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DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 39.

TORONTO, SEPTEMBER 1, 1899.

No. 5.

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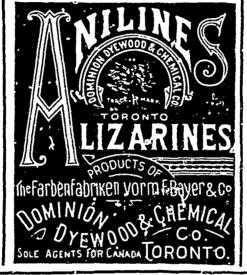
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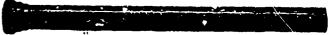
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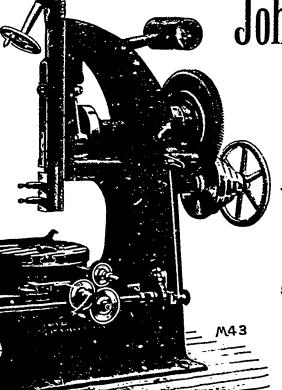
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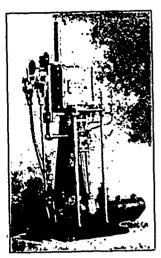
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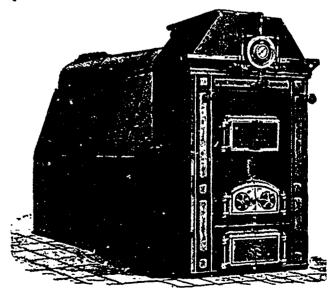
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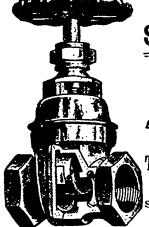
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No Wear

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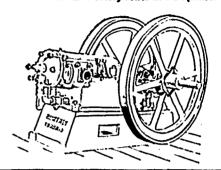
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SIR RICHARD CARTWRIGHT, THE NATIONAL POLICY AND THE GROWING TIME.

None but disgruntled politicians can possibly find fault with the very able, lucid and instructive exposition relating to the affairs of Canada given by Sir Richard Cartwright in his address at Massey Music Hall last week. Like a good and faithful servant, he gave an account of his stewardship, explained the methods of his work and the conditions resulting therefrom. Nor will we find any fault whatever with his definition of the term "National Policy," being only too well satisfied in knowing that the rose under any other name would smell as sweet. We had a National Policy when Sir Richard and his party came into power, by which we mean that the distinguishing feature of the tariff at that time was protection to our manufacturing industries, and as long as that feature is continued and prominent in our tariff, we are quite content. We know that the tariff of to-day is substantially what it was before the general elections of 1896, and we also know a growing time is upon us in which Canada is enjoying greater prosperity than ever before. This journal never was a partizan of any political party further than to advocate the principle of tariff protection, and incidentally to speak approvingly of any and all who advocated that principle. If we admired Sir John A. Macdonald because of his advocacy of protection, we also have admiration for the leaders of the party now in power because of their determination to continue that policy.

It is exceedingly gratifying to learn from Sir Richard's speech, some of the particulars of the situation that now environs Canada, and while his who address was instructive, we can but confine our abbreviated review of it to a few but important particulars. For instance, in speaking of the Crow's Nest expenditure he said that the construction of the Crow's Nest Railway under the Government subsidy of \$3,300,000 had resulted in developing wealth to the extent of thirty or forty millions in the region that was then opened. The capital charge on this sum amounts to some \$80,000 or \$90,000 a year, so that the returns we get in added customs and excise duties is, probably, a matter of \$500,000 or \$600,000 a year, and in a few years the increased receipts

arising from the construction of that railway will fully recoup the country for the outlay that had been made upon it. If that is to be the result, as Sir Richard believes, the exponditure was certainly a wise one. He told us, too, that within three years the revenues of British Columbia, from customs alone, have risen from about a million to two and a quarter millions-that the excise revenue in Rossland and Nelson alone would more than pay the whole interest on the capital that has been expended in constructing the Crow's Speaking of Canada's onormous wealth, Sir Richard said that there was every reason to believe that within the next few years, the value of our mineral products -coal, iron, nickel, gold and silver-will likely equal one hundred millions of dollars, an enormous source of wealth not merely for the miner, but for the capitalist, the manufacturer, the artisan, and the farmer. Canada, Sir Richard poirted out, possesses another source of wealth which has hardly yet been touched—the extraordinary water power along the St. Lawrence and its tributaries, which will shortly become a source of profit and wealth equal if not greater than what is expected from our mineral resources.

Sir Richard drew a comparison between the volume of trade in the United States and in Canada. He said:—

I have received within the last few days the details of the total volume of trade of the United States for the year 1893. They amount to \$1,924,000,000 of exports, and \$697,-000,000 of imports, on which, be it remembered, a duty of \$206,000,000 was collected. Canada for the same year has a total trade of \$319,500,000; so that Canada with a popula tion of about 5,300,000 in 1899, as against the United States, with a population of 73,500,000 by estimation in the same period, has a total trade of \$57.73 per head, as against a total trade for the United States of \$26.16—the total volume of our trade being thus somewhat more than double the total volume of trade in the United States. In the matter of exports Canada exports \$25 worth of goods for every man, woman and child in the country, as against \$16.70 per head in the United States. In this connection I may observe that it is worth while noticing that the Intiable goods imported into the United States in 1898 amounted to \$396,844,966, and the amount of percentage on those goods was 52. The percentage on goods imported into Canada amounts to a little over twenty-eight per cent., very little more than one-half of the percentage imposed in the United States. That bears on a question which has been brought forward, not infrequently, namely, the allegation that the present tariff is a highly protective tariff. There is an easy method of distinguishing between a high revenue and a high protective tariff. Ours is a high revenue tariff, it is true. But there never was a protective tariff under which the imports increased as fast as those of Canada have done in a single year. Look at the American tariff and you will find that after the passage of the Dingley bill, American imports fell from \$750,000,000 to ; nder \$700,000,000. Remember, this, too, that in imposing the tariff it is quite possible for you, under a high revenue tariff, to impose a higher duty on American goods without prohibiting importation than you can impose on British goods. American imports will bear as a revenue tax a higher tariff than British goods will bear, for reasons apparent to all, and if there was no other good reason, and none other is wanted, for the preference which we have extended to the mother country, that should be sufficient. I may add that it is a great mistake to suppose that the reduction of taxes which has taken place in our preferential tariff is confined to the goods imported from England. Bear this in mind, that you compel the American manufacturer to reduce his prices to you in proportion. It may be true, and it is true, that the volume of our trade with the

United States has not greatly diminished, but the volume of American profits has greatly diminished, and in such case the Canadian consumer very largely benefits.

Sir Richard stated a fact with which we are all familiar when, alluding to the general prosperity of the country he said:—Within the last three years Canada has advanced by leaps and bounds in a manner such as very few other countries have known—that our population has increased, that our volume of trade has increased, that our exports have increased, that our mineral resources have increased enormously that everything promises a reasonable continuance of prosperity if we are only true to ourselves.

Speaking of the growth of Canadian trade the Minister said:—

I said that I would show you that it was no mere rhetorical flourish but a simple fact when I stated that between 1896 and 1899 the trade of Canada had increased as much in a period of three years as it had done before in thirty years. I go back to the first year of Canadian Confederation, when we had no Prince Edward Island, when we had no British Columbia, when we had no North-West Territories, and when we had no Manitoba, and I find that in 1868 our total volume of trade was just \$131,000,000. In 1895 our total volume of trade had increased to \$224,000,000, being an increase in that interval of something like \$92,000,000. Since 1895 down to 1899 our total volume of trade has increased from \$224,000,000 to \$319,500,000 being an increase of \$95,000,000, as compared with an increase of \$92,-000,000 from 1868 to 1895. I call your attention also to the fact that the gross income of Canada has increased from \$34,000,000 in 1895 to \$46,000,000 and better in 1899. I call your attention to the fact that the income of Canada has increased in all human probability—I mean the income of the people collectively—by over \$50,000,000 in that interval; and, what is perhaps more important than all, that whereas our population was very nearly at a standstill it has increased something more than 100 per cent. faster within the last three years than it had done in the preceding period.

There is no tinge of blue ruin in the magnificent showing, no financial or other depression, no smokeless chimneys, no closed factories, no idle workmen. Canada is on the high road of prosperity, and this journal can say with much confidence that Canadian manufacturers engaged in the production of all varieties of articles entertain only the profoundest feelings of thankfulness to Sir Richard Cartwright and his co-laborers in the Dominion Government that in the general interest of Canada they have promulgated and maintained a policy that preserves the home market to our various and almost innumerable industries. No organized body of Canadian manufacturers have ever held to any political opinion beyond that which asked that Canadian labor and Canadian capital, the interests of both of which are identical, should not be forced into unfair competition with the cheaper labor and cheaper capital of other countries; and, judging from the course the Government have pursued, and considering that they have used most commendable diligence in promoting both the domestic and foreign trade of the country, and that the prevailing growing time is bringing both prosperity and contentment to the people, they deserve and should have the hearty approval of all Canadians.

We are under obligations to the National Association of Manufacturers of the United States for oft repeated favors in sending us circulars and other literary matter having reference to the work being done by that Association in building up the trade of that country both domestic and foreign.

CANADIAN IMPORTS, 1898-1899.

Unrevised statement of the values of the principal dutiable imports entered for consumption in Canada during the twelve months ended June 30, 1898 and 1899, respectively:

months ended June 30, 1898 and 189	9, respectively	y:
	188.	1899.
	Value.	Value.
Ale, beer and porter	\$146,169	\$163,810
Animals	388,501	459,881
Books, pamphlets, etc.	912,997	1,119,805
Brass, manufactures of	337,528	417,277
Breadstuffs— Corn for distillation	eo o e	919 661
Grain of all kinds	62,247 113,862	218,664 85,741
Flour	143,875	143,939
Meal, corn and oats	184,195	104,538
Rice	297,311	406,341
Other breadstuffs	231,296	248,167
Bicycles, tricycles, velocipedes, and		,
parts of	862,240	801,886
Cars, railway and tram	106,943	230,978
Cement and manufactures of	314,410	465,349
Coal, bituminous	3,145,592	3,665,521
Copper, manufactures of	86,504	84,196
Cotton, bleached or unbleached, not		
dyed or colored, etc	479,464	713,786
" blenched, dyed, colored, etc	2,481,438	3,190,465
" clothing	360,364	424,907
"thread (not on spools), yarn,		
warp, etc	257,940	329,410
"thread on spools	370,164	285,492
" all other manufactures of	728,538	985,770
Drugs and medicines	1,442,699	1,708,851
Earthenware, stone and chinaware	675,185	905,999
Fancy goods and embroideries, viz:—	594 959	250 550
Bracelets, braids, fringes, etc	534,853	576,770
Laces, collars, nettings, etc	707,241	639,795
All other fancy goods	568,232 377,522	641,440 490,758
Flax, etc., manufactures of	1,171,960	1,698,261
Fruits and nuts, dried	1,152,003	1,178,061
" green, viz., oranges and lemons	667,686	797,171
" all other	362,881	415,727
Furs, manufactures of	436,047	646,506
Glass, manufactures of, viz:-	200,021	0.1.100
Bottles, jars, decanters, tableware		
and gaslight shades	432,516	519,613
Window glass	308,577	384,452
Plate glass	1:34,404	219,656
All other manufactures of	149,169	198,469
Gunpowder and explosive substances.	136,709	205,080
Gutta percha, manufactures of	396,522	462,520
Hats, caps and bonnets-beaver, silk		
or felt	834,518	907,712
Hats, caps and bonnets—all other	564,566	558,065
Iron and steel and manufactures of,		
viz:—	1 === ===	A 140 AAA
Band, hoop, sheet and plate	1,765,389	2,109,288
Bar-iron and railway bars	463,632	605,507
Cutlery, hardware, tools and im-	0 107 150	2 200 105
plements	2,427,450	3,329,105
Machines, machinery and engines,	2,857,939	3 236 432
including locomotives Pig-iron, kentledge and scrap	950,474	3,536,435 893,447
Stoves and castings	202,383	262,160
Tubing	563,645	S53,644
All other manufactures of iron and	1707417417	00.,011
atcel	3,264,247	3,798,348
Jewelry and watches and manufac-	,,,	.,,,
tures of gold and silver	860,858	995,310
Lead and manufactures of	333,023	367,500
Leather, all kinds	1,073,335	1,015,835
" boots and shoes	368,348	410,631
" all other manufactures of	•	·
leather	186,292	238,466
Marble and stone and manufactures of	184,639	227,588
Metals and manufactures of	547,548	696,755
Musical instruments	278,631	349,047
Oil, mineral and products of	697,536	718,396
Oil, flax seed or linseed, raw or boiled	183,019	329,998
Oil, all other	382,302	392,414
Paints and colors	652,178	782,661
Paper, envolopes, etc.	1,124,401	1,247,885
Pickles, sauces, capers, all kinds	141,451	184,451

Beptember 1, 1899.	THE	OANADIAN
Provisions, viz:—Lard, meats, tresh	188.	180.
and salt	1,241,6	1
butter and cheese.	82,2	
Seeds and roots.	437,0	
Silk, manufactures of	2,628,4	58 3,715,061
Soap, all kinds	285,5	
Spices, ground and unground	193,6	
Spirits, all kinds	906,1	
Wines, sparkling	160,0	
" other than sparkling	265,6	
Molasses. Sugar	589,9 4,596,2	
Tobacco and cigars	222,9	70 260,231
" leaf	444,5	
Vegetables	264,2	
Wood, manufactures of	630,8	56 746,032
Woollens, carpets, Brussels and tapes-		
try	689,0	
" clothing	940,1	
cionis, worktons, contings, etc.	2,044,7	
areas govas	3,086,5 433,1	
" knitted goods " shawls	53,1	
44 yarns	178,0	
" all other manufactures of	2,0,0	20,0,0,0
woollens	520,2	81 645,154
All other dutiable goods	10,226,1	
Totals, dutiable goods	73,694,6	44 87,536,085
Unrevised statement of the value	es of the	e principal free
imports entered for consumption in C		
months ended June 30, 1898 and 189		
months ended ounce 30, 1030 and 10.	-	•
tuinale for improvement of steels	1878.	188
Animals for improvement of stock Articles for use of the army and navy	216,9 627,4	
Asphaltum or asphalt	56,1	
Broom corn	113,	
Coal, anthracite	5,754,1	
Coffee	453,3	
Corn, Indian	6,949,5	
Cotton waste	191,1	
" raw	3,912,5	
Dyes, chemicals, etc	2,264,0	
Fisheries, articles for, nets, seines,	510,7	00 442,071
lines, etc	416,1	50 524,254
Fruits, bananas, olives, pineapples, etc	503,8	
Fur skins, not dressed	412,5	249 783,814
Grease, for soap-making, etc	146,0	91
Hides and skins	3,628,2	218 3,791,522
India-rubber and gutta percha, crude	1,534,1	
Jute cloth and jute yarn	601,0	
Metals, brass and copper " steel rails for railways	1,045,1 1,641,3	
" iron and steel, all other	1,876,8	
" tin and zinc	1,450,1	07 1,366,083
" other	280,	
Oils, vegetable	66,	382 66,493
Salt	290,7	72 290,445
Settlers' effects	2,739,	309 2,578,921
Silk, raw	229,2	
Sisal, manilla and hemp, undressed	611,9	
Tea	2,590,9 16,9	
Wood, cabinetmakers, etc	1,762,4	
Wool	1,897,0	1,422,835
All other free goods	6,655,	
_		
Totals, free goods	51,446,9	
Coin and bullion	4,389,3	123 4,677,636
Dutiable goods		
6	73,694,6	
Grand totals	73,694,0	344 <u>87,536,085</u>

Comparative statement (unrevised) of the Quantities and Values of the principal articles of merchandise exported from Great Britain to British North America during the twolve

foregoing was:

The amount of duties collected upon dutiable goods as per

.....\$21,564,584.79 \$25,157,930.77

1538.

months ended June 30, 1897, 1898, and 1899, respectively. (From English Returns.)

Note - The figures subsequent to December 31, 1838, of the twelve months ended June 30, 1820, are for Canada only.

months ended June 3), 1829, are for Canada only.											
BRITISH AND IRISH PRODUCE.											
Auticies, 1. Articles of Food	1897. Q	Cantitie 1893.	s. 1899,	1897.	VALUES. 1818.	1899.					
and Drink:— Salt, rock and			•								
white, Tons Spirits Pf Gals	(2),749 23),767	31,103 61,912	35,167 4(6,013	\$15,312 \$15,524	\$201,405	\$196,856 791,956					
2. Ruw Materials:- Wool, bs	151,300	1,499,500	680,900	96,012	257,027	120,149					
3. Articles Manufactured and partly Manufactured:—											
Cotton Manufac- tures-Piece goods gray or unbleach-											
Piece goods bleach	000,873	•	1,208,300	38,057	61.212	30,900					
ed. yds. Piece goods printed		2,923,100		175,742	121'125	RD,559					
yds. Piece goods, dyed, or manufactured		12,751,500		679,188	815,673	E17,830					
of dyed yarn.yds. Jute manufactures —Piece goods, all	9,901,100	12,221,200	13,922,700	904,912	1,1127@	1,252,355					
kindsyds. Linen manufac- tures – Piece	-	15,813,500	14,191,300	G15,15S	©1,713	O#),178					
goods all kinds.	6,511,500	7,08,700	9,777,900	516,59%	G1,532	702,006					
Silk manufactures- Lace	•	•••••		22.165	32,707	0)(055					
materials Woollen tissues yels Worsted	2312.700 10.352.700	2,089,300 10,000,700	3,126,200 8,106,106	100,778 1,178,061 2,514,148	११३७६५ १,१७३,७३ १,८५३,७५१	186,582 1,537,621 2,741,012					
Carpers not being	1,3/2,300			618,336	761,107	579,232					
Hardware unenum-				303,000	20,62	113,110					
Cutlery			• • • • • • • • • • • • • • • • • • • •		35.05.0	28,111					
Iron: pig Tons. Bar, angle, bolt and	G.771	4,510	•	102,172	G7119	19,077					
rod tons	1.451	1,340	1,237	35(062	\$1,(3);	CL SSE					
Forts tons Hoops, sheet, boiler and armour plates	•	9,481	7,961	716,765	100,023	168,200					
tons Galvanized sheets	. 7,771	10,013	10,865	271,276	319,709	127,530					
Tin plates and	. 3,115	4.456	4,827	253,230	301,500	<i>W</i> ,132					
sheets	12,618	3),907	17,316	1,001,731	1,017,578	85G, 131					
manufacturesins	3.281	2,799	2,519	197,681	173,310	174,633					
Old, for remanufac-	, 3,(3)	3,163	626	40,532	44,901	10,503					
Steel, unwrought,	. લગ્રજ્	4,55S 2,396	4.83	3537.66	१८५,३४३ स्वयःस्य	253,901					
Lead: Pig. tons. Tin,unwright cwt.	7 110	G 15G	3,116 3,625	96,901 111,263	101,323	22.19 22.19					
Apparel and slops. Haberdashery and		• • • • • • • • • • • • • • • • • • • •		1,502.188	1,577,161	1,311,156					
			•								
ing embroideries and needlework Alkali Cwt	13),719	197.587	197 (2)	728,470 227,315	677,382 211,518 121,506	221,556					
CementTone	19),719 13,921	197, <u>5</u> 87 14,517	197.021 14,303	190,960	131,506						
chinaware Oil, seed oil Tons	3,579	<u>ā.25</u> i	4,03G	597.558 220,311	172,020 172,020	૧૬૧૧૧૧ આતામ					
Paper, writing or printing and en- velopes Cwt. Paper, all other,	, 18,740	15,395	19,500	155,198	137,091	11जंद					
except hanging.	3,497	3,127	3,701	39,96	ಚಾ,ಡಾ	45,46					
Stationery, other than paper				110,913		126,857					
*Included with	"Hardw	are. unen	umerated	." prior to	1886						

EDITORIAL NOTES.

The Canadian Australian line of steamers between Sydney and Vancouver has been sold by the liquidator as a going concern for the sum of £145,000. The purchasers were the New Zealand Shipping Company, Limited. That was the only tender. The mortgages will be paid; the unsecured creditors will receive a dividend, and the shareholders will get nothing. Mr. James Huddart, the pioneer of the line, and a heavy shareholder, loses all the money he put into the venture, but it is stated that with his characteristic energy he is promoting another company to put on a larger and better class of steamers to compete for the rapidly developing trade between the two continents. He has an abiding faith in the future of Australia.

It appears that American chain manufacturers are taking the Canadian market from the British. A single Pittsburg manufacturer in twelve months exported \$22,000 worth of chain to Canada, and the trade is constantly increasing. The American methods of manufacture are much more economical than the British. In England the welding is done by hand, while in the United States it is done by machinery. The wire rods or bars are coiled cold by a machine, coming out twisted like a corkscrew. The coil is then cut longitudinally, each round making one link, the links put together, and the joints welded by powerful hammers, with special dies. The average output per man is 400 lbs. of § inch, some men r aching 500 1bs., the average of I inch chain being 1,350 lbs.—Tin and

Misses Florence and Juliet Kenrick, daughters of Mr. John R. Kenrick, of Philadelphia, have just returned home after a two weeks' visit with Toronto friends. As was to be expected, they applauded vigorously at the result of the yacht race, and really wanted to take Genesce home with them captain, crew and all. Mr. Kenrick is well known in journalistic circles in Philadelphia.

The Editor has much pleasure in acknowledging receipt of an invitation to be present at the twenty-first annual Rhode Island clam dinner tendered to the electrical fraternity by Eugene F. Phillips, Esquire, general manager of the American Electrical Works, of Providence, R.I., at Pomham Club on Saturday, September 9th, instant. Our card comes to us with the compliments of Geo. H. Olney, Esquire, the Secretary-Treasurer of the Montreal branch of the Providence works. We are told that lunch will be available at 11.30, and that the clam bake is to be opened at two o'clock, and it is a question whether the lunch is only a preliminary incident to the clam bake or how. We have knowledge, however, that the preliminary etc. is usually incident to such affairs, and that a sniff of the odor of the bake is remarkably fetching.

When Professor Weber of the United States Agricultural Department discovered after years of study that the seeds of many fruit bearing trees were polyembryotic, that is, that it was possible to grow more than one fruit from the same seed, the possibilities of intergrafting became far greater than had ever before been suspected, and Director Frederick Taylor of the Pan American Exposition saw possibilities for the consummation of a hoped for, but despaired of result. Weber has succeeded in growing three distinct varieties of lemons from one seed by intergrafting," said Mr. Taylor, "and his success has prompted me to make some researches in that line. I am now working on a couple of trees and shrules, and with the success which I confidently expect I hope to show a tree which will be vastly popular in the summer time and which every man will wish to purchase. I am intergrafting the lime tree with the juniper bush. From the plain lime tree we get limes. From the juniper bush we get juniper berries. From juniper berries gin is made. From the intergrafted tree we shall get both. The fruit will be gin rickies." No doubt such a desirable bit of shrubbery would be an excellent thing for the average Toronto citizen to have on his premises. Not necessarily in his front yard, for the fruit is not conducive to

eached, and operated in connection with the ico chess and the sugar bowl. When Director General Weber addresses the manufacturers' meeting at the Fair Grounds next week we hope he will explain in a practical manner how the rickey business is approached and the results arrived at-Professor Weber, or is it Director General Weber, will carry his experiment a little farther and graft his gin rickey plant onto a sugar maple tree.

The Toronto City Council and the Board of Control use strong efforts to induce manufacturers to locate in this The newcomers are exceedingly well favored with exemptions from taxation, cheap or free water, etc., for long terms of years, and tall smoking chimneys are arising in many sections. But how about the old friends who have borne the heat and burden of taxation for many long years, and who are very roughly repulsed when they venture to ask an equalization of the burden. On a recent occasion the Toronto brewers and maltsters asked that they be supplied with water from the city mains at the same rates that are accorded to other manufacturers, but they got no abatement. shown at the time that Toronto brewers were forced to purchase malt made in other than Toronto malthouses, while the malting plants of the city had capacity to supply every brewery in Ontario, in doing which they would give employment to large numbers of men who are not now thus employed. Later, Messrs. Christie, Brown & Co., who operate the largest biscuit works in Canada, and who have been established in Toronto over fifty years, applied in vain for a similar concession. It is not good policy to refuse terms to old concerns that are readily granted to new.

The Supreme Court of Illinois held, in the recent case of Doremus vs. Hennessy, that members of a trade association who combine to induce or compel other persons not to deal or enter into contracts with one who will not join the association or conform his prices to those fixed by the association, is liable for the injuries caused to him by the loss of business resulting from such combination.

The suggestion meets with much favor in certain circles that the way to "amash the trusts" is by putting on the free list all products competing with those manufactured by the industrial consolidations. Numerous influential newspapers have taken up this view of the matter and given it their in dursement. They have evidently not considered the question very thoroughly or the fatility would easily be seen of such a procedure. Assuming, for the sake of argument, that tariff duties afford protection to some of the consolidations, enabling them to charge domestic consumers higher prices than with free foreign competition, what would be the effect of abolishing such duties? The consolidations would not go out of business simply because prices would then be reduced. They would endeavor to cut down their costs to meet such con ditions. Those from whom they purchase raw material would have to furnish such raw material cheaper, and the wages of their own workmen and of those producing their raw material would be cut down. Profits might be reduced but the greater part of the reduction in price and in costs would come squarely out of the carnings of labor. No "smashing of the trusts" wakefulness, but where it could be easily and frequently I would take place as they are too strong financially to be

CANADIAN MANUFACTURERS' ASSOCIATION.

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The Executive Committee meet on the Second Tuesday 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 aver of the development of home industry and the promotion of Canadian manufacturing enterprises.

To enable those in all branches 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.

bership.

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TORONTO INDUSTRIAL EXHIBITION ASSOCIATION.

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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 Australaga.
- Q. Eustace Burke, Kingston, Jamaica, agent for Jamaica.
 Robert Bryson, St. John, Antigua, agent for Antigua, Montserrat and
- 8. L. Horsford, St. Kitta, agent for St. Kitta, 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, the undermentioned will answer inquiries relative to trade matters, and their services are available in furthering the interests of Canadian traders.

- J. C. Colmer, 17 Victoria Street, London, S.W., England. Thomas Moffat, 16 Church Street, Cape Town, South Africa.
- G. R. Mitchell, 15 Water Street, Liverpool, England.
- H. M. Murray, 10SL Enoch Square, Glasgow, Scotland.
- Harrison Watson, Curator Imperial Institute, London, England.

IMPORTANT.—An enquiry addressed to J. J. Cassidey, Secretary Canadian Manufacturers' Association, Toronto, Canada, will place you in communication with the leading Canadian Manufacturers of the articles you mentic). 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.

driven out of business. Such independent domestic competition as they now have would be equally affected with themselves, and would also have to reduce costs in the same way. The workingman now employed in these industries would be The fact obtains, however, that free the chief sufferer. foreign competition is not seriously feared by many of the great consolidations, especially those in the iron and steel trades. The constituent companies in these consolidations have held their own the past couple of years in the markets of the world, and confidently expect to take a much larger share of such business in the future. is much better for them to be able to dispose of their entire product at home, and their managers doubtless hope that such conditions as now exist may long continue But when the change comes and a surplus product must be marketed, it will be forced into foreign channels at prices which will make the merchandise move in that direction. The great capital at the control of these industrial giants will give them a power in that event which is even now regarded with apprehension by the foreign manufacturers who are expected to "smash the trusts" as soon as the tariff bars are let down. Those who think a club for this purpose can be made of the tariff should think twice.—The Iron Age.

THE PARIS EXPOSITION.

In the Dominion House of Commons in discussing the vote of \$175,000 to defray the expenses of making a Canadian exhibit at the Paris Exposition in 1900 Mr. Fisher, the Minister of Agriculture, announced that he proposed to appoint a chief commissioner. Hitherto he had himself been acting as Chairman of the Commission, but he intended to send

a permanent official, who would go to Paris before the opening of the fair and remain there until its close.

Mr. Britton asked if, in the event of a Central Ontario mineral exhibit being prepared, a place could be found for it in the exhibition.

Mr. Fisher replied that the idea of the Paris Exhibition was not that the exhibits should be arranged according to locality, but that they should be of a national character, and this idea would be carried out in the Canadian exhibit. At the same time each exhibit would be labelled with a description of its nature, but also a statement of the locality from which it

Mr. Clarke Wallace contended that the \$175,000 could be expended in a wiser and more judicious way by promoting trade. This was an exhibition largely of the City of Paris and of France, and would be of a national character, and people who went there would be largely there for pleasure, and little commercial result would be secured. If it was considered necessary for Canada to put in an appearance in France, we were doing it on too lavish a scale for the people of Canada. This \$175,000 would be largely thrown away, and might better be devoted to the development of Canadian commerce. He spoke of the comparatively unimportant amount of our trade with France, and declared that he could not support the

Sir Richard Cartwright said that his own impression was that we probably would not to a very large extent extend our trade with France, although we might do so to a greater extent than Mr. Wallace expected. But at such an exhibition as this literally all the world and his wife would be present; every available nation under the sun would be represented there, and we would have an opportunity of exhibiting the products of Canada and the progress we have made, not merely to the people of France, although that was an important thing in itself, but to every European nation, and probably to all nations in the world; comparisons would be made by them of our products with those of other countries, and it was, therefore, of considerable importance that if we appeared at this exhibition at all we should do so in a manner fitted to maintain the reputation of Canada.

Mr. Wallace repeated that the people would be in Paris for

pleasure.

"Apart from that interesting question," Sir Richard continued, "which some members of the House are more qualified to speak of than I am—apart from that, it is to be considered that when Canada appears at the Paris Exhibition she will find herself literally in the presence of all the world, and I think, although we may assume that although on pleasure bent, they will be on business bent too, and very considerable results may be expected to arise from the exhibition, if properly conducted and properly carried out; and I am perfectly certain the officials will take pains to have the exhibition properly carried on." Sir Richard added that he had great hopes of increasing our trade with the Mediterranean countries, and there could be no better place to display our products to these people than at Paris.

Mr. Foster said that the benefit to be derived from the fair depended altogether on the quality of the exhibit and the class of men whe are appointed to take charge of it. A larger number of people would be at the fair than anywhere else in the world, and the opportunity to make the right kind of an exhibit was one that might redound greatly to the commercial benefit of our country, but it depended on the representative nature of the exhibit. There were some things that every country did well, but there were some things that Canada did a little better than any other country, and to these products

special importance should be given.

Mr. Fisher explained that the Canadian exhibits would be carried from Quebec or Montreal to Rouen, and from there to Paris by lighter. The item passed.

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 their names and addresses by applying to THE CANADIAN MANUFACTURER, Toronto. No charge for giving information. When writing refer to the numerals opposite the enquiries.

6S. A Copenhagen (Denmark) firm wish to be placed in communication with Canadian houses desiring business there, who require the services of a general agent.

69. A Boulogne (France) firm, who do a large trade in apples, are asking for the names of Canadian shippers.

70. A firm of merchants in Glasgow are desirous of being placed in communication with Canadian houses requiring a buying or selling agency in that city.

71. A Midland firm ask to be referred to a representative in Canada who could sell their teazels among woolen manufacturers.

ROLLED OATS AND APPLES WANTED IN SWEDEN.

Mr. C. E. Sontum, Canadian Commercial agent at Christiana, says that owing to the unfavorable weather crops of apples and oats in that country will be short, calling for imports of large quantities of rolled oats and apples during the coming fall and winter.

AUSTRALIAN TRADE.

The report of the Department of Trade and Commerce for the month of June has been received.

Mr. J. S. Larke, Canadian Commercial Agent, at Sydney, N.S.W., gives some interesting facts regarding the values of

the imports of the chief articles of Canadian produce going into that country in 1898 as follows:—

Articles	1823.
Ploughs Reapers and binders. Other agricultural implements Apparel.	£2,073
Range and hindare	
Allen - minited 12 1	926
Other agricultural implements	
Apparel.	1,001
Bicycles	24,780
Boots and shoes	491
Caminana Shoes	
Carriages	454
" materials	224
Confectionery	39
Cordage and twine	36
Deno-	4,714
Drapery	
Drugs	274
Furniture	1,714
Fish preserved	4.787
" fresh	62
11C311	
Flour	54,327
Hardware	131
Cabinet organs	511
Pianos.	1.132
tanus	
Bolts and nuts	132
Lampware Agricultural machinery Other	131
Agricultural machinery	11,865
Other	51
71 *4	
Paints	376
Timber rough	11,641
Laths	SS4
Shooks	415
	202
Varnish	
Brassware	135
Brushware	13
Dentist's tools	42
Nails	20)
T1	39
Jewelry	
Engine packing	80
Printed matter	295
Paper	272
n-1	\$2
Books.	
Ashestic	250
Plated ware	74
Preserves	354
	72
Saddler's ware	
Sewing machines	161
Whiskey	478
Perfumes.	122
Stationery	105
Woollens	372

These figures show the current of trade, though not an accurate account of it, for, as in previous returns, articles originating in the United States are credited to Canada, and articles coming from Canada are credited to the United States. The most noteworthy of the first is that showing slicep to the value of five thousand pounds imported from Canada. These came from Vermont and passed through Canada and came here via a Canadian steamer.

On the other hand the articles originating from the United States and hitherto credited to Canada—such as hops, machinery other than agricultural and newspaper, showed marked decrease. The chief decreases in Canadian articles are in wheat and flour, amounting to £50,509. This trade was dependent upon the yield in Australia, and must naturally fall to smaller proportions still with improvement in the quality and yield of home production. Some when and flour came via New York, and has probably been credited to the United States.

In general merchandise there has been an increase in nearly every line. Where the figures show decrease it is simply a change in the form of entry. Thus no reapers and binders are shown, but these are included in agricultural machinery which increased from £2,710 to £11,865—nearly fourfold. It is claimed that one-half the reapers and hinders sold in this colony last year were of Canadian origin. The growth of the trade in implements is indicative of what can be accomplished in other goods, were similar methods used to push the trade. A reduction is also shown in lampware and leather, but this is also a case in which these goods have been credited to the United States. A third item of decrease is in

dressed timber. As has been previously stated the flour trade destroyed the dressed timber trade. As the steamers from Vancouver could not give any space to a relatively cheap freight such as this timber is, the trade went to San Francisco. Just now the demand is small, but when it revives there is every probability it will return to Canada. The other productions of British Columbia, rough timber, laths, shooks and fish show gratifying increases. In some lines, such as bicycles and furniture which show some increase, the trade within the colony is better than the figures show. In 1897 these goods in the case of the chief manufactures were brought into this city and the other colonies supplied from the stock here. Last year shipments were made direct to the other colonies without being entered at the Sydney custom house.

A considerable number of new lines appear this year. During the two years the number had increased nearly three-fold. Many of the articles were samples or sample orders, but they show evidence that there has been some

activity in developing the imports from Canada.

In the list of articles is found plated ware. This was a small sample lot sent to a commission firm, but so far nothing has been done, and I am advised, nothing is likely to be done. Another Canadian firm has sent out his own representative with what is said to be the finest set of samples ever shown in the colony. They at once attract the attention of the buyer and impress him that this is a firm of such strength that it can fill its orders promptly. United States silverware has not cucceeded very well in Australia, but despite this and the drought making a poor market for high price goods, a good trade is likely to be secured. Some orders have already gone home from strong houses here and more will be secured, and the foundations of a trade laid that can be made permanent. This affords another illustration of the importance of doing Australian trade upon right lines.

Two or three enquiries have been received from Canada respecting the possibility of finding a market here for paper and wood pulp. One or two small lots of pulp have been sent here, but there is no demand for ground pulp, and very little for chemical. Only wrapping paper is made in the colonies, and rags, old paper and cordage furnishes the raw material. There is a large demand for news, wrapping and

bags.

Paper mills are at work on wrapping and bags in New South Wales, Victoria and New Zealand, but the other colonies import all their papers. The following statement of importations and places of origin show the extent of the market:—

Countries	Nonx.	Wrapping.	Hage
New South Wales	£155,316	533,905	TE0.412
Victoria	156,068	3,639	912
South Australia.	30,963	12,591	1,881
Queensland	49,370	Not given.	2,336
Now Zealand	72,529	3,460	3,347
West Australia		Not given.	3,985
Tasmania	7,972		
	£480,453	£53,604	£27,008

Inquiries from a number of Canadian packers have also been received about canned fruits and vegetables. An enterprising firm sent out a car load. Some of the lines could be sold only at a considerable loss. It took a good deal of expense and time to get an unknown brand into the market. No wholesale firm nor any large retail one could be got to buy a pound of the goods; they passed through the hands of four agents and it was only by selling single case lots to the smaller dealers that they were sold. Then the larger houses took some, and now there is an enquiry for certain lines of the brand, but there is none on the market. The discouraging prospects and great expense of selling the consignment and the increased demand in Canada prevented the receipt of another shipment as needed. The rate of freight

on the goods was high, but it is probable the Canadian exporter will get back his invoice value, as the good prices got for corn, strawberries and red raspberries will make up, or nearly so, for the heavy charges and losses on other lines. The following is a letter from the agent who disposed of most of the goods respecting a suggested consignment:—

Corn.—Say about fifty cases, each two dozen. As our people have not been educated to eat sweet corn it would be well to have a small label pasted on the tin, showing how to prepare it for the table, of course presuming this is not

already on the tin.

Peas.—There is a large sale for these, especially in one pound tins. Cases may hold six dozen or 100 tins. There is only a limited sale for the two pounds. I think say twenty-five cases one pound, and five cases of two pounds would be a fair parcel.

Baked Beans.—The sale is limited for this line, they are only eaten by the American population. Send five cases of two pound tins.

Strawberries.—I think five or ten cases could be sent as there is a fair sale for them.

Raspberries.—Five or ten cases also of this line could be sent, but they must be red raspberries.

Cherries.—Red. I would not advise more than five cases of these being sent as a trial.

Jams.—We have a duty of 2d. per pound on these. I hardly think your friends could stand that, but if they think they can, send a few cases of each raspberry and strawberry, and assorted jams.

Apples in tins.—These are only saleable in two pound tins, and then at a low price; they must be cheap to give your friends a fair return.

Evaporated Apples.—Our market is abnormally high at present owing to the scarcity in America, and the largest factory in Tasmania having been burnt down just at the commencement of the season. The price I contracted at before the fire took place, was 43d. on wharf Sydney. But they are worth now from 5d. to 54d. (Our duty is 2d. per pound, so that would mean 7d. to 74d.) They sell best in boxes of twenty-five to twenty-eight pounds each, and a few fifty to fifty-six pound's each. If your people decide to send on some, they understand that good fruit must be shipped. As for quantity they can send as much as they like as we have a good market to work on right up to February and March next year.

All packages must be good and strong to stand the long voyage.

Send on any show cards or advertising matter; they will help the sale of the goods.

Corn.—Prices range from 4s. 9d. to 5s. 3d. according to quality. 5s. is a fair price to reckon on.

Peas.—These run from 3s. 6d. to 3s. 9d. for the ordinary peas, to 4s. 6d. to 5s. for the fancy sorts.

Baked Beans.—For one pound, 5s. to 5s. 3d. Two pounds, Ss. to Ss. 6d.

Strawberries.—11s. to 12s.

Raspberries.—11s. to 12s.

Cherries.—Do not know the selling price of these.

Jams. - The selling price would be according to quality.

Apples in Tins.—About 6s. 6d. per dozen for two pound

Apples in boxes.—Evaporated from 7d. to 71d. Ordinary—"but our market is very bare and they are worth Sd. to S1d. to-day."

Many of the letters mailed in Canada for Australia are posted with but a two cent stamp. This entails the payment of 3d. per half ounce on receipt here. This amount is not very large, but it gives annoyance to the recipients and also leads them to conclude that Canadian business methods are careless.

THE INTERNATIONAL CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY.

Attention has been directed to an international treaty known as "The International Convention for the Protection of Industrial Property," which has existed for the past sixteen years, and which grants certain rights to inventors, patentees, users of trade marks and trade names, and which it is understood, has been laid before the Dominion Government for their action.

The principal features underlying this treaty or convention are:

- 1. To place a patentee on an equality as to citizenship in all the countries party to the convention in respect of his patent, enabling him thereby to take advantage of the laws of the country wherein his patent may have been granted.
- 2. In the establishment of a system, through the granting of certain defined periods of priority, whereby the inventor may be assured of securing perfectly valid patents for the full term of years allowed in the country wherein he may make his application.
- 3. The right of a patentee to introduce his patented articles into other countries where he may have obtained a patent, without forfeiture of the same, being subject, however, to the laws of the country wherein he introduces his patented article, as regards the working and manufacture of the same.
- 4. To establish, as far as is practicable, certain defined laws to govern the issue of a trade mark, and means for the protection of the same in all countries of the union or convention, uniformly.
- 5. The broad principle of protecting a trade name, whether it may or may not have been registered in all the countries of the union.

From the above resume of the articles of the convention, it will be seen that the origin of the convention takes its source in the effort to secure to the first and original applicant for a patent, design or trade mark, his full and exclusive rights in the states composing the union, and to protect him in the enjoyment of those rights, not only as a patentee or user of a trade mark, but broadly as a citizen of the country wherein he may elect to make his application for the same.

At the present time Canadian in entors are debarred from the enjoyment of any rights under this convention, as Canada has not yet become a member thereof, and, as a result, must exercise the greatest care to secure reasonably valid patents abroad. For instance, a Canadian patent is issued good for eighteen years, provided, however, that no foreign patent has issued for the same invention, but if by some mischance one should issue, the duration of the Canadian patent is cut down at once to the same number of years as the foreign patent. Again, should it happen that the Canadian patent should issue even a day ahead of the foreign applications, a valid patent could not be obtained in many of the principal foreign countries, notably France and Germany. In this connection we quote the words of an eminent Canadian barrister and patent expert as follows:

"From the failure of the Government, since 1888, to apply to enter this convention, I know that a large number of foreign patents are annually obtained by residents in Canada, which are absolutely invalid, owing to the invention being published or having reached Europe. The publication of the Monthly Canadian Patent Office Record, which is sent to all the principal countries in Europe immediately after issue, alone suffices to render these foreign patents invalid, and in France and Germany, even before it reaches these countries, whereas under the convention the number of invalid foreign patents taken out from Canada would be minimized by Canada's adherence to this convention as to Industrial Property."

Another advantage secured by Canadians in adopting the convention is, that a Canadian who may be an owner of patents in foreign countries, or who exports goods bearing his trade mark or trade name, would be protected in his rights, as a citizen of the country wherein he introduces his article. At the present time a Canadian patentee or owner of a trade mark who desires to secure redress for his wrongs in foreign countries, whether it be for infringement of his patent right or for the fraudulent use of his trade mark or trade name, can do so only as a foreigner and is subject to the special legis. lation enacted in nearly all foreign countries, through which he can only proceed. By the adherence of Canada to this convention, special legislation now in force against Canadians would be done away, with, and they would enjoy equal rights with citizens of other countries, members of the union, in the protection of their industrial property.

The convention also provides that, a patentee may introduce his patented articles to other states of the union without necessarily forfeiting his patents in such state, provided however, that the laws governing the working of his patents are properly carried out. In some of the states, which are members of the convention, the courts, by their interpretation of this clause, have allowed manufacturers of patent articles certain liberties which could not have otherwise been obtained, and much trade has thus been secured by this interpretation. It follows, of course, that the rights thus accorded would be extended to Canadians, should Canada accede to the union.

The states at present forming the convention are:

Great Britain and Ireland, United States, Holland, Norway. Spain, Italy, France, Belgium, Denmark, Sweden, Portugal, Switzerland, Queensland, New Zealand, Mexico, Greece, Servia, West Australia, Tasmania, Brazil, Paraguay, and Surinam.

It will be noticed that all English and Latin speaking countries are members of this convention except Canada. It is represented that Canada is now fast approaching the front as a great manufacturing country, that with her great mineral resources, her enormous water powers fast being converted into electricity, her great waterways for increasing and carrying on an immense export business, that her government should take advantage of every opportunity to secure for Canadians the advantage of every reciprocal arrangement now existing and seek for her own citizens such treaties as will further secure their rights abroad and foster their industries at home.

THE RUSSIAN MARKET.

Russia is undoubtedly the coming market of Europe. Most of the St. Petersburg trade is local, but Moscow is the gateway to Siberia, and is bound to be one of the most important markets in the world. Russia has a population of 120,000,000, or nearly twice that of the United States. The new railroad which they are building to Vladivostock, and which will be completed in a few years, will open up a country of vast mineral and agricultural resources.

AGRICULTURAL IMPLEMENTS AND MACHINES FOR INDIA.

The latest official return relating to agricultural implements and machines which have been tested in India during the past year, has just been issued. A plough, described as W. Martin's patent, has been tested, but the reports do not agree as to its merits. Dell's machine for winnowing and cleaning threshed grain, by hand power, has continued to do very good work on the Nagpur Farm, and is stated to be used by grain export agents, but not by culti-ators. The Crosskill clod crusher is in use as a thresher at the Dumraon Farm, and continues, according to the Agricultural Department of Bengal, to give satisfaction. Hunt's kibbling machine continues to improve in demand, and is described as light, simple, durable, efficient and labour saving, being largely used by the people in the North Western Provinces and Oudh. A similarly favorable report applies to R. Hunt & Co.'s "Simplex" chaff-cutter. The Stoney water-lift for raising water from wells does not appear to have answered expectations on account of its heavy cost and the skilful supervision required. An American windmill was tested in the North Western Provinces, but found to be not altogether satisfac tory, the light winds prevailing in the mornings and evenings not being sufficient to work it. A four-roller iron mill for cane crushing supplied by a native company has been introduced and is favorably reported upon. An indigo seed drill, also made in India, has been found useful only in large fields. An American grain seeder for sowing all sorts of grain, made by Thompson & Sons, Ypsilanti, Michigan, though not known to the natives, is described as a useful implement, but in provinces where hand labour is very cheap a machine intended for broadcasting seed is not likely to prove economical. As regards cotton gins, Macarthy's hand cotton gin is very satisfactorily reported upon, and among miscellaneous implements a hay press is described as preserving the aroma of grass and facilitating its storage. A fruit evaporator, supplied by Messrs. Lumley & Co., for drying fruit and vegetables, was found fairly successful for drying guavas, plantains, ber, Kashmir apples, shikerkand, carrots and radishes. A machine for making semai or vermicelli is referred to as durable, efficient, and in use by some people in the North West Provinces. The "Humming Bird" cream seperator is described as easily portable, and therefore suitable for camp use and small dairies. It is simple and substantial, and leaves hardly any butter-fat in the milk. The weight is | will be necessary .- New York Financial News.

only thirt, pounds. The Babcock milk tester as supplied by the Dairy Supply Co. is again very favorably mentioned as giving most accurate results and capable of use by natives of ordinary intelligence. The same Company's cheese-making pparatus, butter workers and churns were also tried in the North Western Provinces.—British Trade Journal.

GERMAN COMPETITION.

German manufacturers heretofore anxious about British and Belgian rivalry, are now in increasing fear of American competition. At present they, like the manufacturers of all countries, are taxed to meet demand. But this cannot be expected to last always.

Consul General Hanauer, at Frankfort, sends quotations from a leading German manufacturing organ, the "Confec-

tionair," saying:
"Of late, from various sides, demands have arisen for the establishment of a central bureau, on the order of a commercial museum, like that in Philadelphia, in order to further Germany's export trade. In view of the mighty efforts which other nations are making to push Germany from the position which she has won in the world's markets, it seems necessary for our Government to use all methods which other nations employ in competing with us. It is a stale truth that hitherto the Imperial Government has done very little in this line." Which, perhaps, gives us some reason for patting ourselves on the back. And again quoting:

"It is true that our export trade is the present in such good shape that the resort to extraordinary means for its improvement might seem prompted by excessive anxiety; yet we must bear in mind that the growth of our foreign trade does not keep step with the increase of our domestic production."

The last clause is the important one for our manufacturers to consider. Just now the world is full of rush orders. They are transient, but they stimulate production that must have permanent employment to live. Permanent conditions of extended and rapidly growing development cannot exist on rising prices for iron, machinery, lumber and the great staples which enter into construction. There must come an end to a boom on an inclined grade. It was ability to produce at low cost that started the present world-wide boom. Eventually, it will come back to a competition in low cost of production as soon as existing rush orders are filled. Cold weather will stop a lot of work now being pushed with extreme energy and a breathing spell will ensue that will give time for reflection. Calculations in Wall Street or elsewhere cannot be based on a permanently rising scale of prices. It is a pretty good time for merchants, manufacturers and investors to keep their heads cool and look ahead a little. In all modern countries, power to produce can be calculated to keep ahead of power to huy and use profitably. Just now we are not bothered by German competition, because demand outruns supply. But later on we will find we have Germany, Great Britain and other countries to compete with, and that lower prices

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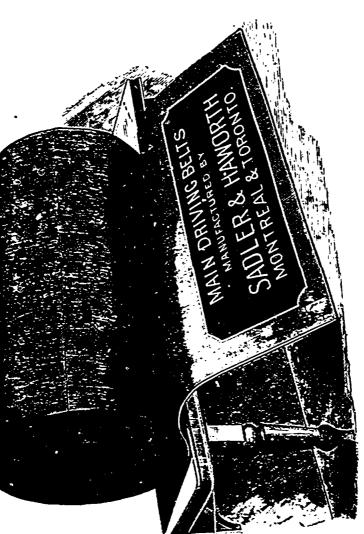
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When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

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 those pages, and to every concern in Canada interested in any manufacturing industry whatever, this interest extending to supply houses also.

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

The starting of any such concern means a demand for some sort of machines. machinery, or supplies, such as steam engines and boilers, shafting, pulloys, belting, lubricants, machinery supplies, wood or iron working machinery, ventilating and drying apparatus; pumps, valves, packing, dynamos, motors, vire, 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 Manufac turer to closely inspect all items under the head of Captains of Industry

Prof. Warren, of Syracuse, N. T., who has lately returned from a visit to London, Eng., and Mr. John McFee, of this city, have just returned from a visit to North Hastings mineral lands. While at Deloro they saw the starting of the new arsenic furnaces of the Canadian Gold Fields Company, and Lavender were the owners. The Dunlop Tire Co., of which Mr. John Westren is were greatly pleased with them. In conversation with a Sun reporter, Mr. McFee said that the arsenic was being properly subliness. that the arsene was being properly sublimative for the first time in this province, and it is expected will be still further increased that the plant there would turn out three through the recent combination of local tons of refined or commercial arsenic per checkle firms. The move into the new day. He says that the supply of crude many premises will be made almost immediately.

The Ogilvie Milling Co., Watang Co., Many to the first time are about to creek an elevator and mill at the plant there would turn out three through the recent combination of local acquaity of 500,000 bushels, and the mill day. He says that the supply of crude many premises will be made almost immediately.

Toronto Globe. product of gold ore, it means a lot to the county. This is, he states, the only place in America in which arsenic can be procured in commercial quantities, and the company which are not asked use of the ma McFee had nothing to say at present -Belleville Sun.

pany of the premises on Temperance street real from Georgian Bay, have arrived. They incorporated with a capital stock f \$250, formerly occupied by the Comet Bicycle weigh 130 tons each and stand fourteen feet 000.

terial at hand. As to the gold output, Mr the company's facilities have been taxed to their utmost for some time past. The Bodge Office Specialty Mfg. Co., Toronto, are Split Friction Clutch Polley is becoming fitting up new and commedious warerooms very popular, also their new line of ball and The City of Vancouver, B.C., has been socket hangers of all sizes, and drops, are authorized to raise \$150,000 to extend and being very generally adopted. The Dodge

machines, etc.

Negotiations which had been under way for some time culminated on Saturday last makes for the Baldwin Fon Works, market factories.

The first two of the eight large modern justly proud of his new city offices as he is locomotives ordered by the Parry Sound of the excellence of the output of his New market factories.

Philadelphia, for the grain traffic to Mont pany of the premises on Temperance street real from Georgian Bay, have arrived. They incorporated with a contract of the factories.

high. They are of the four cylinder consolidated type, and are fitted with ten wheels. These engines are designed to effect a marked saving in fuel and water. They have a hauling capacity of 1,400 tons, whereas the present engines on the Madawaska division are only capable of taking a 1,100 ton load. On account of their great weight the bridges have, where necessary, been strengthened. To provide for their accom-modation at Depot Harbor, a seventy live foot turntable has been built by the Dominion Bridge Company. The lecomotives were built at a cost of \$11,500 each, and are the equal of any on the continent. Tremendous grain shipments are anticipated this autumn.

The Grand Trunk Railway is creeting on the Toronto Industrial Exhibition grounds an art gallery, in which will be snown the magnificent collection of photographs which the company has been exhibiting in a special car throughout the U.S. The building will be of Grecian design and will be finished in staff, the white material used extensively at the World's Fair. Its dimensions will be 120 by 50 feet, and it will be one storey high.

The Wolseley Milling Co., Wolseley, N.W.T., will enlarge its engine and boiler room, and put in an engine of much greater

George Rogers and W. Bride will erect a new grist mill at Sydney. Man., the machinery of which is being purchased. The farmers are giving a bonus of \$2,500.

We have much pleasure in noting that The fitting up new and commodious warerooms and offices at No. 77 Bay street, for the display of their lines of fine office forniture and Shannon filing devices, also their well known office desks and chairs. The factory of this concern at Newmarket, Ont., which is just improve its city sewerage system.

Messrs. Wm. Warnock, W. S. Caron, Stephen Pierce, E. C. Jenkins, Henry pany are kept constantly busy on contracts being completed, is 250x50 feet, the old sapplying for a charter as The Atlantic Washing Machine Co., of Aylmer, with a capital stock of S3,000, to manufacture washing at the Toronto Fair.

being very generally adopted. The Dodge Shannon filing devices, also their known office desks and chairs. The factory of this concern at Newmarket, Ont., which is just being completed, is 250x50 feet, the old specific desks and chairs. The factory of this concern at Newmarket, Ont., which is just being completed, is 250x50 feet, the whole embodying a most representation of the purposes of their stock of S3,000, to manufacture washing at the Toronto Fair.

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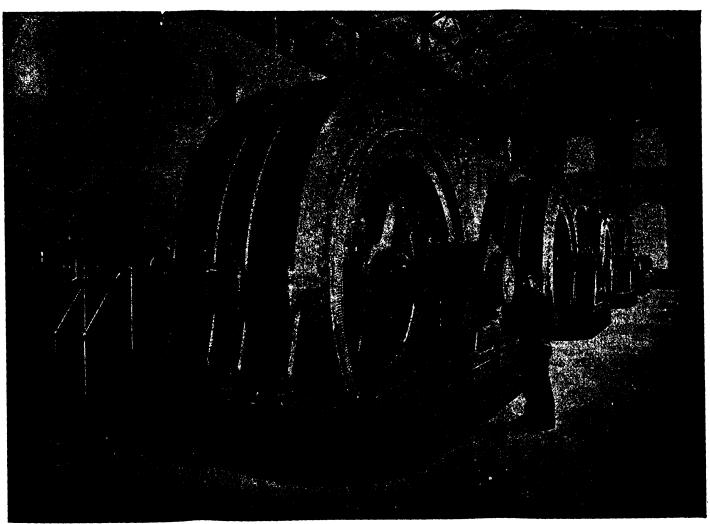
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The first "S.K.C." Generator built in Canada was put in service October 15, 1895, et w

C. O'DEL BAIE ST.	L ELECTI PAUL EI	LECTRIC I RIC CO., A LECTRIC (nnapolis, 20 Baie	N.S.	-	t. -	-		-	-	-	-		-	60 60 25	K. W.
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WOOD B	ROS., Brai	atford, Ont,	-	•	-		-		-		-	•	-		50	"
RRIDGEA	VATER PO	OWER CO.,	Bridgew	ater, N.S	5.	-		-		-	-		-		40	"
G. H. DA	VIDSON,	Brighton,	Ont	•	-		· -		-		-	-	-		30	4.6
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THE ELE	CTRIC CO)., Chicouti	mi, Que.	•	-		-		-		-	-	-		40	4.6
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KOOTENA	XY ELECT	'RIC CO.,	Kalso, B.	C	-		-		-		•	-	-		75	"
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CORPORA	TION OF	MARKHA	M, Mark	tham, Ont	· -		-		-		-	-	-		20	6.6
DOMINIO	M COMMO	MONCTO	N, Monct	on, N.B.		-		-		•	-	•		-	60	"
THE DOV	N COTTO	N MILLS (CO., Mon	treal, Qu	е		-		-		-	-	-		180	"
THE ROY	AL ELEC	TRIC CO.,	Montreal	, Que.	-	-		-		•	-	-		-	300	"
		"	"	"	-		-	-		-		-	-		300	
	"	"	"	"	-	-		•		•	-	-		•	300	
	"	"	"	"	-		-		•		•	•	-		300	• •
	4.6	44	"	"	-	-		-		-	-	-		•	300	
"				"	-		-		•	•	•	-	-		180	"
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		••	"	"	-		-		-	-		-	-		135	6.6
MONMOR	AT SEZAMETO			•	·	-		-		-	-	-		-	80	"
MADANTE	LL WATE	R & POWI	K UU.,	Montreal,	Que.	^	<u>-</u>		-		•	•	•		360	
		& ELECTI				e, On	τ.	-		-	-	-		-	35	
		NEWMAR				c- 04	DDTT	ים ע	'n	Nouth.	Tr	0.00	-		50	
EASIEKN	HORWUL TTT CIVIL	IIPS ELEC	TIME LE	OHI, PO	MEG	OC UA	Tran	ייים ל	U.,	Opt Morth	natiey,	Que.		-	75	
DENIMAN	MEG CO	CTRIC ILI	LUMIINA	TING &	MFG.	υo.,	Owen	oou	пu,	Ont.		-	-		50	
LENMAN	MFG. CO	., Paris, Or	ıt.	-	-	•		-		-	-	-		-	30	••

64 COMPANIES, 100 GENERATORS, 30,856 KILOWATT CAPACITY.

T.-H. Arc Dynamo and Lamp Direct-Current Dynamos and Motors Railway Generators and Apparatus SIMPLICITY

REGUIA

CHARACTE^{R.}

Specially Suitable for Low Specially Specially Suitable for Low Special Specia

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CORRESPONDENCE SOLI CITED.

RIC COMPANY

ERS THE DOMINION OF THE

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YSTEM

96. C. Which the following "S.K.C." Generators have been installed or are on order:—

CANADIAN EL	ECTRIC &	WATER PO	WER CO.,	Perth,	Ont.		-	-		-		-	180 56	K. W.
PETERBOROUG	GH LIGHT	& POWER (CO., Peterb	orough,	Ont.	•	-			-	•		180	"
THE MONTMO	RENCY ELE	ECTRIC POV	WER CO.,	Quebec,	Que.	-		-	-		-	-	600	"
"	6.	"			-		-	-		-		-	600	6.6
		6.6				-		-	-		•	-	600	"
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	"			-	-		-	-		-		-	600	4.6
"	4.6		"			-		-	-		-	-	240	4.6
"		"		-	-		-	-		-		-	240	"
CHAMBLY MF	G. CO., Rich	elieu, Que.	-	-		-		-	-		-	-	2000	"
	•	.4	-	-	-		-			-		-	2000	4.6
"	•			-		-		-	-		-	-	2000	. 6
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44	•	•		-		-		-	-		-	_	2000	"
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A. RIENDAW, I	Richelieu, Qu	e		_		_		-	-		-	-	75	44
RICHMOND CO	UNTY ELEC	CTRIC CO.,	Richmond,	Que.	-		-			-		_	60	
4.6	64	,	"			-		_	-		_	_	60	"
W. McMASTER,	Ridgetown,	Ont.	-	-	-		_	_		-			60	"
IRON MASK GO	OLD MININ	G CO., Ross	sland, B.C.	_		_			-			_	75	"
WELLAND VAI	LE MFG. CO)., St. Catha	rines. Ont.	_	_		_	_		-		_	25	"
ST. JEROME P	OWER & El	${ t LECTRIC}$ Co	O., St. Jero	me. Qu	θ.	_		_	-		_		75	
CANADIAN CO	LORED COT	TON MILL	S CO., St.	Stephen	. N.B.		_	_		_			. 30	"
SHERBROOKE	GAS & WA'	TER CO., S	herbrooke.	Oue	,	_		_	-		_	_	240	44
"		, ,	"	-	_		_	_		_			240	"
6.6	4.4		6.6	_		_		_	_		_	_	180	44
S. GEORGE, Sto	ouffville. Ont.		_	_	_		_	_		_		_	20	
CORPORATION	OF SÚDBU	RY, Sudbur	v. Ont.	_							_		75	"
SUSSEX WATE	R & ELECT	RIC CO., Si	issex. N.B.		_			-				_	40	"
SYDNEY GAS &	E ELECTRIC	CO., Sydne	ev. CB	_				_	-			_	60	
"	4		· , · · · · · · · · · · · · · · · · · ·	_	_		_			_		_	40	"
TEESWATER L	IGHT & PO	WER CO., 7	Ceeswater. (Int		_	_		_			_	20	"
NORTH SHORE	POWER C	O. Three R	ivers. Que.	-						-		_	240	"
**		"	"			_			_			_	240	"
TORONTO ELEC	CTRIC LIGH	IT CO., Tore	onto. Ont.		_							_	60	"
**	46	,	"	_				_			_	_	180	44
VANKLEEK HI	LL ELECTE	RIC CO., Va	nkleek. Ont					_		-		_	50	66
A. GAGNON &	CO. Victoria	ville, Que				_		_	-		_	-	75	
WINDSOR ELEC	CTRIC LIGH	HT CO Wir	dsor NS		_		_	_		_			50	66
"	6	6,	"	_		_	_	_	-			-	90	
RIORDAN PAPI	ER MILLS	CO., Hawkes	bury. Ont	-	_	-	. '	_			_		30	66
CORPORATION,	Liverpool	N.S.	July, Oil.	_	-	_	-		_	•		•	50 75	"
ST. CATHARIN	ES ELECTE	IC LIGHT	& POWER	00 8	Cath	arinos	•				-	-	200	"
GEO. WILSON	& CO St C	atharines	-	JO., BI	. Catil	01111CB	•			-		-	60	66
STEINHOFF &					_	-				_	-	-	40	66
W. H. MELDRU			_	_	-	_		<u>-</u>	_	-		-	30	• •
II. MEMBER	, i aii,			-		-	-	-			-	-	90	

500,000 LIGHT CAPACITY OF S.K.C. TRANSFORMERS IN USE IN CANADA.

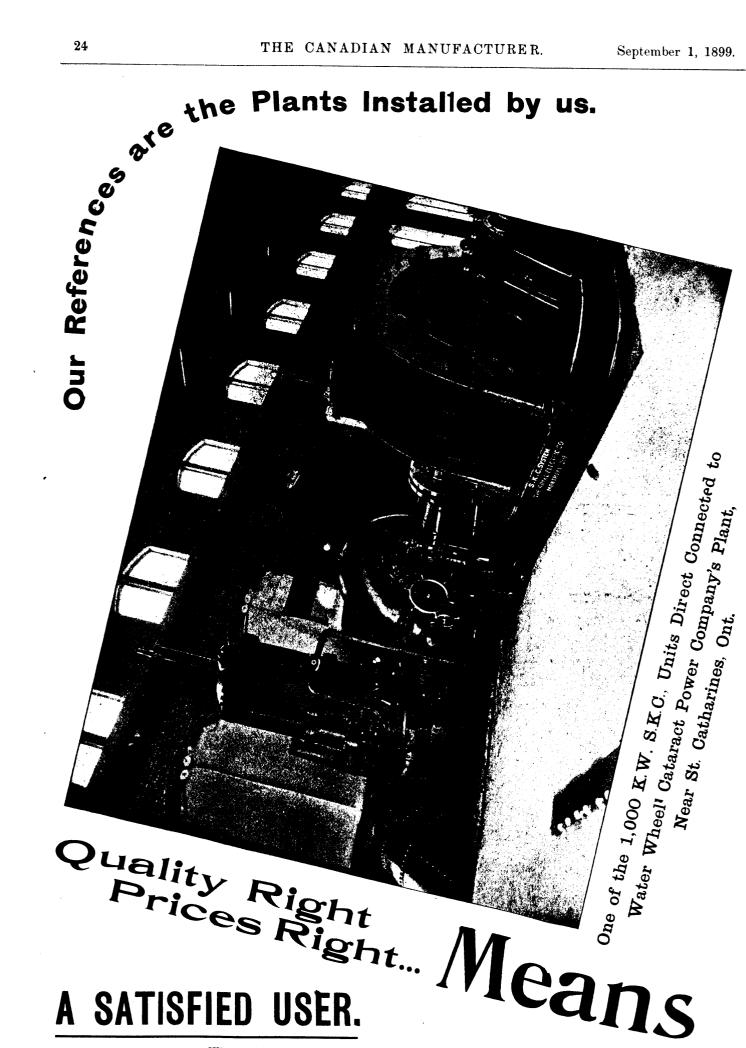
THIS SYSTEM

EFFICIENCY

Distance Transmission

ndy The Canadian Manufacturer.

Series Alternating Current Arc Lamps **Incandescent Lamps Electric Supplies of all Kinds**



with the Botsford-Jenks Co., of Port Huron, Mich., with a view to orecting a 500,000 bushel grain elevator at Meaford. Having visited Meaford, the Port Huran people offered to build an elevator to handle not less than 10,000 bushels an hour and to have given to the Royal Electric Co., who are to discoveries on properties recently acquired storage capacity for 500,000, with power and have the same in operation within two has opened up some of the biggest deposits equipment sufficient for a house of 1,000,000 weeks. Storage batteries for Street Railway of pure lump lead in the world. When the bushels capacity, should the business warrant an enlargement to that size, on condition that a site on the east side of the harbor, locontoble an immense he given free; that there be no taxes levied on the harbor for each of the harbor from the harbor for each of the harbor. the house (except for schools) for two years; that the town guarantee to have the harbor dredged to sufficient depth and channel width and provide railway service to the elevator, and that the town pay the company a bonus of \$25,000 when the elevator is ready to receive and handle grain. The proposition was favorably received and a committee was appointed to negotiate with the Government for the dredging and with the Grand Trunk Railway for the railway facilities asked for.

The Canada Screw Co., of Hamilton, Ont., is another of the converts to electric power, having shut down their steam plant and are now being supplied with power from the wires of the Cataract Power Co. The Royal Electric Co., of Montreal, are now installing one of their forty h.p. S.K.C. two phase This adds another smokeless motors. chimney to the many now in Hamilton.

Dr. N. H. Edgerton, of Philadelphia, the

The Board of Trade and Town Council of building has been obtained in which the shape for the market. Meaford, Ont., have been in correspondence immediate requirements in that line will be patent separator will be used, claimed to be employ about fifty men. The equipment of plete. Mr. Brunnell says that the so electrical instruments and switchboards was of graphite is simply inexhaustible. purposes are to be the specialty of this factory is built work will be given to 150 concern and with the advent of the electric extra men. locomobile an immense field will be opened

> The building known as Nos. 19, 21 and 24 Alice Street, Toronto, was destroyed by fire August 24th. The occupants were -J. Hungerford Smith, Rochester and J. Hungerford Smith, Rochester and Toronto, fruit, syrups and extracts; Queen City Chewing Gum Co.; Cameron Mfg. Co.; Thomas Carroll, wood worker; Edward Crow, y, picture framer; and William Millar, show use manufacturer. The loss on the building will be about \$600. The principal losses were several show cases in process of manufacture for the Paris Exposition.

A large graphite manufactory is to be built at Grenville, Que., in connection with the graphite mines operated there by a company of Wilkesbarre, Penn., capitalists. Mr. II. be ready next spring. P. H. Brunnell, manager of the company, says arrangements have been completed for

manufactured as soon as they can put the the most complete and latest invention of machinery in place. This means another the kind in uso. The works will cost over electrical industry for Hamilton and will \$100,000 and will take eight months to com-Mr. Brunnell says that the supply

George C. Hinton & Co., of Vancouver, B.C., have placed an order with the Royal Electric Co., for one of their ten k.w. multipolar generators and the necessary wiring of lamps for one of their mining camps on Vancouver Island.

Another important water power development is taking place at Chaudiere Falls, on the Chaudiero River, about six nules from Levis, Que., in charge of Messrs. T. Pringle Sons, hydraulic and mechanical engineers. The idea is to furnish light and electric losses by the occupants were; J. Hunger, power to the city of Levis and the smaller ford Smith, \$500; Queen City Chewing places in the immediateneighborhood. The Gum Co., \$700; Edward Crowley, \$500; company which has been organized is known William Millar, \$500. Among Mr. Millar's Levis. The necessary power will be obtained by damming the Chaudiere River, and it is expected about 5,000 horse power will be realized. The contract has been let to the Engineering Contract Company of New York, and it is expected that the plant will

The Hamilton Electric Light and Cataract inventor of the high tension storage battery, is building a factory at Hamilton, Ont., for their manufacture in Canada. Work on the new building is progressing. A temporary

New Principle Ideal Acetylene Gas Generator

Acknowledged by Experts and Insurance Inspectors as the only perfect and safe system for Generating Acetylene Gas.

ADVANTAGES OF

- NEW STYLE ---

Carbide Submerging Machine

Carbide Submerged.

No Generator to open to Recharge.

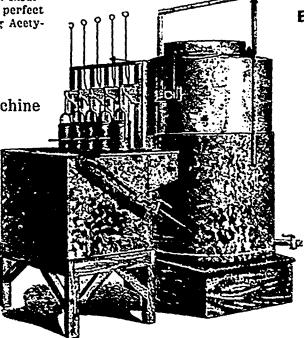
Gas is Generated under Water and is Cool and Pure.

200 Degrees less Heat in Generator than in Old Style.

Absolutely no over-Generation or Loss of Gas.

Can tell at a Glance exactly how much Carbide is Used and how much Unused.

Our Ideal Guarantee is that YOU shall be Satisfied.



Munufacturers of

BEST and CHEAPEST

Acetylene Gas

Burners

IN THE

Market.

\$2.40 Doz.

\$20.00 Gross.

Send for Sample Dozen.

Estimates Furnished for Plants for Village and Town Lighting.

J. WALLACE & SON, HAMILTON,

MANUFACTURERS OF

Acetylene Gas Apparatus

The Iron Mask Gold Mining Co., of Rosaland. B.C., are enlarging their electric hoist and air compressor and have placed their order with the Royal Electric Co. for one of their 120 k.w. S.K.C. synchronous motors.

installed in their printing establishment one of pulp daily will be built.

of the Royal Electric Co's S.K.C. two phase motors to drive their presses.

"Gentlemen! we have just received unfavorable report of financial standing of will be charged with coal, making a total of party in your vicinity who ordered goods one hundred turning out coke. Work is The first order received by the above company from the Iron Mask was for a seventy-live k.w., S.K.C. motor. This was found at a sacrifice, which we do rather than restired around for their requirements.

Fire was started this week in fifty of the new coke ovens built this season by Mr. Baldorf for the Coal Company. It will take well under way with another fifty, and within two months at least 200 ovens will be in full blast.—Fernie, B.C., Free Press. A large quantity of Portland cement has

not large enough for their requirements.

The Trent Valley Peat Fuel Co., of Peterborough, Ont., has placed an order with the F. D. Cummer & Son Co., of Cleveland, Ohio, for one of the world-renowned Cummer Dryers.

The dryer will be used for drying peat preparatory for the formulation, of Brooklyn, N.Y., to the foundations of the plant of the Dominion Iron and Steel Co., at Sydney, N.S. The played with success. Look out for the fakirs.

Mr. C. W. Morrison, of Brooklyn, N.Y., called at Sydney to land there one thousand tons of cement for the new works. The be used for drying peat preparatory for pressing into briquettes. The dryer will have capacity for evaporating two and a half tons of water hourly from the wet peat, which would give about sixty tons of dried peat per day of twenty-four hours.

The Rossland, B.C., "Sentinel" have installed in their printing catablishment one of pull daily will be built. Record.

REDDAWAY'S ORIGINAL

CAMEL BRAND HAIR BELTING

STRONGEST BELT MADE. NO STRETCHING.

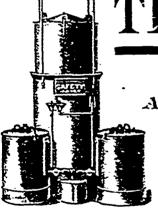
NOT AFFECTED BY DAMPNESS. HEAT OR STEAM.

WRITE FOR PARTICULARS. LARGE STOCK ON HAND.

Fire Hose, Steam Hose, General Mill Supplies.



W. A. FLEMING & CO., SOLE AGENTS 57 St. François-Xavier St., Montreal



THE SAFETY ACETYLENE GAS

With Cliff-Wardlaw Generators

Acetylene Gas is not the "Light of Other Days," it is the LIGHT of to-day and of the future.

THE "SAFETY" HAS THE FOLLOWING GOOD POINTS:

SAFE—All joints are water-scaled and the scals are self-sustaining.

So easy to manage and operate that church sextons have no trouble, and they can be cleaned and recharged in ten minutes and there is no mess nor had odor.

The automatic means by which the ash is removed from the carbide, so quantity of gas is obtained from the carbide. It is made cool and twice washed.

An accident has never occurred to a "Safety," and there are 195 in successful operation 195. in Canada.

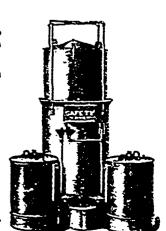
Send for Booklet, Price List and Testimonials.

Sole Agents for Canada for . . .

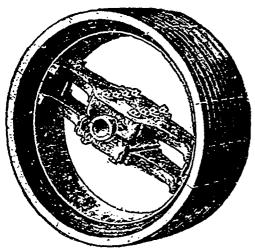
The all Metallic "Durable" Burner-

-is all Metal, unbreakable and non-Carbonizing. -The best Burner on the Market to-day.

SAFETY LIGHT & HEAT CO., Dundas, Ont.

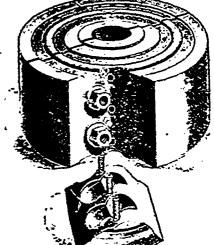


Dodge Manufacturing Co., of Toronto, Limited



FULL LINES of POWER TRANSMISSION MACHINERY-

> **Dodge Wood Split** Pulleys, all Sizes for all Purposes.



Shafting and Hangers



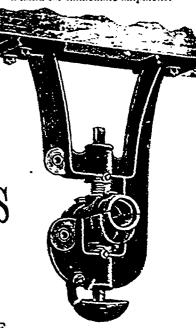
FRICTION CLUTCH PULLEYS.

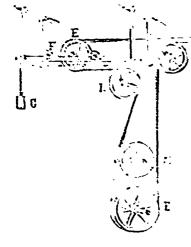
Iron Grooved Wheels

FOR ROPE DRIVING.

Plans and Estimates on Rope Driving

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Dodge Manufacturing Co., of Toronto, Limited, TORONTO.

74 York Street.

GOMBAULT'S Horse Owners!

GOMBAULT'S

A Safe Speedy and Positive Cure

The Safest, Best BLISTER ever used, Takes the place of all liniments for mitd or severe action, itemizes Bunches or Hiemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY DR FIRING. Impunible to produce sear or Menual Every bottles old is warranted to sive satisfaction Price \$1.50 per bottle. Sold by druckists, or each by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO. Cleveland O.

Caustic Balsam

Herse Owners!



Bafest, Best BLISTER everused. Takes too of all liniments for mid or severe action res Bunches or Blemishes from Horses Bunches of Blemishes from Hora Bunches of Blemishes from Hora SUPERSEUES ALL CAUTER C. Impussible to produce scar of blemishes of the satisfaction

RING. Imputive to product surfor birmus.

† bottle sold is warranted to give satisfaction

\$1.50 per bottle. Sold by druggists, or

express, charges patid, with full directions

use. Send for descriptive circulars.

AWRENCE-WILLIAMS CO., Cleveland O.

THE GREAT FRENCH

Veterinary Remedy.

safe, speedy and reliable remedy for Curb, Splint, Sweeny, Poll Evil, Grease Heel, Capped Hock, Strained Tendons, Founder, Wind Puffs, Mange, Epizootic and Distemper, Skin Diseases, Old Sores, Dropsical affections, Inflammations, Throat difficulties, Swellings or Ulcerations, Lameness from Spavin, Ringbone and other bony tumors, and many other diseases or ailments of horses, cattle, sheep and dogs; will quickly remove all bunches or blemishes without leaving any scar or other injurious effects. It can also be reduced with sweet or raw linseed oil and used as a most valuable liniment for all kinds of simple lameness, strains, etc.

CAUSTIC BALSAM has been a standard veterinary remedy in France, Germany and England for the past twentyfive years, and has been in use by many of the very best veterinarians and horsemen of America for the past fifteen years with unfailing success, so there is no room for doubt of it doing just what is claimed for it.

Sold by druggists, or sent by express, CHARGES PAID, on receipt of price. Beware of imitations. None genuine without fac-simile of our signature on the label.

PRICE \$1.50 PER BOTTLE.

Horse Owners! Use GOMBAULT'S



Safest, Reat BLISTER ever used. Takes ce of all liniments for mist of severe action. Bunches or Hiemithes from Horses aller. SUPERSEDES ALL CAUTERS RING. Impunible to produce sure or demail. pointies to produce scar or oldenials is warranted to give satisfaction bottle. Sold by drucklets, or arrespend, with fall directions for describing and applies of the sold by the satisfactions. THE LAWRENCE-WILLIAMS CO. Cleveland O.

COMPANY.

Solo Importers and Proprietors for the United States and Canada.

GENERAL OFFICE-

79 to 87 Wood Street, - CLEVELAND. O.

CANADIAN OFFICE-

21 Front Street West, TORONTO. iorse Owners!

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THE LAWRENCE-WILLIAMS CO., Cleveland

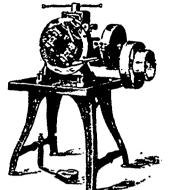
The Cleveland Seed Co., of Picton, Ont., have placed their order with the Royal have placed their order with the hoyal the supervision of 221.

Electric Co. for a complete electric lighting plant for their warehouse. The dynamo is sold to the City of New Westminster, B.C., of 200 light capacity and about 100 lights a 3000 light monocyclic generator. This Coal Co. is to be increased to \$10,000,000.

wired up. The work is being done under addition will enable the city to supply equal the supervision of Mr. Crandall, of Picton. to 7,000 16 c.p. lights in addition to its arc The Canadian General Electric Co., has system.

The capital stock of the Crow Nest Pass

PIPE THREADING and CUTTING-OFF MACHINES



ARE MADE ARMSTRONG MFG. CO.

BRIDGEPORT, CONN.

anufacturers of ADJUSTABLE STOCKS and DIES Also Manufacturers

And WATER, GAS and STEAM FITTERS' TOOLS.

SEND FOR CATALOGUE 27.

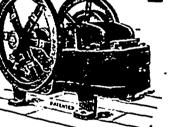
Factory: BRIDGEPORT, CONN.

New York Office: 139 CENTRE STREET.

ONLY

No. 00 Machine, Power Attachment.

FINE CRUSHER



FOR QUARTZ and ORES.

DOES WORK OF CRUSHER AND ROLLS COMBINED.

ROLL JAW CRUSHER.

STURTEVANT MILL CO.,

Send for Circular.

BOSTON, MASS.

Toronto and Hamilton ELECTRIC CO.

(Late KAY ELECTRICAL MANUFACTURING CO.)



ELECTRICAL MACHINERY

HIGH-CLASS ONLY.

255-7 James St. N., HAMILTON. 'Phone 958.

Engine Packing,

Magnesia Pipe Covering

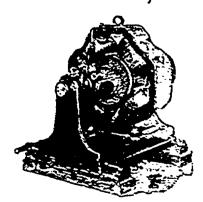
Lubricating Oils

and Grease.

William G. Wilson Go.

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.

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When writing to Advertisors kindly mention THE CANADIAN MANUFACTURER.

Messrs. Nanz & Co., manufacturers of Building, that city.

American capitalists have purchased a site watchmen's time detectors, etc., whose in New Westminster, B.C., for a large veneerformer headquarters were at 116 Chambers ing and woodenware manufacturing plant. street, New York, announce their removal They will put in \$40,000 worth of machinery. to 127 Duane street, room 45, Graham They intend reaching out for the Australian

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., Hoom No. 13, Graham NEW YORK

This Clock received the First Prize at World's Fair

DYNAMOS,

ANY TYPE OF

MOTORS,

NAME PLATES FOR

BECKER NAME PLATE CO., 34 OLIVER STREET. -BOSTON, MASS.

ELECTRICAL APPARATUS AND ALL KINDS OF MACHINERY

The corporation of Goderich, Ont., after receiving report of committee appointed to visit and investigate a number of plants in stalled by different manufacturers of alternating current apparatus, have awarded contract to the United Electric Co., of Toronto, for one of their sixty k.w. inductor alter

The Atlantic Washing Machine Co., Aylmer, Ont., are applying for incorporation.

The works of the Ontario Box Co., Hamilton, Ont., were entirely destroyed by fire August 20th, loss on buildings \$12,000, machinery \$7,000, stock \$7,000, lumber \$6,000.

Messrs. Henry Morgan & Co., of Montreal, recently asked for tenders for two seventy-five k.w. and one fifty k.w. direct connected generators and engines for lighting and power for their departmental stores in that city. Tenders were received for apparatus manufactured by the United Electric Co., Limited, of Toronto, and several other large concerns, both Canadian and American, and after investigating the several tenders the contract was awarded to the United Electric Co., for the entire apparatus.

Fire at Stirling, Ont., August 17th, destroyed the following buildings:—Jerome Conley's, Jun., barrel factory, J. Conley's, Sen., cooper shop, John Ralph's marble works, and S. Barrow's residence.

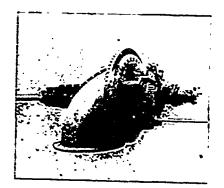
The Dutton Electric Light Co., Dutton. Ont., has been incorporated with a capital stock of \$15,000.

A condensed milk factory has just been completed at New Westminster, B.C., and will be runing in a few weeks. English and American capital is backing the enterprise.

The Royal Electric Co., Montreal and Toronto, have, in addition to the sale of other electrical machinery alluded to elsewhere, just concluded a contract for the installation of two 300 k.w. machines for the new works at Orillia, Ont., and one 200 k.w. for the Dominion Cotton Company's factory at Montreal.

Messrs. Bennett Bros., who own and operate a flour mill at Hamilton, Ont., are installing a forty h.p. S.K.C. motor to drive their mill, power being supplied by the Cataract Power Co., that city.

The Economical Development of Water Power



Horizontal Setting, with Quarter Turn Elbow.

CHICOUTIMI PULE COMPANY.

Requires, where the supply of water is limited, that every available foot pound of energy contained in it be properly set to work. On the other hand, if the source of power is abundant your interests suggest that the plant be made as compact and powerful as possible. to reduce the space occupied and the first cost.

The Crocker Patent Turbine....

Is peculiarly adapted for service under any of these conditions, as it possesses great efficiency under varying degrees of gate opening, and the ratio of power developed to diameter of wheel is remarkably large. To those interested we will supply catalogues and particulars of leading plants, together with a copy of latest official Holyoke test, 1892. Water powers reported upon, and estimates prepared. Correspondence invited.

The JENCKES MACHINE CO.,

42 Lansdowne St., Sherbrooke, Que.

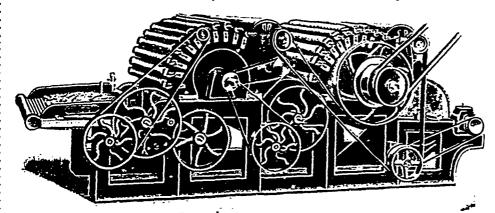
When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

P. & C. GARNETT, Limited

CLECKHEATON, YORKS, ENG.

TELEGRAMS, -

GARNETT, CLECKHEATON.



THESE Machines have a world-wide reputation. They are made in various widths up to 60 inches on the wire, and with one, two, or three swifts. They can be clothed as fine as 24 rows per inch so as effectually to open the finest threads.

Waste Opener or Garnett Machine, for Opening Hard Twisted Woolen and Worsted Waste.

<u>AAAAAAA</u>

Garnet Wire, or Metallic Card, made with any form of tooth, in Swedish Charcoal Iron or Cast Steel, with points hardened by electricity. This Wire is used for covering iron rollers, breasts of woolen cards, lichersin of conton cards, comber doffers, etc.

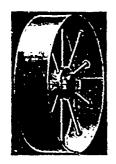
Garnett Wire.

Patent Garnett Ciothing Apparatus

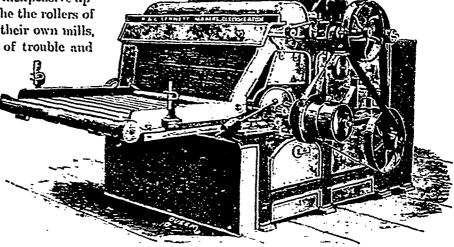
BY means of this simple and inexpensive apparatus parties can re-clothe the rollers of their waste-opening machines in their own mills, and so save an immense amount of trouble and expense in sending their rollers away to be done.

WROUGHT IRON PULLEYS

Light, True and Unbreakable.



Cast Iron Pulleys.



Improved Wool Cleaning or Burring Machine.

Capable of cleaning 1,500 pounds of wool per day. The very best and most economical machine made for the purpose.

Iron and Steel Shafting, Couplings,
Flummer Blocks, W. I. Collars,
Hangers, Wali Boxes, etc.

TO PREVENT "BUSTING."

Messrs. Saddler & Haworth, manufactures, and your firm is to be congratulated."

The second and your firm is to be congratulated."

Our manager returned from Toronto turers of leather belting, have many letters acknowledging receipt of the waist belts a few days ago wearing a pleasant smile and recently sent out to some of their friends, a 'Sadler & Haworth ; belt' and I am mention of which has already been made in seized with the desire to possess one and adthese pages. If the head is swelled, apply vertise your progressive company incident-the belt to the head—if the trouble is with ally."

the stomach, arising from the prevalent

"We are in receipt of a leather belt with the stomach, arising from the prevalent "We are in receipt of a leather belt with "Growing Time" disease, buckle it around the name of Sadler & Haworth embossed the waist. Some of these letters are as on the back. How you knew that the writer follows:

"We beg to acknowledge, with thanks, receipt of a leather belt from you, we think around your customers,' we trust everyone will appreciate it as much as the writer."

"We thank you for the 'belting' you so for postage.

kindly administered, this is one of the best and most appreciated souvenirs I have ever

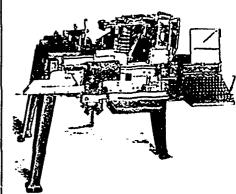
wanted that particular article, just at that particular time is very mysterious. It is a bang up Ad' and very applicable to your husiness."

Any users of leather belting may have one just for the asking and seven cents in stamps

MONOLINE COMPOSING MACHINE.

One of the most ingenious machines on exhibition at the Fair this year is the Mono line Composing Machine, manufactured by the Canadian Composing Company of Mont real, shown in Machinery Hall.

This little machine not only does the work



The Monoline Composing Machine.

of three or four ordinary hand compositors, but makes for the paper each day a new type. In operation it sets up a line of little brass plates called matrix bars, which the machine automatically and properly spaces to the proper width of the column, and then easts a bar of type the right height and the right width of the column ready to go into the forms. It is all done very quickly, and every operation of the machine is automatic. The little brass plates, after the line has been cast therefrom, are redistributed to the magazine from which they were taken and are ready for use again.

We understand this machine is now in use in a large number of daily and weekly papers in Canada, among which are La Patrie and True Witness of Montreal, the Daily Chroni-cle and Daily Telegraph of Quebec, the Gazette of Sherbrooke, Brockvillo Recorder, Kingston Whig, Woodstock Sentinel-Kingston Whig, Woodstock Sentinel-Review, Toronto Star, and a number of other smaller publications. The inventor of the machine, Mr. W. S. Scudder, of Montreal, is looking after the exhibit at the Exposition, and will be pleased to see any printers or publishers of Untario.

NEW SYSTEM OF STREET LIGHTING.

The new system of street lighting, installed by the Sherbrooke Gas & Water Company, was inaugurated on Wednesday evening by closing the switches and in an instant putting the whole system into regular services. lar service.

Much interest centres in this plant, it being a new system and the first to be operated in Canada. It is known as the Constant Current alternating Series Are Lighting System, supplied by the General Electric Company of Toronto.

The current is supplied by large Stanley two-phase generators, which also supply in-candescent light and power for motors. There are immense transformers placed in the basement of the lighting station through which the street lamps are supplied, and which are so automatically constructed as to regulate the supply of the current. The result is a steady white light.

Under the new contract there are nearly double the lamps formerly supplied, and the appearance of the streets is greatly improved. On some of the principal business streets the great distance between lamps.

..CHICAGO.. TIME RECORDER

A RELIABLE TIME RECORDER MUST POSSESS THESE THREE QUALIFICATIONS:

1.-It must be an accurate Timepiece.

We use the famous SETH THOMAS CLOCK.

2. -- IT MUST PRODUCE A CLEAR RECORD, AND ONE THAT CANNOT BE DISPUTED.

Our Sight-opening feature, whereby each man can inspect his record when made, eliminates all chance for dispute.

3.-IT MUST BE SIMPLE, POSITIVE, AND QUICK OF OPERATION.

The "CHICAGO" has less complicated mechanism than any other Recorder made, and by the simple manner of operating employes can register two-feld more rapidly than on any other.

If you have none you pay for it in lost time every year.

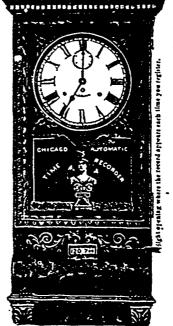
CHICAGO TIME REGISTER CO., CHICAGO, ILL.

SOLE AGENTS FOR CANADA:

W. C. BULLOCK,

348 Harkham Street

TORONTO, ONT.



Numerical (or Key) Recorder

ESTABLISHED 1823.

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

WILSON BROS. BOBBIN CO.

(LIMITED)

CORNHOLME MILLS, TODMORDEN, ENGLAND.

BOBBIN AND SHUTTLE MANUFACTURERS.

FORTY PRIZE MEDALS AWARDED.

HIGH-CLASS WORKMANSHIP. SEVENTY YEARS' REPUTATION.

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

Appress-

CORNHOLME MILLS, TODMORDEN, ENG.

BRANCH ESTABLISHMENT:

ATLAS BOBBIN WORKS, GARSTON, LIVERPCOL.

OFFICE AND SHOWROOMS

14 MARKET PLACE, MANCHESTER | which formerly existed, has been materially

Examiner.

reduced, and the effect is a decidedly more Ont., have decided to put in a new pump, brilliantly lighted street. - Sherbrooke, Que., and increased supply pipe to the river, and filtering basins, in all an outlay of \$50,000. The stop is necessitated by the greatly in-The Water Commissioners of Brantford, creased consumption of water in the city.

ESTABLISEED 1849.

CHARLES F. CLARK, President.

JARED CHITTENDEN. Treasurer.

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

Executive Offices:

OFFICES THROUGHOUT THE CIVILIZED WORLD.

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

THE BRADSTREET 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 promutgating 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 responsible and worthy financial, fluciary and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

CORRESPONDENCE INVITED.

The Bradstreet Company, Toronto Cor. Jordan & Melinda Sts.

_

THOS. C. IRVING,

Superintendent.







TORONTO, ONT.

Manufacturers of

Machine Screws

OF RVERY DESCRIPTION.





WESTERN

TRADE:

Leather Belting. Lancashire Hair, English Card Clothing,

D. K. McLAREN

Head Office and Factory-MONTREAL

Toronto Stock Depot.

84 BAY ST.

Phone 374. 88

A shipment of butter, especially packed, from the New Westminster, B.C., creamery, to Dawson City, was successful.

The City of New Westminster, B.C., is adding two 150 h.p. boilers, supplied by the Robb Engineering Co., Amherst, N.S., to its lighting plant.

Mr. Thomas Southworth, Clerk of Forestry for Ontario, is in receipt of a letter from the Imperial Institute, London, England, in reply to enquiries made some time ago, in which it is stated that there is a good market in England for tamarac gum for medicinal purposes. Mr. Southworth will send specimens. He will also send to the Imperial Institute specimens of Canadian sumac, which is largely in demand for tanning purposes in Europe. Sicily at present suppl es the world with this produce, and Mr. Southworth is of opinion that large quantities of the shrub which is now cumbering many acres of good agricultural land, may be put to some use.

The corporation of the ity of Liverpool, N.S., are installing a complete electric plant to furnish are and incandescent lights for the streets and incandescent lights for indoor use. The by-law was voted on some time ago, and last week an order was given to the Royal Electric Co. for a complete electrical equipment, consisting of one seventy-five k.w. S.K.C. two-phase alternating current generator, with exciter and switchboard complete, also a complete switchboard and regulating apparatus for twenty-five 2,000 c p. enclosed alternating are lamps for the streets, as well as the necessary transformers and materials for installing 2,000 incandes-

To Manufacturers.

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

RICE LEWIS & SON, Limited,

Cor. King and Victoria Sts.

TORONTO.

WIRE MANUFACTURERS & METAL PERFORATORS

Wire Screens for Every Class of Material.

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

Special Attention given to Minera' Requirements.

cent lamps, the whole plant to be in operation within six weeks. its inventor the snug sum of \$25,000, while procured by them, but who do not desire patents for pneumatic tools sold for \$20,000, their names to be published. Many inventors who have not met with and a charn for \$5,000. John J. Stone sold. The latest proposition for a grain elevator success in selling their patents are inclined his patent for door bell and burglar alarms system in the harbour of Montreal is on success in selling their patents are inclined his patent for door bell and burglar alarms system in the harbour of Montreal is em to believe that there is no longer a demand for \$75,000, and will henceforth probably bodied in a prospectus which has just been for them, and in this view the general public use his own invention to protect his money, issued. The prospectus nominates a new appears to concur. It is therefore worth of course, the saleability of a patent depends company, to be known as "The New Harbour here many patents sold, some of which were prepared and the skill employed in brought their fortunate owners wealth. At obtaining good valuable claims. Messrs, the head of the list is a patent which sold for the princely sum of \$98,000, and another treal, have a number of clients who have brought \$75,000. A patent beverage brought realized large sums of money from patents the harbour as well.

The latest proposition for a grain elevator

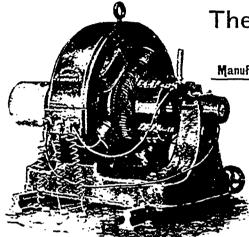


Mechanically Drying Everything

THE F. D. CUMMER & SON CO.,

HUNDREDS IN OPERATION.

CLEVELAND. OHIO.



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.

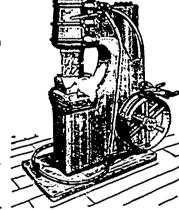
Canadian Patent November 9, 1897.

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

George Brush

EAGLE FOUNDRY.

MONTREAL



Sizes-25 light to 2000 lights.

ACETYLENE GAS

Ideal Generator the only machine that submerges the carbide.

No Opening of generator.

No Heat in generator.

No Overgeneration.

No Bad Odor through house

No Danger.

Recognized by all EXPERTS as the PROPER PRINCIPLE Town Lighting and Large Plants a Specialty

J. WALLAGE & SON, 156 King St. East, Hamilton, Ont

T. H. & A. H. DRYDEN

FLOUR, SPICE AND

OATMEAL MACHINERY

Grain Elevators Shafting, Hangers Pulleys, Sprockets and Chains

Portable Mills All Sizes.

Gears Cogged

MACHINES MADE TO ORDER

All kinds of Repairing Promptly Attended to

Warehouse Elevator Works Electric or TORONTO

Dominion Oil Cloth Co.

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. Catharine and Parthenais Sts., MONTREAL, Quo.

MR. C. B. THISTLETHWAYTE OF SYDNEY, NEW SOUTH WALES,

Will be in Canada about November 1st, to arrange for Australian agencies. If you have no agents in that country please write, stating lines of goods you make suitable for that trade. Best of references. Address

THE CANADIAN MANUFACTURER,
McKinnon Building, Toronto.

THOMPSON & CO.,

Manufacturers of

BOBBINS and SPOOLS

FROM SELECTED STOCK.

Correspondence Solicited Orders Promptly Filled

SHERBROOKE, P.Q.

THE GROWING TIME.

employees to 150, the exact number now on when heretofore, they have at different the pay roll. As a further evidence of the seasons closed the works.

The M. Campbell Fanning Mill Co. increasing trade and prosperity this concern The M. Campbell Fanning Mill Co, has for months been running nightly until Limited, employ one-fifth nore men than

on," have given the men continuous employ-The Toronto Globe is doing good work in advertising the manufacturing industries of Canada. Speaking of Chatham, Ont., it says:—

Win. Gray & Sons Co., Limited, carriage manufacturers, have increased the number of men work after prospects have induced the management of men employed from an average of 120 ment to continue to keep the men employed, employees to 150, the exact number now on when heretofore they have at different. ment this year, something they have not done

ten o'clock, the men thus getting increased formerly, and pay mechanics \$1.75 per day work and pay accordingly. The Chatham Manufacturing Co., Limilargest in thirty-one years' experience, and ted, manufacturers of "The Chatham Wag this year will be quite its equal. Two or

If the envelope is of superfine qual-

ity, and in perfect harmony with

the letter paper, the prima facie evi-

dence is in favor of securing a ver-

dict of nequiescence in a business

three years ago their factory was only running a part of the time; now full time is the order

And regarding Brantford, Ont :-

The wages of Brantford workingmen have increased protty generally during the present summer, ranging in the principal factories from five to ten per cent, over the old wages, according to the departments in which they are employed.

The following particulars will be found reliable:-

Massey-Harris Company, 700 hands, increase ten per cent. all over,

Cockshutt Plow Co., 350 hands, ten per cent. all over.

Verity Plow Works, 350 hands, moulding department, ten per cent.; other depart-

ments, five per cent. Waterous Engine Works Co., 390 hands, from five to ten per cent., according to departments.

Goold, Shapley & Muir Co., 150 hands, from five to ten per cent.

Knowles, Ham & Nott Co., ten per cent. Buck Foundry Co., Limited, 250 hands, from five to ten per cent.

The Envelope Loudly Proclaims The Business Standing of The Concern it Represents____

No. 8 and No. 81 Envelopes

Are now most in demand for commercial use. If your stationer does not handle our unequalled goods, write for samples,

The Barber & Ellis Co.,

Nos. 43, 45, 47, 49 Bay St., Toronto. Ont.

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

The Dominion Leather Board Co., MONTREAL, OUE.

Please mention Canadian Manufacturer.



THE SMART-EBY MACHINE CO.,

Steam and Gas Engines, Pumping Machinery, General Machinery.



193 BARTON STREET EAST HAMILTON, ONT.

CITY ACENTS WANTED.

proposal.

WRITE US BEFORE PLACING YOUR ORDER.

TO FOUNDRYMEN

To the Superintendent of the Foundry Department:

DURANGO, MEXICO, July 31, 1899.

DEAR SIR,-We are desirous to establish an agency in Toronto, Canada, and it will give us pleasure and you satisfaction to allow us to express to you a sample keg of hundred kilos of our new Ferro-Nickel Manganese Calcium Fluoride for trial in cupola and ladle use. This alloy, like yeast, not an expensive article, gives new life to the metal in purity,

ductility and softness.

Upon receipt of this, please telegraph at once to our exclusive Sole Agents, Messrs. Stahknecht y Cia., Bankers, Durango, Mexico, for a trial sample keg alloy, which we will be pleased to forward to you immediately by Wells, Fargo y Co.s' Express direct to your foundry. Twenty-four page catalogue free.

Awaiting your immediate roply, we are, your faithful servants,

DURANGO, MEXICO, P. O. BOX 83.

The National Ore and Reduction Go.

Howard Chemical Works, Howard Station, St. Louis, Mo., Agents for U.S.

ONTARIO GOLD MINING DISTRICT:

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

Few Mines



BRITISH COLUMBIA 2

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

CANADIAN RAND DRILL COMPANY, Montreal

Speaking of Parkdale, a suburb of Toronto,

the Globe says :-

The great cause of prosperity in the west has sprung up within the past year and a end is the marked boom in the factories.

The existing industries have in most cases.

The Toronto Carpet Co. has been but four found it necessary recently to add to their plant and staff, while many new factories have been established. Although not quite far enough west to be in Ward six, the Massey-Harris Company must be considered as exerting important influence on the locality. Since their decision two years ago to extend

Moulders generally in all factories in the city have received ten per cent. of an increase.

The increase in smaller factories has run from five to ten per cent.

There are only a few factories of any importance in which increases have not been given this summer.

Speaking of Parkdale, a suburb of Toronto, the City have received ten per cent. In 1897 the average increased the number of their employees by about fifty per cent. In 1897 the average forty hands, which is now increased to sixty three, but after Exhibition it will be seventy five. They have occupied their new building only a year. The transformation of this plot of land from a baseball field and circus street subaya and in the Sixth Ward a new ground to a factory centre is wonderful. factory centre of a good deal of importance

On Atlantic avenue, running south toas sprung up within the past year and a wards the Exhibition grounds, is an even more developed factory district. The On-The Toronto Carpet Co. has been but four tario Wind Engine & Pump Co. moved to



The Man Who Pulls the Chain

Would Appreciate the

Yale Chain Blocks

THE DIFFERENTIAL are Durable, Smooth, and Easy Working For occasional use.

THE DUPLEX. For General Use....

Yale Differential Block.

Load Always Self-sustained.

One man can lift 800 pounds four feet per minute.

Three men pull 216 pounds, and handle thirty feet of chain.

THE TRIPLEX. Most Efficient Block Made. I wice one efficiency of the screw-gear type, and triple that of the Differential type.

YALE TRIPLEX BLOCK

Load Always self-sus-tained

One man can lift 2,000 pounds four feet per minute.

One man pulls 82 pounds, and handles 31 feet of chain.

STOCK CARRIED IN MONTREAL

THE FAIRBANKS COMPANY,

749 Craig Street, ...Montreal...

Reduce Your Fuel Bills

Increase Your Output...

JONES UNDERFEED STOKER

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

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

No Underfeed Stoker is successful without infringing our Patents, and the public are warned against importing or using infringing devices.

3.B.—Have you seen our Underfeed as applied to Houses Schools, Churches, etc. 7 (Send for Circular).

For Estimates and other Information write

The General Engineering Co. Limited

SOLE MANUFACTURERS FOR CANADA,

Head Offico.... 80 GANADA LIFE BUILDING, - TORONTO.



Montreal—A. TREVETHICK; Box 1123.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURES.

Other new factories on the same street, though smaller in size, are those of the St. David's Vine Growers' Co., for making Canadian wines, which moved up from down town; the Canadian Sand Paper Co., which opened a year ago; and the Finch Wood Preservative & Paint Co. Seaman, Kent & Co. are erecting a factory nearby for the manufacture of window shutters.

At the corner of King and Dufferin is the Metallic Rooting Co., of Canada, whose location there only dates back a couple of years. They are constantly increasing their plant and staff, and employ now 125 men.

Further up Dufferm street the Dominion Radiator Co. has found it necessary to increase their building at different times recent-

ly.
The Gutta Percha & Rubber Co. two years ago added a large wing to their factory, and now employ 350 persons, compared with

150 previously.

The Toronto Glass Co., on Dovercourt road, near the King street subway, has only been in the city five years. It started with sighty-five men, which number has been



By Special Warrant

NOTICE

MEMBERS of the Canadian Manufacturers' Association and others visiting Toronto during the Fair are cordially invited to call at our Office and avail themselves of the opportunity to inspect, and, if they so desire, to use our unrivalled facilities for exploiting CANADIAN EXPORT TRADE.

Fullest information freely and cheerfully given.

KELLY'S DIRECTORIES, Limited 28 Victoria St., Toronto, Ont.

MAGNETO ECO WATCHMAN'S

ELECTRIC CLOCK.

Without Batteries.

Write for descriptive circular to

Eco Magneto Clock Co.,

Room 71, 620 Atlantic Avenue, BOSTON, MASS.

MONTREAL ELECTRIC CO.,

1898 Notro Damo Stroot, (Balmoral Hotel Block).

Agents for Province of Quebec.

John Starr, Son & Co. (Limited), HALIFAX, N.S.,

Agents for the Maritime Provinces.

gradually increased to 300. A recent fire destroyed the wooden portions of the factory, but they are being promptly replaced with brick. Four hundred feet of land was also recently bought for a new storehouse.

Another circumstance which has brought of two car sheds there by the Toronto Railway Co., one on Roncesvalles avonue and one on High Park avonue. The placing of these in the west end caused a demand for houses for a couple of hundred men who had to start out on early cars in the morning.

All these conditions have increased the population until there is a real scarcity of the class of houses which the workers in factories want. Scores of them still live down town, being unable to secure suitable dwellings in the west end. There will be a good investment for any persons who will build a cheaper class of houses to meet the growing

The situation in Montreal is alluded to as follows:

Manufacturing of all kinds is booming here as it has not done for years. It is undoubtedly the fact, too, that wages, or at least the remuneration of labor, have increased in nearly all lines of business. In some cases the wages have advanced for some of the departments of large concerns and not for others. In other cases, where laber is paid partly by the piece, the workmen are making more on account of the increased output.

United States, for machinists and shops here are compelled to advance wages in order to retain men whose work has been satisfactory for years.

At the Grand Trunk Railway head offices it was learned that there was a general many men to Parkdale is the establishment increase in the wages of employees, but that it was difficult to say exactly how much this was. The wages of the trackman had been increased by ten per cent., namely from \$1 to \$1.10. As a result of the new agreement with the engineers and firemen their wages were also increased, though the amount varies, depending upon the length of the run, the duration of service, etc. In the shops there was also an increase in the skilled labor, while the wages of the ordinary laborer had gone up there as well as elsewhere.

In the cotton manufacturing industry, reports differed. The Merchants' Manufacturing Company a month ago made an increase of from five to ten per cent. in the wages of 1,200 to 1,500 operatives. In some of the others there was no general increase, but there was a readjustment of the scale in some departments which amounted to a substantial increase. Most of the companies enlarged their factories recently and there was difficulty in getting a sufficient number of additional hands. The Montreal Cotton Company at Valleyfield increased their capacity about one-third a year ago, and last month sent circulars into all the back There is a great demand, especially in the parishes of the Province offering to engage

Felts for Pulp Mills 20 years in the business to make Felts in Canada; capacity 1,000

Felts are woven endless, without a splice. Our Felts will last longer and make

dryer Pulp. All up-to-date mills use our Felts. New mills, when in need, write for samples and prices. HAMELIN & AYERS, Lachute Mills, P.Q.

The London Machine Tool Go., London, ONT. Toronto Office. 42 York Street. (PHONE) MANUFACTURERS GENERAL MACHINERY....

Having recently sold our patterns and plant to the A. R. Williams Co., of Toronte, 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 turn out nothing but list-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.
DRILLS-Standard, Sensitive, 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.

ቼ CARTSHORE-THOMSON PIPE & FOUNDRY CO.

Limited



3 in. to 60 in. diameter.

For Water, Gas, Culverts and Sewers Special Castings and all kinds of FLEXIBLE AND FLANGE PIPR.

WATER WORKS SUPPLIES

HAMILTON, ONT.

When writing to Advertisers kindly mention THE CANADIAN MANUFACTURER.

500 new hands between now and Christmas at the highest wages paid in the country, but the response was so small that the company has engaged men at \$2 a day to drum up operatives by personal appeals.

The Montreal Rolling Mills, employing over 600 hands, report that though the scale of wages has remained about the same most of the men are paid by the piece and are earning much more because of the great increase in the output Another large iron works. perted that there was an increase of fifteen per cent, in the wages of those employed in the foundry, and of five to ten per cent. for those in other departments. There has been no increase of wages in the boot and shoe factories or in the leather business, but every establishment is working full time. The flour mills report the wages about the same.

subject stated that the wages of machinists had advanced from ten to twenty per cent.; those of iron moulders ten per cent.; those of stone cutters working nine hours a day, from \$2 to \$2.75 per day, and those of plasterers working ten hours a day from \$2 to \$2.50 per day.

A significant mark of the general prosperity and the great demand for labor is the advance made by the Montreal Street Railway. Two months ago the company announced an increase, which means that all permanent employees will receive an additional \$6.50 per year; that conductors and motormen of more than two and less than five years' service will receive an additional \$34 per year, and those of five years' or more

The Federated Trades Council affiliated service will receive an additional \$49 per with the American Federation of Labor in year. In addition to this all employees are reply to a request for information on the obliged to become insured in some accident company, but the Montreal Street Railway Company will pay the premiums and free uniforms will be supplied to conductors and motormen of over five years' service. These advances, it is estimated, will cost the company about \$25,000 per year.

The Quebec and Montmorenci Electric

Light & Power Company, have lately increased the salaries of such of their employees as have been with them for two

years or over by ten cents per day. The change affects nearly 200 men.

Senator Paquet, City of Quebec, has lately given an increase averaging 5½ per cent. of their former wages to each of the 800 employees of his fur manufacturing establishment.

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 **Nutgal!** Extracts.

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

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JOHN R. GEIGY & CO.

BASLE, SWITZERLAND

LIGHT YOUR FACTORY WITH

The latest device for LIGHTING dark rooms and By Daylight For catalogue and estimates write to Luxfer Prism Go'y, Limited.

58 Yonge Street. -TORONTO.

The Best verything

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.

> Prices furnished on application.

G. T. PENDRITH & CO.

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The Fan System of Steam Heating for Heating of Factories and all Classes of Buildings.

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Appliances for Drying

Lumber, Brick, Wool, Cloth, Hair, Soap, Glue, etc.



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Ventilating Fans for removal of Dust, Foul Air, etc.

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McEachren Heating and Ventilating Co., GALT. ONT.

F. E. ATTEAUX & CO.

53 Colborne Street, Toronto.

15 Lemoine Street, Montreal.

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

Dyewood Extracts, **Qne Dip Alizarines, Aniline Colors,** Dyestuffs and Chemicals.

The Quebec shoe lasters have received an increase of over five cents per day quite recently. They number about 600.

THE BICYCLE DEAL.

The bicycle department of the Massey-Harris Co., H. A. Lozier & Co., the Goold Bicycle Co., Brantford, Ont., and the bicycle department of the Welland Vale Mfg. Co., St. Catharines, Ont., are to be or have been consolidated under a syndicate management.

A leading member of the syndicate has

A leading member of the syndicate has given out the following regarding the deal:
"The leading members of the new firm are:—Geo. A. Cox, Toronto; Warren Y. Soper, Ottawa; W. E. H. Massey, Toronto; E. R. Thomas, Toronto; and Hon. Lyman M. Jones, Toronto. We have also one or two minor members. The probability is that Mr. W. E. H. Massey will be the president of the common but further than that dent of the company, but further than that we cannot state at present who the other officers may be.

"We have purchased these businesses outright and have paid the cash for them. They have all been prosperous, and it is the intention of the new company to carry on the business as far as possible in the manner maintained by the different firms who have to-day come under our control. Each of the firms will still possess its individuality, so that whatever popularity the different wheels may have procured will not be buried with

the new scheme.

"Remember, this is not a trust; we do not control the bicycle trade of Canada, we have simply bought these four firms out, and with such an amalgamation of interests we are positive that we can cut down expenses, that is, 'overhead expenses,' and it goes THE ...

A. R. WILLIAMS MACHINERY CO.

Hoad Office. SOHO MACHINE WORKS, TORONTO

Manufacturers of and Dealers in

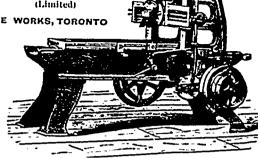
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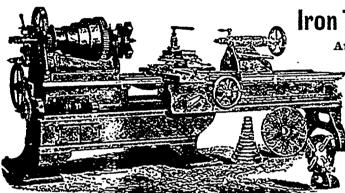
Motors, Water Wheels,

General Machinery

and Supplies.



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Iron Tool Works

At London.

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345 and 347 St. James St., MONTREAL

Send for Circula... Referring

to this Adva

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TWENTY-FIVE SIZES AND STYLES

HAND POWER AND

BELT POWER

Hand Blowers

FOR FORGE.



The Sturtevant STEAM: FANS

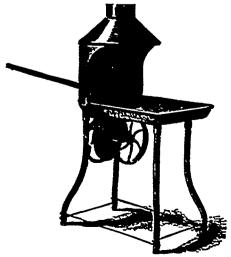
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MANUFACTURED BY

B. F. STURTEVANT CO.

Boston, Mass., U.S.A.

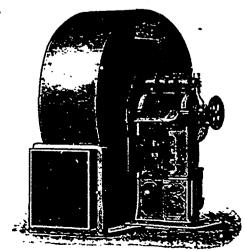


The STURTEVANT

Blowers and Exhausting

Known as the Monogram Pattern, For Blowing Boilers and Fires, Exhausting Dust and Gases.

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



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PRICE COMPLETE. - \$25.00

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

Sun Lighting Machine.



The Acme of Perfection 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.

LONDON, ONTARIO.

without saying that we will be able to buy One of our greatest in the hest markets. intentions and hopes is that we may be able to build up an enormous export trade.

"From facts and figures we have learned that about one-half of the wheels in Canada have been imported from the United States, but they are not the high-grade bicycles which we can put on the market, and therefore we expect to be able to more than compete with the firms across the border. We will be, moreover, the only company making a specialty of the manufacture of juveniles bicycles, and all classes of the silent steed.

We have no desire to inflate the price of wheels, and as a positive proof of this, it is the intention of the company to manufacture automobiles, which branch will be an entirely new one in Canada. We have been following this line of the business up in order to be able to turn out a good article, and we are of the opinion that a good bicycle manufacturing firm can, with a little additional plant, turn out a good automobile. At present it costs from \$1,500 to \$2,000 to buy an electric motor cycle or automobile, but it is thought that our company will be able to put these popular machines on the market much cheaper, so that they will come within the reach of men of moderate means. We will probably make them smaller, and therefore less unwieldly than those at present

Toronto, but the manufacturing will be done at the places where the present plants of the different firms of the company are located.

"The company will be a joint stock company, with a capital of six million dollars, so that the concern will have ample capital in its business, it has cost us now several millions of dollars to buy these firms out.

"The name of the new company has not om- yet been chosen, but at once we will make We application for incorporation, either by obtaining a provincial charter, or by making special application to the Dominion Parlia ment for our charter.

"This year the output of these four firms has been more than 30,000 wheels, and with such excellent plants we will not be compelled to have a new one for the manufacture of automobiles.

"The firms mentioned are the only ones who were asked to deal with us in the matter, and it is the intention of the company to employ the same men on each staff as are now in the employ of the several With reference to the books of companies. these firms, they will come into our possession on Sept. 1st.

"Some stock may be put on the market, but in case it is, the shareholders before named will control the interests of the new

concern."

The papers have been signed, scaled and delivered, and by these acts one of the "There will be a general head office in largest business deals over brought off in

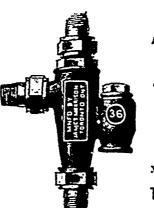
MeLaehlan Electric & Gasoline Motor Co., 94 ADELAIDE ST. WEST.

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

The Packard Electric Co., Limited.

Lamps and Transformers

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THE IMPROVED

Automatic

Re-starting

Gresham Injector...

Simple—Durable—Efficient

Combining all the best features required in a high-grade boiler feeder.

Manufactured by

THE JAMES MORRISON BRASS MNFG. GO., Limited,

For Sale by the Trade.

TORONTO.

pleted.

THE DOMINION STEEL COMPANY.

The Directors of the Dominion Steel Co., held a meeting in Montreal last week, at which they considered a great many important matters in connection with their new enterprise. The contracts for the entire plant have been given out and the work on the coke ovens, blasting furnaces, and steel works will be pushed ahead at once. It is expected that within eighteen months the company will commence the manufacture of steel on an extensive scale. The company owns 400 acres of land near Sydney, C.B., and its works will occupy a vast area. It has of all kinds of bridge and other structural

Later Mr. H. M. Whitney, president of the Company, accompanied by several of his Directors visited Sydney, N.S., from where they were to embark for Newfoundland to inspect their iron ore fields in that island. Mr. Whitney, while in Cape Breton, personally started the sinking of what will be probably the greatest coal mining shaft on the continent. It will be fifty-five feet square, the output of coal to be at the rate of 4.000 tons per day. A contract has been

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

ONTARIO WIND ENGINE and PUMP CO.

LINITED, 95 ATLANTIC AVE, TORONTO.

this province has been successfully com. entered into for the construction of the 400 coke ovens, which, with their equipment, will cost about \$1,000,000.

A HUGE SMELTER.

Paul Johnson, known as the designer of the Hall Mines Smelter, is in Nelson on a business visit, says The Nelson, B.C., Tribune. He will leave for Greenwood in a day or two where, as the representative of an English syndicate, with \$3,000,000 capital, he will superintend the construction of the largest smelter in Canada. The work will be begun at once and, with ordinary fortune, Mr. Johnson says that it will be completed by Nov. 1st. The company erecting the new plant is the British Columbia Copper Smeltbeen decided to have 400 ovens for the making of coke. The company will first enter England. The plant will be of the most upon the manufacture of steel, the openhearth process being adopted and the steel business will be followed by the manufacture of the Greenwood district are well known to the limits of bridge and other structural contain just about the proper quantities of contain just about the proper quantities of lime and iron and other fluxes to make them practically self fluxing. Up to the present time, the Hall Mines smelter has the largest copper stack in the world, capable of treating about 250 tons of ore per day, and it was constructed by Mr. Johnson. He is now going to build a still larger plant, which will be the second time the largest plant in existence. The intention of the new company is to enter the field in competition with both American and Canadian smelters, and, as the Canadian smelters at the present time do not attempt to treat all kinds of copper, the new plant expects to get a fair share of

the work of the district.

Accompanying Mr. Johnson is John O.
Norbon, of the Union Iron Works of San

The E. Desbarats Advertising Agency. Montreal, not only secures low rates for advertising space, but attends to every detail for an advertiser. Correevery detail for an appondence solicited

Francisco, to whom the contract for all the iron work has been let. Mr. Norbon will also look after the matter of supplying power to the plant. At the present they are con-Power Company, who agree to transmit the amount of power required a distance of twenty-nine miles, the whole plant to be run by electricity. If this does not prove satisfactory, the smelter company will erect a steam power plant in connection with its own works.

OLE COMMISSION CO., Toronto.

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BUSINESS CHANCE

UNEQUALLED opportunities here for Americans with brain and cash. Writtend every assistance to first-class energetic mea. A permanent official position for an experienced business man in a new composition metal industry at Durango. Iron mountain is open for engagement. The National One & Replection Co., Durango, Mexico.

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.

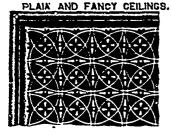
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Use Metal Goods in the construction of your new building or to improve appearances of the old.

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We are the only Job Spinners in Canada, Write for prices on anything in the Spinning line.

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Practical Painters prefer to bridle their own brushes with twine. With the help of the JENKINS PATENT BRIDLE CATCH.

This is now easily accomplished. These Catches are attached to all our large Paint Brushes without extra cost.

ASK for BRYAN BRUSHES.

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or tissue, while it destroys burrs, etc., as efficiently as acid. It leaves the wool in fine condition. Manufactured by the Merrimac Chemical Co., 13 PEARL ST.

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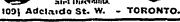


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CYANOLE FF. PATENTED.

Messrs. Wm. J. Matheson & Co. Limited, New York, have sent us a bulletin and specimens of dyoing produced with this color.

Regarding it they say:
"In properties this color very closely resembles our Cyanole Extra Pat., except that the new brand yields shades considerably brighter and purer than the older brand. It is extremely well adapted for dycing blue shades upon wool and silk, possessing great brightness and durability. It is best dyed on wool with ten to fifteen per cent. bisulphate of soda. If a complete exhaustion of the bath is necessary a small quantity of sulphuric acid should be added later, and the boiling continued until the bath is completely exhausted.

"Upon silk it is best dyed in boiled off liquor with a further quantity of sulphuric

"Cyanole FF. Pat., is well adapted for the dyeing of woolen yarn and piece goods. owing to its level dyeing properties and to the evenness of the results that are thus obtained.

"We will take pleasure in dyeing these or any of our other colors, or in matching any required shades upon your own goods, and will submit exact dyeing directions for producing the results thus obtained.

"Any information of a technical nature

will be cheerfully given.

"We make no charge for such services and, in accepting it, you are under no obligations to purchase from us anything that you can buy, or that you think you can buy, to better advantage elsewhere."

COBOURG, ONTARIO.

At the Crossen Car Works the majority of employees are engaged at piece work, and for the last few weeks many have been receiving more in their envelopes for the fortnight's pay than they have before in some years. This has been an excellent year so far for this industry, new hands are weekly, perhaps daily, being taken on, employees' pay has increased, several very large contracts have been satisfactorily filled, and still there is an abundance of work.

The Woollen Mills, under the management of Messrs. Dick, Ridout & Company, is another of Cobourg's most important and successful industries. Here a large staff of workmen are employed, they receive good wages and considerate treatment and are well satisfied with the present management, who are now getting out plans for additional new buildings so as to enable them to run the mills to their fullest capacity. Their new department, the rag works, which industry was inaugurated here by Messrs. Dick, Ridout & Company last year when they assumed charge, has proved very successful and afforded employment for a large number of hands.

The matting factory, unlike some other industries, never ceases operation. No material changes have taken place there during the past year. The works are running at full capacity, hands are well paid and everything satisfactory.

The wages of day laborers have for some months shown an upward tendency. This year there has been daily demand for every class of working men -no one need remain idle and many have made from twenty five to lifty cents per day more than they have in other years. Carpenters, painters, masons, gardeners, carters, and indeed all classes, have had an unusually busy season.-The Globe.



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Toronto Fence & Ornamental Iron Works
St. Fast, Toronto.

BROWN & CO.



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PARIS, - ONT.

Paris Electro Plating Co.

PARIS STATION, ONT.

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Guelph Woolen Mill Co...

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

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Manufacturers of

Hosiery, Shirts, Drawers, Glove Linings and Yarns.

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ALMONTE, ONT,

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

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Repreductions Made for Eight Cents per Square Inch.



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THE OLDEST. THE LARGEST. THE SAFEST. THE CHEAPEST.

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ESTABLISHED 1782. AGENCY ESTABLISHED IN CANADA, 1804.

PATERSON & SON. GENERAL AGENTS FOR THE DOMINION.

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USED AND RECOMMENDED

LEADING MUSICIANS.

Send for Catalogue.___

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GUELPH,

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STEAM GAGE AND VALVE CO. Sole Proprietors and Manufacturers of

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

Original Single Bell Chime Whistles.

BRANDEN PATENT PUMP VALVES

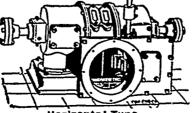
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HORIZONTAL AND VERTICAL BUILT IN 44 SIZES.

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.

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J. H. Heald & Co., Extracts Oak, etc.



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....Manufacturers of

MALLEABLE

Castings to IRON Order for all kind-

> AGRICULTURAL **IMPLEMENTS**

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SUCCESSORS TO

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

ARE PREPARED TO CONTRACT FOR COMPLETE INSTALLATIONS.

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Manufacturers of SPECIALTIES FOR

Steam and Electric Railways, SPRINGS, STEEL CASTINGS, FROGS, FORGINGS,

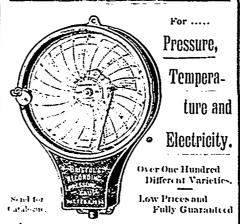
TRUCKS FOR ELECTRIC RAILWAYS, ETC.

INTERLOCKING SWITCH and SIGNAL PLANTS.

(Under patents of Messrs, Saxby & Farmer, Limited, of London, Eng.)

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CAPACITY 2,000 TONS.

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