making the time in 100 hours, which is a considerable reduction on the present time consumed by the journey.

The Canadian Pacific Railway Company will build a million bushel elevator at St. John, N.B., this summer.

A mill to manufacture tissue paper is to be started in Ottawa by a number of the employes of the E. B. Eddy Co.

The James Smart Manufacturing Company Brockville, Ont., will soon put upon the market a complete line of hot water boilers.

Mr. Walter Dean, at Sunnyside, Toronto, is very busy filling orders for his detachable Klondike canoe, and is also doing a large local trade. He is stocking a boathouse at Orillia and is building several canoes of fancy Canadian woods, ordered to go to the Old Country.

Mr. Amos Campbell, of the late firm of Campbell & Brodie, City of Quebec, manufacturers of boots, shoes and rubber goods, will engage solely in manufacturing for the trade. He will occupy the Botterell factory, that city, and will manufacture men's, boy's and youth's boots and shoes, boots for lumbermen, miners, fishermen and river drivers as well as long boots, beef moccasins, specialties for the Klondike trade and other heavy goods.

A. J. Corriveau, Montreal, and associates are seeking incorporation as the North Shore Electric Railway Company, to build an electric railway from Three Rivers, Que., to Montreal.

The Vancouver Smelting Company has been incorporated in London, England, with a capital stock of £250,000. The company will build a million dollar smelter and refinery in Vancouver, B.C.

A \$30,000 steamer capable of making eighteen miles an hour, has been launched at Pembroke, Ont.

The Building Committee of the House of Industry, Toronto, have decided on the addition of two wings to the institution to cost \$13,000.

The American Lake Superior Power Company, is asking for bids for the construction of a water power canal at Sault Ste. Marie, Mich. The canal will be one and one-half miles long, 200 feet wide and twenty two feet deep. The work is one of great magnitude, involving the expenditure of several millions of dollars.

**A FREE
Scholarship**

in a High Grade Business College is worth winning. **ENTRANCE** and **LEAVING** Candidates for the next examination have the chance this year. By writing to the

CENTRAL BUSINESS COLLEGE

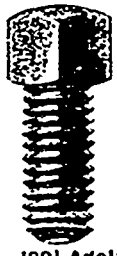

OF TORONTO.

Stating name, address, teacher, school, and which Examination, all information about competition will be cheerfully furnished. Mention this paper.

Address,
W. H. SHAW, Principal,
YONCE AND GERRARD STS., TORONTO.

TORONTO MACHINE SCREW CO.

Manufacturers
of

**Hexagon
AND
Square
Head Cap
Screws.**

Steel and Iron
Set Screws.
Hanger and
Plumber Bolts,
Studs, etc.

Send for Price List
and Discounts.

109 1/2 Adelaide St. W., - TORONTO.

R. C. Jamieson. A. T. Higginson.

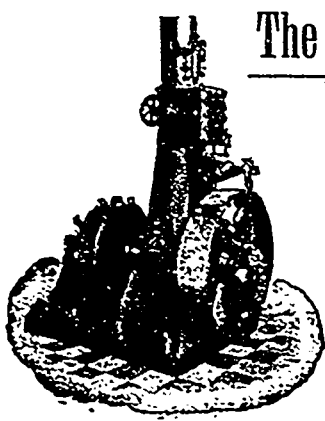
R. C. JAMIESON & CO.

Manufacturers of
Varnishes and Japans.

Importers of Oils, Paints, Colors, Turpentine,
Methylated Spirits, Shellacs, Rosins,
Glues, Gold Leaf, Bronze, etc.

OFFICE—13 ST. JOHN STREET.
FACTORY AND WAREHOUSE—23 to 29 ST.
THOMAS STREET.

MONTREAL.



The Whitelaw-Shepherd

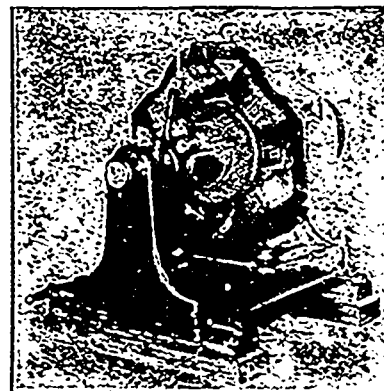
...ENGINE...

SIMPLICITY, COMPACTNESS,
PERFECT REGULATION,
ECONOMY,
AUTOMATIC LUBRICATION.

For Electric Lighting Mills, Factories,
and other purposes where Economy,
close regulation and enduring service
is required.

Manufactured by..... **R. WHITELAW, Woodstock, Ont.**

The Electrical Construction Co., OF LONDON, LIMITED.



**MULTIPOLAR MOTORS
AND DYNAMOS**

AND
Direct Connected Plants
FOR ISOLATED LIGHTING.

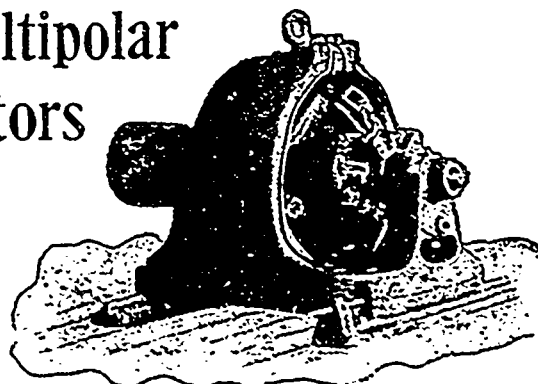
Head Office and Factory:
**No. 90 York St.,
LONDON, Can.**

750 Main Street,
WINNIPEG.
12 York Street,
TORONTO.

**Direct Current Multipolar
Generators and Motors**

The simplest and most
efficient Line of
Direct Current
Machines ever designed,

1/2 H. P. up.



The name of
WESTINGHOUSE
Is a guarantee.

Westinghouse

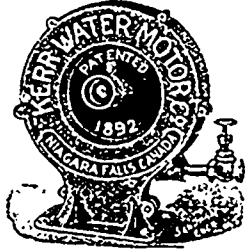
Electric & Mfg. Co.,
Pittsburgh, Pa.

New York, Boston, Chicago, Cin-
cinnati, Philadelphia, St. Louis, San
Francisco, Buffalo, Syracuse, At-
lanta, Tacoma, Austin, Mountain
Electric Co., Denver. For Canada,
Ahearn & Soper, Ottawa. For
Mexico, G. & O. Braniff & Co.,
City of Mexico. Westinghouse El-
ectric Co., Ltd., 32 Victoria St.,
London.

KERR Water Motors

1/8 to 20 HORSE POWER.

Noisiloss Running, Require No Attention, operated with water at a pressure of 30 pounds and upwards.

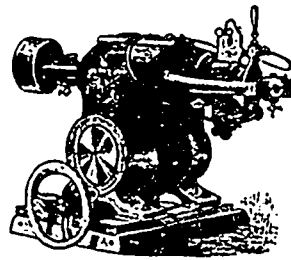


Reliable intending purchasers can have our Motors on trial by writing us, stating water pressure available, power required and class of work to be done. Our Motors are sold on their merits. Our prices are low. Enquiries solicited and cheerfully answered.

.. WRITE US ..

KERR WATER MOTOR CO.,
NIAGARA FALLS, CANADA.

Jones & Moore Electric Company



Manufacturers

DYNAMOS AND MOTORS
1 to 100 K.W.

SLOW SPEED MOTORS

A SPECIALTY.

200 Light Dynamo, second hand, cheap.
6 H.P. Motor, second hand, cheap.
1/2 H.P. Motor, second hand, cheap.
and several others.

22 Adelaide Street West, - Toronto.

Messrs. J. E. Smith and H. B. Murphy are establishing a reed and rattan factory at Falmouth, N.S.

The Ossekeag Stamping Co., Hampton, N.B., has commenced the manufacture of enamelled ware.

The R. S. Williams Co. have been awarded the contract for a new pipe organ for Memorial Church, London, Ont.

Charles Austin Barnard, of Montreal, and others have been incorporated as the Kennedy Company, to manufacture boots, shoes, hats, clothing, etc.

The Canadian Yukon Lumber Company, Montreal, is being incorporated with a capital stock of \$100,000.

John Gillies, Carleton Place, Ont., and others, are applying for incorporation under the name of the Lake Temiscamingue Navigation Company, capital stock to be \$25,000.

J. W. Cameron, Ingersoll, Ont., manufacturer of pitching machines, etc., has sold out to M. T. Buchanan & Co.

Munn & Murphy, Kearney, Ont., manufacturer of chair material have dissolved. A. E. Munn continues.

The Lac Du Bonnet Mining, Developing and Manufacturing Company, Winnipeg, Man., has been incorporated.

The Thamesford, Ont., cheese factory is making an average of sixteen boxes of cheese a day.

The Brock Woolen Company, Simcoe, Ont., are working overtime.

The new wool clip is coming forward slowly. A year ago Toronto dealers were paying 20 to 21c. for washed, and 12c. for unwashed. Now they quote 10c. to 10 1/2c. for unwashed and 16c for washed.

The Sheppard Publishing Company, Toronto, will add another story to the Saturday night building.

Hon. John Haggart, Perth, Ont., and others, have been incorporated under the name of "The Canadian Electric and Water Power Company" with a capital stock of \$150,000, to produce and distribute electricity in Perth, as well as in other towns in Canada.

The Simpson Company, Berlin, Ont., shipped four car loads of furniture during the second week of May.

The Sherbrooke, Que., Gazette, gives an account of the visit of a party of Sherbrooke gentlemen to the Royal Paper Company's Mills at East Angus, Que., and the result of their observations. The new pulp mill has just been erected on the ruins of the old one recently burned. It is in itself a large factory, and is fitted with modern machinery and plant, including six boilers, a rotary furnace, four digesters, etc. The paper mill has a capacity of 15 tons of book and writing paper per day and is up-to-date in every particular. There is a large sawmill in connection which is also provided with the latest appliances.

Charles Cochran Corneille, merchant of Montreal, and associates, including David L. Baumgarten, of Cincinnati, Ohio, are applying for incorporation as the Sun Light Gas Co. The chief place of business will be Montreal. Apparatus for the production of Acetylene gas will be manufactured.

The Chicoutimi, Que., Pulp Company, is turning out 40 tons of ground pulp daily, all for the British market. It has entered into an arrangement with the town of Chicoutimi to add to its establishment a sulphite fibre mill, to be erected at a cost of \$250,000.

To MANUFACTURERS.

Bar Iron, Steel, Boiler Plate, Rivets, Tubes,
Tube Expanders, Hammers, Metallic
Letters and Figures for Patterns.

RICE LEWIS & SON, (LIMITED).

COR. KING AND VICTORIA STS., - ...TORONTO.

Keep your Belts from Slipping and Preserve them by using

STICK FAST
FELT DRESSING.



REGISTERED.

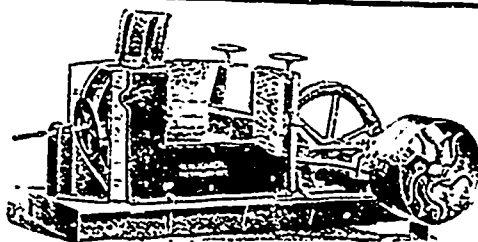
Guaranteed to keep any Belt from slipping the moment it is applied; also to keep Belts from cracking.

This Dressing will save you power and money.

Give it a trial order. Hundreds of testimonials from users.

H. R. RIDCUT & CO.,

Railway, Mill, Foundry and Engineers' Supplies,
22 ST. JOHN STREET, MONTREAL.



H. W. KARCH

HESPELER, ONT.

IRON FOUNDER and MACHINIST

Manufacturer of

WOOLEN MACHINERY,

Rotary Fulling Mills, Kicker Fulling Mills, Soaping Machines,
Cloth Washers, Wool and Waste Dusters, Rag Dusters, Drum Spool Winders,
Reels, Spooling and Doubling Machines, Ring Twisters, Card Creels,
Dead Spindle Spooler for Warp or Dresser Spools,
Patent Double-Acting Gig Dyeing Machines.

The street railway is now graced by a handsome new closed-in-car, built by Paterson & Corbin, St. Catharines. It is longer and wider than any of the old cars, leaving it much more comfortable. It has double doors, which work automatically, and is quite metropolitan in appearance.—Thorold Post.

The Ashcroft Water, Light and Power Company, will erect a power house on the Bonaparte River, about three miles from Ashcroft, B.C., and install an electric plant to furnish light and power to Ashcroft, and for irrigating purposes.

A correspondent of The Paper Mill recently interviewed a gentleman who had just returned from a trip through the Dominion. He is interested in the paper mill business, and makes it a business to keep in touch with what is going on in Canada among the mills. He stated that a new company has been incorporated for the purpose of building a pulp mill on the Sissiboo river, near Weymouth, N.S. In Dartmouth, N.S., a proposition is being considered to bonus a pulp mill which is to have an output capacity of about 20 tons a day. The promoters have secured options on a fine water power, as well as land in the town. He had information that certain Ottawa people were looking for a suitable site and reliable water power, with the intention of building a large pulp mill. It had been stated that if

the site and power were available, building operations would be commenced during the summer. He had learned that considerable capital was ready to invest in pulp making in Canada, as it was considered a good field for profit, considering the way the paper and pulp trade is now looking.

A scissors manufacturing company is carrying on negotiations with St. Catharines Ont., with a view to locating in that city.

The Waterloo Woolen Co. have just completed a large order for Klondike goods for the Sanford Mfg. Co., Hamilton, Ont.

The capital stock of the London Electric Company, London, Ont., is being increased from \$200,000 to \$250,000.

Bicycles are now being manufactured at the Moncton Manufacturing Company's works at Moncton, N.B.

The Thornbury Woolen Mills, Thornbury, Ont., were burned a few days ago.

At a recent meeting of property owning electors, of Valleyfield, Que., it was decided to grant a bonus of \$10,000 to the Northrup Loom Co., a bonus of \$5,000 to the Cie Generale des Boissons Canadienne, and a bonus of \$300 to provide a ferry boat between Coteau and Valleyfield.

N. P. Tanquay has bought the sawmill of R. H. Cross at Weedon, Que., and will replace the steam power by electricity.

Barrington Bros. & Co., trunk manufacturers Montreal, offer to remove their factory to Lachine for a bonus of \$15,000.

The Cataract Power Company expect to be ready to furnish power to customers in Hamilton by July 1st.

Four new 10-wheel Mogul freight engines were recently added to the equipment of the Ottawa and Parry Sound railway.

Mr. Thos. Barnes, representing the Hamilton Iron Smelting Works Co., has been in town for the past few days looking up new properties for the company, as it is their present intention to increase their works. The company is now shipping 110 tons of ore per day from the following mines: Old Hemette 50 tons, Cook-Thompson 30 tons and McLone 30 tons.—Marmora, Ont., Herald.

The newest industry in Paris is the manufacture of the shoulder brace for which Mr. A. Copeman has applied for a patent. A representative of the Ballingall, Copeman Co. last week submitted samples to Toronto and London wholesale houses and secured good orders, which have since been supplemented by still larger. Machinery, now being made by Peter Hay, Galt, will be shortly installed, when the firm anticipate giving employment to from a dozen to twenty hands.—Paris Review.

THE - - -

WM. HAMILTON MANUFACTURING CO., Limited

MANUFACTURERS OF

THE "RELIANCE"

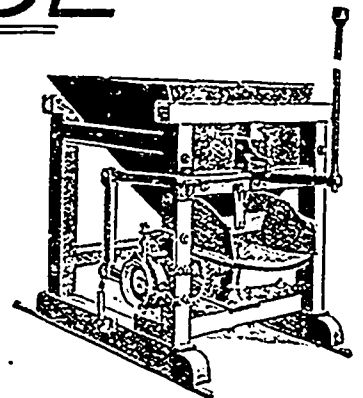
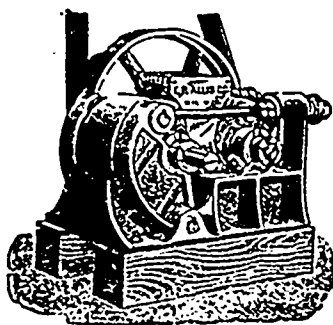
Mining, Milling

AND

Smelting Machinery

FOR THE DOMINION OF CANADA

(Under License from The E. P. ALLIS CO., Milwaukee, Wis.)



Crushers, Rolls, Jigs, Concentrators, Screens, Stamps, Pumps, Compressors, Hoists, Boilers, Engines, Water Wheels, Etc.

Branch Office
VANCOUVER, B.C.

 PETERBOROUGH, ONT.

A pulp mill is to be erected at Millon Vache, near Tadoussac, on the Saguenay River, Que., by Mr. Drow.

The Chicoutimi Pulp Company has asked the town of Chicoutimi, Que., for a bonus of \$30,000, in consideration of which they agree to build a large sulphite pulp mill, in addition to their present mill. They agree to expend in all some \$250,000.

E. F. Head and A. C. Boyce, Rat Portage, Ont., will ask incorporation as the Rat Portage Cold Storage Co., to build a \$50,000 cold storage plant at that place.

Mr. Galbraith, of Parry Sound, Ont., has

taken over the Beatty mill property at that place, which he will convert into a lumber mill and furniture factory.

The City Council, of Halifax, N.S., have voted \$50,000 bonus towards the erection of a grain elevator there.

The premises in Brantford, Ont., until recently occupied by the Verity Plow Co., are being remodelled and will be occupied by the Gould, Shapley & Muir Co.

S. R. Wickett, of Toronto, and associates have been incorporated under the name of the Westminster Mining Company, of Toronto, with a capital stock of \$195,000.

The Lakeport, Ont., Preserving Co., will rebuild its factory destroyed by fire some time ago.

The P. & A. Corset Co., Farnham, Que., is being incorporated with a capital stock of \$50,000.

The Amherst Prospecting and Mining Company, Amherst, N.S., has been incorporated with a capital stock of \$50,000.

The roller shovel shop of the D. F. Jones Manufacturing Co., Gananoque, Ont., was burned a few days ago.

The St. John Sulphite Co., of St. John, N.B., announce that they are in the market for large quantities of pulp wood.

Samuel Clark, Duncan Clark and associates of Toronto, have been incorporated under the name of The Toronto Grain and Seed Cleaner and Grader Manufacturing Company with a capital stock of \$40,000.

The ratepayers of Orillia, Ont., will shortly be asked to vote the sum of \$75,000 for the proposed Ragged Rapids Power scheme.

The town of Fort William, Ont., purposes spending \$40,000 in the construction of a system of waterworks.

**CANADIAN
CHEMICAL
COMPOUND
COMPANY**

**CORRECTLY
COMPILED
CHEMICAL
COMPOUNDS**

**CIVILITY
CAREFULNESS
COMPLETENESS
CONTINUITY**

SAVE COAL! SAVE COAL!

USE OUR SPECIALLY PREPARED

COMPOUNDS

SAFE—SURE—AND RELIABLE.

See that our Paper Brand is on the Package.

ZINKOLINE
Will Save You Money.

Office at—
310-311 Temple Bldg.
TORONTO.

FOR
SALE OR LEASE
For term of years,
LARGE
FACTORY PREMISES
AT KING ST. SUBWAY, TORONTO.
Ground Floor Area, 36,000 feet.
Railway sidings and other City facilities.
LIBERAL TERMS.
LAND SECURITY COMPANY.
11 Victoria St., Toronto.

THE OTTAWA PORCELAIN AND CARBON CO., Limited, OTTAWA, ONT. . . .

MANUFACTURERS OF

CARBON POINTS

for all kinds of Arc Lamps, including Cored and Solid Carbon for Incandescent Circuits.

.....ALSO.....

MOTOR BRUSHES and Specialties in Carbon for Telegraph, Telephone and Electric Light Supplies.

PORCELAIN INSULATORS, Cleats, Door Knobs, and all kinds of Pressed Porcelain for Electrical and Hardware Lines.

ALL GOODS GUARANTEED TO GIVE SATISFACTION.

A Saving.

The first cost is not the test of an actual saving. The truly Economical Manufacturer knows this to be true. For instance, the cheap, trappy Pulley, by its inferior working qualities, is a source of loss to the user the moment it is put in operation, and this loss continues all the time the Pulley is working. You do not get the full or proper results from your power plant. Higher price, though, is not always a sign of better quality, for instance—you may or may not have to pay more for

“THE REEVES” PATENT WOOD SPLIT PULLEY

but in either case you are getting the best value on the market. Because with THE REEVES the saving is continual, in Power, in Time, in Shafting, in Bolting, and last but not least, and as a result of all the other savings, a saving in Money. CAN YOU AFFORD TO BE WITHOUT “THE REEVES”? Is the best too good for you? WRITE TO-DAY FOR OUR CATALOGUE AND GET OUR PRICES.

Also COLUMBUS, IND.

REEVES PULLEY CO., Toronto, Ont.

The Halifax Tramway Co., Halifax, N.S., recently installed a second 5,000 light mono-cyclic alternator for their electric light service, making a total capacity of 16,000 lights.

Most of the lumber mills in the Ottawa Valley have commenced operations for the season. The J. R. Booth mill started with 800 hands, the Hull Lumber Co. with 200, the Bronson and Weston Co. with 350, and Gilmour & Ilughson with 300.

The city council of St. John, N.B., have granted the local Board of Trade \$300 to aid the Board in getting out a book, descriptive of the harbor and the facilities for trade at that port.

The Londonderry Iron Co. are receiving large orders for culvert pipes. They recently shipped a carload to Messrs. J. H. Townshend & Co., contractors for the Coast Railway Co.

Messrs. Rhodes, Curry & Co., Amherst, N.S., who were burned out less than two months ago, already have new buildings nearing completion. They will give employment during the summer to 200 hands in the carshops alone.

Mr. J. W. Daly, of Cartwright, Man., and associates, are applying for letters of incorporation as The Mather Joint Stock Farmers Elevator Company, Ltd. It is proposed to erect an elevator at Mather Siding, Man.

The city council of St. Henri, Que., have authorized Mr. L. N. Senecal, the city clerk, to use his new patent on the St. Henri fire engine. The patent is an ingenious arrangement by means of which the engine is driven by electricity instead of steam.

Messrs. W. P. McNeil & Co., New Glasgow, N.S., have shipped two new bridges, one to Canada Creek Keings Co., and one to Wilmot Annapolis Co. They also have four more bridges in course of construction.

Messrs. I. Matheson & Co., New Glasgow, N.S., have the contract for overhauling the machinery of and putting a new boiler in the steamship John L. Cann.

The Condensed Milk & Canning Co., of Truro, N.S., have ordered a fifty horse power engine from the Robb Engineering Co. to replace the one destroyed in their recent fire.

The Lakeport Preserving Company's factory at Lakeport, Ont., was destroyed by fire a few days ago.

A late issue of the Bras D'Or Gazette says that Mr. C. Ochiltree McDonald, of Port Morien, C.B., who returned from England last month, is instructed by the Newcastle Coal Syndicate, which he represents, to call for tenders for sinking shafts, and putting up mining works on the coal property which his syndicate has acquired at Port Morien.

The Eureka Mineral Wool and Asbestos Co., 136 Bay St., Toronto, have increased their lines of business, having added a large and complete stock of engine packings, lubricating oils, grease, boiler compound, etc., and they are now ready to supply any of these goods to consumers and the trade.

A. Schneider & Co., Pearl St., Toronto, manufacturers of electrical machinery, etc., have moved to 106 York St.

The Russell Theatre, the Sun Life Insurance Building, the Hotel Cecil, the Harmony Hall, and Grand Opera House. These boilers are installed by E. A. Wallberg, Montreal.

G. B. Burland, Montreal, has installed a Kingsley water tube steam boiler plant, in the Union Card and Paper Co.'s new works. This is the second order that Mr. Burland has given for Kingsley boilers after using them for four years. They are installed by E. A. Wallberg, Montreal.

The Western Loan & Trust Co., Montreal, is installing a new heating system in their building, using the Kingsley water tube boiler installed by E. A. Wallberg, Montreal. David Ogilvy is the architect.

The drying and shipping of eel-grass to Montreal and the United States is becoming quite an industry in Yarmouth, N.S. It is used for making certain classes of paper and for sheathing purposes.

Factory for Sale.

A large, convenient and well-located factory, situate on Barton street, Elgin and Mary streets in the

CITY OF HAMILTON.

With Engine, Boilers and Shafting, suitable for any purpose. Adjacent to G.T.R. railway track. For particulars apply to

W. M. COCKBURN,

11 Toronto Street, Toronto, or

F. H. LAMB,

65 King Street East, Hamilton.

EMERALD-BOILER-OIL

1-16 of an inch of Boiler Scale adds 15 per cent. to the fuel account. Emerald Boiler Oil gives the most perfect results with all kinds of water. It's a Pure Petroleum Extract. It is an effective agent for removing scale from Boilers.

"ATLANTIC RED" "BAYONNE" ENGINE.
"CAPITOL" CYLINDER. "RENOWN" do.

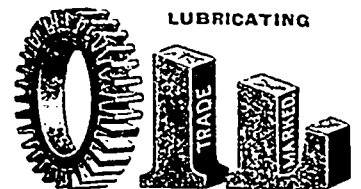
The Very Best that is Made.

All information and Samples Furnished Freely.

The Queen City Oil Co., Limited,

SAMUEL ROGERS, President.

TORONTO.



BELTING

E
L
L
I
N
G

Leather Belting,
Lancashire Hair,

English
Card Clothing,

D. K. McLAREN

Head Office and Factory—
VICTORIA SQUARE, - MONTREAL
Stock Depots—Ottawa, Galt.

OAK

E
N
D
I
N
E

WESTERN TRADE:—

Our Mr. R. M. W. McLaren, in charge of Galt Branch, will be pleased to give quotations as well as receive orders.

STORAGE BATTERIES

THE LIGHTEST. THE STRONGEST. THE BEST.

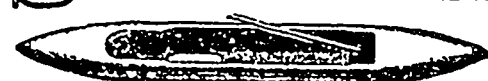
If you use Electricity we Batteries Repaired and Recharged
can save you Money. at Reasonable Rates.

The Croftan Storage Battery Co.

W. M. H. NELLES. CANADIAN BRANCH. REIN WADSWORTH.

22 Sheppard Street, Toronto, Ont.

SHUTTLES



BOBBINS
SPOOLS
PICKER
STICKS
CLOTH
ROLLS, Etc.

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

THOMPSON & CO., Manufacturers of

BOBBINS and SPOOLS

FROM SELECTED STOCK.

Correspondence Solicited
Orders Promptly Filled.....

• SHERBROOKE, P. Q.

Burr Bros., manufacturers of furniture, Guelph, Ont., have sufficient orders ahead to keep the factory running for the next six weeks at full time.

No less than 32 boot and shoe factories are in full operation in Quebec city. They employ in all about 4,500 hands and turn out 30,000 pairs of boots and shoes per day.

The Dominion Government has voted \$250,000 for increased accommodation of the I.C.R. at St. John, N.B., and \$75,000 to build an elevator at the same place. An appropriation of \$75,000 has also been made to build an elevator at the Port of Halifax. This amount will be supplemented by the Halifax City Council to the extent of \$50,000.

Robert Shaw, of Avonport, N.S., has recently equipped a brick yard with the most improved machinery consisting of a 40 h. p. engine, a 45 h. p. boiler, a new Quaker mill for making bricks by the moulding process, and a Kelts combined brick and tile mill. The latter cuts the bricks or tiles at the ends by wire. The tiles are to be made from 2½ inches to 10 inches in diameter.

D. K. McLaren, mill furnisher and manufacturer of oak tanned leather belting, at Montreal, Ottawa and Galt, is hard at work in his new factory turning out the belts ordered by Messrs. W. Doherty & Co., for their new organ factory at Clinton. This order amounts to upwards of three thousand feet, including two dynamos, and was placed through his Galt stock depot.—Galt Reporter.

A new flour mill is to be built at Keowatin, Man.

Fire at Aylmer, Ont., a few days ago destroyed the planing mill, blacksmith shop and residence of John Watts. Loss about \$15,000.

The Winnipeg Industrial Exhibition Association will hold their annual exhibition this year from July 11th to 16th inclusive.

The Cockshutt Plough Co., Brantford, Ont., who spent \$20,000 in improvements last year, contemplate still further expenditures for alterations and improvements this year.

The Galt Lumber Co., Galt, Ont., has received the contract for supplying the lumber for the new Turnbull factory. Over a quarter of a million feet will be required.

Operations have begun at the Chalcraft screw works, the new industry established at Brantford, Ont.

The English Bay Canning Co. has been incorporated with a capital stock of \$50,000. The head office of the company will be in Vancouver, B.C.

The business of the Brantford Box Company has increased to such an extent that it has been decided to erect large additions to their factories, and put in additional machinery.

The Tilbury, Ont., handle factory is now running overtime, being pressed with orders, which include twelve car loads for shipment to England during the next four months.

Messrs. Rhodes, Curry & Co., Amherst, N.S., recently sent out ten new cattle cars for the I.C.R. They are at work on other cars for the I.C.R., the Dominion Coal Co., the Broad Cove Coal Co., and the General Mining Association.

Charles Fawcett will double the capacity of his flour and feed mill at Moncton, N.B.

The works of the Ossekeag Stamping Co., at Hampton, N.B., are now in active operation. The range of the company's production is quite large, including stamped, pieced, japanned, galvanized, and retinned tinware of all kinds. The plant is distributed throughout five buildings, which are very conveniently situated on the line of the I. C. R., and thus makes shipping and receiving their goods very expeditious. The plant which is employed in the manufacture of the goods, was all bought in London, Ont., and is massive and particularly suited to the requirements of the company. The entire premises are supplied by light from their own electric plant, and an average of 100 to 125 hands are employed.

The Amherst Red Stone Quarry Co., start the season with prospects for work that exceeds those of any year yet. A large area has been cleared and the indications are that the stone improves steadily in quality as it extends westward. There is now in sight a broad escarpment of magnificent stone which is being taken out with little work, and hundreds of tons of stone suitable for cellar walls, etc., are within easy access. The company have put in a new boiler and have a steam drill at work. The latter is proving a great savor of labor; with it a hole can be made in five minutes that by the drill and hammer process would take three men two hours. A carload of excellent stone was sent forward to Ottawa, and the company have been invited to tender on some of the best buildings now in contemplation in the lower province cities. At present twenty-one men are employed.—Amherst, N.S., Press.

The Canadian Manufacturer

TORONTO, CANADA.

The Official Organ of the Canadian Manufacturers' Association,

Which Represents all the Important Manufacturing Industries of the Dominion.

EXPORTERS FROM CANADA

Desiring information regarding the best facilities for shipment abroad, with whom Correspondence may be had, and to whom Consignments may be made, should correspond with

THE CANADIAN MANUFACTURER,
TORONTO, CANADA.

NO CHARGE MADE FOR GIVING INFORMATION.

BUSINESS BRINGERS.

Paying Pointers for Wide-awake Business Men who are Watching for Trade Opportunities.

The congregation of the First Methodist church, Picton, Ont., will build a new edifice to cost about \$22,000. Messrs. Power & Son are the architects.

Mayor Fowke and Mr. T. H. Everson, of Oshawa, Ont., have formed a joint stock company to be known as the Oshawa Grain and Produce Company, with a capital of \$25,000 for the purpose of buying and selling all kinds of grain, seeds and farm produce, and of doing a general warehousing and storage business. A large grain elevator and fruit house will be constructed at once.

A two-room brick school building is to be erected at Scarboro Junction, Ont. Messrs. Simpson & Ellis, Toronto, are the architects.

Hintonburg, Ont., is raising \$7,000 for the erection of a school building.

J. Brown, Toronto, is asking the city of Guelph, Ont., to grant a bonus of \$50,000 to the Smelting Mfg. Co. which he represents, as an inducement to erect smelting works there which will cost \$135,000.

The new C.P.R. grain elevator to be built at St. John, N.B., will cover an area of 182x94 feet, and be 148 feet high.

Irwin Joyle, Fulford, Que., will build an electric lighting plant there for commercial purposes.

The present season promises to be an unusually busy one in Quebec. The corporation has \$250,000 to spend on improvements, the Harbor Commissioners will build a \$350,000 wharf, while the amalgamation of the Quebec District Railway with the Quebec, Montmorency & Charlevoix Railway, will necessitate extensive works, the cost of which is not yet known.—Trade Review.

The congregation of Knox Church, Toronto, have decided upon improvements to cost \$4,500. A galvanized iron roof will be put on, the main entrance improved, the basement, including Sunday school room, remodelled, and the interior of the auditorium painted.

The Dominion supplementary estimates include the following appropriations: Intercolonial Railway—improvements to Dalhousie wharf, \$3,600; increased accommodation at Moncton, \$40,000; to pay for replacing a wooden trestle by masonry, culvert and solid embankment, \$2,450; dredging at deep water terminus at St. John, \$5,000; snow plough for Cape Breton district, \$2,500; lengthening engine stalls and turn table, \$5,000. Windsor, N.S., public building—reconstruction of building destroyed by fire on October 17th, \$15,000; drill shed—reconstruction of building, \$3,000. Prince Albert, N.W.T., court house and jail accommodation—new works and repairs, \$6,900. Public buildings, Ottawa—for increased heating apparatus and gas fixtures, etc., Langerin Block, \$1,700. Coteau Landing—dredging, \$11,000. Dredging Kingston harbor, \$6,000. Examinations, etc., Stikine river, \$14,000. Dredging—Nova Scotia, Prince Edward Island and New Brunswick, \$10,000; Quebec and Ontario, \$10,000. Bow river bridge at Banff, repairs, \$2,500.

A new Methodist church is to be built at Chesley, Ont.

T. C. Douglas, Reove, North Dumfries, Ont., is inviting tenders for the erection of a bridge with necessary stone or wood abutments, over Grand River, near Galt, Ont. The bridge is to be 395 feet long, about 16 feet high with 10 or 12 feet roadway, of either iron or wood, capable of sustaining a strain of not less than 6 tons.

The erection of church edifices in the Province of Quebec seems to be on the boom. A Sherbrooke architect has furnished plans for the following Roman Catholic churches to be built this summer. At Marbleton, foundations already laid, completed by November 1st, cost \$8,000; at Garthby, of wood, finished by November 1st, cost \$11,000, at Barford, granite with cut stone front, foundations already laid, finished by January 1st, cost \$19,000; at St. Cecile de Whitton, of wood, finished in autumn, cost \$6,000; at Factoe's Mills, chapel of wood, finished in June, cost \$3,000; at Island Pond, finished in autumn, cost \$9,000; restoration of church at Paquetville, \$7,000.

Architect W. W. LaChance, Hamilton, Ont., has completed plans for the following work, all of which will be proceeded with immediately: A three story and basement factory building for E. T. Wright & Co.; a two-story addition to the school building at Stony Creek, school section No. 3, Saltfleet; an office building and steel coal sheds, covering 21,000 square feet of ground space, for Homming & Marshall.

Architect Knechtel, of Berlin, Ont., has prepared plans for alterations in the high school building in that town to cost \$3,200. The plans provide for a plumbing system and a hot water heating apparatus.

The authorities of Winnipeg University are considering the question of erecting new buildings. The Dominion Government has granted to the University six acres of land, and upon this University buildings and probably a Normal and Model school will be erected.

David Ouellet, architect, Quebec City, has been instructed to prepare plans for a church for the parish of Sayabec.

An agitation is on foot to establish a factory in St. John, N.B., to cure bacon and hams for the English market.

HAMILTON COTTON CO.

HAMILTON, ONTARIO.

YARN MANUFACTURERS, DYERS, AND BLEACHERS,

Warp Yarns of all descriptions, in Skein, Chain or on Beams.
Hosiery Yarns in Single or Double; in Cop, Skein or Cone.
Yarns of all kinds for Manufacturers' use.

Twines, Lampwicks, Webbing, Etc.

Dyeing of all colors, including GENUINE FAST BLACK.

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

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO.

Limited

CAST IRON PIPE

3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers

Special Castings and all kinds of
WATER WORKS SUPPLIES

FLEXIBLE AND FLANGE PIPE.

HAMILTON, ONT.



BENT WOOD SPLIT PULLEYS, RIM... (REID'S PATENT).

The Strongest, Lightest and Best Belt Surface in the World

No Glue, no Nails in Rim like Segment Rim Pulleys, to be affected by Steam, Dampness or Moist Temperature.

EVERY PULLEY GUARANTEED.

The Reid Bros. Manufacturing Co., of Toronto,
257, King St. West, Toronto.

Messrs. J. Z. Long & Son, architects, St. Thomas, Ont., are asking for tenders for the erection of a brick and stone twelve room school building to be erected in that city.

C. J. Brown, city clerk of Winnipeg, Man., is advertising for tenders for the construction and supply of a system of wells and pumping plant for the supply of 4,000,000 gallons of water daily to that city.

W. E. Binning, town clerk of Listowel, Ont., is asking for tenders for power house, steam boiler, elevated storage tank, water mains, valves, hydrants, etc., for that town.

J. A. Cockburn, clerk, Crysler, Ont., is asking for tenders for deepening, widening, straightening and otherwise improving the Payne River and Beaver Creek near that place.

N. R. Darrach, architect, St. Thomas, Ont., has charge of the erection of a brick and stone school building in that city.

John Shaw, Mayor of Toronto, is asking for tenders for placing elevators in the new city buildings.

A new Methodist church and schoolhouse is to be built at Picton, Ont.

A new Presbyterian church is to be built at Windemere, Ont.

Kalso, B.C., is offering a premium for accepted plans for municipal buildings to be erected at that place.

A new Methodist church is to be built at Hampshire, Ont.

The town of Prescott, Ont., wants water works, and will try to raise \$100,000 for that purpose by the sale of debentures.

It is estimated that commercial buildings will be erected in Winnipeg this year to cost not less than \$700,000.

Tenders are invited for building a three storey brick hotel for the C.P.R. at Moose Jaw, N.W.T., to cost \$30,000.

Mr. J. C. Dumaresq, architect, Montreal, is inviting tenders for a bank building in Moncton, N.B., as well as for a number of other buildings both in Moncton and Montreal.

The city engineer of Brantford, Ont., reporting on the best method of protecting certain parts of the city from flood, recommends the construction of works that would cost about \$40,000.

The town of Woodstock, N.B., is to have a new electric fire alarm system. H. D. White, of Fredericton, is preparing the specifications.

The plans of Simpson & Ellis, architects, Toronto, have been accepted for a public school building at Scarborough Junction to cost \$3,500. The same architects are preparing plans for a school building for Prince Albert, N.W.T.

The Dominion Government will ask for new tenders for the reconstruction of the breakwater and repairs to piers at Goderich, Ont., the original contractor having been compelled to throw up the work on account of ill health.

The following appropriations were included in the supplementary estimates presented to the British Columbia legislation: Jail at Vernon, \$12,000; furniture at court house, Vancouver, \$2,000; registry office at court house, Victoria, \$7,000; recorder's office and lock-up at Teslin Lake, \$10,500; lock-up at Stikine river; protection to town of Golden, \$1,100; protection work, Columbia river, near Revelstoke, \$16,000; dredging and dyking plant, \$8,000; new wing to Asylum for Insane, \$16,000.

The Northrop Loom Co., of Canada, are about erecting a factory in Valleyfield, Que., for the manufacture of the Northrop patent loom, for use in Canada. This company has been incorporated for this purpose with a capital stock of \$100,000 with Mr. A. F. Gault as president, and for directors Messrs. A. F. Gault, Geo. Otis Draper, of Hopedale, Mass., R. R. Stevenson, Samuel Findlay and Louis Simpson, general managers of the Montreal Cotton Company. The erection of the new factory buildings will be begun during the present month, and it is expected that the work will be in full operation early in the coming fall, when the output of looms will be about twenty per week. Quite a large number of these looms manufactured by the Draper Company, Hopedale, Mass., are now in operation in the Valleyfield mills of the Montreal Cotton Company, giving so much satisfaction that the management of that mill are convinced that no concern manufacturing plain clothes, especially with the lower counts of yarn, can afford to be without them.

The Eureka Mineral Wool and Asbestos Co., Toronto, have the contract for covering the steam and refrigerating pipes of Harris & Co.'s, abattoir, Toronto, also the pipes in new building corner King and Yonge Sts., Toronto, and the steam pipes in Firstbrook Bros. new box factory, Toronto. They have just completed covering the steam pipes of the entire plant of the St. John Ry. Co., St. John, N.B.

JOHN J. KELLER & CO.

104 and 106 MURRAY ST.
NEW YORK

220 Church St., Philadelphia.

135 Pearl Street, Boston.

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

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

MANUFACTURED BY

JOHN R. GEIGY & CO.

BASLE, SWITZERLAND

**LIGHT YOUR
FACTORY WITH**

LUXFER PRISMS

The latest device for

LIGHTING

dark rooms and
offices

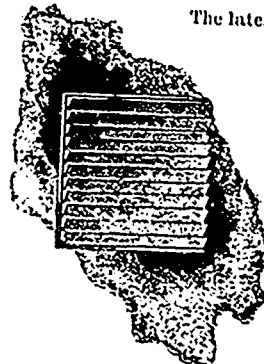
By Daylight

For catalogue
and estimates
write to

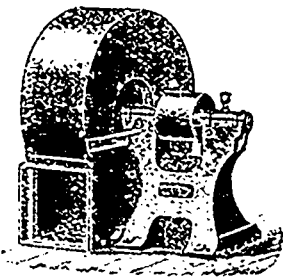
Luxfer Prism

Co'y, Limited.

58 Yonge Street, - **TORONTO.**



**Ventilating Steel-Plate
Fans, Blowers and
Exhausters.**

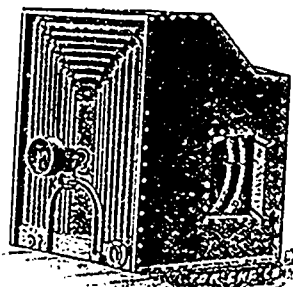


WE have on hand Fans of the Best American Makes, ranging from 15 inch to 72 inch. Also Second-hand Coil Heaters, with Fans to suit, from 1,000 feet to 5,000 feet of inch pipe capacity.

THE ABOVE ARE FOR SALE CHEAP.

Write for Prices and Send for Catalogue.

**McEachren Heating and
Ventilating Co., GALT, ONT.**



CORRESPONDENCE.

Editor of THE CANADIAN MANUFACTURER:

Sir,—I have read in your journal of a novel method of compulsory early rising, but I would call it a very intricate way of doing the work. I will tell you of my way of effecting the same object, and by a more simple apparatus. To start with I procured one of the old style bedsteads, one that I had to get a chair or step ladder to enable me to get up on the bed. I fastened on the foot legs of this bedstead a pair of hinges, three feet from the floor, then with a line saw I cut the legs a trifle on the bevel upwards, so that when cut through the angle would be a trifle over the centre which held them in place. Arranged to a common spring clock which was in the room I connected wire to a small lever with weight attached to the foot legs of the bed, and at whatever hour I wished to be dumped I would set the alarm clock. When the proper hour arrived the alarm mechanism would wind a cord that was at the end of the wire, which would pull a little slide trap that held the weight on the lever, then the weight would come down on the lever, which in turn, would push the sawn legs of the bedstead over the centre, and down would come the foot of the bed, leaving me in an almost standing position. This plan worked to perfection for a time, but one morning being very sleepy I pulled the mattress onto the floor where I slept it out. Then, when I found that I had slept when I should have been at work, I fastened the mattress and bedclothing to the bedstead, which plan worked very well for a time until another sleepy morning came, when, after the usual tumble-down process, I lifted the bedstead

up into its place and had a good sleep, but this particular morning happened to be Sunday and the only trouble was that I got no breakfast. Thinking that I might be induced to indulge again on some other morning, I made a spring lock or catch, so that when the foot of the bed went down the legs were locked in that position, the key being hung up down stairs, and with the knowledge that it was impossible to get another nap on that bed after once upended, I soon became accustomed to the upsetting time and seldom got the upset for I would invariably be out on the floor before the tumble took place. This was twenty-five years ago and I might say that I have not slept in that cut leg tumble down bed for twenty-four years, but for all that when the hour arrives I jump out all the same. It is what I call a sure cure for late rising and morning sleepiness. The contrivance is effective, simple and not expensive, as the whole contrivance costs less than \$5.00, but I assure you that I have had more than five times five dollars worth of fun from that bed. Myself and Mrs. on more than one occasion have arranged that bed for the use of newly married couples, with most remarkable results. You will notice, Mr. Editor, that the ideas and results obtained are the same, only the plan you mention is operated with electricity and mine with the force obtained from the spring of an ordinary alarm clock. There is money in making such beds for the market for they would sell like hot cakes. C. C. C.

Charles F. White's mill at Apple River, N.S., was burned a few days ago. Loss about \$20,000.

**The Pulsometer
STEAM PUMP**

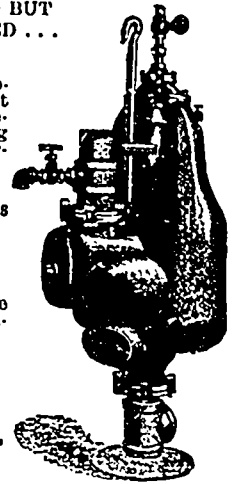
OFTEN IMITATED BUT
NEVER EQUALLED . . .

•••••
The handiest simplest and most efficient steam pump for general Mining, Quarrying and Contractors' purposes.

•••••
Muddy or Critty Liquids Handled without wear.

•••••
Descriptive Catalogue with prices, furnished on application.

•••••
PULSOMETER
Steam Pump Co.
New York, U.S.A.



A. R. Williams Machinery Co.

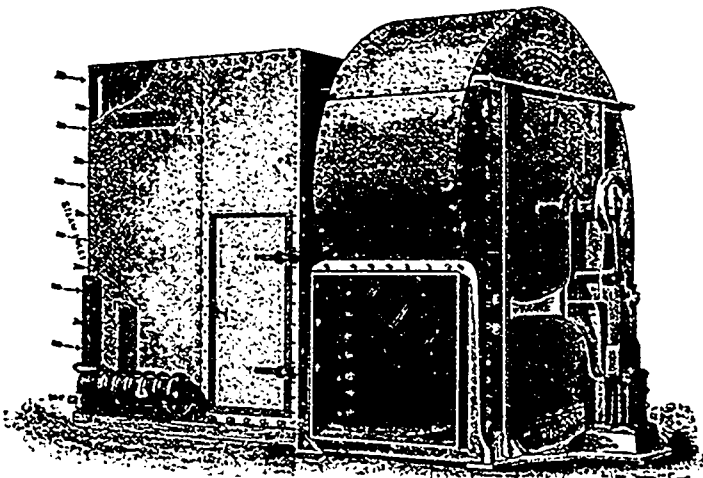
Toronto and Montreal,
Selling Agent for Canada.



THE STURTEVANT SYSTEM

OF

Heating and Ventilating



The Sturtevant Steam Heating and Drying Apparatus

APPLICABLE TO ALL CLASSES OF BUILDINGS

Has had a THOROUGH TEST in the Dominion AND THE Northern Portion of the United States.

Over 300 Plants in Successful Operation in this Cold Climate.

Send for Catalogue No. 84, Describing this System and No. 86, Showing 2,500 Representative Buildings Heated and Ventilated

B. F. STURTEVANT CO.
BOSTON, MASS., U.S.A.

A. R. WILLIAMS MACHINERY CO., LIMITED
General Canadian Agents
Toronto, Brantford, Montreal

**For . . .
Drying**

{ This Apparatus is unexcelled for Lumber, Cotton, Wool, Hair, Brick, Pottery, Glue, Soap, Cloth and all Textile Goods.

TARIFF AMENDMENTS.

In the issue of THE CANADIAN MANUFACTURER of August 6, 1897, was published the full and entire Canadian Tariff, compiled from official sources; and in the same issue the United States Tariff, the British Tariff and the British Merchandise Act and the Newfoundland Tariff. At the session of the Dominion Parliament just closed, the following amendments were made to this Canadian Tariff, and it would be well if our readers who desire to be correctly informed as to the tariff as it is at this date read the amendments here given in connection with what appeared in our Tariff Edition of last August.

SCHEDULE "A."

1. That it is expedient to repeal section six of "The Customs Tariff, 1897," and to substitute the following section therefor:

6. The importation into Canada of any goods enumerated, described or referred to in Schedule C to this Act is prohibited, and any such goods imported shall thereby become forfeited to the Crown and may be destroyed or otherwise dealt with as the minister of customs may direct; and any person importing any such prohibited goods, or causing or permitting them to be imported shall for each offence incur a penalty not exceeding two hundred dollars.

2. That it is expedient to provide that section seventeen of "The Customs Tariff, 1897," shall be repealed on and after the first day of August in the present year, one thousand eight hundred and ninety-eight, and that the following section shall be substituted therefor:

17. Articles which are the growth, produce or manufacture of any of the following countries may, when imported direct into Canada from any such countries, be entered for duty or taken out of warehouse for consumption in Canada at the reduced rate of duty provided in the British preferential tariff set forth in Schedule D to this act:

(a) The United Kingdom of Great Britain and Ireland.

(b) The British colony of Bermuda.

(c) The British colonies commonly called the British West Indies, including the following:

The Bahamas.

Jamaica.

Turks Island and the Caicos Islands.

The Leeward Islands (Antigua, St. Christopher-Nevis, Dominica, Monserrat, and the Virgin Islands).

The Windward Islands (Grenada, St. Vincent and St. Lucia).

Barbados.

Trinidad and Tobago.

British Guiana.

(d) Any other British colony or possession the customs tariff of which, on the whole is as favorable to Canada as the British preferential tariff herein referred to is to such colony or possession.

Provided, however, that manufactured articles to be admitted under such preferential tariff shall be bona fide the manufactures of a country or countries entitled to the benefits of such tariff, and that such benefits shall not extend to the importation of articles into the production of which there has not entered a substantial portion of the labour of such countries. Any question that may arise as to any article being entitled to such benefits shall be decided by the minister of customs, whose decision shall be final.

(2.) The minister of customs, with the approval of the governor-in-council, shall determine what British colonies or possessions shall be entitled to the benefits of the preferential tariff under clause (d) of this section.

(3.) The minister of customs may, with the approval of the governor in council, make such regulations as may be deemed necessary for carrying out the intention of this section.

3. That it is expedient to provide that Schedule D to "The Customs Tariff, 1897," shall be repealed on and after the first day of August in the present year, one thousand eight hundred and ninety-eight, and that the following schedule shall be substituted therefor:

SCHEDULE "D."

BRITISH PREFERENTIAL TARIFF.

On articles the growth, produce or manufacture of the United Kingdom of Great Britain and Ireland, or of any British colony or possession entitled to the benefits of this preferential tariff under section seventeen, the duties mentioned in Schedule A shall be reduced as follows: The reduction shall be one-fourth of the duty mentioned in Schedule A, and the duty to be levied, collected and paid shall be three-fourths of the duty mentioned in Schedule A.

Provided, however, that this reduction shall not apply to any of the following articles, and that such articles shall in all cases be subject to the duties mentioned in Schedule A, viz: wines, malt liquors, spirits, spirituous liquors, liquid medicines and articles containing alcohol; tobacco, cigars and cigarettes.

Provided further, that the reduction shall only apply to refined sugar, when evidence satisfactory to the minister of customs is furnished that such refined sugar has been manufactured wholly from raw sugar produced in the British colonies or possessions.

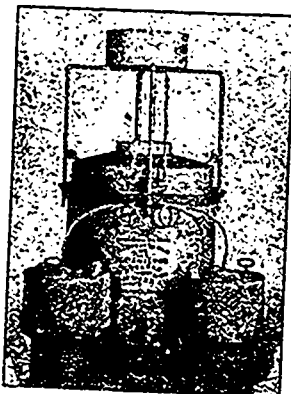
4. That it is expedient to repeal items 435 and 436 of Schedule A to "The Customs Tariff, 1897," and to substitute the following therefor:

435. All sugar above number sixteen Dutch standard in color, and all refined sugars of whatever kinds, grades or standards testing not more than eighty-eight degrees by the polariscope, one dollar and eight cents per one hundred pounds, and for each additional degree one and one-half cents per one hundred pounds. Fractions of five-tenths of a degree or less not to be subject to duty, and fractions of more than five-tenths to be dutiable as a degree.

436. Sugar n.o.s. not above number 16 Dutch standard in color, sugar drainings or pumpings drained in transit, melado or concentrated melado, tank bottoms and sugar concrete, testing not more than seventy-five degrees by the polariscope, forty cents per one hundred pounds, and for each additional degree one and one-half cents per one hun-

Hamilton Acetylene Gas Machine.

SIMPLE, ECONOMICAL, DURABLE AND SAFE.



Adapted for PRIVATE HOUSES, OFFICES, STORES, CHURCHES, or any building where a clear, bright and steady light is required.

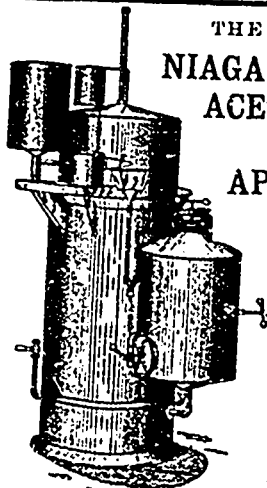
300 in use in Dominion of Canada.

Address Communications to

HAMILTON ACETYLENE GAS MACHINE CO., Limited.

71 York Street, HAMILTON.

THE NIAGARA FALLS ACETYLENE GAS APPARATUS



Patented in Canada, United States and Great Britain.

This is the only machine perfectly automatic in its action, requiring little or no attention. Machines made in 70 Sizes costing \$15 and upwards.

Acetylene Gas the Coming Light.

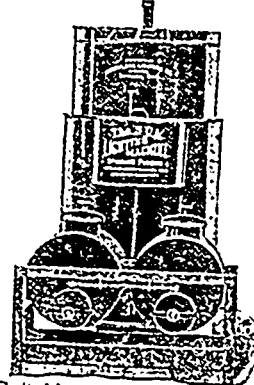
CHEAPER THAN ELECTRIC LIGHT COAL GAS OR COAL OIL

For Private Dwellings, Business Houses Churches, Public Halls and Offices.

For particulars write to the NIAGARA FALLS ACETYLENE GAS MACHINE CO. NIAGARA FALLS, ONT. LIMITED.

Sun Lighting Machine.

ACETYLENE GAS.



The Acme of Perfection in Lighting.

At the Minimum of Cost.

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

Write for Catalogue.

THE

Acetylene Lighting Co.

(LIMITED).

LONDON, ONTARIO.

dred pounds. Fractions of five tenths of a degree or less not to be subject to duty, and fractions of more than five-tenths to be dutiable as a degree. The usual packages in which imported to be free.

5. That it is expedient to provide that items 445 and 446 of Schedule A to "The Customs Tariff, 1897," shall be repealed on and after the first day of July in the present year, one thousand eight hundred and ninety-eight.

6. That it is expedient to provide that on and after the 1st day of July in the present year, one thousand eight hundred and ninety-eight, the following items shall be added to Schedule B to "The Customs Tariff, 1897":

636. Tobacco, unmanufactured, for excise purpose under conditions of the Inland Revenue Act.

7. That it is expedient to provide that on and after the first day of July in the present year, one thousand eight hundred and ninety-eight, in addition to the excise duties at present levied on manufactured tobacco, cigars and cigarettes, there shall be levied and collected the following excise duties, that is to say:

(a). On all foreign raw leaf tobacco, unstemmed, taken out of warehouse for manufacture in any cigar or tobacco manufactory, ten cents per pound.

(b). On all foreign raw leaf tobacco, stemmed, taken out of warehouse for manufacture in any cigar or tobacco manufactory, fourteen cents per pound.

Provided that the weight upon which such duty shall be computed shall be with reference to the standard mentioned in paragraph (c) of section 247 of the Inland Revenue Act.

When the House went into committee of Ways and Means, Hon. W. S. Fielding explained that an error had crept into the tariff act of last session. The votes and proceedings of the House showed that the duty imposed on rubber belting was 25 per cent., but the words "rubber belting and rubber cement" were omitted from the rubber resolution as finally printed, throwing these items under another item at the rate of 20 per cent. The committee restored the duty to 25 per cent.

SUGAR DUTIES.

Mr. Fielding made a proposal with reference to the duty on raw sugar, which he said might be regarded as another step in the direction of imperial preferential trade. In the tariff passed on April 6th last, the benefit of the preferential duty was extended to the British West Indies and Bermuda. It had been claimed that one effect of that was to produce unequal conditions of the sugar trade by giving advantage to the sugar interests on the Atlantic coast, which did not extend to the sugar interests on the Pacific coast, where they draw their supplies of sugar from sections of the empire not brought within the scope of the preferential tariff in April last. It was suggested to extend the preference to the British possessions of Queensland, Fiji, and perhaps Mauritius. He proposed to deal with raw sugar, as described in our tariff in a different way, and instead of admitting these products generally under the preferential tariff, to provide that raw sugar from all portions of the British empire shall be admitted under the terms of the preferential tariff. That would meet complaints of those interested in the trade on the Pacific coast, and he was inclined to think might lead to the encouragement of trade between Canada and the Australian colony. The duty on this raw

sugar is 40 cents per 100 pounds, and for each additional degree 14 cents per 100 lbs. Such sugar coming now direct from any portion of the British empire will be dutiable at the above rates, less 25 per cent.

Another resolution provided that the tariff shall be treated as coming into force April 6, 1898. There was no discussion on these amendments and the resolutions were reported.

NOTE.—The tariff of 1897 was amended by resolutions introduced in April 1898. In June 1898 additional changes were made, all of which are embodied in the foregoing.

NEW DYESTUFFS.

Direct Deep Black E. and Direct Deep Black E. extra.—A new homogeneous Benzidine color in two concentrations. This Black corresponds to the well known brand Direct Deep Black G., being somewhat clearer in shade. It exhausts better and is of the same strength. The Extra brand however, is double as strong. Up to the present time the cheapest direct blacks have had preference, irrespective of their shade. Many dyers have changed to cheaper blacks, even when the shades have been totally different to that which they have been using. Direct deep Black E. extra, being just twice as strong as other direct Blacks, is proportionately cheaper in price as saving in freight and packing can be affected.

Diazo Indigo Blue B., and Diazo Blue, 3 R.—These products are the two latest substitutes for Indigo on Cotton just placed upon the market by the Farbenfabriken of Elberfeld. The disadvantages of Indigo in cotton dyeing, viz., high price, bad penetration, looseness of color to washing and rubbing and consequent continual stripping of color, have been long recognized by textile manufacturers as well as color makers.

Diazo Indigo Blue, B., gives of itself, light or medium shades of Indigo when diazotised and developed. For dark shades it is combined with Diazo Red Blue, 3 R., or the new Diazo Blue, 3 R. The last named color produces clear reddish blue shades when diazotised and developed on the fibre. Besides dyeing easily level, these colors do not effect the natural softness of the cotton, or deteriorate it for spinning. In price they are much cheaper than Indigo.

Benzo Chrome Brown, 3 R.—The above brown is the fourth and newest addition to the Benzo Chrome Brown family. The G. B. and R. brands of which were recently brought out by the Farbenfabriken Co., of Elberfeld, met with such success, that the above Benzo Chrome Brown, 3 R., has just been added to the group, and will prove a very useful color.

Benzo Chrome Brown, 3 R., dyed direct, produces a clear deep reddish brown, having the same properties as the older brands, and is therefore applicable either as a direct color or for after treatment with Chrome or Bluestone, and in the latter case is noteworthy for its great fastness to washing, light and rubbing.

For dyeing half wool, it should prove extremely useful, since it dyes both fibres equally, as do the older brands; it is also suitable for dyeing half-silk.

Lazuline Blue, R.—Lazuline Blue R. is the latest addition to the list of acid wool dyeing blues. It dyes very easily level, being in this respect equal to the average acid violets, to which however it is much superior, in its fastness to light and rubbing and being therefore very suitable for the production of slates and drabs or bright navy blues, upon ladies dress goods, yarn, etc.

FOR SALE.

NEW AND SECOND-HAND WORSTED MACHINERY
INCLUDING

Wool-Washing, Drying, Combing, Back-washing, Gill Boxes, Drawing, Spinning and Twisting.

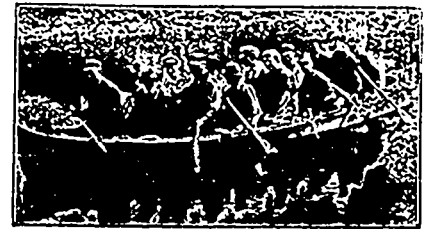
CHANCE WHEELS FOR WORSTED MACHINES
KEPT IN STOCK.

Apply to **EDWARD JEFFERSON & BRO.**

28 Strawberry St., Philadelphia, Pa., U.S.A.

Sole Agents for

J. B. FAIRBANK & SONS, Halifax, England.



Canoes for Alaska and Gold Regions

This cut is one of our 19 foot, No. 69xx Canoes, and shows carrying capacity. Write for our catalogue and discounts. Peterborough Canoe Co., Limited, Peterborough

The Acme Acetylene Gas Burners.

Only Multiple burner ever invented. Any number of flames, from one upward, on a single burner tip. Will not Carbonize. Samples—single flame, 25 cents; three flames, 50 cents.

THE STATE LINE TALC CO.,
Chattanooga, Tenn., U.S.A.

Smith Wool-Stock Co., 219 Front St. E., Toronto.
Makers of **WOOL STOCK, SHODDIES, Etc.**
All lines of Graded Woolen Bags, Carbonizing and Neutralizing, Buyers of Wool Pickings. All lines of Hard and Soft Waste.

LEITCH & TURNBULL, Canada Elevator Works, Queen and Peter Sts., HAMILTON, ONT. Patent Safety Hydraulic, Hand and Power **ELEVATORS.** Telephone connection.



FOR **IRON FENCING, BANK and OFFICE RAILINGS** and all kinds of **IRONWORK**

Address: **Toronto Fence & Ornamental Iron Works**
73 Adelaide St. West, Toronto.

BROWN & CO.



Manufacturers of **Square and Hexagon HOT PRESSED NUTS.**

PARIS. - ONT.

FIRSTBROOK BROS.

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

THE PARIS ELECTRO-PLATING CO.

Manufacturers of **Stove Trimmings, Organ and Piano Trimmings, also all kinds of Brass and Nickel Plating Done**
Paris Station, - - Ontario

It is fast to milling and stoving, and should prove useful in blanket manufacturing.

Samples, dyed shades and circulars of any of the above new products will be mailed gratis by applying to the Dominion Dye Wood & Chemical Co., Toronto, sole agents in Canada for the Farbenfabriken, vorm. Friedr Bayer & Co., Elberfeld Germany.

CANADA'S GREAT FAIR.

Toronto's Great and Only Industrial Exhibition is booked to be opened to the public on August 29th, and continue open until September 10th next, of which event intending exhibitors should take due notice.

Of the Manufacturers' and Industrial Department. Robert Davies, Esq. is chairman of the committee in charge, and it is announced that entries to this department close on August 6th. The Implement Building is fitted throughout with shafting so that exhibitors can show their machines in operation. The shafts are turned to 2 1/2 inch gauge, speed 65 to 70 revolutions per minute. Manufacturers who were exhibitors last year will, if possible, be allotted the same space in this building this year. No charge is made for space or power. Articles in this department are received for exhibition only.

Engines and Machinery Department: Chairman of Committee, George Booth, Esq. Entrance fee 25 cents for each article. No charge for space or power. There are two shafts in Machinery Hall, each turned to 2 3/4 inch gauge—speed 150 and 300 revolutions per minute. In this department will be located stationary engines, steam hammers, iron and wood-working machinery, road making machines, machines for flour and saw mills, fire engines and appliances, pumps, machines for miscellaneous purposes, railway and street cars and appliances, telegraph, telephone, and electrical supplies and appliances, fire escapes, boats, etc.

Miscellaneous Manufacturers, W. K. McNaught, Esq., Chairman of Committee. Most of the exhibits in this department will be displayed in Main Building and Annex. It is recommended that entries should embrace a full assortment of each kind of article exhibited, and the display should be as extensive and attractive as possible.

Other departments include textile fabrics, stoves, ranges, furnaces, hollow-ware, carriages, wagons, bicycles, etc.

Tenders are called for a central fire hall building for Winnipeg.

WHY SHOULD IT BE?

A comparison of the state of affairs at Skagway and at Dawson City is anything but favorable to Yankee administration of law and order. In Dawson City, under British rule, a new mining camp, composed of a heterogeneous mingle of representatives from half the nations of the globe, is kept in order by a few police; and life and property are as secure there as in Victoria; indeed more so, for they have neither aldermen nor Point Ellice bridges. In Skagway, on the other hand, crime and murder stalk abroad unpunished, and a United States officer is wildly imploring his government to send him a few battalions of infantry to enable him to keep some semblance of order among the miscellaneous brood of tin-horn gamblers, murderers and disreputable characters of all sorts who appear to consider that wherever the Stars and Stripes fly, there they are free to ply their trades unchecked. And all this demand for soldiers it not because of a riot, mind you. There is no popular commotion. It is simply because soldiers are required to undertake the duty that the United States police have, in every large city, been too venal and too cowardly to perform. — British Columbia Mining Record.

TRADE OF THE LAKES.

"The importance of the commerce of the lakes increases every year," says the Buffalo Sunday News. "The commerce of the lakes has already dwarfed the Suez canal. The total tonnage of the Soo during the year 1897 was 16,500,000. The tonnage of the Suez canal in 1896 was 7,000,000. And the tonnage of the Soo does not by any means represent the entire commerce of the Great Lakes; it is only a portion of it.

"The commerce of the lakes passing to the seaboard by the Erie canal is of the greatest importance. Every loaded boat distributes something to add to the business of the state as it goes along its course.

"The receipts at the Buffalo Custom House for 1897 show a great advance over the previous years and the value of the exports exceed the value of the imports by \$1,663,450. The value of the exports for the year was \$6,116,957, against \$3,919,341 in 1896 and \$4,407,977 in 1895. Importations during 1897 were valued at \$4,453,477, against \$3,316,418 in 1896 and \$3,720,921 in 1895.

"The number of vessels of all kinds which entered the harbor during the season was 11,563 or 243 more than in 1896, and the

tonnage reached the enormous total of 11,581,858, which exceeds the phenomenal record of 1896 by 277,116 tons. These figures fix the rank of Buffalo among the commercial ports of the world as fourth. It was a matter of dispute last year whether the city was entitled to fourth or fifth rank.

"It is of the greatest importance, therefore, that the Erie canal should be prepared to meet this great flow of commerce which is centering at the harbor of Buffalo. The benefit to the state at large is very great. The traffic amounts to more than the mere passage of so much produce through the state. It is the money expended for necessary supplies by those who handle it. This money is dropped along from place to place, and in the aggregate it amounts to thousands of dollars. A good year for the canal men is a good year for the state."

Mr. R. P. Rothwell, editor for the Scientific Publishing Company, New York, has sent us advanced sheets of "The Mineral Industry, its Statistics, Technology and Trade" which will shortly appear, and which, we are assured, be the most comprehensive and accurate statistic of the mineral production of the United States ever yet published. These statistics are used by European Governments in their official publications. We shall have occasion at an early date to reproduce some of the important facts set forth in this most valuable book.



Mills,
Factories,
Warehouses

Are best protected
against fire by being
equipped with

Eddy's Indurated Fibreware

FIRE PAILS

We are the only manufacturers in Canada
of this celebrated ware.

The E. B. EDDY CO., Limited.

Hull, Montreal, Toronto

ABBEE IMPROVED CHILLED SHOT CO.

(LIMITED)

NEWCASTLE, GREAT BRITAIN.

THIS SHOT IS NOW MADE BY A NEW PROCESS.

Samples sent on application.

Read the following Reports on our New Make of Shot:—

Sporting Goods Review states:—"The size and shape of pellets are good and are exceedingly hard. We understand that the demand for this shot has considerably increased and gaining in favor with sportsmen, to whom its excellence of manufacture appeals."

Arms and Explosives states:—"For soundness and general regularity of surface the pellets possess a very high degree of excellence."

W. W. GREENER, "the Great Authority on the Gun," speaks highly of Chilled Shot, and strongly recommends it in preference to soft shot.

A. KLIPSTEIN & CO.

122 PEARL STREET, NEW YORK.

Anilines, Dyestuffs and
Chemicals.

DELIVERY MADE AT NEW YORK, MONTREAL OR HAMILTON.

WRIGHT & DALLYN,
AGENTS,

HAMILTON, ONTARIO.

Ford, Ruthven & Co.,
26 PITT STREET, SYDNEY,
AUSTRALIA.

WOOL BUYERS on Commission

Letters of Credit must accompany orders.

Bankers:—Bank of Australasia Sydney.

Ferguson & Pattinson,
PRESTON, - ONTARIO.
Manufacturers of

FINE AND MEDIUM **TWEEDS**

Guelph Woolen Mill Co.,
QUELPH, ONT. LIMITED.
Manufacturers of

Underwear, Hosiery, Wheeling, Fingering and Worsted Yarns, Eiderdown Flannel, Etc.

Selling Agents—Donald Fraser, Montreal.
E. H. Walsh & Co., Toronto.

PENMAN MANUFACTURING CO.
PARIS, ONT. LIMITED,
Manufacturers of

Hosiery, Shirts, Drawers, Glove Linings and Yarns.

Selling Agents—D. Morrice, Sons & Co., Montreal and Toronto.

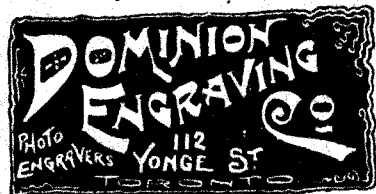
ROSAMOND WOOLEN CO.
ALMONTE, ONT.

Fine Tweeds, Cassimeres, and Fancy Worsted Suitings and Trouserings.

JOHN HALLAM
TORONTO.

WHOLESALE DEALER IN DOMESTIC and FOREIGN **WOOLS**
Sumac, Japonica, etc.

Reproductions Made for Eight Cents per Square Inch.



Half Tones Made Direct from Photos.

It Leads Them All.

THE OLDEST,
THE LARGEST,
THE SAFEST,
THE CHEAPEST,

CANADIAN LIFE INSURANCE COMPANY IS

THE CANADA LIFE ASSURANCE COMPANY.

CAPITAL AND FUNDS OVER \$13,000,000.

Write for Prospectus.

A. G. RAMSAY,
PRESIDENT.

GEO. A. & E. W. COX,
Managers for Toronto and Eastern Ontario.

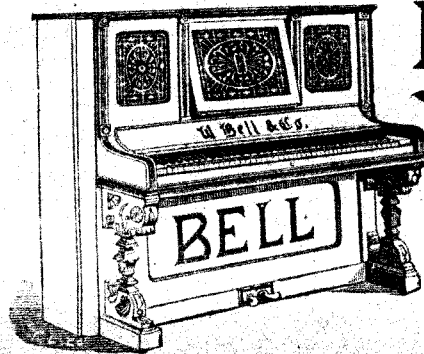
WOOL.



A. T. PATERSON & CO.,
...Merchants...

35 FRANCOIS XAVIER STREET,
MONTREAL.

Represented by
MR. DAVID GUTHRIE.



BELL

HIGH-CLASS

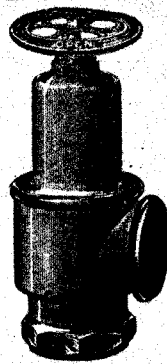
INSTRUMENTS

USED AND RECOMMENDED BY

LEADING MUSICIANS.

Send for Catalogue.

THE BELL ORGAN AND PIANO CO
(LIMITED)
QUELPH, - ONTARIO.



CROSBY STEAM GAGE AND VALVE CO.

Sole Proprietors and Manufacturers of Crosby Pop Safety Valves, for all kinds of Boilers, Water Relief Valves including the Underwriter, which is fully approved by the Associated Factory Mutual Insurance Companies; Crosby Steam Engine Indicators, with Sargent's Electrical Attachment; Crosby Improved Steam Gages, Recording Gages and Patent Gage Testers. Original Single Bell Chime Whistles.

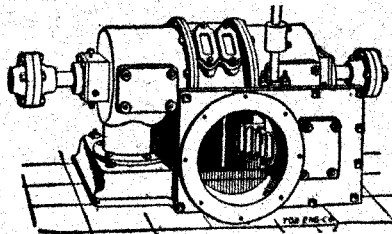
BRANDEN PATENT PUMP VALVES
CLARK'S LINEN FIRE HOSE AND ADJUSTABLE COUPLINGS

All Kinds of Pressure and Vacuum Gages used in the Various Arts

Gold Medal Paris Exposition, 1889
Ten Highest Awards Columbian Exposition, 1893

Main Office and Works BOSTON, MASS., U.S.A.
Branch Offices at New York, Chicago, and London, Eng.

Underwriter



Horizontal Type.

"LITTLE GIANT" TURBINE

...FOR ALL PURPOSES...

HORIZONTAL AND VERTICAL.
BUILT IN 44 SIZES.

We guarantee a higher percentage of power from water used than any other wheel on the market.

Water Wheel Governors, Machine Dressed Gearing, Pulleys, Shafting and Bearings.
Catalogue and Gear List mailed on application. Correspondence Solicited.

J. C. WILSON & CO., - - GLENORA, ONT.

FOUNDRY FACINGS and SUPPLIES, CRUCIBLES, PLUMBAGO, Etc.
 FOR LIGHT and HEAVY WORK.
MOULDING SANDS
 Albany and South Amboy

LANGWELL'S BABBITT, MONTREAL.

AN EXCELLENT ANTI-FRICTION METAL.
 G. LANGWELL & SON, MONTREAL

BELLHOUSE, DILLON & CO.

SOLE AGENTS FOR THE UNITED STATES AND CANADA.
 The West Indies Chemical Works LIMITED, JAMAICA.
 MAKERS OF THE FINEST QUALITY OF
EXTRACTS OF LOGWOOD.

28 Colborne St., TORONTO.
 30 St. Francois Xavier St., MONTREAL.
 20 Cedar St., NEW YORK.



The Ontario . . . Malleable Iron Co.

(Limited)
 . . . Manufacturers of . . .
MALLEABLE IRON Castings to Order for all kinds of
AGRICULTURAL IMPLEMENTS .
 . . . AND . . .
Miscellaneous Purposes
 OSHAWA, - - ONT.

Manufacturers of
FINE VARNISHES
Japans—Asphaltums—Shellacs
Maple Leaf Brand Coach Varnishes

J. H. FARR & CO.

Armature Insulating Compound
 Insulating Compound for Weather-Proof Wire, Tube Compound, Mica Paste, etc., etc.
 6 to 16 MORSE STREET
 TORONTO

THE CANADA SWITCH & SPRING CO., LIMITED.

Manufacturers of
 SPECIALTIES FOR
Steam and Electric Railways,
SPRINGS, STEEL CASTINGS, FROGS, FORGINGS, TRUCKS FOR ELECTRIC RAILWAYS, ETC.
INTERLOCKING SWITCH and SIGNAL PLANTS,
 (Under patents of Messrs. Saxby & Farmer, Limited, of London, Eng.)
CANAL BANK, POINT ST. CHARLES, MONTREAL.

BRISTOL'S Recording Instruments

For
PRESSURE
 Temperature AND Electricity
 Over One Hundred Different Varieties.
 Low Prices and FULLY GUARANTEED

Send for Catalogue

THE BRISTOL CO.
 WATERBURY, CONN., U.S.A.

SMITH'S FALLS

Malleable Iron Works
 OOOOO
CAPACITY 2,000 TONS.
 OOOOO
WILLIAM H. FROST
 PROPRIETOR,
SMITH'S FALLS,
 ONTARIO, CANADA.