Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Instituto has attempted to obtain the best original

copy ava may be t of the in	itute has attentiable for file pibliographic nages in the rather thange to below.	ming. Feat ally unique eproductio	ures of this , which ma n, or which	copy was a literal and a liter	hich any			lui exe bib rep dar	a été p emplair liograp roduite	ossible e qui so hique, d e, ou qu thode d	de se p ont peu qui peu	rocure It-être i Ivent m ent exi	r. Les unique: nodifie iger un	emplair détails (s du poi r une in e modif sont ind	de cet nt de vue nage ication
(Z)	loured cover uverture de (ured pa s de coi	•				
	vers damage uverture end									s damag s endon	_	es			
1 1	vers restored uverture rest		· ·							s restore s restau					
	ver title miss titre de couv	_	que					~	Pages	discolo décolo	oured. orées, t	stained achetéd	or for	ked/ iquées	
	oured maps/ tes géograph		uleur						1	detach détach					
	oured ink (i. cre de couleu				e)			1		through					
	oured plates nches et/ou i									ty of pi té inéga			ssion		
1 2 1	ınd with oth ie avec d'aut									nuous pation co	-				
alor La :	nt binding m ng interior m reliure serrée	argin/ peut cause	r de l'ombi	e ou de					Comp	des inde Frend ui	n (de.:)	ndex			
	orsion le Ion									on head re de l'é			-		
with	nk leaves add nin the text.	Whenever	possible, th	may app ese have	pear e					oage of		•			
	n omitted fro peut que ce			aioutés	se .					le titre		vraison	1		
lors mai:	d'une restau s, lorsque cel été filmées.	ration appa	raissent da	ns le tex	cte,					on of is: de dépa		e livrais	ion		
									Masth Génér	ead/ ique (pa	ériodiq	jues) de	e la livr	raison	
]	itional comm imentaires su	=	ieoe•												
	is filmed at t ent est 'ilmé					ous,									
10X		14X	·	18X			22:	Κ		:	26×			30 X	
													7		
	12X		16X		20	0X	····		24X	<u> </u>		28	x		32X

28X

AND INDUSTRIAL WORLD

DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 40.

TORONTO, JANUARY 5, 1900.

No. 1.

MAGNOLIA

ANTI-PRICTION

Leading Governments

THE BEST ANTI-FRICTION METAL FOR ALL MACHINERY BEARINGS For Sale by all Dealers Beware of Imitations.

MAGNOLIA METAL CO.

Owners and Solo Manufacturers.



265-257 Wast St., New York Montreal Office: 24 Board of Trade Bldg.

Chicago Office—Fisher Bidg., 231 Dearborn St. London Office—49 Queen Victoria St., E.C. Cloveland, 15S. Water St.

Maguolia Metal is still selling at the same price it has always sold at—No advance.



PLATES, BARS, SHAPES

Iron and Steel

IMPORT ONLY

A. C. LESLIE & CO.

MONTREAL

Agents SANDERSON'S Tool Steel.

"Every Factory in Canada should use "the best Belting. Our "EXTRA" brand.

THE J. C. McLAREN BELTING CO.

Factory: MONTREAL.

TORONTO.

VANGOUVER.

Fensom's

ELECTRIC HYDRAULIC STEAM HAND-POWER

All made of the best material and Finest workmanchip.

RUBBER GOODS OF ALL KINDS.



Walkerville Malleable Iron

CO. (Limited)

-Manufacturers of.

REFINED AIR FURNACE

alleable L astings

ALSO LIGHT GREY IRON CASTINGS.

WALKERVILLE.

ONTARIO.

ATENTS

Fetherstonhaugh & Co.

HESPELER. ONT

DIAMOND BRAND



Manufactured The HAMILTON AND TORONTO SEWER PIPE CO. HAMILTON, ONTARIO.

Samson Brand Portland Cement

Manufactured by the

Owen Sound Portland Gement Co.

OWEN SOUND, ONT.

LIMITE

is Equal to any Coment made in the WORLD.

Write to us for Tests, Prices and other Information.

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.

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, Webbings, Etc.

Dyeing of all Colors, including CENUINE FAST BLACK.

ANILINES

St. Denis Dyestuff and Chemical Co.,

(A. POIRRIER),

of Paris, France.

Manufacturers of

Aniline Colors, Aniline Oil and Salt, Archil Extracts Cudbear, Cachou de Laval, Thiocatechines, etc.

A Complete Assorted Stock of the above always on hand.

W. T. Benson & Co.,

Sole Agents for Canada

164 St. James St., MONTREAL.

CANADA IRON FURNACE CO., LIMITED

Montreal, Radnor and Three Rivers

Manufacturers of the well-known

"C.I.F." Three Rivers Charcoal 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.

MONTREAL PIPE FOUNDRY CO...

SUCCESSORS TO

(Limited)

DRUMMOND-McCALL PIPE FOUNDRY CO.

Manufacturers of



"Specials," Hydrants, Valves, Etc.

Offices: - - - Canada Life Building,



THE STANDARD DRAIN PIPE COMPANY, ST. JOHNS, P.Q.

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

The Standard Drain Pipe Co. of St. Johns. P.Q., Ltd. W. C. TROTTER

The "MODEL" Cas and Casoline Engines

Are especially suited for plants requiring small power. These Engines are convenient and easily managed, and are very economical. No engineer is needed; no fuel or water for steam. They can be started in five minutes, and there is no expense when they are not running. They are adapted to run electric light plants, and give good satisfaction. Send for Catalogue and Prices and mention The Canadian Manufacturer.

The Goldie & McCulloch Co., Limited, Galt, Ont. We also make WHEELOCK AND IDEAL ENGINES, BOILERS, PUMPS, WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY, OATMAL STEAM BANK UND WORD WORD WATER WHEELS, FLOUR MILL MACHINERY, OATMAL MILL MACHINERY WATER WHEELS, FLOUR WATER WHEELS, FLOUR MILL MACHINERY WATER WHEELS, FLOUR MILL MACHINERY WATER WHEELS, FLOUR WATER WHEELS

WHEELOCK AND IDEAL ENGINES, BOILERS, PUMPS, WATER WHEELS, FLOUR MILL MACHINERY, OATMEAL STEAM PAN KILNS, WOOD WORKING MACHINERY, IRON PULLEYS, WOOD RIM SPLIT PULLEYS, SHAFTING, HANCTRS, GEARING, FRICTION CLUTCH PULLEYS, Etc., Etc., SAFES, VAULTS and VAULT DOORS.

THE IMPERIAL OIL COMPANY, Limited.

Highest Awards at the World's Fair, Chicago, upon

Lubricating, Water White Illuminating Oils, Paraffine Wax, Etc.

We manufacture all grades of oils, greases, soap stocks, candles, wool stocks, leather and tanners oils, fuel gas, machinery, cyaneler ons, A. And some a opportunity to compar against any oil on the market. Write for prices and samples.

Refineries at SARNIA and PETROLIA, CANADA. Merchandising Branches at:

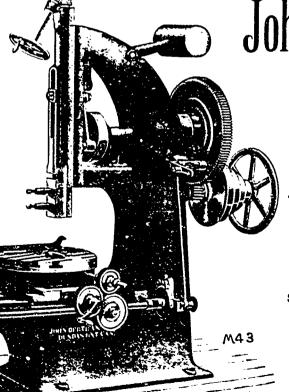
HALIBAN, N. S. HAMI, 198 ONE. QUEBE, QUE, LONDON ONE. TORONTO, ONE. WINNIPEG, MAN. SELJOHN, N. B. GUPEPH, ONE. MONTHUAL, QUE. CHALLES ONE. PETERBORO, ONE. VANCOUVER, B. C. MONCON, N. B. STRAFFORD, ONE. KINGSTON, ONE. WINESOR, ONE.

Branch Offices and Agencies:

Vancouver, B.C., Wm. Hamilton Mfg. Co.

Winnipeg, Robt. Douglas, 94 Aloxander Avanuo.

Montroal, 321 St. James Street.



John Bertram & Sons

DUNDAS, ONTARIO.

Ganada Tool Works

MANUFACTURERS AND BUILDERS OF

METAL-WORKING MACHINE TOOLS

--FOR---

Machine Shops,
Ship Yards, Boiler Shops,
Rolling Mills,
Locomotive and Car Shops,
Brass Shops.

PAPER MILL MACHINERY

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

THE NOVA SCOTIA STEEL CO., LIMITED

MANUFACTURERS OF

BRIGHT COMPRESSED STEEL SHAFTING

FROM & TO 5 INCHES IN DIAMETER. CUARANTEED STRAIGHT AND TRUE TO WITHIN x8. 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.

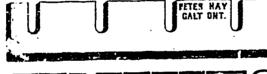
"FERRONA" PIG IRON, For Foundry Use.

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

Head Office-NEW GLASGOW, NOVA SCOTIA

Machine Knife







Cutting and Leather-BARK KNIVES PULF KNIVES

Special Knives Made to Order.

Splitting Machines

Shear Blades, Straw Knives, Paper Knives, Etc., Etc. Send for Prico List



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.

Alargo ROLLED STEEL BEAMS, JOISTS, GIRDERS, CHANNELS, ANGLES, TEES, Z BARS and PLATES IN LENGTHS TO

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

KNIVES

ALWAYS ON HAND

THIRTY FIVE FEET

Post Office Address, MONTREAL.

Agent, 38 Canada Life Building, GEORGE E. EVANS, TORONTO, ONT.



BRUNNER MOND & CO.'S

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

Wm. J. MATHESON & CO., LIMITED

NEW YORK

BOSTON

PHILADELPHIA

PROVIDENCE

CHARLOTTE, N.C. MONTREAL, CANADA STUFFS

The Polson Iron Works.

THE BEST EQUIPPED BOILER AND ENGINE WORKS IN CANADA

We Manufacture-

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

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



Bicycle Screw Plate

HEAPEST 🔊 BEST

14 PAIRS DIES-22 TAPS

... A Complete Repair Shop in Itself...

BUTTERFIELD & CO.

Rock Island, P.Q.

If your Dealer Does not Keep Them Send to Us.

When writing to Advortisers kindly mention THE OANADIAN MANUFACTURER.

ALBERT MANUFACTURING CO.

MANUFACTURERS OF THE WELL-KNOWN

"HAMMER BRAND"

Calcined Plaster

VND_

Patent Rock Wall Plaster

HILLSBOROUGH, N. B.,

KEMP MNFG. CO.

TORONTO.

Galvanizing

DONE FOR THE TRADE.

GET OUR PRICES.



For IRON FENCINC, BANK and OFFICE RAIL-INCS and all kinds of IRONWORK

Address

Toronto Fence & Ornamental Iron Works 20 Queen St. East, Toronto.

BROWN & CO.



Nap 's t rem ' Square and Hexagon

HOT PRESSED NUTS.

PARIS, - ONT.

Send for Caldingue and Prichet to

THE JOHN MORROW MACHINE SCREW Co.

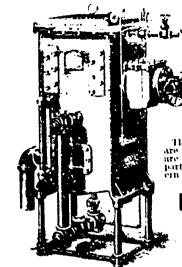
IN GLASOLL, ONT.

Mire. of Set. Cap and Spr.

Screwe, Stude, Fraished Nate. And Spr.



Advertise The Canadian Manufacturer



FEED WATER Heaters, Oil Extractors.

WEBSTER

LIVE STEAM SEPARATORS.

The need for a Feed Water Heater is recognized. It should not be taken for granted that all Feed Water **Heaters** will accomplish the same result.

The "WEBSTER Heators are a class by themselves and are established as a standard part of the equipment of modern power plants.

No other Food Water Heater can maintain est great an of theires or ensure more economical operation

DARLING BROTHERS,

SOLE MANUFACTURERS FOR CANADA.

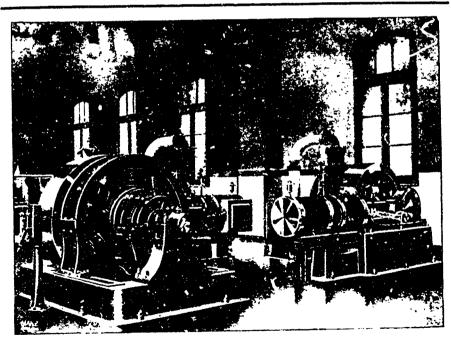
Reliance Works, - Montreal.

A. KLIPSTEIN & CO. 122 Pearl St. New York

Anilines, Dyestuffs & Chemicals

DELIVERY MADE AT NEW YORK, MONTREAL OR HAMILTON.

WRIGHT & DALLYN, HAMILTON, ONT.



These engines are installed in the power house of the electric railway in Barcelona, Spain. We have also exported a number of large engines to England, Australia, Isle of Man, Brazil and Cuba. They are sold on their merits.

Robb Engineering Co., Ltd., Amherst, N.S.

WM. McKAY, - Seaforth, Ont., - Traveller.

CANADIAN RUBBER CO..



OF MONTREAL

Manufacturers of High-Grade Rubber Goods of all Descriptions.

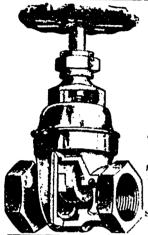
BELTING. HOSE. PACKING. VALVES. BOOTS. Etc., Etc.

Factories and Head Office. -Ontario Branch. Western Branch.

MONTREAL. TORONTO WINNIPEG.



Orders Filled with Despatch from Head Office or Branch Warehouses.



The WEBBER Patent

STRAITWAY VALVE

...Steam, Water or Gas...

EVERY VALVE TESTED.

The Kerr Engine Co., Limited WALKERVILLE, ONT.

ole Manufacturers for Canada. Send for Price List.

The Wellington Mills, LONDON, ENG. GENUINE EMERY

Oakey's Flexible Twilled Emery Cloth. Oakoy's Flint Paper and Glass Paper. Oakoy'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, LIMITED, Wellington

Westminster Bridge Read, London, Eng.

Inquiries should be addressed to

JOHN FORMAN, 650 CRAIG ST. MONTREAL.

Gurrent Completely Registered

> No Current Lost

Entire Revenue Secured

No Friction

ABSOLUTELY ACCURATE

From Less than 5 c.p. to Full Capacity.

Guaranteed for Three Years.

STANLEY INSTRUMENT CO.,

GREAT BARRINGTON, MASS., U.S.A.

Magnetic Suspension

Air Tight

Moisture

Proof

Dust Proof

Proof

Insect

No Wear

FOR SALE IN CANADA EXCLUSIVELY BY

Electric

MONTREAL, QUE.

TORONTO. ONT.



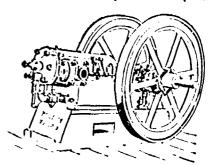
We have equipped some of the largest nenutrotories in Canada with our Feed, General Service and Stuff Pumps. In no case have they failed to give entire satisfaction, nor in proving that the Northey Pumps for all duties are unsurpassed for design, up-to-date features and reliability.

Our Catalogue is yours for the asking.

Northey Mfg.Co. Limited, Toronto



Most Satisfactory Power in the Market.



THE BEST IS NONE TOO GOOD

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

SYRACUSE BABBITT

> BEATS THEM ALL

Importers and Dealers in

PIG TIN
ANTIMONY
INGOT COPPER
ALUMINUM

NICKEL BISMUTH IRON AND STEEL SCRAP



Manufacturers of

BABBITT METALS SOLDER TYPE METALS COLUMBIA
PHOSPHOR TIN
AND ALL OTHER
WHITE METALS

SYRACUSE SMELTING WORKS,

WILLIAM and ST. THOMAS STREETS,

MONTREAL

WHEN YOU SEE

ON . . .

SOCKETS
ROSETTES
BRANCH BLOCKS
SWITCHES
INCANDESCENT
LAMPS

MPERIAL

NO CKA

BATTERIES ANNUNCIATORS WEATHERPROOF

AND

RUBBER-

YOU KNOW TEEY ARE STANDARD.

JOHN FORMAN, - 708-710 Craig Street, - Montreal.

When writing to Advertisers kindly mention The Canadian Manufacturer.



ESTARLISHED IN 1880.

PUBLISHED ON THE FIRST AND THIRD FRIDAYS OF EACH MONTH

SUBSORIPTIONS:

CANADA AND UNITED STATES, - - - \$1.00 Per Year.
ALL OTHER COUNTRIES IN POSTAL UNION, EIGHT SHILLINGS
STERLING PER YEAR, INCLUDING POSTAGE.

The Canadian Manufacturer Publishing Co., Limited. McKinnon Building, Cor. Mclinda and Jordan Sts., Toronto.

J. J. CASSIDEY,

Editor and Manager.

PREMIER ROSS' POLICY AND THE MANUFACTURING INTEREST.

The public sentiment of Ontario has not been backward in responding appreciatively to the policy of development enunciated by Hon. G. W. Ross in his notable speech delivered at Whitby in November last. In that deliverance the Provincial Premier laid down very clearly and comprehensively the needs of the Province, both as regards the opening up of the rich unsettled districts of New Ontario, and the utilization of the resources of the older portion of the country, so as to give to all classes of producers a greater share of the returns than they have hitherto enjoyed. The manner in which the reconstructed administration has faced the situation and is grappling with its great and grave responsibilities in this work of peaceful expansion has commended itself strongly to all who realize that, great as has been the industrial advancement of the past, we have, in the language of the Premier, "scarcely touched the fringe of the great agricultural wealth which this Province possesses "; and that in the exploitation of our mining and manufacturing l resources we have been yet more backward in reclaiming our heritage. It is gratifying to note that we have in Mr. Ross a leader who is fully alive to the vast opportunities for national enrichment, demanding only judicious government aid and wise legislation to enlist the enterprise, skill and labor of our people, and sufficiently clear-headed and practical to set aside the outworn formulas and narrow conceptions belonging to the past, and undertake the work of progress.

While fully impressed with the general benefit to the people at large of the forward policy, we propose to consider at present its effect more particularly upon manufacturing industry. There is not a single item of the government program as laid down in the Whitby speech which is not calculated largely to increase the demand for manufactures of various kinds, and contribute greatly to industrial prosperity. It is proposed to survey the country north of the C. P. R. up towards Hudson Bay to ascertain what districts of that yet unexplored region of 100,000,000 acres are adapted for settlement, or valuable by reason of their timber or mineral wealth, with a view to opening them up by railways and colonization roads. This enormous area is

at present unproductive, but by liberal land grants and some expenditure of money it can be made tributary to production, and the investment repaid many times over. As Mr. Ross points out, the considerable expenditures made in the past upon railways have yielded abundant returns in promoting settlement, building up towns and villages, and rendering accessible the timber, minerals and other raw materials for which no market could otherwise have been found. The construction of railways will at once create a large and continuous demand for rails, locomotives, rolling stock and all the varied accessories of railway traffic. But that will be merely the initial advantage to be reaped from the expansion of our settled territory. Whatever may be the character of the industries developed, the settlement of a large population in a new country will vastly promote mr ufacturing activity in all directions by giving us a larger home market. The settlers will need supplies of goods for consumption, in addition to farm implements and machinery.

The opening up of new fields for the energies of the lumberman, the miner and the dependent manufacturing industries, fostered by the wise policy of compelling the raw material to be worked up in the province in place of being shipped broad, will give a great impetus to the production of machinery and tools. The stimulus of this just and reasonable provision has been already experienced in connection with the lumber trade. In place of building up the industries of Michigan, the erection of saw mills to manufacture the output of Ontario's forests necessarily promotes an active demand for saw-mill machinery. In the same way the establishment of pulp and paper mills has noticeably contributed to this branch of the iron industry. In addition to the mills of the Sault Ste. Marie Pulp and Paper Co., which give employment to five hundred persons, similar mills are being established at Sturgeon Falls, Spanish River and Mattawa, which, besides their machinery requirements, will contribute by the demands of their working force to build up home industries. It is taking a very narrow view of the question to consider merely the balance-sheet of any particular industry as the measure of its value to the community. In addition to what it directly contributes to production, each industry, employing a number of men, creates a market for other products and stimulates the general progress. To ensure the manufacture of our raw material at home does not simply enrich the country to the extent by which the value of the finished product exceeds that of its crude form, but gives life and prosperity to a host of allied and dependent activities which would otherwise languish. Its effects are so wide and far-reaching that it is difficult to over-estimate the beneficial result that such a course, if carried out in the spirit which pervades Mr. Ross' utterance, may finally produce. His language on this point indicates that he has fully grasped the importance of encouraging domestic manufactures as a means of retaining our population and huilding up the country. After speaking of the need of providing employment for the people in order to prevent their leaving the country to seek a living abroad, the Premier went on to say :-

"We want to remedy this. We want to take the lumber, copper, nickel,—all our mineral wealth and all our raw material, and see if we cannot, in some way or another, encourage the manufacturing industries in the Province of

Nevis.

Ontario. What has built up Sheffield, Manchester, Leeds? Was it not that the merchant marine of England traversed the whole globe and gathered cocoons from the south of France and India, and woods and dyes from various countries and brought them to England, where the skill of the English artisans made them into goods which commanded the approval of the world? We have surely intelligence enough to take our timber and make it into manufactured goods instead of sending it to the Old Country and having it manufactured there. We surely have intelligence enough to take our own raw wool and make woollen goods of it. We surely have intelligence enough to convert our wheat into flour and send the manufactured product abroad, and in the same way why not take our nickel, or copper, or iron ore, and encourage the manufacture of these into the finished article t"

This is just such an enlightened and progressive view of the crying needs of the country and the obvious practical duty of the administration as entirely coincides with the opinions which have always been voiced by The Canadian MANUFACTURER, and were we to withhold our cordial approval and support of a policy entered upon in this spirit, we should be false to the principles we have at heart and the interests we represent. It has been the misfortune of Canada that too many of those entrusted with power, or possessing the means of making their influence felt upon public opinion, while professing to make the progress and prosperity of the country their first consideration, have regarded all measures put forward for the development of our material interests from the narrow standpoint of faction, and viewed such proposals solely with regard to their effect upon the chances of their party in gaining or keeping office. It is to be hoped that broader and more patriotic views may prevail in a matter so vitally affecting the interests of Canadian industry, as the forward movement now initiated by the Provincial Government of Ontario, and that measures so wisely calculated to place the Province in the position Nature destined her to occupy, as a wealthy, progressive and populous community, will commend themselves to the support of the Legislature, as they certainly must to the approval of the public-spirited and enterprising men interested in promoting home manufactures.

PARCELS POST FACILITIES.

The British Post Office Department appreciates the commercial value of a domestic and foreign parcels post system, and has recently made extensive additions to it, and this incites American Trade, which is published under the auspices of the National Association of Manufacturers of the United States, to remark that it would be an exceedingly good thing for the United States to establish a similar system which would enable that country to be in a position to enter more largely into conventions with other countries.

Our esteemed contemporary discusses the matter as follows ;-

The Duke of Norfolk, Postmaster-General of Great Britain, has taken considerable interest in the extension of a foreign parcels post by giving equal advantages to the British colonies and other nations in return for extended facilities offered by them. The foreign and colonial parcels post has recently been extended by England to Russia, Formosa, the Banks and Santa Cruz Islands, the Comoro Islands, Kiaochau in China, Nigeria, Guatemala, and Bolivia. England has also recently extended the system under which the senders of parcels can take upon themselves the payment of the customs duty levied in the country of destination to their service with France and the French possessions, Sweden and the Leeward Islands.

In his last annual report, dated March 31, 1899, the Duke of Norfolk gives an account of some recent extensions with the colonies, which is a hint to the United States as to the commercial advantage of a parcels post. The Duke of Norfolk states:

An important step has been taken towards simplifying and making uniform the postage on parcels exchanged between the United Kingdom and other parts of the Empire. I took the opportunity of the meetings held by the Imperial Postal Conference to bring forward a scheme for adopting, whenever possible, a scale of-

ls, for a parcel weighing not over 3 lbs

2s. for a parcel weighing over 3 lbs., but not over 7 lbs.

3s. for a parcel weighing over 7 lbs. but not over 11 lbs. The proposal met with wide approval, and since the beginning of the present year the scale has been brought into operation in the parcels post with the undermentioned places; Antigua.

British East Africa. Ascension. British Guiana. Bahamas. British Honduras. Barbados. Bevrout. Ceylon. Niger Coast Protectorate. Constantinople (by direct Niger Territory (Nigeria). steamer). St. Helena. Cyprus. St Kitts. Dominica. St. Lucia. Falkland Islands. St. Vincent (West Indies). Gambia. Sarawak. Gibraltar. Seychelles. Gold Coast Colony. Sierra Leone. Grenada. Smyrna (by direct steamer.) Johore (via Singapore). Straits Settlements. Lagos (Africa). Tobago. Malta (by direct steamer). Tortola, Montserrat. Trinidad.

Newfoundland. The simplicity in the scale and the reduction in the postage on heavy parcels which it involves, seems likely to give a great impetus to the parcel post with the colonies

Zanzibar.

The report states that the total number of parcels sent to and received from places abroad during the year was 2,243,-865-an increase of about 8 per cent. in the number in the previous year. The parcels received from abroad increased in a considerably larger ratio than those sent abroad, owing chiefly to the fact that a very large growth took place in the number received from France, Germany, and Italy. Other large increases were in the service with British East Africa, Canada, Hong Kong, India, and South Africa. On the other hand, there was a falling off in the number of parcels sent to Colombia, Spain, and the West Indies. According to the Board of Trade returns the value of the goods exported and imported by parcels post during the last two years was as

onows;			
Day and 3	1867-98,	188-99,	Increase.
Exported	£2,070,417 1,122,724	£2,200,773 1,265,623	£130,356 142,899
Total	£3,195,141	£3,466,396	£273,255

The total number of foreign and colonial parcels insured shows an increase of over 20 per cent., being 141,475 (59,392 despatched, and 82,083 received) as against 117,545 in the previous year.

Such parcels post facilities as England enjoys, both at home and abroad, would be of infinite value to the manufacturers, the merchants and consumers in the United States.

F. H. Clergue, Esq., president of the Sault Ste. Marie Pulp and Paper Co., writing to the editor of THE CANADIAN MANU-FACTURER, says: "We think all Canadian manufacturers should support your excellent journal." Kind words can never die.

FOR THE FISCAL YEAR ENDING JUNE 30, 1899.

Canada's foreign commerce as shown in the Trade and Navigation Returns for the last fiscal year is summarised by The Globe as follows:—

Our aggregate fereign trade has increased from \$304,475,-736 for the year ending with June, 1898, to \$321,661,213 for the last fiscal year, a total gain of \$17,185,177. This is not swollen by obstructive imposts forcing trade into unnatural channels, but is a natural and profitable exchange of commodities. The customs revenue yielded by this trade has increased from \$22,157,788 to \$25,734,229, a gain in a single year of \$3,576,441. The British preferential tariff has been a material advantage as well as a new sentimental tie binding the colony to the mother country. British dutiable goods entered for home consumption during the last fiscal year aggregated \$22,854,080, as compared with \$19,651,495 for the year ending with June, 1898, an increase of \$3,202,585. The total imports of dutiable goods from Britain for the past year were \$27,450,325, an increase of \$4,480,604 compared with the figures for the previous year. The revenue collected from British goods increased from \$6,649,428 in the year

1897-98 to \$7,328,192 in the last fiscal year.

Germany and Belgium originally entered into the mostfavored-nations treaties, which were afterwards extended to the leading commercial nations of the world. The denunciation of these treaties caused a certain amount of retaliation against the Dominion, yet our aggregate trade with these nations has continued to expand. During the past year we imported from Germany dutiable goods to the value of \$7,382, 499, an increase of \$1,618,715 over the figures for the previous year, and our exports to that country increased from \$1,837,448 to \$2,219,569, a gain of \$382,121. Our imports of dutiable goods from Belgium were \$2,311,300 during the past fiscal year, against \$1,450,197 for the year previous, a gain of \$861,133, while our exports to that country showed a slight falling off, the figures being \$973,944 for the year ending with June, 1898, and \$849,413 for the last fiscal year. aggregate trade with Belgium, including the imports of dutiable goods and the total exports to that country, shows an increase of \$736,602. It is in trade across the international border that the greatest expansion has taken place, and although the moving spirit in trade must always be profit, its secondary results are often important in creating a feeling of friendship between nations. While trade may not follow national amity nor national emblems, these not infrequently follow trade, and the mutual be efit of a profitable commercial relationship between Canada and the United States has been quite as potent in establishing the present cordial feelings between the nations as the sympathetic unity of purpose in national expansion. Our imports from the United States entered for home consumption were \$53,281,683 for the past year, an increase of \$7,184,688 over the total for the year 1897-98. Of these imports for home consumption \$44,721,-824 worth were dutiable, as compared with \$38,063,960 for the previous year. On the imports from the United States there has been an increase of \$1,772,234 in duty collected, the figures being \$11,713,858 last year and \$9,941,624 for 1897-98. In grand totals the increases have been equally marked. The total value of dutiable imports for the past year was \$98,319,633, as compared with \$84,141,104 for the year previous, an increase of \$14,208,529.

The same relative proportion is retained in the imports of dutiable goods entered for home consumption, which aggregated \$89,433,172 last year, and \$74,625,088 in 1897-98, an advance of \$14,808,084. The results go to show what can be accomplished by statesmanlike moderation in relieving a long continued pressure and in giving free play to the commercial and industrial activities of the Dominion. The British preference has been of great advantage both to the Cominion and the Mother country. It has cheapened proportionately

levied. In all parts of the Dominion the benefit of this reduction has been felt, while the British producers have taken full advantage of the enlarged opportunity for the expansion of their trade. The American exporters have been forced in many cases to meet the reduction while contributing the full duty, thus narrowing their own margins of profit, and in many lines the price of domestic products has been proportionately moderated. Where American competition virtually fixes prices the British producer enjoys a small measure of protection. These are the results of a measure that was heralded by its opponents as a blow at Canadian industry, and as a mere pretence of opening our markets to the British producers. It has granted material relief to the consumers of British goods, and their appreciation of the change is shown in the great increase in their purchases. The difference between freedom and restraint could not be more forcibly illustrated than in the record of our foreign commerce for the last fiscal year, and the people of the Dominion have the satisfaction of knowing that the statistical evidence is confirmed by the actual conditions of trade and industry they now enjoy.

EDITORIAL NOTES.

Mr. E. M. Trowern is no longer in the employ of the Canadian Manufacturers' Association.

Mr. Edgar Tripp, Canadian Government agent at Trinidad and Tobago, has written to the Department of Trade and Commerce expressing the satisfaction felt in the British West Indies at the prospect of an improved steamship service between Canada and those islands. It will be remembered that during the last session of Parliament Sir Richard Cartwright carried out negotiations with Messrs. Pickford & Black to this end. Mr. Tripp believes that the trade will grow, and that there is no longer a handicap in favor of the American steamship lines, which until lately gave a superior service. The agent remarks that all the split peas in barrels which are imported into the British West Indies are shipped via New York, and expresses the hope that the large trade in this commodity will be henceforth done by the Canadian line, The quality of Canadian cheese sent to the islands, Mr. Tripp says, is inferior, ruling some five cents a pound less than its And ican rival. Canadian butter, on the contrary, finds a ready market.

One of the finest lines of samples of Shears it has been our privilege to inspect in a number of years was shown us coming from the factory of the Bailey Cutlery Co., of Brant-These samples are now on their way to Sydney, N.S.W. where an agency has been arranged for in charge of C. B. Thistlethwaite, of that city.

The officials of the Ontario Crown Lands Department congratulate themselves on the result of the recent sale of timber limits in this province. The figures summed up show that \$723,550 was received for 360 square miles, an average of \$2,000 per mile. As much of the land had been burnt over, and there was not by any means a good class of timber on it, this is considered a remarkable return. The only recent sale with which they say this can be rightly compared was that of 1837, when the same class of timber realized many lines of supplies, while the increase in the volume of trade has more than compensated for the decrease in the rates been disposed of were put up in 1897, but could not be sold. only \$1,690 per mile. Some of the berths which have just

The prices now realized were sometimes two or three times as much as the upset price put upon them by the department. The officials are satisfied that the manufacturing clause did not at all depress the prices given. Hon, Mr. Davis, the Commissioner, expressed himself as exceedingly pleased with the results. The sale, he said, was eminently satisfactory in the interests of the province, and no better value had ever been obtained at any sale than was obtained at this one.

The tariff of \$2 a thousand feet on Canadian lumber does not keep it out of the United States. During the season just closing an immense quantity of lumber has come to this country from the Dominion, a quantity so large as to fairly stagger the people who thought the tariff would be practically prohibitive. The Bay City Tribune has frequently called attention to the enormous shipments from Canada arriving at that port, but few realized the magnitude of the trade. The receipts at Bay City during the season will not be far from 140,000,000 feet from Canada alone. This lumber has paid a duty of \$27,719.07. The Saginaw customs office has collected about \$2,800, so that the total receipts from Canada will not be far from 150,000,000 feet. This quantity of lumber is largely in excess of the shipments from Bay City in a single season for several years. It is also independent of the receipts from other ports on which duty is not paid, and which will swell the total of lumber received at Bay City to over 200,000,000 feet .- Cleveland Marine Record.

The official assurance conveyed through Lord Salisbury to United States Ambassador Cheate that the Government of Canada will participate in the Pan-American Exposition in 1901 was received with marked evidence of gratification at Pan-American headquarters.

The Pan-American management is exceedingly pleased at the assurance that Canada will participate. While there never has been any real doubt that the Dominion would do its full share towards making the exposition a success, still it is pleasing to all concerned that the official announcement of that fact has been made. It is felt that Canada, as the largest country on the American continent and, next to the United States, the most important, should make such provision for exploiting her resources and development as will attract great attention, and will be second only to the United States Government exhibits.—Buffalo Express.

The Pan-American management should comprehend that while the Canadian Government may make some creditable displays at the forthcoming exhibition of Canadian products, such a display would be very incomplete and disappointing to our neighbors unless supplemented with some such exhibitions of steam and electrical machinery, iron and wood-working tools, agricultural and farm machinery, etc., as are usually shown at the annual Toronto fairs. As yet, however, no invitation has been extended to Canadian manufacturers to participate. Such exhibits are not prepared in a day.

LITERARY NOTES.

John Ritchie, Jr., who tells in the January Ladies' Home Journal "Where the New Century will Really Begin," is one of the editors of the Science Observer, and a writer of wide repute on

scientific subjects. He has devoted many years of enthusiastic effort to scientific pursuits, and is one of the foremost amateur astronomers in Boston, where he reside. Besides contributing to various periodicals, he is a frequent speaker before local scientific bodies. His article on the new century shows a vast amount of research, and brings to light many things that are a revelation to the non-scientific mind.

There is no gloom in the winter season for readers of Outing. Its pages sparkle with the jewel-bedecked branches of the forest and the tinkling silvery ice-bells of the underbrush. Anon, you are transported to the spicy isles of enchantment in the tropics. Yet all is strictly within the scope of this magazine of sport and pastimes. You crouch with the wary hunter, with the first flurry of snow, Out for his Christmas dinner; follow the fortunes of Black Beard through the charming story of Colonial days by Sara Beaumont Kennedy; "A Message from Ocracoke," Camp in the woods, "After Deer in Eastern Maine," chase "The Rabbit on Ice in Illinois;" wander 'Round the North Shore with a Camera; sail with the deer-hunters to the Sea Islands of Georgia; rise with the tropical sun and go "Gunning for Snipe in Jamaica;" tramp Californian orchards "Among the doves with a shot-gun;" fish in the waters of the Florida coast with the veteran, Wm. C. Harris; cycle in Madeira, or go "Pleasure Yachting 'Way Down South," and it is hard to choose which is the most pleasant pastime. The illustrations alone would be a sufficient justification for the assurance that in its Holiday number Outing has excelled itself, and it is appropriately garbed in one of the handsomest covers ever placed on a magazine.

Scribner's Magazine for January marks the opening of two of its important serial features for 1900. J. M. Barrie's novel, "Tommy and Grizel," on which he has been at work for four years, begins in this number with the arrival of Tommy in London with his sister Elspeth, and launches him as a writer who suddenly acquires celebrity. Tommy will be followed throughout the year with absorbing interest. Each instalment will contain a full-page illustration by Bernard Partridge. Theodore Roosevelt also begins in this number his monograph on "Olicer Cromwell," which is to be a feature of the magazine for six months. The illustrations are elaborate and sumptuous. An article of great significance is Frederick Palmer's view of "White Man and Brown Man in the Philippines." Mr. Palmer is a well-known correspondent who has spent months at the scene of the war. A short article by Frederic Ireland, called "The Coming of the Snow," gives an account of a successful mosse hunt in New Brunswick in winter, which terminated with a splendid chance to photograph a bull mosse in the snow.

One of the most interesting and instructive visitors that has appeared in this office is the Christmas number of the Farmers' Advocate, published at London, Ont., by The William Weld Co. The Advocate appears to set the standard for agricultural journalism. and has clearly outdone itself in this magnificent number. In keeping with the general policy of the paper, its contents and make-up are thoroughly alive and comprehensive, substantial and in good taste. Not only has the best authorities and writers in Canada and other countries been drawn upon as contributors, but the matters with which they deal are particularly fitting for such a number at such a season. The topics dealt with cover a wide range and do it in a helpful way. The Hon. Sydney Fisher, Minister of Agriculture, deals with the agricultural condition and outlook in Canada. Pioneering east and west, home life on the farm, agricultural education, and a host of popular and important topics are reviewed; facts are given about many of the best farms in Canada, also matters grave and gay, adorned with a wealth of original illustrations rarely seen in a single publication. Embracing some eighty pages, bound in a richly tinted, beautifully-illustrated, becoming cover, the Christmas number of the Farmers' Advocate is a fitting representation of the best in Canadian agriculture.

The Methodist Magazine and Roview for January begins its fifty-first volume with a notoworthy number. The initial paper of Sir John Bourinot, one of a series on the "Progress of Canada during the Queen's Reign," by that distinguished writer, atrikes a philosophic and patriotic note. It is beautifully illustrated, many of the prints being very rare. "The Progress of Canadian Methodism during the Century," by the Editor, has soveral excellent portraits and other illustrations. Dr. Lathern, of Halifax, writes vigorously on "Cromwell and his New Statue," a cut of which is given. The new aerial story, "Your Little Brother James," strikes a fine note of blended humor and pathos. A vivid sketch and portrait are given of Cecil Rhodes, the founder of Rhodesia, now impounded at Kimberley. The progress of the war is vividly presented, with map and numerous excellent half-tone cuts. Toronto: William Briggs. \$2 a year.

CANADIAN MANUFACTURERS' ASSOCIATION.

President: J. F. ELLIS.

Pirst Vice-President: P. W. ELLIS.

Second Vice-President : R. E. MENZIE.

Treasurer: GEORGE BOOTH.

Chairman Executive Committee:

R. W. ELLIOT.

Chairman Tariff Committee: W. K. McNAUGHT.

The Executive Committee meet on the First Tursday of each month.

OFFICER

McKinnon Building,

TORONTO. Tol. 1274.

J. J. CASSIDEY, - SECRETARY.

THE OBJECTS OF THIS ASSOCIATION ARE:

To secure by all legitimate means the aid of both Public Opinion and Governmental Policy in favor of the development of home industry and the promotion of Canadian manufacturing

enterprises.

To enable those in all branches of manufacturing onable those in an oranches of manufacturing enterprises to act in concert, as a united body, whenever action in behalf of any particular industry, or of the whole body, is necessary. To maintain Canada for Canadians.

Any person directly interested in any Canadian manufacturing industry is eligible for membership.

CANADIAN INDUSTRIAL LEAGUE.

President. . . . JAS. KENDREY, M.P.

WOOLEN MANUFACTURERS' ASSOCIATION. President. - BENNETT ROSAMOND, M.P.

KHIT COODS MANUFACTURERS' ASSOCIATION. President, Joun Penman.

CARPET MANUFACTURERS' ASSUCIATION. President, J. P. MURRAY.

CLOVE MANUFACTURERS' ASSOCIATION, President. · · · · · · · A. R. CLARKE.

REPRESENTATIVES TO

TORONTO INDUSTRIAL EXHIBITION ASSOCIATION.

R. W. ELLIOT. GEORGE BOOTH. W. K. MCNAUGHT. A. E. KEMP. J. J. CASSIDEY.

CANADA'S COMMERCIAL AGENTS.

The following Canadian Commercial Agents (whose addresses are given) will answer correspondence relative to commercial and trade matters, and give information to those interested as to local trade requirements in the districts they represent.

J. S. Larko, Sydney, N.S.W., agent for Australasia.

d. Eustaco Burko, Kingston, Jamaica, agent for Jamaica. Robert Bryson, St. John, Antigua, agent for Antigua, Montserrat and Dominica.

8. L. Horsford, St. Kitts, agent for St. Kitts, Nevis and Virgin Islands. Edgar Tripp, Port of Spain, Trinidad, agent for Trinidad and Tobago.

C. E. Sontum, Christiania, Norway, agent for Sweden and Denmark. D. M. Ronnio, Buenos Ayres, Argentine Republic, agent for Argentine Republic and Uruguay.

In addition to their other duties, 'he undermentioned will answer inquiries relative to trade matters, and their services are available in furthering the interests of Canadian traders.

J. G. Colmar, 17 Victoria Street, London, S.W., England. Thomas Moffat, 16 Church Street, Cape Town, South Africa. G. H. Mitcholl, 15 Water Street, Liverpool, England. H. M. Murray, 10 St. Enoch Square, Glasgow, Scotland. Harrison Watson, Curator Imperial Institute, London, England.

An enquiry addressed to J. J. Cassidey, Secretary Canadian Manufacturers IMPORTANT. Association, Toronto, Canada, will place you in communication with the leading Canadian Manufacturers of the articles you mention. Merchants and Importers in all parts of the world are invited to make free and full use of the facilities afforded by this Association when they desire information about anything produced in Canada. No charge whatever for answering inquiries.

ANNUAL MEETING

The Canadian Manufacturers' Association.

The twenty-fifth annual meeting of the Canadian Manufacturers' Association will be held in their office in McKinnon Building. Toronto, at two o'clock in the afternoon of Tuesday, February 6, 1900.

By order of the Executive Committee.

J. J. CASSIDEY,

Secretary.

Toronto, December 12, 1899.

BRITISH CANADIAN TRADE.

The following enquiries have been received at the office of the High Commissioner of Canada in London, England.

Note-Those who may wish to correspond with any of these enquirers can obtain the names and addresses by applying to The Canadian Manufacturer, Toronto. No charge for giving information. When writing refer to the numerals opposite the enquiries.

114. A Scotch firm are open to purchase blankets and flannels if satisfactory prices are quoted.

115. An enquiry comes from the Midlands for plasterers' laths (either machine or hand riven) and quotations are desired delivered C.I.F., Liverpool and Glasgow.

116. The addresses of a few Canadian houses who are in a position to ship wood pulp are asked for by 2a Antwerp firm.

117. A Welsh firm who import fir props for mining purposes chiefly from Norway, Sweden and the Baltic ports, enquire if Canadian shippers could supply large quantities to the Mersey and Bristol channel by steam or sailing vessel.

118. A Scotch firm of export and import commission merchants ask to be referred to Canadian firms who put up canned goods (salmon, etc.,) oatmeal, hams and bacon, butter, cheese and apples. They also require names of importers of liquors as they act for several of the largest exporters from the United Kingdom.

119. A firm of produce merchants in the North of England desire to be placed in communication with one of the principal shippers of oats, peas, wheat, maize and flour.

120. Enquiry has been received from a Vienna merchant who is willing to act as the representative of important Canadian houses who desire to utilize the market that is open

for raw products, hides, wool, fruits and patented articles.
121. Buyers of birch and maple dowels of the following sizes ask to oo placed in communication with Canadian exporters of these goods:—3-8 inches, 15-32 inches, 1-2 inch and 5-8 inch in diameter. Length thirty-two inches and thirty-six inches. Prices should be I.C.F., London.

PRIZE OFFERED IN GERMANY FOR A SUCCESS-FUL BEET-LIFTING MACHINE.

In writing to the State Department from Magdeburg Consul Diederich says :- "Among the agricultural implements needed in cultivating the sugar beet, no machine is more useful than a good beet digger. In fact, some such device has become absolutely indispensable to every one engaged in that kind of work. A number of beet digging

machines have been brought into the market, some of which are very serviceable. In order to ascertain which is the best, the 'German farming association' has opened a prize competition, offering premiums amounting to a total of 550 marks (\$130) The examination of the competing machines is to be held in the fall of the year 1900. An additional prize will be given to that machine which will raise and top the beets at the same time.

"In conjunction with the above association, the 'Association of the German sugar industry' has offered prizes amounting to 8,000 marks (\$1,904) and 10,000 marks (\$2,380). These prizes will be given to machines that are not only the best of those exhibited in the competition of the farming association, but that in addition they are to come up to certain other requirements and specifications set forth in the conditions of the prize offer. These conditions have not yet been published.

"This competition is not confined to German manufacturers. Foreigners will also be admitted, and it is expected that the results of these offers will go a great way toward solving the important question under consideration."

POSSIBILITIES OF TRADE WITH QUEENSLAND.

According to a report from Mr. J. S. Larke, Canadian Commercial Agent for Australia, received at the Department of Trade and Commerce, there is a growing market in Queensland for the cheaper grades of white pine, the selling price having appreciated eight per cent., but in Canada this class of lumber has lately increased by from eighty to 100 per cent. A gentleman from Queensland is now on his way to Canada, and will interview export lumber firms of the Dominion. In the timber trade with Queensland, says Mr. Larke, the British Columbia mills suffer in comparison with those of Oregon in respect of shipping facilities. The Americans can often take orders when the Canadians, on account of lack of ships, are forced to decline them. Canadian steam cargo boats, Mr. Larke remarks, could get return freights of sugar, although it would seem here that the freight rates which would have to be paid would make it impossible for Queensland planters to compete with the West Indies. Mr. Larke points out that between them British Columbia and Queensland should be able to institute a valuable new industry, that of tanning. Queensland could send to British Columbia any quantity of the necessary hides, there to be tanned with the Pacific coast's abundant hemlock bark. At present the tick plague has rendered the Queensland hides very inferior, but the plague is expected soon to disappear. Queensland canned meat companies will soon be able to rival Chicago in price and quality of goods, and as the wheat of the colony is soft, there should be a good market for flour from Manitoba hard wheat, which would be used in mixing with the local article. Mr. Larke, whose address is Sydney, N.S.W., invites correspondents from Canadian firms desirous of pushing trade in Australia.

EXPORT TRADE.

The export question is a difficult one to handle to suit everybody concerned. Manufacturers who have built up an export trade are urged by business men who are thinking ahead to keep up their foreign connections by all means, even at the sacrifice of some profit. The present heavy domestic demand is regarded as a temporary matter, hable to severe shrinkage at any time, in which event foreign outlets will prove a good thing for the country at large as well as for the branches of trade directly affected. With many manufacturers, fortunately, foreign prices are so high or domestic prices have advanced so moderately that their foreign business continues on about the same basis as their home trade. But in some lines the difference between domestic and export prices is quite a figure, and perhaps at the same time manufacturers are much in arrears on deliveries. Here difficulties are encountered in the endeavor to keep up an export trade for the benefit of the future. If an export price becomes known, the manufacturer making it is liable to severe criticism from his domestic customers for charging them so much more than he is willing to take on foreign business. If a rush order for export is accepted and filled while domestic consumers are standing in line at the factory door and begging for goods, they feel that they have been unfairly treated and discriminated against. In such cases domestic consumers should exercise the virtues of forbearance and unselfishness and take a more liberal view of the situation than their own interests would dictate. It is a wise policy to keep up foreign connections if at all possible, while domestic prices depend entirely on supply and demand. The demand has for some time been exceeding the supply, and therefore domestic prices have risen. But no matter where domestic prices may be from this time forth, whether at a high or a low point, the manufacturers who will persistently cultivate an export trade are to be commended and not criticized.—The Iron Age.

CANADA AND THE WEST INDIES.

Writing from Montreal to the Hon. B. Howell-Jones, Mr. Chapman, financial agent of the new Demerara Electric Company, says, according to the Demerara Argosy, that the stock and bonds have been subscribed twice over, and if the Demerarians do not want the \$50,000 which, under the agreement, is reserved for them, the new Canadian subscribers will gladly take it all. The chairman of the new company is Sir William Van Horne, and the vice-president Senator Drummond, who, as it happens, is the largest sugar refiner in the Dominion. The stockholders include a large number of prominent Canadians. Unfortunately, continues the Argosy, the present congested state of the iron trade renders it impossible to get rails and other materials for the renovation of the tramways plant; and the price of material has gone up nearly 100 per cent. over the prices of last year. Mr. Chapman is strongly of opinion that if the venture should be found successful it will result in a further introduction of Canadian capital into the West Indies.

"Canada consumed 2,000,000 bunches of Jamaican bananas and 600,000 barrels of Jamaican oranges last year," according to Mr. A. B. Vantresse, of Jamaica, who has been visiting this city. And he added, "Of these hardly any were brought in direct. Nearly all came by way of New York, and, of course, the Canadian people paid more than was necessary. If Canadians had a line of freight steamers running regularly and often, between Jamaica and, say, St. John or Halifax, fruit could be landed in Canada about two days earlie. than by the present route. It would be handled fewer times, and would cost less for freight. When you consider the amount of fruit Canadians import, and the fact that it comes from Jamaica, although it is labelled Florida, you can readily understand that a great saving could be effected by having better freight connection. A Canadian freight steamer calls once a month at Jamaica, while every week ten or more United States boats call for the products of the island. For that reason Canada gets her fruit supply through United States sources, and bearing United States trade-marks. Most of the so-called Florida fruit is grown in Jamaica, taken to New York, reparcelled and reshipped."

It is stated that if a fortnightly steamer could be run between Jamaica and St. John, New Brunswick, or Halifax, there would be a saving of 60 cents on every barrel of oranges.

TO CHINA BY WAY OF CANADA.

Ellison A. Smyth, president of the Pelzer Manufacturing Company, of Pelzer, S.C., in a recent issue of the Manufacturers' Record says:—

"The Pelzer Company is a large shipper of export cottons, and to-day we are shipping five carloads of sheetings and drills to China, and, as usual with our transcontinental shipments these goods are routed by the buyers by the most direct line to Canada, then by the Canadian Pacific Railroad to Vancouver, and by British Mail Steamship Line to China.

It is perhaps not altogether strange, under all the circumstances, that while there are three railroad lines in the United States across the continent, and with steamship lines from San Francisco, the Canadian Pacific Railroad and the British Mail Steamship Lines bag all this business. It is a fact, however, that from mills in South Carolina goods for China go first to Canada and thence across the continent. If our steamship lines were also subsidized between San Francisco and China this would not be the case."

THE SUGAR BEET INDUSTRY IN THE UNITED STATES.

"During the last three years," the Secretary of Agriculture says in his annual report for 1899, "extensive experimentation has been had in co-operation with most of the States of the Union to ascertain where sugar beets can be produced sufficiently sweet to justify extensive growing and manufacturing. It has been fairly well demonstrated that many States have soil and climate, fuel, water, and limestone admirably adapted for this industry. Thirty-two factories are now in operation and many more in contemplation. There is every indication that the United States will produce its own sugar within a few years. The rich valleys of the mountain and Pacific coast states find sugar-making very profitable. It is being demonstrated that the rich corn fields of the Northern States are also admirably adapted to the growth of the sugar beet. This industry will eventually be more profitable where the by-product is fed to the dairy cow and other domestic animals. The department publishes annually a report setting forth all the facts in relation to this industry and the latest developments of interest to producers."

COMMERCIAL TRAVELERS, THE RAILWAYS AND BAGGAGE.

The question of convenience, time and profit in relation to the commercial travelers and the railways, suggests a few ideas which might be considered by both interests.

The railways and their employes are, as a rule, ever ready to facilitate this part of their traffic, and it is no small part either.

The commercial travelers have rarely appreciated the trouble the railways have in the handling, che king and all the other et cetera of this immense traffic.

There are probably 10,000 commercial travelers in Canada, carrying, during the year, probably 5,000 tons of baggage, on which the railways collect no direct charges. When this is considered, together with the costs of the excess cards, prepaid certificates, tips to baggagemen, etc., it is easily seen that the balance of baggage that pays its way must also pay for that which is nominally free.

Why not make all commercial baggage pay for being carried, and formulate a price that would be known to everyone—say, 100 ibs. of baggage, 100 miles, for 10c? This sum may be too low or too high, but no doubt their mathematicians could give a price that would pay the railways.

Were this system introduced, it would save the railways the cost of excess tickets and prepaid certificates. It would save the baggagemen no end of trouble just when the train was leaving. It would end the question of a commercial traveler handing any baggage to a companion going light. The idea being still further followed out would be facilitated by books of coupon tickets, which could be issued by the railways for any mileage or weight of baggage, and interchangeable on any line of railway or boat.

So far this may read as if it was all well studied out for the railways' benefit, but an idea to be of enough value for adoption by one should be of value to both.

Were this idea adopted, the commercial travelers could have charges on their baggage all settled for before they leave for their trip. When leaving a station, the time lost in having to be there long before train time to have excess made out or prepaid certificate attended to, is well known to most every man on the road. Under this idea, commercial baggage could be checked as any ordinary traveler's trunks. On arrival at its destination it could be settled for by the commercial traveler. If he traveled fifty miles he would simply give up fifty miles in coupons. Every firm knows to a pound or two what their travelers are carrying and how long a trip they will have, so the matter could easily be calculated, and it is much satisfaction to know that baggage is all settled for. By this idea the commercial traveler has the very last moment in the town he is leaving for business, just saving enough time to pack and get to the station. Under the present system he must be there from at least a quarter of an hour before train time.

These books of coupons would have the commercial traveler's name and certificate number and his firm's name. Each coupon being numbered, belonging to a series, would easily be checked by the railways.

Should a commercial traveler send part of his baggage back to his firm before he has completed his trip, it is easy to compute the number of coupons to pay on the balance.

Should a commercial traveler not use his entire book, the balance could be used on a later trip, or used as part payment on a new book.

The amount of money saved to the railways by this method would very likely permit a reduction of the rate per mile on commercial travelers' passenger transportation, possibly bringing it to two cents a mile, and, if this were so, there would be no reason why employers of travelers should not also buy their passenger as well as the baggage transportation for their entire trip before they leave.

A COMMERCIAL TRAVELER.

Transfer Ornaments,

AMERICAN MADE.

Guaranteed Quality.

TRADE MARKS, DECORATIONS, NAME PLATES, ETC.

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

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

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

CHAS, H. JAGGAR, Buffalo, N.Y.

Largest Makers in the World Cuaranteed Decalcomania Transfers.

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 n 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 boing 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 robuilt, our friends should understand that possibly there may be semething 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, are 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 Manufacturor to closely inspect all items under the head of Captains of Industry.

The Ottawa & Parry Sound Railway will Hill said, "was so clear cut and decisive this season handle more than 14,000,000 that they entertain little hope of success in bushels of grain, or 2,000,000 more than in the appeal. The only reason why they de-1898. From 100 to 120 cars of grain move lay the removal of their mills to Canada is eastward every day from Parry Sound to Montreal. Nearly all of this is American grain, shipped from Chicago and Duluth. Treaty is concluded. Influence is being The success of this new Canadian route has been amazing. The railway company has bought five new steamers which will next season double its present carrying capacity on the lakes.

plant of the Independent Electric Light & mills, on the contrary, would be run at Power Co., of San Francisco, is a complete their full capacity, and new ones were mechanical draft equipment, consisting of four fans arranged to operate upon the mental duced principle. These fans are arranged in pairs, each fan being ten feet in diameter, and provided with an independent to provided with an independent to consisting of the cutting of their logs. Playfair and Co. and Chew Bros., of Midland, were both building new mills. meter, and provided with an independent at the Drayton Electric Light Co., Dray-8 x 12 horizontal engine, direct connected. The Drayton Electric Light Co., Dray-This apparatus is being furnished by the ton, Ont. are revamping their station equipment and have placed an order for a equipment and have placed an order for a

The St. Thomas Gas and Electric Co. are increasing their lighting capacity and in doing so have decided to change their lighting system from single phase to two-phase, having ordered from the Royal Electric Co. a 150 k.w. S.K.C. two phase matric Co. a 150 k.w. S.K.C. two phase matric Co. a 150 k.w. S.K.C. two phase matric Co. a 150 k.w. S.K.C. two phase matrices of the following system from the Royal Electric Co. a 150 k.w. S.K.C. two phase matrices of the following system from the following system from single phase to two-phase to two chine with marble switchboard and instru ments.

Mr. Arthur Hill, of Bay City, Mich., when in Toronto a few days ago stated that the lumbermen of Eastern Michigan were already beginning to move over into Ontario as a result of the recent decision of Mr.

that they entertain little hope of success in garding the matter before the pending treaty is concluded. Influence is being brought to bear at Washington to this end." The Michigan mills, Mr. Hill stated, would be practically idle next season, save for what little timber can be taken off the One of the features of the new power belong to the province. The Georgian Bay

30 k.w. S.K.C. two phase machine with the Royal Electric Co., of Montreal.

The Tudhope Carriage Co., of Orillia, Ont., to the lines that can be exported from Canada to almost every part of the world.

Application has been made for letters patent to incorporate the Nickel Copper Company of Ontario, Limited, with a capital of \$1,000,000, with head office in Hamilton, Ont. The objects are the mining and Justice Street in the case against the On-tario Government. "The judgment," Mr. incorporators are :—A. T. Wood, M.P.,

John Patterson, J. H. Tilden, T. H. Mac Pherson, M.P., J. A. Kammerer, John Moodie, sr., John Milne, George E. Tuckett, H. B. Witton, and W. W. Osborne. Just what shape the business will assume has not yet been made public, but it is known that it will be the biggest sort of a boom Hamilton has ever had in a manufacturing way if it is carried out on the lines projected by Mr.

Messre Gilmour & Co., of Trenton, Ont., have lately installed in their mills a 100 light D.C. generator from the Royal Electric Co.

The Cling Surface Mfg. Co., of Buffalo, N. ., report steadily increasing demand for Cling Surface, gaining lifty-eight new customors in New Brunswick and Nova Scotia alone in the past eight weeks, among which are the Fredericton Gas Light Co., Fredericare the Fredericton Gas Light Co., Fredericton, N. B., Gibsen Cutton Mill, Marysville, N. B., Maritime Nail Co., St. John, N. B., St. John Ry. Co., St. John, N. B. City of Moncton Electric Light Co., Moncton, N. B., The Canadian Electric Co., Amherst, N. S., Intercolonial Coal Mining Co., Westville, N. S., North Sydney Electric Light Co., North Sydney, N. S., St Croix Paper Co., Hartville, N. S., Commercial Cable Co., Hazelhill, N. S., and others.

The Dominion Oil Pipe Line and Mfg. Co will reduce its capital stock to \$500,000 and change its head office from Sarnia, Ont., to Toronto.

Fire in the drying kiln of the Shearer and Brown Lumber Co. at Montreal on December 17 did damage to the extent of about \$20,000

A new flour mill is to be erected in the near future at Franklin, Man.

The Citizens' flour mill at Qu' Appelle, Assa., is to be remodeled at a cost of about

A new flour mill is to be erected at Kirkton, Ont.

The Headingly Milling Co., Headingly, Man., are seeking incorporation with a capital stock of \$20,000 to manufacture flour, etc.

The La Riviere Milling Co., La Riviere, Man., is seeking incorporation with a capital stock of \$5,000 to erect and operate a flour null and grain elevator.

The Dodge Mfg. Co., of Toronto, have been awarded the contract for supplying the shafting and hangers for the large shops of the Dominion Iron and Steel Co. at Sydney, N. S.

INGERSOLL-SERGEANT ROCK Drills

PISTON INLET Air Compressors

STRAIGHT LINE **DUPLEX** and COMPOUND.

FOR ALL DUTIES.

... COMPLETE MINE EQUIPMENT ...

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

Other Offices - - - ROSSLAND, B.O.

RAT PORTAGE, ONT.

HALIFAX, N.S.

These Belts Do Not Slip,

BECAUSE THEY ARE FULL

OF

CLING-SURFACE.

COMPARE THE TWO SIDES OF THESE BELTS: ABSO-LUTELY NO INITIAL TENSION ON EITHER SIDE. THE STRAIN BELOW IS A WORKING TENSION ONLY, WHICH IS WHOLLY RELIEVED IN THE SLACK, ALLOWING THE BELT TO RECOVER ITSELF AND RETAIN ITS ELASTICITY.

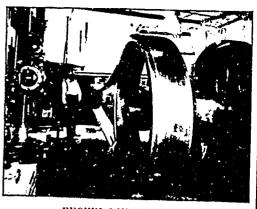
CONSEQUENTLY NO SLIPPING IS POSSIBLE.

POWER AND THE LIFE OF THE BELT ARE INCREASED. ATTENTION IS DECREASED TO A MINIMUM.

THESE ARE ONLY THREE OF OVER 200,000 SUCH BELTS FULL OF CLING-SURFACE.

CLING-SURFACE IS NOT A STICKY BELT DRESSING.

WE WILL BE GLAD TO TELL YOU MORE ABOUT IT.



BROWN, DURRELL &JCO. C. F. Chase, Mgr. for N.E. & E. Can.

CLING SURFACE MFG. CO.

SIR-Having tried Cling-Surfact on my 12'
dynamo belt (16 feet between centres) I have
been able to carry full load with 22' sag on belt
with no perceptible slip. It surpasses my expectations, and I can recommend it to do all that
is claimed for it, if directions are followe.

Yours respectfully, E. B. PRESCOTT, Ecgineer.

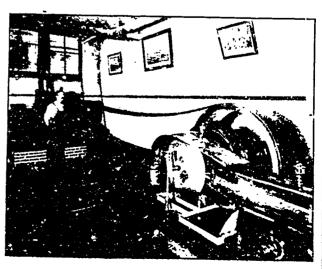


CLING-SURFACE MANUFACTURING CO.

120-126 YIRGINIA STREET, BUFFALO, N.Y.

NEW ENGLAND AND E. CANADA BRANCH 170 SUMMER STREET, BOSTON.

CHICAGO BRANCH, 225 DEARBORN ST.



A second edition of the lecture by Walter stock of \$15,000 and head office at Kam-Restigouche Harbor, in the Gulf of St. B. Snow on "The Influence of Mechanical Braft upon the Ultimate Efficiency of Steam Boilers," has just been issued by the B. F. Sturtevant Co. of Boston, Mass., by whom copies will be sent upon application

The steam boiler in the factory of the Crescent Milling Co. at London, Ont., exploded December 21st completely wrecking the boiler house and doing considerable other

Messrs. Foster & Co. of Utica, N.Y., one of the largest concerns manufacturing brass and iron bedsteads, etc., in the United States, will establish a branch of their works in Toronto. They have secured the large buildings on the Esplanade recently occupied by the Toronto Carpet Manufacturing Co., which will be fully equipped with new and best approved machinery. Another testi-mony to the wisdom of tariff protection to our manufacturing industries.

The new addition to the works of the B. The new addition to the works of the B. F. Sturtevant Co., Boston, Mass., which was designed to meet the requirements of its rapidly growing electrical department, is already overcrowded, although completed only a few months ago. Numerous special orders for electric fans and generating sets for the Navy Department are being filled, and the construction of a complete line of enclosed motors of new design is now under

The Department of Public Works, Ottawa, has awarded to Messrs. Hency & Smith of Ottawa, a contract to construct a \$30,000 wharf at North Bay. Antigonish county.

The Magic Grater Co. is being incorporated in British Columbia, with a capital

loops, to manufacture the Magic vegetable Lawrence, 200 miles east of Quebec. Numgrater.

Messra, T McAirty & Co., St. John, N. B., will establish a branch of their hardware manufacturing business at Sydney,

The town of Tottenham, Ont., has voted a bonus of \$15,000 to Mr. Steele, of Montreal, for the erection of a furniture facdamage, but there was no loss of human tory in which not less than fifty hands will life. Caused by a defective patch. be employed.

The outlook for next season's supply of binder twine is somewhat uncertain. Stocks of raw material at the different factories throughout the Dominion, excepting the Central Prison, are almost exhausted. The great bulk of the hemp comes from Manila. Should the present blockade in the Philippines continue during next summer the supply from other sources will probably not be sufficient to meet the demand. Since the blockade commenced the price has risen rapidly. If it be removed soon the price will likely take a sudden drop, there being, it is said, an immense amount of hemp in the Philippines ready for shipment. The present supply is imported from Great a 75 k.w. alternator the order for which has Britain.

J. M. Deagle of Cataract, Ont., has placed his order for a complete electric light plant for the town of Erin, Ont with the Royal 100 light direct current generator. Electric Co. The order includes a 30 k.w. The B. F. Sturtevant Co., of alternator and 300 light capacity in transformers.

bors of large streams flow through this vast tract, down which the logs will be floated to the bay and harbor. On the shores of the bay there will be erected a sulphite mill with bay there will be erected a suipnite mill with a capacity of ninety tons of fibre every twenty four hours. This fibre will be turned out especially for the European trade, particularly for that in England, ships being loaded at tidewater direct for Europe. The papers having been already signed the work of erecting the mill will commence without delay. It is probable that the company will be called the Bay Challeurs Sulplite Fibre Company.

The Dodge Mfg. Co., of Toronto, have fitted up the new works of the Office Specialty Mfg. Co., at Newmarket, Ont., supplying the entire outfit of shafting, hangers, pulleys, mule shafts, friction clutches, belting, etc., including all mill-wrighting, laying out of the power transmission machinery,

The Kingsville Electric Light Co., Kingsbeen placed with the Royal Electric Co.

Mr. H. Corby, Belleville, Ont., has placed an order with the Royal Electric Co for a

The B. F. Sturtevant Co., of Boston, Mass., reports an increase of nearly forty per cent. in the volume of its business for A telegram from Watertown, N. Y., states that Col. J. T. Outterson and associates have recently purchased a tract of 160,000 acres of spruce lands in Bonaven ing, ventilating, drying and mechanical draft ture County, Que., upon which they will apparatus, engines, electrical apparatus, etc. eract extensive pulp mills. The property During the past year an addition covering fringes the shores of Challeurs Bay and 20,000 square feet has been made for the

W. A. FLEMIN

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



57 St. Francois-Xavier St., Montreal.

The Stratford Building

STRATFORD.

Manufacturers of....

STEEL BOILERS—all Sizes, THE BROWN AUTOMATIC ENGINE,

FLOUR MILL MACHINERY, CORN MILL MACHINERY, GRAIN CHOPPERS OF ALL KINDS.

We keep a Full Stock of Chain, Leather and Cotton Belting, Sprockets, We have one of the Most Complete Boiler Plants in Canada.

Write for Prices.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

use of the electrical department, which has shown the most rapid growth, the output having more than doubled during the year, been chosen and plans have been prepared mality mentioned.

A strong syndicate, mostly of Toronto men, has been organized to provide Muskoka and Northern Ontario with largely into the fact that under the parcel post regu-creased hotel accommodation. The Grand lations no parcel can be forwarded to Great Trunk Railway Company and the Muskoka Navigation Company and the Muskoka Navigation Company are co-operating with the syndicate and preliminary work is already begun. The men composing the syndicate are: J. J. Foy, Q.C., M.P.P., Ald. John Hallam, George P. Magann, Alexander Nelson of the Rossin House, all of Toronto; D. W. McDonald of Sutton West, Ont., and Major William Clark of London Ont., and Major William Clark of London, England. The company will be known as the Ontario Summer Hotels Company, Limited, with an authorized capital of \$1.

shown the most rapid growth, the output best sites have tained for want of having more than doubled during the year, and covering principally electric fans and special generating sets. The sale of mopany, for three hotels, which, it is expected, the very best sites have tained for want of mality mentioned. An increase of two chanical draft apparatus has been practically ed, will be ready for occupation next summer. Frederick Smily, who publishes the increased one third over that of the preceding year, and has included many new designs.

Canadian Summer Resort Guide, has been chosen secretary for the company.

The Post-Office Department has sent out operation in August, 1898, a circular calling the attention of postmasters Britain, or any country with which closed parcels are exchanged unless duly accompanied by a Customs declaration giving the name of the sender and the contents, value and weight of the parcel. This regulation applies only to parcels forwarded under parcel post regulations; it has no application to packages of fourth-class matter (general merchandise) open to inspection, circulating which must come from the colonies themin Canada, or addressed to the United selves. It is one thing to accept such a States. The object of the department in tariff from a Colony, and quite ar ther to ask 000,000, to be incorporated under the the disappointment which arises when par- Trade Journal

An increase of twenty two per cent, in the exports of British produce to Canada during the last financial year, as compared with 1897, is by no means an unsatisfactory position, and one doubtless largely the result of the preferential tariff which came into full To make this point conclusive, however, it would be necessary to have statistics for the same period of the imports of similar classes of goods from the United States, Germany, France and other countries not on a preferential basis. There seems now to be a full in the preferential tariff movement throughout the Empire, the Imperial authorities having evidently come to the conclusion that in view of the wide ramifications of British trade with foreign countries, the movement is one calling attention to this matter is to prevent or agitate for it from this side. - Butish



Mechanically Drying Everything

THE F. D. CUMMER & SON CO.,

HUNDREDS IN OPERATION.

CLEVELAND, OHIO.



FINE GRUSH

QUARTZ and ORES.

DOES WORK OF CRUSHER AND ROLLS COMBINED.

ROLL JAW CRUSHER.

STURTEVANT MILL CO.

Send for Circular.

BOSTON, MASS.

Shafting-Hangers-Pulleys

FRICTION GLUTCH PULLEYS AND COUPLINGS

Rope Transmission of Power.

HANDSOME ILLUSTRATED CATALOGUE ON APPLICATION.

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

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

Smolting Co., Grand Forks, B.C., have in-stalled a 50 light direct current generator over \$300,000. Like many other of our that time to purchase for \$20,000. The of the Royal Electric Company's manu-big manufacturing concerns, the Massey negotiators guaranteed this fund, and have

In an interview recently published in The Company gave some interesting testimony regarding the prosperous condition of the business under his control. This evidence is especially suggestive, as the company's especially suggestive, as the company's necess depends primarily on agricultural Patterson and J. J. Scott. By the terms of the company from the subscribers.

And a large portion of the \$5,000 which will be practically a gift to the company from the subscribers. In the case, the Cataract Power Company's offer of cheap power was a potent factor in securing the industry - Hamilton Specta Globe, the President of the Massey-Harris prosperity. To accommodate the increasing of the bargain, the company is to commence business of the company a new paint shop manufacturing here in temporary quarters has been erected, having four stories and a at once, and to have a new factory in operabasement 185 by 55 feet. In addition to tion before September 1, next year, giving this new structure the foundry completed employment to 400 hands at least nine last year is being extended by an addition months in the year, or a total of 90,000 days' 112 by 95 feet. The company is also in employment. Temporary quarters have in Toronto and Brantford that its output cient to erect a factory that will cost \$25,-

The Granby Consolidated Milling and can be increased by fully fifty per cent., and 000; this the company agrees to rent for ten Harris Company is doing a large and increasing export business.

The National Cycle and Automobile Co.'s

been engaged since in securing subscriptions toward it. They have obtained the \$20,000 which will be repaid at the end of ten years,

H. M. Whitney, of Boston, and Alfred J. Moxham, the general manager of the projected iron works at Sydney, C. B., are said to be making arrangements for locating stalling a new air-compressor plant, made been secured in the Wanzer building, and a steel shipbuilding plant at North Sydney. entirely in Canada, and costing about a factory will be built in the northeast end Negotiations with the General Mining Association will be used for power as well of the city on a site adjoining the Grand cuation, looking to the purchase of association heating blasts. During the last two years the company has so enlarged its plant ments involve the provision of a fund sufficient of the process. The price mentioned is \$1,500,000.

Leather Belting, Lancashire Hair, English Card Clothing,

D. K. McLAREN

Head Office and Factory-MONTREAL

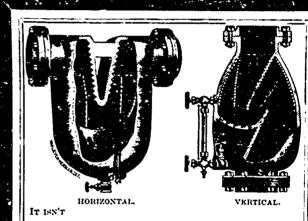
AK

WESTERN TRADE—TORONTO STOCK DEPOT. 'Phone 374 88 BAY STREET.

ADVERTISE IN.....

THE CANADIAN MANUFACTURER.

SEND FOR RATES



A Mere Question of Economy in Fuel

Though we claim to save good money you are now burning up—but the inlinitely better service you get with every pound of steam from which the moisture has been eliminated by an

AUSTIN SEPARATOR.

There a many a business man who struggles along with a \$5.00 a week office boy when he might employ a good man with much better effect.

So with steam plants. It's the up-to-date equipment that produces most for the least money and the initial cost don't

we ship to responsible parties anywhere in the United States on thirty days trial and pay freight both ways if our guarantee of satisfactory service is not substantiated. The buyer is both Judge and Jury.

AUSTIN SEPARATOR CO.

38-40 Woodbridge St.

DETROIT, MICH., U.S.A.



When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

Wire Screens for Every Class of Material.

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

Special Attention given to Miners' 2 Requirements.

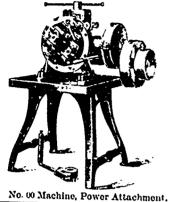
The Hotel Brant Company has been in-corporated with a capital stock of \$50,000 to build and operate summer resorts in different parts of Canada. Head office at Burlington, Ont. Provisional directors, A. B. Coleman, J. H. Coleman, John Patterson, James Dixon and J. A. Kammerer.

The Toronto Rubber Shoe Co., Port Dalhousie, Ont., are installing in their new factory a 150 k.w. S.K.C two phase gen erator with switchboard and one 30 h.p.

The Dodge Mfg. Co., of Toronto, have supplied the entire outfits of shafting, hargers and pulleys for the St. Charles Condensing Company's new plant at Ingersoll, Ont., also for the new plant of Toronand one 7 h.p. S.K.C. two phase induction motors. The entire factory will be lighted and operated by electricity.

Condonsing Company's new plant at Ingertson motors. The entire factory will be Rubber Shoe Co. at Port Dalhousie, lighted and operated by electricity.

PIPE THREADING and CUTTING-OFF MACHINES



BY THE ARMSTRONG MFG. CO.

BRIDGEPORT, CONN.

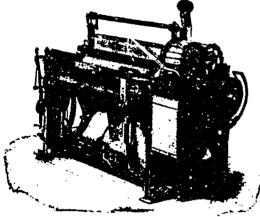
Also Manufacturers of a full line of ADJUSTABLE STOCKS and DIES

And WATER, GAS and STEAM FITTERS' TOOLS.

SEND FOR CATALOGUE 27.

Factory: BRIDGEPORT, CONN.

New York Office: 139 CENTRE STREET.



THE NORTHROP LOOM.

There is only one Profitable Plan-Buy Northrop Loom

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

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

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

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

Write for particulars and quotations. Address

The NORTHROP LOOM CO. OF CANADA, Ltd.

VALLEYFIELD, P.Q.

Toronto and Hamilton

ELECTRIC CO.



Motors and Dynamos

COMMUTATORS REFILLED.

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

Engine Packing,

Magnesia Pipe Covering

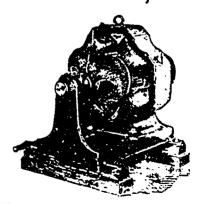
Lubricating Oils

and Grease.

William C. Wilson Co.

24 FRONT STREET EAST TORONTO, ONT.

. Electrical Construction Co. of London, Limited.



MULTIPOLAR MOTORS & DYNAMOS

And Direct Connected Plants for isolated Lighting.

Repair Work a Specialty.

HEAD OFFICE AND FACTORS

No. 90 YORK STREET, London, Canada. 760 Main St., Winnipeg. 42 York St., Toronto. 131 Granville St., Halifax.

When writing to Advertisers kindly montion THE CANADIAN MANUFACTURER.

LARGE SALES OF ELECTRIC MOTORS.

The McLachlan Electric and Gasoline Motor Co., Toronto, manufacturers of electric motors and dynamos, gasoline engines for launches and horseless carriages complete, inform us that some of their recent sales include the following:

Duncan & McLennan, Campbellton, N.B., two 50 light dynamos and one 3 h.p. gasoline engine, Hill & Rutherford, Victoria Glass Works, Toronto, one 15 and one 8 h.p. motor, Roden Bros, Toronto, three 12 h.p. motors, Imperial Woolen Mills Co., Streetsville, Ont., 200 light, installation complete; Leitch & Turnbull, Hamilton, Ont., five 6 h.p. motors;

son Bros., Toronto, one 4 h.p. motor ; A. E. Long, Toronto, one 2 h.p. motor; A. R. Williams & Co., Toronto, one 10 h.p. motor; O'Leary & Robillard, Ottawa, Ont., one 8 and one 15 h.p. motor, W. R. Robertson, Brantford, Ont., one 1 h.p. motor, Continental Costume Co., Toronto, one 6 h. p. motor, Capp & Co., Toronto, one 3 h. p motor, H. W. Petrie, Toronto, one 2 and one 8 h.p. motor; Walter Dean, Toronto, one 6 h.p. motor, Gold Medal Mfg. Co., Toronto, one 25 light dynamo full installation, Matthew Bros., Toronto, one 30 light dynamo full installation, Wm. Meck, Kingston, Ont., one 2 h.p. motor. John Henry & Sons, Ottawa, Ont., one 8 h.p. motor; Murray Printing Co., Toronto, one 12 h.p. motor; H. W. Petrie, Turnbull, Hamilton, Ont., five 6 h.p. motors; Toronto, one 12 h.p. motor; H. W. Petrie, Purdy, Mansell & Co., Toronto, two 6 h.p. motors, Douglas Ford, Toronto, one 8 h.p. motor, White Allan Mfg. Co., Toronto, one motor, Tarbox Bros., Toronto, one 3 h.p. motor, White Allan Mfg. Co., Toronto, one motor, Mrs. Fieroe, Toronto, one ½ h.p. motor; T. Eaton & Co., Toronto, one motor, Mrs. Fieroe, Toronto, one ½ h.p. motor; h.p. motor; E. B. Corlett, Toronto, one 1½ h.p. motor; Dancyger Safety Pin Ticket 2 h.p. motor; J. B. Kleinert Rubber Co., Co., Toronto, one 3 h.p. motor; G. T. Pentoronto, one 3 h.p. motor; McKenzie, Snyder drith & Co., Toronto, one 2 h.p. motor; & Co., Toronto, one 12 n.p. motor; Tomple Moyer & Shapro, Toronto, one 2 h.p. motor; Building, Toronto, one 6 h.p. motor; Thomp-

CORPORATION ORGANIZATION UN-DER THE DELAWARE LAW.

The attention of our readers is called to the advertisement of the Delaware Office, Realty & Trust Company, of Wilmington, Delaware, elsewhere in this issue

This company is, we are informed, com posed of representative business men of the State of Delaware, and is prepared to transact the business of securing charters under the Delaware law with dispatch. Parties interested in organizing companies and obtaining charters of incorporation therefore would do well to put themselves in communication with this company.

An examination of the Delaware Corneration Law will demonstrate the fact, that it is especially liberal to corporate interests, much more so, perhaps, than the law of any other state, while the cost of securing a charter, and the annual Franchise Tax is much less than in any other state.

Some of the special features of the Dela-

ware law are as follows:

The corporation has perpetual existence; The charter cannot be repealed; directors and stockholders meeting may be held out of the State; the books of the corporation may be kept out of the State; consolidation of corporations may be effected, stocks may be sessed for services rendered, the corpor ation may conduct business in any part of the world; the corporation may have as many objects as desired, the amount of the capital stock, the value of the real and personal estate, the amount of liabilities which corporations may incur, and the number and par value of the shares are

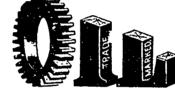
unlimited by the law
No part of the capital stock need be paid

m previous to application.

The company publishes a "resume" of the most important provisions of the Delaware law, also a copy of the act, which may be had upon request. It also furnishes to incorporate a specially parties desiring to incorporate, a specially prepared certificate of incorporation drawn in exact accordance with the law, also a pamphlet of directions for preparing the same correctly, and in such a manner as to secure all of the advantages offered by the law. They will upon request take pleasure in giving any special information desired.

Capitol"Cylinder

"RENOWN" **ENGINE** "ATLANTIC" RED



RELIABLE WELL-KNOWN BRANDS.

ALL ORDERS PROMPTLY FILLED

SAMUEL ROCERS, President

TORONTO, CANADA,



This Clock is adapted for six or twelve stations, and the keys are all different, ranging from 1 to 6, and 1 to 12, instead of as in the old style Time Detectors, which mark either by holes or an impression on the dial, being the same for all stations.
For Circulars, prices and further information address

A. NANZ & CO., Room No. 45. Graham Building, 127 Duane St. NEW YORK

This Clock received the First Prize at World's Fair.





SEND FOR CATALOGUE AND PRICE LIST

The Diamond Machine & Screw Co. TORONTO.

ACHINE SCREWS and BICYCLE PARTS OF EVERY DESCRIPTION





WILLSTAND ANY TEST.

Patent sustained by United States Parent Offices.

AGENTS WANTED IN OANADA.

Write for Samples and Particulars.

F. M. LOCKE, VICTOR, N.Y.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

NEW DYE STUFFS.

Victoria Navy Blue.—This is a new acid possesses all the advantageous properties of the older N extra brand, and only differs in its somewhat redder shade and its lower price. Wool Blue R extra levels well, and is recommended as being specially suited for the dyeing of half-woolen goods. In its good solubility, easy level dyeing properties, and good fastness to light and alkalies, it closely approaches the fast and violets.

Victoria Navy Blue.—This is a new acid wool did blue.—This is a new acid duced. Dyed in one bath, in combination with Logwood, full dark blues are obtained. Its fastness to light and milling suffices medium requirements, but it is considerable of the dyeing of yarm or piece goods.

Fram Blue G—This new wool dyestuff is therefore suited for the dyeing of shoddy with chrome.

This is a new acid duced. Dyed in one bath, in combination with Logwood, full dark blues are obtained. Its fastness to light and milling suffices medium requirements, but it is considerable of the dyeing of yarm or piece goods.

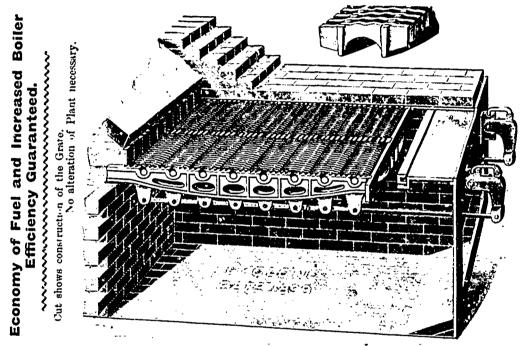
Fram Blue G—This new wool dyestuff is therefore suited for the dyeing of shoddy with chrome.

This is a new acid duced. Dyed in one bath, in combination with Logwood, full dark blues are obtained. Its fastness to light and milling suffices medium requirements, but it is considerable of the dyeing of yarm or piece goods.

Fram Blue G—This new wool dyestuff is therefore suited for the dyeing of shoddy with sulphiric acid it levels well and its fastness to light and milling suffices medium requirements, but it is considerable or piece goods.

Fram Blue G—This new wool dyestuff is the transfer of the production o

CYCLONE GRATE BAR



SIMPLICITY, DURABILITY, ECONOMY.

Burns the Cheapest Fuel with the Best Results

A Boy Can Operate It.

SEND FOR DESCRIPTIVE CIRCULARS AND TESTIMONIALS.

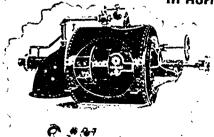
Office...

Manufactured Gyclone Grate Bar Co. Limited, by...

10 KING ST. WEST TORONTO, CAN.

Crocker Patent Turbine

In Horizontal Setting, with Quarter Turn Elbow,



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

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

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

The JENCKES MACHINE CO.,

42 Lansdowne St., Sherbrooke, Que.

Alizarine Red P. S. Powder.—Alizarine Red P. S. Powder is adapted for the dyency and S. B., qualities dyeing either in one or two baths on an alumina or chrome mordant. The main difference between this mordant. The main difference between this mordant.

mine Brown. It is, however, as fast as 3 R is dyed with acetic acid and the bath Benzo Violet R, which closely resembles in shade, fastness to alkalies, acids, perspiration and ironing. Apart from the dyeing of cotton, it should also prove of service for the dyeing of half-silk. In cotton printing Chloramine Violet R is well adapted for padding purposes, and the color is distanced fairly well with zinc or tin.

Anthracene Brown when dyed according to the two bath method, and has the further the two bath method, and has the further

weaving of bed ticks. They are further suited for the dyeing of loose cotton and piece goods. The Trona Reds can be discharged well with zinc and fairly well with tin crystals.

THE MONTREAL ELEVATOR SCHEME.

mordant. The main difference between this new mark and the older W brand is that its shade is more yellowish and is possessed of greater fastness to milling. This property will prove of particular value to those requiring a red product, fast to milling, for dyeing of loose wool, slubbing, yarns and shoddy. There are a sufficient number of yellows, browns, blues and blacks already at the dyer's disposal for this class of work, but hitherto no fast red color to shade same with.

Diamond Brown 3 R.—Diamond Brown

Trona Red G. G., 3 B and 7 B.—The with some of the largest grain shippers of Chicago regarding an all-water route for grain to the seaboard. Montreal is to be the possessed of great clearness of shade, especially when dyed on merceised yarn. Trona Red 3 B is in this respect far superior to Benzo Purpurine 4 B. Trona Red 7 B closely approaches the shade of Turkey Red. In fastness to light and washing these products are on a par with length, forty-three feet beam and drawing the average fastness of artificial dyestuffs. Through the open water months they will be engaged for the greater part in carrying

ESTABLISHED 182

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

WILSON BROS. BOBBIN CO.

(LIMITED)

CORNHOLME MILLS, TODMORDEN, ENGLAND.

BOBBIN AND SHUTTLE MANUFACTURERS.

FORTY PRIZE MEDALS AWARDED.

HIGH-CLASS WORKMANSHIP.

SEVENTY YEARS' REPUTATION.

LARCEST BOBBIN MAKERS IN THE WORLD-(Over 1,400 Workmen).

ADDRESS--

CORNHOLME MILLS, TODMORDEN, ENG.

BRANCH ESTABLISHMENT:

ATLAS BOBBIN WORKS, GARSTON, LIVERPCOL.

OFFICE AND SHOWROOMS

RICE LEWIS & SON, LIMITED

HARDWARE and METAL

Bar Iron, Steel, Boiler Plate Tubes.

MACHINIST TOOLS, PIPE FITTINGS.

A COMPLETE STOCK OF

STOCKS and DIES.

PIPE VICES.

STILLSON & TRIMO WRENCHES.

STEAM PIPE.

14 MARYET PLACE, MANCHESTER Cor. King and Victoria, TORONTO

FAIRBANKS VALVES

SA

 $\overline{\mathbf{s}}$

MOH (



The Globe Valve

Has enough metal to stand the strain of expansion and contraction; has the best and simplest renewable disc made; stuffing boxes all packed with "VULCABESTON." The Gate Valve

Has two renewable seat rings Vulcabeston Bronze, as desired, Renewable Wedge; Double seated. Made in all sizes in Brass or Iron.



A. S. GATE.

A. D. GLOBE.

THE FAIRBANKS COMPANY, 749 Graig St., Montreal.

When writing to Advertisers kindly mention The Canadian Manufacturers.

grain from the various lake ports to Montre. During the season just ended only a little In North Carolina and Georgia it is of secal, but in winter they will be employed both more than 21,000,000 bushels of the vast ondary or derived origin and occurs in al, but in winter they will be employed both in coast trade and in carrying grain to Liverpool. Mr. Conners expressed the opin ion that the project would be in operation by July 1st, 1900. He said, —'Naturally, I feel much gratified at the conclusion of my labors. I can say I have the support of all the large grain interests of Chicago and Duluth. The representative men have expressed confidence in the practicability of the scheme, and a syndicate with which I am connected have begun preparations for establishing a carrying trade all over the establishing a carrying trade all over the water route between the great lakes and Montreal. The Montreal route will afford Montreal. The Montreal route will afford an all-water way to the sea, which can compete with railways because of its cheapness. Montreal is 300 miles nearer Liverpool than Now York, a decided advantage. Besides three elevators at Montreal we expect to build an elevator of 1,500,000 bushels capacity at Port Colborne, and through grain going to Montreal will be broken there.

CORUNDUM IN ONTARIO.

parties and the syndicate in which Mr. Craig is interested only obtained possession after a hard-fought lawsuit with some of the parties claiming to be part owners of it.

As to the question so frequently asked



MOST

PERFECT CLEANER OF BOILER FLUES KNOWN.

Manufactured and sold with

Great Success IN THE UNITED STATES.

For Particulars Write to

FRANKLIN A. BECHER

224 GRAND AVE. MILWAUKEE, WIS., U.S.A.

THE RUGGLES FLUE CLEANER.

SADLER & HAWORTH

Manufacturers of

OAK-TANNED LEATHER BELTING

MONTREAL AND TORONTO.

Orders addressed to our Toronto or Montreal Factory will have prompt care Goods will be forwarded same day that order is received.

that does the cutting. The iron simply rubs and heats without cutting. It is on account of the iron in emery that the latter cannot be used to grind tempored steel, as the friction is such as to destroy the tempor. Unlike emery, corundum is a cold cutter, each grain makes a clean cut and once wheels of pure corundum are produced at a reasonable price they supersede entirely the slow-cutting grindstones which are now used for sharpening all steel tools.

The Ontario Government, after making practical tests of the treatment and separation of this corundum ore, estimates that it can be produced at a cost of from \$13 to \$14 per ton. Its present price varies from \$140 to \$200 a ton, according to purity, and the Ontario corundum readily gives what would be considered the maximum percentage of purity.

Edmunston, N.B., is to have a new roller flour mill.

AN IMPORTANT BELLEVILLE INDUSTRY.

With the completion of the works of the Abbott-Mitchell Iron and Steel Company the city of Belleville, Ont., will see a marked increase of prosperity, and a very material addition to the industrial interest of the city. The new works are favorably situated on the shores of the bay, and are composed of an immense structure, 321 feet in length and 150 feet wide, for use of the rolling mill proper. This building is fitted with a full equipment of heavy machinery and furnaces, with ample power for the driving of the mills, shears, etc. The whole of this mill in practically complete working order, and will be put in operation within a few days. Directly opposite the main building is a substantially constructed brick building, 266 feet in length and fifty-three feet wide, where the manufacture of nails and spikes will be carried on. A portion of this build-

ing is used for machine shop, engine-room, and electric dynamos for furnishing light for the whole plant. The machines for the making of nails and spikes are of the latest modern designs, and will produce all the various sizes from four-penny shingle to the eighteen-inch spikes; there are also a number of machines for the making of wire nails. It is the intention of the company to add other branches of work to their plant, such as the making of horseshoes and horseshoe nails, for which additional buildings will be erected during the winter. A first-class office building is detached, and is arranged for the accommodation of the large staff. A large track scale is placed in front of the building, with the capacity of eighty tons.

A branch of the Grand Junction railroad runs into the yards, and supplies the different buildings. A roadway and dock will also be constructed, giving splendid water facilities. The officers of the company are:

— Mr. F. A. Mitchell, president and managing director; Mr. W. Abbott, vice-president and secretary; and Mr. Henry Pringle,

treasurer.

The company will manufacture iron and steel horseshoes, cut and wire nails, railway spikes, etc. The estimated output of the concern will be from 12,000 to 15,000 tons per annum, and the works, when in full operation, will employ from 150 to 175 men.

The Pope Mfg. Co., of Hartford, Conn., has sent us one of their handy and useful Columbia Desk Calendars designed to furnish the user with a convenient memorandum pad arranged according to the days of the year, and incidentally, to supply valuable gidance to all seeking for information on the subject of quality in bicycles, for which we return our thanks.

The Jones & Moore Electric Co.,

Manufacturers and Contractors

All Work Fully Guaranteed

ELECTRIC LIGHT and POWER PLANTS a Specialty

A Fow Second-Hand A 1 Machines
For Sale Cheap

20 and 22 ADELAIDE STREET WEST TORONTO

The Yeakley Vacuum Hammer.

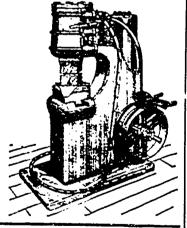
Canadian Patent November 9, 1897.

is now Manufactured and for Sale by the undersigned Sole Proprietors of the Canadian Patent:

George Brush

EAGLE FOUNDRY,

MONTREAL



"IDEAL" ACETYLENE GAS BURNERS

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

FOUR LIGHT CLUSTER-\$2.00 cach. Larger sizes on application.

"IDEAL" Garbide Sub-Merging Acetylene Gas Machines,
15 to 2,000 Lights. WRITE FOR PRICES.

"IDEAL" BURNERS and MACHINES are the BEST in AMERICA.

Manufactured by J. WALLACE & SON, GET THE "IDEAL," HAMILTON, ONT.

T. H. & A. H. DRYDEN

Manufacturers of and Dealers in

FLOUR, SPICE AND

OATMEAL MACHINERY

Grain Elevators Shafting, Hangers Pulleys, Sprockets and Chains

Portable Mills All Sizes

Goars Coggod

MACHINES MADE TO ORDER

All kinds of Repairing Promptly Attended to

Warehouse Elevator Works Electric or TORONTO

Dominion Oil Cloth Co.

Manufacturers of

OIL-CLOTHS of Every

Floor Oil-Cloth, Table Oil-Cloth, Carriage Oil-Cloth,

Enamelled Oil-Cloth, Stair Oil-Cloth, etc.

Office and Works
Cor. St. Catharino and Parthona: Sts.,
MONTREAL, Quo.

NEW COACHES ON THE GRAND TRUNK RAILWAY

to their already up-to-date equipment ready during the past year some fifty of these modern cars have been built and placed in service, taking the place of some into requisition to make these new creations venient appointment. perfect in every detail, and great credit is were turned out. In completeness of detail, artistic workmanship, appointments and

of five handsomely built first-class coaches nals. A special feature of the cars is the

The total weight of these coaches is 72,reflected on the Grank Trunk shops at Point 100 pounds each, and they have each a seat-St. Charles, where the present lot of cars ing capacity for seventy-two passengers. There are twenty windows on each side of the cars, finished on the outside and inside finish they are said to surpass anything of in Gothic architecture in oak, and mahogany their kind yet built in America, and in fact, combination. The interiors are finished in authorities as long ago as gunpowder, and it would be hard to equal them in the quartered oak, and are extremely handsome. some hold it to be as destructive of health quartered oak, and are extremely handsome. some hold it to be as destructive of health. The seats are Grand Trunk standard rever. and happiness as the explosive mentioned, world.

The new cars form part of what is known as the 800 series, and are of the wide vestibility of the other trimmings are of exquisite debug with four sizes in Learning Land Trunk standard revers and happiness as the explosive mentioned, a contention that could scarcely be confident sixty-night feet long with four sizes in Learning are of exquisite debug sidered popular or seasonable at this time.

wheeled trucks, making the riding of the smoking room with a seating capacity for cars easy, and with the least possible jolting eight passengers is provided where the effect. The cars are equipped with Westing-lovers of the fragrant weed can enjoy their The Grand Trunk have added another lot house quick action triple brakes and air sig-smoke with luxurious case and comfort. The saloons are fitted with the litest devices to nais. A special feature of the cars is the same are nated with the steet devices to pseculiar construction of the platform, which is built of steel, and an adjustable covering is arranged over the steps, making the whole platform a vestibule. By this means dust is excluded, and perfect safety to passengers on the platform is assured. The provided for the ladies. The cars are heated placed in service, taking the place of some whole platform a vestil-ale. By this means of the older coaches, and these new cars dust is excluded, and perfect safety to pashave been greatly admired by all who see sengers on the platform is assured. The them. Everything that science, experience vestibule is also lighted with a powerful and skilled labor can do has been brought light, which, though unusual, is a most constitution of the smoking compartment. The closets are provided for the ladies. The care are heated by steam, and the ventilating arrangements are ample and satisfactory. The tout ensuable of these heateds in one semble of these handsome coaches is one of elegance, and everything about them wears an air of ease and comfort.

CANDY IN TORONTO.

Candy was invented according to some bule order, sixty-eight feet long, with four signs in bronze. A large and comfortable The Chinese invented gunpowder 4,000 years

PLANING MILL MACHINERY...

SAWS, MOULDERS. MATCHER, BOILER, ENGINE, PLANERS, JOINTER, SHAPERS. Apply

WILKES & HENDERSON,

BRANTFORD.

FRICTION PULLEY **BOARD** If you are not yet using it, send for sample.

The Dominion Leather Board Co.. MONTREAL, QUE.

Please mention Canadian Manufacturer.



CHARLES F. CLARK, President.

JARED CHITTENDEN, Treasurer,

ESTABLISHED 1849

Capital and Surplus, \$1,500,000.

Offices Throughout the Civilized World.

EXECUTIVE OFFICES, - - 346 and 348 BROADWAY, New York City, U.S.A.

The Braystreet Company gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information no effort is spared, and no reasonable expense considered too great that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world. Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns and by repectable and worthy financial, fiduciary and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

Toronto Office, - Cor. Jordan and Melinda Streets. | Winnipag Office, - 398 Main Street.

Hamilton ** - 39 James Street South.

- 365 Richmond Street

Vancouver " - Cor. Kastings and Hamilton Sts.

Victoria - Board of Trade Building.

THOMAS C. IRVING, - - General Manager Western Canada, - - TORONTO.

THE SMART-EBY MACHINE CO.,

Steam and Gas Engines, Pumping Machinery, General Machinery.

193 BARTON STREET EAST HAMILTON, ONT.

CITY ACENTS WANTED.

London "

WRITE US BEFORE PLACING YOUR ORDER.

ONTARIO GOLD MINING DISTRICT:

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

A Few Mines



BRITISH COLUMBIA:

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

CANADIAN RAND DRILL COMPANY, Montreal

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

ago, and they also may have invented candy about the same time. John Chinaman has a wholcsome taste for confectionery, a fact which will be readily granted by Chinese Sunday School teachers have the confection of the Sunday School teachers have the confection of t Sunday School teachers here who every trade. The stepply is simply not in sight year receive presents from their scholars of boxes of expensive sweetmeats. Therefore, while the statement about the invention of candy may be true, the other should their staffs working a day and half every be taken cur grane sale, for this receive day a statement however about it was one who was sans teeth altogether.

the demand for randy on the approach of

ADDRESSES furnished **ENVELOPES and CIRCULARS**

addressed and mailed

ASIA, AFRICA, and AMERICA. MANY youngsters. of these lists are SPECIAL; that is, There are two classes of candy manusteam-can be had only from us, or through factured, if we exclude candy of a medicinal ronto.

KELLY'S DIRECTORIES, Limited 28 VICTORIA St., Toronto, ONT.

be taken cum grano sall., for it is propa-bly the invention of some dyspeptic indi-vidual who had not a sweet tooth left or one who was sans teeth altogether. But all this has little enough to do with opinion of any unusual capacity on the part of young Canada. The idea of children the world over as to the proper allowance of candy is limited only to the squaw's esti-mate of the proper allowance of whiskey for an ablebodied native: A little too much is just enough. Twas ever thus as any one can testify who is fortunate enough to have children to sit up with the night after Christ-Reliable Type-written lists of names mas. The extraordinary demand for candy furnished at reasonable rates, from this year, with which the Canadian factories a more liberal supply of candy for the

our publications; on these lists a RE- sort, much of which is imported. One is our publications; on these lists a RE-BATE of full amount paid, including postage, will be allowed on all envelopes returned to us post marked "Can't find."

KELLY'S DIRECTORIES, Limited series of the series of t the whole country at large as well as small its commercial rivals in this important recentres, and sells at a very low price com- spect.

pared with ten years ago-fully fifty per cent. less.

The candy of to-day is essentially pure and wholesome. Sugar is as cheap as adulterants and it would not be profitable for the manufacturers to substitute any other ingredient. Formerly gum-arabic was the viscous ingredient used in the manufacture of candy, now glucose is the chief substance of that nature employed. The low price of sugar and the cheapness of glucose have largely contributed to the reduced cost of sweets. It may be added that candy manufacturers never found skilled candymakers as difficult to get as at present, and that is limiting the production.

WHAT CHEAP POWER MEANS.

The City Council cannot too speedily realize that the progress of Toronto is seriously checked by the disadvantageous position in regard to the supply of power this city helds as compared with other cities of the Domin OUR OWN PUBLICATIONS, embracing have so much difficulty in keeping pace, is ion. The new factory of the National Cycle all the Professions, Trades, Industries, due rather to the fact that the parental company, which it was believed would be purse is longer than in past years. We are located here, has been captured by Hamilton, etc., throughout the WORLD, covering passing through years of plenty. That means chiefly because the latter city has waterevery Commercial Centre, in EUROPE, a more liberal supply of candy for the produced electric power to sell and can afford produced electric power to sell and can afford to sell it very much more cheaply than steam-produced power can be sold in To-

Not only is Hamilton in a better position

harters for Corporations Under the Best Corporation Law, at the Least Cost. Secured____

A Copy of the Law-Blank Incorporation Papers, with Proper -Directions, and Full Information upon request.

THE DELAWARE OFFICE, REALTY and TRUST CO., 838 Market Street, WILMINGTON, DEL., U.S.A.

The Advantages offered by the Delaware Law are the GREATEST. The Expenses are the LEAST

This Company secures the Charters, maintains the Delaware offices, and transacts all of the business in this State for non-residents organizing under the Delaware Law. Write us.

James H. Wright, Pres-Louis Pfromm, Vice-Pres, Minor C. Smith, Sec. E. C. Hardesty, Treas, Artemas Smith (General M. E. Smith, Counsel.

DIRECTORS.

Hon. Robt. J. Reynolds, Hon. W. T. Malster. T. N. Stayton. Artemas Smith, E. C. Hardedy, Discovery Martin E. Smith. Artemas Smith, Hon E. C. Hardedy, Mar Louis Pfromin.

Reduce Your Fuel Bills

Increase Your Output...

Guaranteed Increased Economy, from 15 to 50% | Guaranteed Increased Boiler Capacity from 40 to 100%

NO ASHES. NO SMOKE. NO TROUBLE. NO MONEY REQUIRED IF GUARANTEES ARE NOT FULFILLED The First and Only Successful Underfeed Stoker.

No Underfeed Stoker is successful without infringing our Parents and the public are warded against importing or warded against importing or warded against importing at the Stokes to a second our Underfeed as adopted to House Schools, Churches, etc. I (Send for Circular)

For Estimates and other Information write

The General Engineering Co. Limited

SOLE MANUFACTURERS FOR CANADA,

Head Office .. 80 CANADA LIFE BUILDING, TORONTO.



から、 となっているとのできるとのできるというできるとう

If the Electric Light Company now operating in this city fails to take advantage of the development now going on at Ningara or to secure some other waterpower from which electricity can be transmitted to Toronto, it will become a question as to whether the city should not seek some other means to supply what is quite evidently a great want. Here we have a case where a small fraction in the cost of power definitely settles the location of a factory which, it is stated, will employ hundreds of mechanics. Were Toronto able to offer power as cheaply as any of its competitors, in addition to the splen-did shipping facilities already enjoyed, the city would unquestionably become the chief manufacturing centre of Canada. Hamilton is to be congratulated in this instance on the early adoption of a progressive policy and the carrying out of that policy with a resolute purpose. - Toronto Globe.

SALMON CANNING IN BRITISH COLUMBIA.

A correspondent of the Toronto Mail and Empire, in the course of an interesting article on the salmon canning industry,

It is sometimes said that a visit to a cannery will cure the visitor of his taste for salmon. But this does injustice to the business The work is done in a clean and rapid manner, and there is nothing about it to discredit the canned article. Chinamen do most of the canning, and machinery does the rest. When the boat laden with its catch of salmon reaches the river-side door of the cannery, the fish are speedily cast into the building at the feet of a long row of Chinamen working at a bench. With marvellous dexterity each Chinaman reaches for a salmon, beheads it, removes the his and the interior and passes what is left to an Asiatic on the other side of the table. This gentleman washes the fish thoroughly, and transfers it to his neighbor, who operates a revolving knife of many blades, each equally distant from the other. Pressed towards the knife, the salmon is cut into slices, each the size of a can. The slices are washed

The International Broker.

INVENTORS, IMPORTERS, SHIPPERS, INVESTORS, MERCHANTS, FINANCIAL MEN.

Proprietors, and Private People having to buy or sell any valuable properties as houses, estates, land, mines, factories, businesses, patents, or parcels of general goods, machines, etc., in any part of the world, further, people wanting or offering partnerships, investments, financing, forming syndicates, companies, or having any other business to transact in any part of the world, should read, subscribe 2s, a year, advertise in, or apply confidentially to the journal the international Journal (patent, property, commercial) ROMENGER, il South ampton Row, London, W.C.

Patents, Trado Marks, and Designs registered in all countries. Transations in all languages. Adventising circular distributing addresses the following contents of general design for the fact of goods and congress of for cash Any business transacted. Advances granted COMMER, IAL DEPARTMENT

COMMERCIAL DEPARTMENT

H. HAACKE & CO..

11 Southampton Row, LONDON, W.C., ENG.

again and deposited in a can starding on a come in myriads. Then it is that you can moving table. The moment the can has re- almost walk upon them in the river. The its wighbors, until it reaches another machine, which places the cover on top of it. F nerging duly covered, the trip is resumed, out on the way the can turns automatically on to its side, and commences to roll. As it

ceived its slice, off it goes along the table to next season there are but few. In the ena little machine, which seizes upon it and lets down into it a punch to prepare the top for the reception of the cover. Then it proceeds along its journey in procession with large and it was not small. In 1897 the catch was large, and 879,000 cases were put up; in 1898 it was small—merely 200,000 cases. This time it was medium. But the 490,000 cases at \$4.50 means \$2,250,000. They required no less than 5,800,000 salmon to fill rolls it tips slightly, and the cover end them. The average price paid for salmon is moves through a little stream of solder, and the canning is done. The salmon is afterwards submitted to a great heat. In other wards submitted to a great heat. In other words it is cooked, and after that the label of the country words it is cooked, and after that the label of the country words it is cooked. The country words it is cooked, and after that the label of the country words it is cooked. is applied, and the can is ready for the entire world for a market. Everything in market It is a swift operation, and quite connection with the canning is done in New unobjectionable, except, of course, to the fish. Westminster. There is an automatic can It is estimated that this year 490,000 cases making factory here that can turn out 200,of salmon were put up. But this has not 000 salmon cans in a day. It ought to be been a first class year. The sock eyes are added that cold storage is also applied to eccentric in their habits. Some seasons they salmon. The fish are artificially frozen and

DAYLIGHT DISCOUNTED.

ACETYLENE GAS

Does it when made by the

220 MACHINES IN OPERATION AND NO ACCIDENTS SPEAKS VOLUMES.

SIMPLICITY-SAFETY-ECONOMY the Leading Features.

Manufactured by

THE SAFETY LIGHT AND HEAT GO.,

Send for Booklet.

DUNDAS, ONT.



The London Machine Tool Co., LONDON, ONT. Toronto Office, 42 York Street (293) MANUFACTURERS GENERAL MACHINERY....

Having recently sold our patterns and plant to the A. R. Williams Co., of Toronto, retaining only such machines as are useful in our business, we beg to say that we are rapidly putting in New Machinery, from new and improved designs, and are now in a position to receive orders for all Standard Tools for Metal Working in all branches. It will be our aim, by personal supervision of the product of works, with expert men of large experience at the head of each department, to surn out nothing but first-class work at moderate prices. And as we intend to deal directly with the manufacturers, they will be enabled to get their machinery at first cost.

As we shall not be able to personally visit each manufacturer, it is for this purpose that we publish this advertisement. This is our agent who is going about to solicit a share of your patronage. We are thankful for the patronage extended to us in the past, and hope that we may secure an extension of the favors for the future.

All correspondence relating to the following Tools will be promptly answered, viz:

LATHES—Engino, Gap, Break, Turrot, Fox, Spinning, Etc.

PLANERS Standard, Crank, Plato, Etc.

PRILLS—Standard, Sonsitivo, Multiplo, Radial, Etc.

MILLING MACHINES—Lincoln, Plain, Universal, Etc.

And we would call special attention to our PRESSES for Cutting, Stamping, Drawing, Wiring, Rivoting, Etc. We shall also exteem it a pleasure to give quotations on Special and General Machinery in our line.

LONDON MACHINE TOOL CO.

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

CARTSHORE-THOMSON PIPE & FOUNDRY CO.

Limited



3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers Special Castings and all kinds of

WATER WORKS SUPPLIES

FLEXIBLE AND FLANGE PIPE. HAMILTON, ONT.

are encased in a covering of ice. In this TORONTO HARBOR IMPROVEMENTS. state they pass to the purchaser, who has fresh salmon whenever he needs it. There fresh salmon whenever he needs it. There is just one thing needed in connection with this great industry, and that is more extensive work by the Government salmon hatcheries. Millions and millions of young fish ought to be deposited every year in the upper waters of the Fraser. The Fraser River hatchery does much good work. It sends out some 9,000,000 of young salmon annually. But with the enormous catch that is made, and with the possibilities of the business, it will pay the country well to do far more than this. In fact, the life of the mast successful one, and shipply the demand for vessels. Marine men say the season of 1900 will be unusually active. The new city wharf is longer than the new Free land what the possibilities of the business, it will pay the country well to do far more than this. In fact, the life of the mast of Milloy's, will be let within a few days. These two docks will provide accompany now land. This will give considerable additional wharfage space on Scott street. The dock will be long. The new city dock commences at the west side of Bay street and extends 450 feet into the bay. It is nearly square and will be the widest dock in the harbor. Although the new city wharf is longer than the new Free land wharf will be, the latter extends nearly two docks, an extension to accounted for, however, by the fact that he the midustry depends upon cultivation. the industry depends upon cultivation.

The Grenfell Milling Co., Gronfell, Assa. have recently erected a large grain elevator at Summerbery, Assa.

Important dock extensions, the need of days. These two docks will provide accommodation for a third more business than was done at this port last season. The new dock mentioned will be built by W&R. Free-land, and will run south from the west side

of Scott street parallel with Milloy's wharf, where the boats of the Niagara Navigation Company now land. This will give con-

city property jets out considerably to the south from Yonge street westward and that the Freeland dock is to be built out from the Scott street side of Milloy's wharf, which in itself is nearly 400 feet long.

JOHN J. KELLER & CO.

104 and 106 MURRAY ST. **NEW YORK**

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

Aniline Colors, Dyewood Extracts, Sumac and **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

The latest device for LICHTING dark rooms and offices By Daylight For calalogue and estimates write to

Luxfer Prism Co'y, Limited.

58 Yonge Street. -TORONTO.

The Best **Everything**

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

> Percos lucinolista on application.

PENDRITH & CO.,

Adelaide St. West. TORONTO.



PLANING MILL STEEL PLATE **EXHAUST FANS**

For removal of refuse from Wood Working

CYCLONE DUST SEPARATORS

Fan.

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

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

McEACHREN HEATING AND VENTILATING CO.,

GALT, ONT.

WE MAKE-Forge, Cupola and Disc Fans, Electric Fans, Heaters and Fans for Lumber and Wool Drying, etc., and for Heating of Factories. STEAM TRAPS, OIL SEPARATORS, ETC.

F. E. ATTEAUX & CO.

53 Colborne Street, Toronto.

15 kemoine Street, Montreal.

Boston, New York. Philadelphia, Chicago, and Qioversville, N.Y.

Dyewood Extracts, **One Dip Alizarines**, **Aniline Colors**, Dyestuffs and

Chemicals.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER

THE McLAUGHLIN CARRIAGE COM. PANY.

Ata public meeting held in Ushawa, Unt., a few days ago for the double purpose of expressing sympathy with the McLaughlin Carriage Company in the loss by fire which destroyed their factory and for taking such High Class Iron Tools, stops as might be advisable to secure their re erection in that town, a committee of citizens was appointed to take joint action with the Town Council in carrying out the Motors, Water Wheels, wishes of the meeting. After several consultations with the company since then, who have received many tempting offers to move to other places, conclusions were reached at another meeting between the committee and the company, the effect of which will likely terminate in a loan to the company, of \$50,000 without interest, repayable in twenty years. The committee reported their conclusions to the Town Council, and at a special meeting of that body, held later a by-law was introduced and read a first time for that purpose. The vote thereon will be taken on January 13, and the probabilities are that it will carry by a large majority. That being effected the company intend purchasing six acres of land adjoining their old premises, and erecting thereon buildings having a frontage of 800 feet and 50 feet wide, and three storeys high, fitted up with all the conveniences, advantages and machinery that modern skill can supply. By the month of June it is expected the new premises will be in full blast, giving employment in five hundred or more men and turning out carriages as expeditiously as ever.

A. R. WILLIAMS MACHINERY CO.

Head Office, SOHO MACHINE WORKS, TORONTO

Manufacturers of and Dealers in

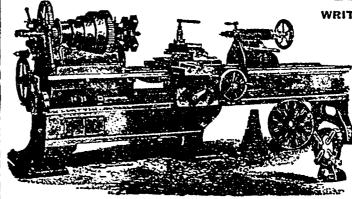
Wood-working Machinery. Engines, Boilers,

General Machinery and Supplies.



WE ARE THE EXCLUSIVE McGregor-Gourlay Co. Limited, GALT. AGENTS OF THE

IRON WORKING MACHINERY.



WRITE TO US FOR PRICES.

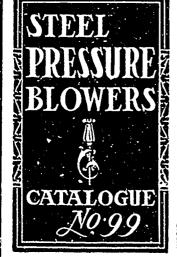
> BRANCHER 193 Colborne St., BRANTFORD

> 345 and 347 St. Jamos St., MONTREAL

Send for Circulars. Referring to this Advt.

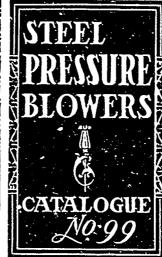
Send for New Catalogue, No. 99 OF FOUNDRY BLOWERS

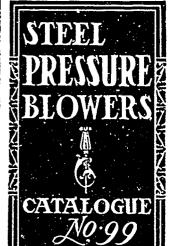
> Showing Superiority of Fan Blower over **Rotary Blower**



BRANCHES:

New York-Philadelphia Chicago London.





B. F. STURTEVANT CO.,

BOSTON, MASS.

BRISTOL'S ROUND RECORDING PRESSURE GAUGE.

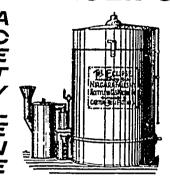
The illustrations Figs. 1, and 2, show exterior and interior views of a new round recording pressure gauge that is being placed on the market by The Bristol Company of Waterbury, Conn.

This new form has been designed to meet designed for a recording to the control of the

a demand for a recording gauge at a lower price than their standard gauges which have, during the ten years they have been in use. acquired a high reputation for accuracy and durability.

A special feature of the round form is that the dial is located slightly eccentrically to the main body of the case, thus allowing sufficient space on lower side of the dial for pen arm to pass out between dial and the

The ECLIPSE

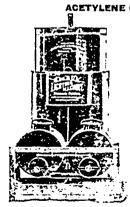


BUIL'S ESPECIALLY For Private Residences. Offices or Small Stores. PRICE COMPLETE, - \$25.00

Write for particulars.

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

Sun Lighting Machine.



The Acme 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.

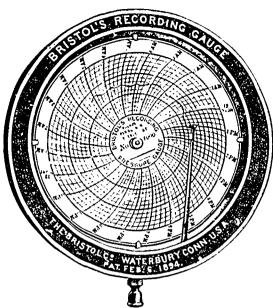
Write for Catalogue.

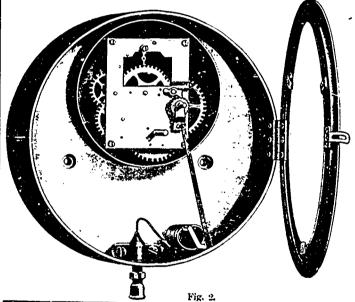
Acetylene LONDON, ONTARIO.

Figure 1 shows exterior of the gauge complete and ready for application. Figure 2 shows the interior construction of the instrument and the extreme simplicity upon which its accuracy and durability depend to a large degree. The pen arm is directly attached to the free end of a tube of flattened cross section which is bent into a helical form.

The tendency of pressure applied is to straighten or uncoil the helical tube which causes the pen arm to move over the range of the chart without the necessity of any intervening

multiplying devices.
In order that the advantages of using recording pressure gauges and other recording instruments may be more gener-erally appreciated, The Bristol Company are filling orders for these instruments with the privilege of returning at end of thirty days' trial if not perfectly satisfactory.





For some time past Alfred E. Martin, an English graphite expert, has been at St. Malachy, in the Ottawa Valley, prospecting for graphite, and has discovered on land belonging to Owen McCoy two extensive seams of ore of great rich-ness, and averaging from thirty-five to sixty per cent. flake graphite. In the opinion of the expert this is equal to anything in Can-ada. The find is situated on the south side of the mountain immediately along side Blanch River, and offers abundance of

McLachlan Electric & Gasoline Motor Co., 94 ADELAIDE T. WEST.

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

The Packard Electric Co., Limited.

Lamps and Transformers

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

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

water-power for milling purposes. At a point about a half mile to the south of this another fine bed has been located on the same property and is of high-grade ore. It is the intention of the owner to open out all these seams at once and place the product no the market. It has been the opinion that graphito exists in this particular district in great abundance.

The Penman Littlehale Chemical Co., of Hamilton, Ont., has been incorporated with a capital stock of \$50,000, to manufacture chemicals, etc. The provisional directors are John Penman, Paris, Ont., Thomas Littlehales, Syracuse, N.Y., and D. B. Long, Hamilton.

The United Electric Co. have recently sold to Henry Morgan & Co., of Montreal, one of their bipolar type motors.

ALVANIZING

We are prepared to attend to all orders Promptly and Economically. WINDMILLS, PUMPS, TANKS, Etc.

ONTARIO WIND ENGINE and PUMP CO. 95 ATLANTIC AVE., TORONTO.

THE....

Toronto Paper Manufacturing 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.

THE IMPROVED



It's simple in construction,

Effective. Inexpensive and Guaranteed.

Sold by all Dealers.

We manufacture and handle everything for .. Engineers and Plumbers.

THE JAMES MORRISON BRASS MFG. CO., LIMITED,

DELIVERY

89 to 97 Adelaide St. West, Toronto.

CLARK'S OIL CAN FAUCETS.

Mr. Chas. H. Clark was the inventor and original manufacturer of The Angle Plug and Straightaway Oil Can Faucets shown here.



These goods are used by manufacturers of oil cans throughout the United States and They are conveniently operated. Canada. and are fitted with thick fibre washers and double running thread. They are made of



brass, nicely machined and nickel plated. The oil has a nearly direct flow and cannot ooze through the threads. These goods are

Bring customors to your customors, by advortising to the consumer. Plans and rates will be cheerfully propared and submitted by the E. DESBARATS ADVERTISING AGENCY, Montreal.

NOTICE.

I would like to secure the right to represent several good Canadian houses; have the best of connections with the different trades, and would be responsible for bad debts; I will guarantee to increase the sale of any article now on the market here, and will make a specialty of introducing new goods; manufacturers wanting to place an agency with me will please send samples, with full particulars and commission al lowed, to

CHARLES W. RENT,

Keith Building, HALIFAX, N.S. REFERENCES, R. G. Dun & Co. and Bradstreet's.



Bobbins, spools, picker sticks, cloth ROLLS, Etc.

JOHN HOPE & CO., LACHUTE, QUE.

made by Hoxie & Clark, Rochester, N.Y., who invite correspondence from consum-ers of metal faucets.

CANADIAN CANNED GOODS.

The season of 1899 has been a phenomenal one for the industry of fruit and vegetable canning in Canada. Not only has a larger quantity than usual been put up, but consumption has in some lines out run even this large pack. There were several directions in particular in which buyers seemed at one

F SPORTSMEN 🖘

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

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

ROLLED THREAD **MACHINE SCREWS**

HARVEY HUBBELL, BRIDGEPORT, CONN.

For Manufacturers of Oil Cans, Filters, etc.

<u>~</u> ö % 9Z S . 9 9

7.

ಕ

Gross (

per

Also Filters, with Shank plant or threaded send for Free Sample. CHEAPEST IN THE WORLD.

J. M. LITCHFIELD, 105 BEEKMAN ST.,



AY TEDDER FORKS, AY RAKE TEETH, ARROW TEETH,

DOUBLE POINTS, CULTIVATOR SHOVELS,

Teath SEAT SPRINGS. of all kinds. Prices Quoted on Application.

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

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

A. C. NEFF

CHARTERED ACCOUNTANT

Room 500 McKinnon Bidge

Tol. 1330.

TORONTO.

Audits and Investigations a Specialty.

CANADA IN NEW ZEALAND.

We are Importers of Canadian Goods and Manufacturers' Agents.

The YEREX & JONES CO., WELLINGTON, . NEW ZEALAND.

REFERENCES-The Union Bank of Australia, Limited, Wellington.

FOR SALE.

ABOUT 100 TONS

56 lb. T Rails,

INCLUDING FISH PLATES AND SPIKES.

Would be good for Sidings and for Contractors' use.

APPLY TO

Syracuse Smelting Works,

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.

CARBONIZER A neutral substance, harmless to animal fibre

er tissue, while it destroys burrs, etc., as efficiently as acid. It leaves the wool in fine condition. Manufactured by the Merrimac Chemical Co., BOSTON.

J. ALEX. CULVERWELL,

Electrical and Hydraulic Broker

(Formerly of Edison Gen. Elec Co.) Late Dist. Mgr. Royal Victoria Life)

6 King Street West. - - TORONTO

WELLAND VALE MARUFACTURING CO.

Limited, ST. CATHARINES, ONT.

Axes, Edge Tools, Saws,
Farming Implements
and Bicycles.



KIRVAN & BARNARD, ELECTRICAL ENGINEERS and CONTRACTORS, Purchasing Agents.

Complete Electric Light Plants, Witing, Dynamo and Motor Reparting, Residential and Factory Work Telephones Bells, and all Electric Fixings. Specifications, Plans, 1 ests and Consultations. Estimates furnished free, and all work promptly executed. 112 Church 8t., Toronto. Phone 8383.

time to make a dead set at all there was in sight. Of Indian corn, of which hundreds of thousands of cases were put up, there is so little now left that it is predicted the last will be gone before next year's crop comes into market. Tomatoes, while hardly so scarce as corn, are in a very limited supply. Peas, though constituting but a small pack as compared with the foregoing two items, have sold well. There is a marked improvement in the quality of Canadian canned peas within a very few years. They are more delicate and of better color as a rule, indicating that the packers have learned by experience at what stage of growth to pull them, and that they have been making chemical experiments as to the retention of color.

The rise in price of core and tomatoes has been striking. Some months ago corn could be had freely at sixty-live cents per case, to-day it is worth \$1.05 and firm. Tomatoes have advanced from less than seventy cents to around eighty-five and ninety cents. Peas, while firm, have not shown such a rise. Fruits are in rather better relative supply at present. Peaches, it is true, are high in price and very firm, while strawberries, raspberries and cherries cannot be called

plentiful.

Very remarkable progress has been made in the business of canning fruits and vego-tables among us. While it is true that the development of fruit canning generally has not kept pace with the putting up of peas, corn and tomatoes, yet in the preserving of apples there has been a very marked increase. There is a big demand for canned apples in the Northwest, and even in the older Provinces. A considerable quantity is also sold in England. Said Mr. Wellinging Boulter last week, who is known to be one of the first authorities on the subject of canned goods: "One and a half million of dollars was distributed amongst the farmers of the Bay of Quinte during the past season for fruit, corn, peas, tomatoes, etc., taken by the canning factories." If this be true of the district named -which covers several of of the Midland counties of Ontariowhat sum of money will represent the disbursements of the Province for fruit and vege-tables, fresh or canned! What of the Hamilton and Dundas territory; what of the famed Niagara district; what of Essex, Middlesex, Oxford-a dozen counties? The extent and value of our frum producing districts is none too well known.

It is probable that the astonishing demand from the Klondike for canned vegetables and fruit within the past two years has interfered with export of these products to Europe. That demand absorbed great quantities. One dealer sent in 1896 to Dawson City six carloads—the first shipment to go into that district, and this year the same gentleman says he has sent no fewer than lifteen carloads to Nelson, Rossland, Kaslo and Grand Forks, B.C. Evidently, therefore, the mining towns are a large and sure market for canned vegetables and fruit. There is, Mr. Boulter tells us, a prospect for the opening up of a very large trade with England, and not only with England but with Germany. He adds that he has put up fourteen tons of fruit poly this year, and one ton is about to be sent to England, by way of introduction. This fruit poly is presumably for use by jam-makers.— Monetary Times.

The fate Optical Co., of Peterborough, Ont., are installing electric power in their factory and have contracted with the United Electric Co. for the necessary apparatus.

Paris Electro Plating Co.

Manufacturers of

Stove and Piano Trimmings and Novelties
Fine Grey Iron Castings a Specialty.
Nickel, Copper and Brass Electro Plating.
WRITE FOR PRICES.

TORONTO MACHINE SCREW CO.

Manufacturers



Hoxagon AND Square Hoad Cap

Steel and Iron Set Scrows. Hanger and Planer Bolts, Studs, etc.

Send for Price List and Discounts. 109} Adolaido St. W.

- TORONTO.

JOHN J. GARTSHORE,

83 Front St. West, Toronto.

RAILWAY, TRAMWAY, and

....Contractors' Supplies

METALS and SCRAP IRON
Bought and Sold.

PATENTS

TRADE MARKS, Etc.

HANBURY A. BUDDEN
NEW YORK LIFE BUILDING,
MONTREAL

F. R. F. BROWN, M.I.M.E. Consulting Engineer,

Tolophono Main 3351.

Machinery, Rolling Stock, Engines and Boilers of every description supplied. Inquirie a specialty. ARBITRATIONS VALUATIONS 22 Street Ratiway Chambers, Montreal.

CHARLES H. MITCHELL, B.A.Sc.

C.E. (Tor. Univ.), A.M. Can. Soc. C.E.

Givil and Hydraulic Engineer, NIAGARA FALLS. CAN.

Special attention given to Water Power Development and Improvement.

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

Wheels. Wheel Materials, Shafts, etc.



Smith Wool-Stock Co.

219 FRONT ST. E., TORONTO,

Makers of

WOOL STOCK, SHODDIES, Etc.

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

GEO. PATTINSON & CO.

PRESTON, - ONTARIO. Manufacturers of

FINE AND MEDIUM

PENMAN MANUFACTURING CO.

PARIS. ONT. Manufacturers of

LIMITED.

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.

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

Manufacturers FINE GLOVES AND MITTS

In every variety and style. Moccasins.

WM. BARBER & BROS. Quorgetown, Ont.

Manufacturers of

Book and Fine Papers.

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 Prospoctus.

A. G. RAMSAY,

PRESIDENT.

GEO. A. & E. W. COX,

Managers for Toronto and Eastern Ontario.

ASSURANCE COMPANY

OF LONDON, ENGLAND.

ESTABLISHED 1782.

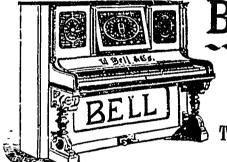
AGENCY ESTABLISHED IN CANADA, 1804.

PATERSON & SON, GENERAL AGENTS FOR THE

London and Lancashire Insurance Buildings, } - - MONTREAL, QUE.

Agent at Toronto,

20 Toronto Street.



HIGH CLASS

INSTRUMENTS

USED AND RECOMMENDED

LEADING MUSICIANS.

Send for Catalogue.___

THE BELL ORGAN AND PIANO CO.

(LIMITED)

GUELPH.

ONTARIO



STEAM GAGE AND VALVE CO. Sole Proprietors and Manufacturers of

Crosby Pop Safety Valves, for all kinds of Bollers, 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 Ohime Whistles.

BRANDEN PATENT PUMP VALVES

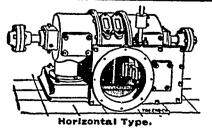
CLARE'S LINEN FIRE HOSE AND ADJUSTABLE COUPLINGS

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..... Underwriter

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



"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., - - GLENOR!

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

McARTHUR, CORNEILLE & CO..

310 to 316 St. Paul Street.

WAREHOUSES:

147 to 151 Commissioners Street.

...MONTREAL...

AGENTS FOR . . .

Berlin Aniline Co., Aniline Colors and other Coal Tar Products.

Stamford Manufacturing Co.. Dyowoods and Extracts.

Coez, Langlois & Co.,

French Extracts. Miller Extract Co., Hemlock Extracts. British Alizarine Co., Alizarine. J. H. Heald & Co., Extracts Oak, etc.



The Ontario Malleable Iron Co.

(Limited)

....Manufacturers of

MALLEABLE IRON . . . Order for all kinds

Castings to

AGRICULTURAL IMPLEMENTS

....AND....

Miscellaneous Purposes

OSHAWA, - - ONT.

THE UNITED ELECTRIC CO. Limited.

SUCCESSORS TO

W. A. JOHNSON ELECTRIC CO. THE TORONTO ELECTRIC MOTOR CO., Limited. THOMPSON ELECTRIC CO.

We Manufacture a complete line of Electric Light and Power Apparatus.

ARE PREPARED TO CONTRACT FOR COMPLETE

INSTALLATIONS.

134 KING ST. W., TORONTO, ONT. Head Office,

THE CANADA SWITCH & SPRING CO., LIMITED.

Manufacturers of SPECIALTIES FOR . . .

Steam and Electric Railways,

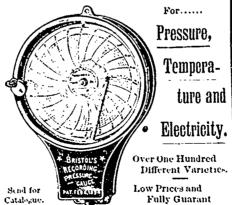
SPRINGS, STEEL CASTINGS, FROGS, FORGINGS, TRUCKS FOR ELECTRIC RAILWAYS, ETC.

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



BRISTOL CO

WATERBURY, CONN., U.S.A.

SMITH'S FALLS

Malleable Iron Works

00000

CAPACITY 2,000 TONS.

00000

William H. Frost

PROPRIETOR,

SMITH'S FALLS.

ONTARIO, CANADA.

CARRIER, LAINE & CO. LEVIS. P.Q.

ENGINEERS, FOUNDERS, MACHINISTS, 1 BOILER MAKERS AND GENERAL CONTRACTORS.

147 St. James St. Quebeo Branch....

263 St. Joseph St.