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THE CANADIAN MANUFACTURER

DEVOTED TO *
THE MANUFACTURING & MINING INDUSTRIES,
OF THE DOMINION. *

INDUSTRIAL WORLD.

23-
July to Dec
1887

Vol. 13.

TORONTO, JULY 1, 1887.

No. 1.

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&
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MONTREAL.**



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Write for Price Lists and Discounts.

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Are always open to buy and pay spot cash for
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COTTON GOODS—Grey and White Cottons, Grain
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We also keep in stock MANUFACTURERS' TRIMMINGS,
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Special Drives in above lines now to stock at interest-
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SEE ADVERTISEMENT, PAGE 434.

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Commercial credits issued for use in Europe, the East and West Indies, China, Japan, and South America.

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Manufacturers of

ANILINE DYES.
ARCHIL
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Prize Medal, London Universal Exhibition,
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Gold Medal, Paris Universal Exhibition,
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Grand Diploma of Honor, Vienna Universal
Exhibition, 1873.

Medal and Diploma, with Highest Com-
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Maintain large stock, replete with all the
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to furnish quotations, with samples and
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All kinds of

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Dye Woods, Extracts, Cutch,
Indigo, Gambier, Cudbear, Coch-
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CHEMICALS AND DYE STUFFS,

Sal Soda, Soda Ash, Bleaching Powder,
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Extracts Indigo, Sumac, Fustic, etc.,
Gambier, Cutch, Sumac, etc., Acids,

ANILINE DYES,

Brooke, Simpson & Spiller's Full Assort-
ment on hand.

PHOSPHOR BRONZE, SILICATE CLOTH.

PILLOW, HERSEY & CO.,

Manufacturers of every description of
Cut Nails, Tacks, Brads, Railway and
Pressed Spikes, Horse Shoes, Carriage, Tire
and other Belts, Coach Screws, Hot Pressed
and Forged Nuts, Felloe Plates, Lining and
Saddle Nails, Tufting Buttons, etc., &c.

The Hardware Trade, Shoe and Leather
Finding Dealers, and Boot and Shoe Manu-
facturers, will find the Largest and Best
Assortment and Greatest Variety of above
Goods always in stock, and can rely on orders
being rapidly executed, our facilities for
doing so being unequalled.

OFFICE, 91 St. Peter St. Montreal.

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Card Clothing Works,
York St., Dundas.**

W. R. GRAY & SONS,
PROPRIETORS,

MANUFACTURE EVERY DESCRIPTION OF

Card Clothing and
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Largest Manufacturers of STEEL
and BRASS STAMPS in Canada.

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**Rubber Stamps,
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SEND FOR PRICES.

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SOLE MANUFACTURERS OF

The Celebrated Yorkshire Scouring and
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Pure Lard Oils specially adapted for the
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 OF THE DOMINION.

AND THE INDUSTRIAL WORLD.

Vol. XIII.

TORONTO, ONT., JULY 1, 1887.

No. 1.

The following suggestion is offered, free of charge, to those patriots who are engineering an Annexation Picnic at Dufferin Lake on the birthday of our young Dominion.

❖ GRAND ❖

INTERNATIONAL AGGREGATION

AND UNRIVALLED STAR (AND STRIPES) COMBINATION

— OF —

SERIO-COMIC CONVOLUTIONISTS.

Bro. Jonathan is pleased to announce to his patrons, and the public generally, that he is directing the great and only original troupe of INTERNATIONAL ITINERARIES AND POLITICAL ACROBATS, who will perform for one day only their celebrated and side-splitting Farce (interspersed with ground and lofty tumbling), of

“HEADS I WIN, TAILS YOU LOSE.”

❖ CAST = ❖

TWEEDLEDUM (a speculator),	- - - - -	RASTUS STATENILAND
TWEEDLEDEE (an <i>honorable</i> politician),	- - - - -	BENNY BUTTERPRICE
THE PROFESSOR (a professional theorist of uncertain convictions),	- - - - -	P. LUCRE SMEATH
BUTTONS	} two gentlemen engaged in commerce, {	HENRY W. DRYGOODS
TASSELS		E. YORK EVERYTIME
MISS CANADA (a young lady of 21 summers),	- - - - -	=====
MISS ONTARIO	} companions of Miss Canada, {	=====
MISS QUEBEC, Etc., Etc.,		=====

Camp Followers, Henchmen, Sycophants, etc., etc.

SCENE I. —Home of Tweedledum.— Enter Tweedledum and Tweedledee, who conspire to rob Miss Canada.—Conspirators are seen writing letters to the press.

SCENE II.—Annexation Club. Conspirators complete negotiations with the Professor, Buttons and Tassels, who bind themselves as accomplices.

SCENE III. Country fair.— Miss Canada's birthday festivities — Conspirators and accomplices endeavor to secure the assistance of rustics in carrying out their plot.

SCENE IV. (One year later). - Farm of Tweedledum.—Miss Canada's friends having frustrated the schemes of the conspirators, Tweedledum is in retirement and is seen watering his stock.

ORCHESTRA.

ACT I.—Overture, “Yankee Doodle.” ACT II.—“The Pirate King.”
 ACT III.—“The Traitor's Hand is on Thy Throat, Ontario, Ontario.”
 ACT IV.—“Not for Joe,” followed by the National Anthem.

"FROM ENVY, HATRED AND MALICE," ETC.

I HAVE noticed the following paragraph in the Chatham (Ont.) *Planet* of June 16th.

"In opposing Commercial Union the *Planet* and other Canadian journals are said to be held in the leash of Fred Nicholls, Secretary of the Industrial League, and ordered by him to do the work he desires. The silliness, not to say reckless falsity, of the insinuation is apparent when we say that the *Planet* staff or no one connected with it, has ever had any communication directly or indirectly with Nicholls, or know him, personally or otherwise, except by reputation, and never heard of him until his name became prominent during the last election. What grounds has the *Banner* for talking in that manner? If we were similarly inclined, we might accuse our contemporary of being subsidized by Erastus Wiman to advocate the principle of Commercial Union. Only we know that Erastus Wiman is not such a fool as to purchase an influence which is worth so little, we would almost be persuaded so to believe."

Of all the stupid assertions ever made for the purpose of manufacturing a little cheap political capital surely the above specimen betokens more than the average amount of imbecility. I admit that articles appearing in this paper have been freely and favorably commented upon by many Canadian and American journals which have exercised their privilege of reproducing them in whole or in part, but the editor of the *Banner's* contemptible insinuation of covert influence emanates from a brain as senile as the soul is small.

FREDERIC NICHOLLS.

WHAT COMMERCIAL UNION LEADS TO.

THE *Textile Record*, of Philadelphia, in an editorial discussing "Reciprocity with Canada," says that the proposition is of a kind that will work only one way—and that against the interests of the United States, and therefore there will be no reciprocity at all. It says:—

The enterprise will seem full of evil promise if we remember that such a treaty will make the Canadian custom house the gateway of Europe to our market, and the Canadian customs officer the interpreter of our tariff laws. The success of the reciprocity scheme, therefore, involves the surrender by our Government of control of the execution of the laws which shelter our vast industries and supply our revenues. We would invoke a flood of importations where our Treasury Department would have no voice, and our statutes no influence. The fiscal policy of our Government ought, as a matter of common self-respect, to be kept absolutely within our own control. To be dependent upon another Government for its enforcements, or to suffer another Government to interfere with it, or to regulate, interpret, or direct it would be a humiliation. Our laws are made for our territory. To affect to extend their operation beyond our borders is simply folly.

These arguments, adduced to prove the folly of the United States in submitting to such a state of things as our contemporary suggests, has equal or greater force as a converse proposition. It is a fact that under the proposed Commercial Union duties would have to be collected at all Canadian ports of entry upon all imports except those from the United States, and at all ports in the United States except upon imports from Canada. The tariff laws of the United States and of Canada

differ widely, and it is doubtful is equal duties and restrictions are placed upon any one article in the two countries. Who would harmonize these differences? And if they were harmonized and equalized, and made alike in all respects, who would collect the duties? And if this were agreed upon, to whom would appeals be made in case differences should arise between importers and customs officials? Such differences are constantly arising, and disputes regarding the construction of the laws are quite as constantly being referred for discussion in the United States to the Secretary of the Treasury or to the Federal Courts, and in Canada to the Minister of Customs or the judicial authorities of the Dominion. Under Commercial Union would the authorities of each side decide only such cases as arose within their borders, or would there be a commission to which all such cases would be referred? And would such decision be final and binding in both countries? Would the people of either country be willing to forego their right to appeal to their high courts of justice to settle disputed points of law or fact? Would there be any appeal from the commission? How would such commission be constituted—an equal number from each country with an umpire? Who would the umpire be—how would he be chosen? In the language of our contemporary, the fiscal policy of our Government ought to be kept absolutely within our own control; and to be dependent upon another Government for its enforcement, or to suffer another Government to interfere with it, or to regulate, interpret or direct it would be a humiliation which Canadians likely would not submit.

The natural and direct tendency of Commercial Union would be towards free trade pure and simple with all the world, and there are those both in Canada and the United States who would be glad to see such a result effected through such means. These are the ones who would rather see the manufacturing industries of both countries languish and become eradicated than that their falacious doctrine should not prevail. That the United States are much further advanced in manufactures than is Canada is due to the high protective tariff which has prevailed there for so many years. That Canada has good reason to hope and believe that a similar advancement and aggrandizement awaits her under a similar policy is evident.

We particularly comment to Canadians the closing paragraph of our contemporary's editorial here alluded to which reads:—

"Our system of free trade at home and of protection against the aggressiveness of foreign industry was designed as an advantage for our own people. Free trade among ourselves is a good thing, and a fair thing, because social, political, industrial and other conditions are uniform from one end of the land to the other. We have the advantage of such unrestricted traffic because we are Americans. If outsiders wish to share in these things they can do so by coming in with us. The door is open. When an Irishman or a German wants our good things he comes and partakes of them. We do not reach across the ocean to grasp him. If Canada wants free trade with this great country she can get it, once and for all, by casting in her lot with ours. Nobody who has any sense would strike a blow to annex her territory to ours; but when the Canadian people, kindred to us in blood and language, and living in a land which nature has made a part of ours, wish to become incorporated with this great Republic, they will be cordially welcomed; and we may confidently affirm that they will never

secure permanent free trade with us until that movement occurs."

American laws and American policy are intended specially to benefit Americans. If any wish to participate in and enjoy the privileges which Americans enjoy, they must become Americanized—individuals by domiciliation and naturalization—nations by absorption and annexation. Do Canadians desire closer relationship with the United States either for themselves or their country on such terms?

EXTRA-JUDICIAL LAWS.

MR. JAMES R. BROWN, chairman of the Legislative Committee of the Oshawa Trades and Labor Council, in a recently-published report referring to the bill which had been introduced by the Minister of Justice in the Dominion Parliament regarding threats, etc., in relation to persons employed in or about vessels, says:—

"The contention of those opposed to labor organizations, and which is voiced by the judiciary, is that a man has a right to be allowed to work under any conditions, however degrading, if he so desires. But as the law of the country at present states, 'no person shall be in the condition of a slave,' any person working under conditions which tend to slavery should be prevented from doing so. And were the Minister of Justice, instead of introducing such a bill, doing his duty in protecting the rights of the people, labor organizations would be relieved from the responsibility of doing so."

What laboring men and the public generally are interested in knowing is: (1) Whether a free man has a right to be allowed to work under any conditions whatever that may meet his approbation; (2) whether he is to be the judge of the fitness of the circumstances under which he shall work; (3) whether he shall be the judge of the conditions constituting "slavery," or shall self-constituted "Trades and Labor Councils" exercise that supreme judicial power; (4) whether a man shall be prevented from work against his will by any labor organization or any other unauthorized power, and (5) whether such assumption and exercise of power shall be tolerated.

Mr. Brown does not seem to comprehend the duties of the Minister of Justice, or even the legal power and limit of authority of labor organizations. If there is any law on the statute books prescribing under what conditions a man may work, and that law is violated, Mr. Brown and his labor organizations have free access to the courts, duly constituted by law, to enforce observance; and private information, prosecuting attorneys, grand juries, etc., are some of the means by which violations of the law may be brought to the notice of the courts, and the violators punished according to law. But the law does not confer any of this power and authority on labor organizations, and the acme of impudence, tyranny and injustice is reached when labor organizations undertake (1) to decide and declare what constitutes a condition of slavery in the eyes of the law on the part of a working man, and (2) to try, convict and punish a man for taking upon himself such a condition.

It is fairly and legitimately deducible from Mr. Brown's "report" that the contention of the labor organizations is: (1) That no man has a right to labor except he belongs to some labor organization; (2) that no man has a right to work when organized labor decides a strike; (3) that working for wages

less than those stipulated by labor organizations constitutes "the condition of a slave"; (4) that any such labor should be prevented, and (5) that whether there be any law on the subject or not, labor organizations will undertake to see that such labor is prevented.

LAVISHING TREASURE ON TRADE.

The British have been lavishing treasure and fighting all over the world since Queen Elizabeth's time, largely for the purpose of obtaining new buying and selling markets. Russia has overrun Asia at huge cost of blood and treasure for the same purpose. There is not a nation in Europe but would cheerfully undertake war to gain a new market including two millions of people. Canada has the opportunity to include sixty millions within her commercial boundaries, and there are actually people who gravely assert that she ought to refuse!—*Toronto Globe*.

Greater nonsense was never written. England during Queen Elizabeth's time never lavished treasure and went fighting all over the world for the purpose of obtaining new buying and selling markets. Whatever she did in those days was for the acquisition of territory and through love of conquest. She was not a commercial and manufacturing nation in any sense of the word, such as she has been within the last century. Since the invention of the cotton gin and the perfection of machinery for the rapid and cheap production of textile fabrics, and the development of the thousand processes for supplying the wants of mankind by the manipulation of natural and crude products and the manufacture of them into the necessities of life, giving employment to her teeming and rapidly-growing population, producing more manufactured goods than could be consumed at home, England has been constantly seeking new markets for whatever she may have had to sell. But she would never have had occasion to seek such markets if it were not that her soil was dotted with almost unnumbered thousands of factories, workshops, furnaces and foundries, the bowels of her earth honeycombed by delvers for coal and ores, and the very atmosphere above her murky with the smoke from her industrial establishments.

Canada does not seek or desire to acquire territory to add to her domain as England did in Queen Elizabeth's time. She already has as many broad acres as she cares to own, and every school-boy in the land knows that no such industrial conditions prevail with her. Canada does not desire to undertake any war to gain a market of any sort.

On the other hand it is plainly observable that the United States have need of new markets in which to dispose of their surplus of manufactures and from which to obtain many of the natural products and raw materials necessary to keep their industrial establishments in operation. Under an economic system of government, that English statesmen do not think can be successfully and profitably applied in their country, the United States have sprung forward in the race for greatness, and now equal the mother country in nearly all and actually surpass her in some of the most important industries which elevate nations.

And this is the country that the nonsensical *Toronto Globe* suggests that Canada now has the opportunity of capturing and including within her commercial boundaries.

ENCOURAGE SMALL INDUSTRIES.

REGARDING the inauguration of new industries in the North-West, a Winnipeg contemporary makes some sensible suggestions which will no doubt be acted upon. It is not alone the large aggregation and consolidation of capital put into manufacturing enterprises that is to be depended upon to build up the country, valuable as such undoubtedly are. The value of diversified industries, small in themselves individually though they may be, cannot be over-estimated. Involving comparatively small capital; embracing a wide variety of objects; giving employment to a large aggregate of workers, and consuming the products of the soil in many instances near where they are located, these small manufacturing establishments form the nuclei of what will in time become extensive and most important industries. The policy of this government is to foster such enterprises. Closing the doors against the free admission of foreign made goods creates a demand for similar goods of home production, and in this way the wool of the farmer is woven into cloth at home; the fruits and vegetables are canned and preserved contiguous to the farm where they were grown, and the thousand workers employed in these industries, being consumers of the products of the farm, and not producers of them, create a demand for them which affords a remuneration to the farmer which he would not otherwise enjoy. Therefore we hail with pleasure the announcement of any and every new manufacturing industry begun in Canada and wish it every success.

Speaking of the canning business in Manitoba the *Winnipeg Commercial* says:

"In one direction the field here is not likely to be over-estimated, and this is in the demand. The consumption of canned goods is very large in the North-West, in proportion to the population. This is a well known fact, and the reasons for such are so apparent as not to require special notice. Only one point may be mentioned to show this, and that is the convenience of preserving and handling canned goods in such a vast country, but thinly settled, and where supplies are often not readily obtained. On this point there need, therefore, be no fear of the result. The next thing, or rather it should be the first thing in connection with a manufacturing industry, is the supply of raw material. This undoubtedly is limited in many directions, but is capable of being greatly increased. In vegetables, for instance, it would only require a demand to bring forth an abundant supply. Large quantities of canned beans, peas, corn and tomatoes are consumed in Manitoba and the Territories, all of which could be prepared at home. In meats there should certainly be an unlimited supply, and these also are largely used in a canned state, throughout the country. In fruits the prospect for supply is not so favorable, though even in this branch many varieties of small fruit could be produced here to good advantage. In the matter of expenses, only a practical test in a proper way can rightly determine the advantage of canning such articles as the country produces to advantage. Still the prospects would seem favorable to the success of the undertaking in this particular. Some of the articles of canned goods now used in the country, have to be imported from foreign countries, and are subject to a heavy customs tax, whilst those varieties prepared in Eastern Canada, would be at the disadvantage of the freight rates for a long haul. Taking these matters of supply, demand and expense of manufacturing into consideration, the field here would therefore not seem altogether unfavorable for the successful prosecution of a canning industry at Winnipeg."

A MANUFACTURER'S VIEW ON COMMERCIAL UNION.

AT the last meeting of the Toronto Board of Trade for discussing the Commercial Union question, Mr. Jury, a member of the Board, made a strong and ultra free trade speech which called forth the following energetic letter from Mr. E. C. Boeckh, of Messrs. Charles Boeckh & Sons of this city, who are extensive manufacturers of machine and other brushes:

"In the debate on Commercial Union Mr. Jury made an apparently strong point, one that seemed to gain favor and applause from the Commercial Unionists, to this effect, that if our manufacturers could not compete and sell as good goods as cheap as American manufacturers they must be the sufferers, and that Commercial Unionists could wish for no better argument in its favor if at every meeting it could be said and demonstrated that Canadian manufacturers are unable to compete with the Americans. Now, sir, I think that Mr. Jury's argument shows not only that he has had no experience either as a merchant or a manufacturer, but that he has not given that portion of the question sufficient consideration. As to the ability of our manufacturers I need only refer to the splendid showing made at the Colonial and Indian Exhibition where our manufacturers gained the very highest praise and a reputation of which every true Canadian may feel proud, and I am confident that none of our manufacturers are afraid of straightforward, honest competition. Will we, however, get that by having Commercial Union? I think every one who gives the matter serious thought will say no, and for these reasons: (1st) Most American manufactures are controlled by rings and have thus practically unlimited capital; (2nd) through extreme competition they have been driven into making specialties of many lines which are here only a portion of our manufacturers' outfit; (3rd) as a rule they are overproducing most lines, and to get a market for their surplus would sell in Canada at or even below cost, not for a month or two but for years if necessary. Are there any of our manufacturers who would stand long against this sort of competition? Now, how much and how long would the farmer get the benefit of cheap goods as claimed by Mr. Jury? Would not prices in every line be higher than ever as soon as our manufacturers were crushed out of existence. I think that even Mr. Jury will not deny this. It has become habitual with some people since this question of Commercial Union was started to look upon manufacturers as a small and monopolizing class. But do these people realize that a manufacturer represents a good deal more than one man, and do they take into consideration that a moderate-sized factory employing say one hundred men really represents a population of four or five hundred people, in fact the whole population of a small village; and have not these people to be fed and clothed and are they not the very backbone of our home trade and commerce? I am surprised that Mr. Jury, the ex-labor candidate and friend of the workingman, should show so little sympathy for them at this great crisis, for such it undoubtedly is for every workingman in Canada, and his wife and children to-day.

"E. C. BOECKH."

NUMBER 90 of the Humbolt Library of Science, published periodically by Mr. J. Fitzgerald, New York city, is entitled "Notes on Earthquakes; with fourteen Miscellaneous Essays," by Professor Richard A. Proctor.

THE shipments of crude petroleum, and refined reduced to crude equivalent from the Canadian petroleum regions for the first five months of the present year amounted to 230,061 barrels.

A RETURN to the Democratic policy of free trade would plunge the country into distress and do more material damage than would the bombardment and destruction of the city of New York by a hostile fleet. —Washington, D.C., *National Republican*.

THE Southern Exposition will be held at Louisville, Kentucky, this year under exceptionally favorable conditions. The attention of the world is now being directed to the extraordinary development of the New South, and this exposition will illustrate the resources and needs of that section on a grand scale. It will be opened August 27th and close October 22nd.

THE June number of *The Office*, published in New York, contains the opening paper on "Organization, Business Routine and Book-keeping of a Dry Goods Establishment" by R. W. Bierworth, the same having been awarded the prize in the competition invited by The Office Company, recently decided. As the name indicates *The Office* is a practical journal for business managers, accountants and office men.

◇ THE ◇

Canadian Manufacturer.

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Editorial Notes.

MIR. FREDERIC NICHOLLS is Secretary of
The Canadian Manufacturers' Association,
The Woollen Manufacturers' Association, and
The Tanners' Association.

His Office is at the Publication Office of
THE CANADIAN MANUFACTURER,
6 Wellington Street West, Toronto.

Any association of manufacturers who may desire to hold meetings for organization or other purposes, are invited to avail themselves of the meeting room adjoining the office of the CANADIAN MANUFACTURER.

Every business man who receives the CANADIAN MANUFACTURER should carefully observe the business cards displayed therein, and, in corresponding with advertisers, mention this journal. This will be of benefit to both the buyer and the seller, and the medium by which they are brought together will also be made more valuable.

MESSRS. ROBERT BARDER, of Toronto, ex-Alderman Rocque, of Ottawa, and James R. Brown, of Oshawa, have been appointed inspectors under the Ontario Factory Act.

A FRIENDLY HINT.—Manufacturers intending to make displays at the Dominion and Industrial Exposition to be held in Toronto in September, should have their appropriate spaces allotted them without delay.

CHINA has determined to at once construct a railroad along its north-eastern coast for one hundred and fifty miles from Takoo to where the Great Wall reaches the sea, to be followed by another line extending from Takoo to the Kaiping coal mines, a distance of thirty miles. The importance of China and Japan as markets for manufacturers' products is increasing rapidly, and schools are being established in England, Germany and Italy for the teaching of the languages of those countries, to the end that all possible trade advantages may be derived from such knowledge.

SAYS the *Huntingdon Gleaner*:—"Reference to any daily paper will show farmers that the prices of butter and cheese of the quality they have to sell are no higher on one side of the line than the other. Both are regulated by the Liverpool quotations." Then how upon earth do the Americans manage to make such fools of themselves as to send into Canada 2,132,424 pounds of butter in a year, and pay four cents per pound duty thereon? How, unless the alleged "butter" is not butter, but oleomargarine?—*Toronto Globe*. If the duty of four cents per pound is not high enough to keep American oleomargarine out of the Canadian market, raise it higher. If the existing duty does not answer the purpose, Commercial Union will not.

It is amusing to hear both Canadian and British free traders declaring against the Tupper tariff, which levies a duty of \$4 per ton on importations of pig iron, declaring that everything is going to the demerit bow-wows in consequence, and then to read in the English papers that shipments of pig and cast scrap iron to the United States, where the duty is fifty per cent. higher, are exceedingly large and active. In fact, these shipments have been so large recently as to largely reduce stocks on the other side of the water. During the months of

January, February, March and April last, Great Britain sent 92,925 tons of old iron to the United States—a quantity which is said to be thirty times as much as that sent in the same period two years ago; which, coupled with the larger quantities of pig iron sent and being sent to the same destination, have greatly reduced the available stocks of these classes of products.

WADE'S *Fibre and Fabric*, speaking of the letter of Mr. D. R. Van Allen, president and manager of the Chatham Manufacturing Co., printed in our issue of June 17, which it reproduces, says: The "CANADIAN MANUFACTURER wages a continual warfare against free trade. Such efforts are not always appreciated, and we know a good many on this side of the line who are perfectly willing to let the other fellows fight their battles, and instead of even subscribing, are satisfied with a free copy every few weeks. The Chatham Manufacturing Co. are an exception to this rule, as will be seen by their letter to the CANADIAN MANUFACTURER." No doubt that there are too many manufacturers on both sides of the line who are content to stand by and do nothing while their battles are being fought for them; but reference to our advertising pages will show that we have many friends who do their part in holding up our hands while the battle rages.

RECENTLY, at a meeting of workmen which was held in Philadelphia to welcome Mr. Powderly, Mr. Charles H. Litchman, grand secretary of the Knights of Labor, speaking of the identity of interests of the employer and employee, said that the failure of the order thus far to accomplish many desired reforms was attributable to the fact that the employer and the workman did not stand together; that the organization has been engaged in family quarrels, and that it has been raising issues on frivolous matters. "The barricades have been thrown up across the streets instead of on the outskirts. Supposing labor wins what it would call a victory, it amounts to nothing. What, then, is the use of making unreasonable demands on employers, and then trying to enforce them by strikes, only to fail and weaken the cause. Better, by far, bring the order down in all things to a reasonable basis, where the American overseer can clasp hands with it, and where employer and employee can meet on equal ground and make common issue against monopolies that sap the life blood of our industries."

THE *Toronto Globe* is receiving quite severe rasping at the hands of its contemporaries because of its inconsistent course on political questions. They show what the *Globe* said only a few years ago when it was strongly in favor of Imperial Federation, and what it is saying now in favor of Commercial Union with the United States and other political heresies. We are sorry for the *Globe*, for its idiosyncrasies indicate the presence of insanity and the necessity of an asylum. Its tergiversations remind us of the crack-brained man who was always imagining himself some other person. On one occasion when being visited by a friend he insisted that he was the veritable German Chancellor, Prince Bismarck. Some time after this friend met him again and addressed him as Prince Bismarck, but the crazy, harmless old gentleman drew himself up and promptly declared that he was no other than His Royal High-

ness, the Prince of Wales. On being reminded of his previous declaration of identity, after considering a moment he exclaimed. Ah, so I was, so I was; but that was by my first wife—I am now the Prince of Wales.

THE Montreal market reports of June 17th state that on the previous day the ruling price for cheese was 9½ cents, the Liverpool cable quotations being 52c. 6d., and the New York market quotations being 9½ cents. On the same day at Belleville, Ont., large sales of factory cheese were made at 9 @ 9½ cents, at Brockville at 8½ @ 8¾ cents, and at Peterborough 1,716 boxes were sold at 9½ cents. Bradstreet's of June 18th, reporting the New York cheese market of the previous day, says that the export call there was less satisfactory, due in part to the very liberal shipments being made from Montreal (for the week about 50,000 boxes with freight rates thence by steam to Liverpool the same as from New York; the quotations for best factory cheese being 9¼ @ 9¾ cents. Alas for the poor hopeless and helpless farmers of Canada! On the very day that best factory New York cheese was selling at New York city for 9¼ cents, Canadian cheese was selling in Belleville, Peterborough and other cheese-making centres at the same price, and the amount of business being done at Montreal, and the prevailing prices there, having a depressing effect on the trade in New York city. What good could possibly accrue to Canadian cheese makers from Commercial Union anyhow?

THE first shipment of cheese from the Manitou factory was made on Monday last. The product consisted of about fourteen hundred pounds, and was consigned to Messrs. G. F. & J. Galt, Winnipeg, at fourteen cents a pound.—*Manitou Mercury*. We suggest to Mr. Wiman, Mr. Fuller, the *Toronto Globe*, and the others who go around weeping over the woes of the poor hopeless and helpless farmers of Canada, to go on a missionary expedition to Manitou and other places in the great Canadian North-West, and preach to the benighted farmers and cheese makers there who are getting fourteen cents a pound for their cheese the larger liberty and greater profits they will enjoy under Commercial Union, selling their cheese in New York city for nine cents a pound. A recent report of the Manitoba Department of Agriculture says that butter and cheese making in that section is likely to be carried on this season with much greater energy than during 1886. There are quite a number of creameries and cheese factories now in operation in Manitoba, and others are projected, outside of which there are a number of desirable locations awaiting enterprise and capital to establish others. Why is it that Manitoba cheese is worth fourteen cents a pound at Manitoba cheese factories? The National Policy, of course.

FREE trade is said to be playing the mischief with hop growing in England. The free introduction of foreign hops has reduced the price of the article from three hundred shillings to thirty shillings per hundredweight, and threatens to destroy an industry that gives employment to some three millions of English men, women and children; and the worst of it, perhaps, is that, though foreign competition has brought down the price of hops, the English beer is neither cheaper nor better. The hop grower can hardly get enough for his crop to pay for his beer.

Nobody in this country wishes to quarrel with Canada, and for the good reason that Canada is surely destined to be a part of the United States. It belongs to us by nature, and if there is a continued maintenance of peace it will come to us, sooner or later, by

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the spontaneous acts of the Canadian people. If we should most unhappily become embroiled in war with England, Canada would be in the possession of American troops within ten days, and in our possession it would remain. No, we wish to have no ill-feeling between the two countries. Future fellow citizens should maintain the friendliest relations with each other.—*Textile Record, Philadelphia.*

CERTAIN parties in Woodstock, Ont., are asking for a bonus to enable them to build a dry dock at that place, and other parties are asking for a bonus to assist them in establishing a piano factory there. While one of these enterprises should be encouraged and assisted the other should not be neglected. Let Woodstock have both if she wants them. The effect of such industrial establishment is to create a demand for skilled labor, for additional residences, to more largely consume all manner of agricultural and manufacturers' products, and to make times better all around.

We are informed by Mr. Erastus Wiman, publisher, that it is the intention of certain members of the Canadian Club of New York to issue in book form a number of papers which have been and are to be read before that club. Among the morceaux are embraced extracts from speeches made by Mr. Wiman, and articles contributed by Prof. Goldwin Smith, Rev. Dr. Geo. Grant, Mr. J. W. Bengough and other well-known writers, among whom we observe the name of Hon. Benj. Butterworth. The book will no doubt afford exceedingly interesting reading. Mr. James Ross, of the Canadian Club, 12 East 29th Street, New York, will give further information.

THE first train of cars lighted by electricity and heated by steam ever run over a railroad, recently arrived at New York from Boston. The train consisted of seven cars and a baggage car, each of which, with the exception of the latter, had eighteen lights of sixteen-candle power in the interior and one on each platform. The baggage car had a light on either platform and six inside. The cars were all brilliantly illuminated. The heating of the cars was by the Martin patent, and the only fire in the train was in the locomotive furnace. The batteries are placed in boxes under the cars and furnish sufficient power to keep twenty-four sixteen-candle power lights burning for twelve hours.

It is said that a Franco-German syndicate has made certain propositions to the Canadian Government having for their object the development of the Dominion's iron industry. The principal proposals submitted are reported to be as follows: First, to build certain extensions of the Intercolonial Railway to Cape Breton. Second, to establish blast furnaces in Nova Scotia, for the manufacture of steel rails. The syndicate offers to put up works costing \$1,500,000, with an annual capacity of at least 40,000 tons of rails, provided the Government will contract to take 200,000 tons of rails within six years, will admit plant free of duty, and will put a duty of \$17 per ton on rails for ten years. It also offers to operate the Intercolonial Railway with its extensions. Indications are not wanting, it is said, to show that the Government is inclined to consider the above offers.

THE first sod of the Canadian Pacific railway was turned on May 3rd, 1881. The last spike was driven on Nov. 7th, 1885. The time occupied in building road was four years and six months. Total length of line between Quebec and Vancouver, 3,065 miles. Eastern division, 2,115 miles, Western division, 1,846 miles, Pacific division, 447 miles; total mileage 4,306. Comparative distance on Canadian Pacific railway, Montreal to Vancouver, 2,906; Canadian Pacific railway, New York to Vancouver via Brockville, 3,162 miles; Northern Pacific railway, New York to Portland, Ore., and shortest connections, 3,235 miles; Union and Central railway, New York to San Francisco and shortest connections, 3,271 miles. The Canadian Pacific railway is thus the shortest line between ocean and ocean by 365 miles.

THE new steamer, *Lake Ontario*, of the Canada Shipping Company's "Beaver Line" is described by the *Liverpool Journal of Commerce* as being one of the staunchest and finest and best equipped ships that plies the ocean. She is 375 feet long, 43 feet 5 inches beam and 29 feet 7 inches depth of hold, measuring 5,300 tons. She has six longitudinal watertight bulkheads extending up to the upper deck; a cellular bottom and every known improvement and appliance conducive to safety of life, ship and cargo. The state-rooms are very spacious, and are fitted with every modern invention, the accommodations being for 72 first class, 40 second class, 200 steerage passengers on the saloon deck, and for 800 emigrants with ordinary steerage accommodation on the main deck. The ship is

first class in every respect, and those who may desire further information concerning her should write to Mr. H. E. Murray, General Manager of the line, at Montreal.

THAT GERMAN IRON SYNDICATE.

THE fact that a German Syndicate is anxious to purchase the Intercolonial Railway of Canada, and that its agent, Mr. E. Kamper, was recently in Ottawa interviewing the Dominion Government with that end in view, has drawn the attention of the country to the vastness and importance of the works the Syndicate propose to undertake. While in Ottawa Mr. Kamper is reported to have said to a newspaper reporter that a part of the contemplated scheme is to open up and operate immense iron works at or near Pictou, N.S. He said: Our company has already spent some money in having an examination and report made of the iron resources of Nova Scotia by a staff of German engineers, and their report was so flattering that the company decided to open up immense iron smelting works near Pictou, provided the Canadian Government would give us protection for a certain number of years to enable us to cope with American and European iron manufacturers. If this protection can be obtained we will at once commence the construction of immense works near Pictou, and will immediately bring out from Germany 1,000 skilled iron workers to introduce the German methods of working iron in Canada. We have also a very high opinion of the great mineral resources of Nova Scotia, and are satisfied that if worked according to German methods, and with sufficient capital, they would turn out results that would astonish Canadians."

"Whether Mr. Kamper will succeed in purchasing the Intercolonial or not is a question that has still to be settled," says the *Halifax Critic*, "but this in no wise alters the fact that the attention of capitalists has been drawn to the immense mineral resources of the Province, and that in a very short time large smelting works, utilizing our coal, and giving employment to thousands of workmen, will be in operation. The scheme proposed by the German Syndicate is a gigantic one, and proves that men of unlimited means must be behind it. The Germans are noted workers in iron and steel, the great Krupp works being the largest in the world, and we trust, whether they succeed in purchasing the railway or not, that they will still proceed with the erection of smelting works in Pictou County. The mining outlook is indeed most promising. The gold mines are yielding steady returns and the hosts of miners and capitalists now engaged in the business are reaping good profits on their labor and outlay. In coal the prospects were never so bright. The strikes in Pictou are happily settled, and the demand for coal from Quebec and the Eastern States is likely to exceed that of any previous year. Higher prices are likely to be obtained, and this coupled with the fact that large smelting works are soon to be erected, should put the coal companies in good humor. The Lounderry works with Sir Geo. Stephen as President, and with sufficient capital, should make a fine showing this year, and the Steel Works at New Glasgow have met with such success that they have sent one of the firm to England to secure a large number of skilled workmen, in addition to the force now employed. The Antimony mine at Rawdon has yielded largely in the past, and under new management the output will, we trust, be largely increased. The copper mine at Coxheath is being steadily worked, and there are other districts in the province, where rich deposits of that ore are only awaiting capital for development. Manganese is being profitably worked in several localities, and the output will be greatly increased when the large steel works, now mooted, furnish a profitable home market. Large deposits of lead at Smithfield and Gay's River remain undeveloped for want of capital, but the indications are that the present season will see a change in this respect, and that lead will form no unimportant item in the mineral returns of this province in the next report of the Commissioner of Mines. The supply of plaster and building stone is inexhaustible, and every day reports of new mineral discoveries are being made. With these facts staring us in the face, it is strange so little interest seems to be taken by our capitalists in what should prove one of the surest sources of wealth. It is this lack of interest by our home business men that has so long retarded the development of our mines. Outside capitalists have been tempted to say, "Surely the mineral wealth of Nova Scotia must be largely mythical, else its monied men, whom we know as shrewd merchants, would put their capital into mining." It is only now, when they have sent their own engineers to report that they have found the mineral resources of the province underestimated even by the most enthusiastic Nova Scotian, and as an immediate result comes this offer to purchase the Intercolonial and conduct mining operations on a scale heretofore unknown on this side of the Atlantic. The present should prove a Jubilee year to all interested in the mines of Nova Scotia.

Manufacturing.

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The co. st. action of the new buildings of the Canada Screw Company, at Hamilton, is to be commenced at once. The main building will be 300 feet long.

The New Glasgow, N.S., Steel Company have sent an agent to England to engage a large number of expert workmen for their works, their present force of about 120 men not being sufficient to enable them to fill the orders they are receiving.

Messrs. Moore & McGarvin, manufacturers of trunks, valises, etc., Acton, Ont. inform us that they are now running their works full time, and are enjoying a large trade. They operate more than thirty workmen, besides a number of women and girls.

The property of the Peter's Combination Lock Company, at Moncton, N.B., was sold by order of the liquidators on June 14th, the purchaser being ex-Mayor Duffy, of that place. The works have been closed for three years, but they will be again put in operation and that without delay.

At the recent annual meeting of the Amherst Boot and Shoe Company, Amherst, N.B., it was shown that the sales of the previous year amounted to more than \$290,000, an increase of nearly \$60,000 on the business of the preceding year. A dividend of seven per cent. was declared, and a fair sum was placed to rest account. The company employ 140 hands and paid out to them during the year \$45,680.

The American Electric Manufacturing Company, of New York, are extending their business to Australia. A complete plant with engines, dynamo machines, lamps, boilers, wires and other apparatus was shipped last week for Sydney. An American plant is to be immediately installed there. A company has been organized with a capitalization of half a million of dollars to control the American apparatus in Australia.

A PROMINENT junk dealer recently received an order for 10,000 old tomato cans. The dealer explained that much of this kind of tin is used for corners and edge-nieces on a low-grade of trunks, while many people use it for flushings on roofs. The dealer is obliged to melt the solder off, straighten the cans out into flat sheets, pack the pieces in flat bundles for shipment, and only gets about \$10 a ton for his trouble.—*Iron Age.*

At the annual meeting of the New England Paper Company, held in Montreal, June 21, Mr. J. Brooks Young was re-elected president, Mr. Arthur G. Walton treasurer, and Mr. Joshua Morton, jr., secretary. A dividend of five per cent. was declared. It was recommended by the meeting that the company proceed to erect a pulp and board mill with a capacity of not less than five tons per day, and that an artesian well for spring water be at once put down on their mill property at Portneuf.

The American Electric Manufacturing Company, of New York, have decided to establish a factory for the manufacture of electric apparatus and appliances in Montreal. This is to escape the payment of duty on goods sold in Canada, which would otherwise be made in the United States. The new works will involve the investment of a great deal of money and the employment of a large number of skilled workmen. It is said that some of the most prominent gas companies in the Dominion are interested in the enterprise.

Messrs. HEINTZMAN & Co., Toronto, manufacturers of grand, square and upright pianos, are meeting with very large demands for their instruments, both at home and abroad. In addition to a large number of sales effected in Great Britain through their London agency, they have recently closed a contract with the Halifax Piano Company, of Halifax, N.S., for 100 instruments to be delivered within the year. Last year their sales through their Montreal agency amounted to more than 250 instruments. The firm are now in correspondence with parties in Australia, who discovered the excellence of these goods at the Colonial exhibition in London last year, which will most probably eventuate in the sale of large numbers of the Heintzman pianos in that far off country.

Mr. J. W. HERMAN, 114 1/2 King street, Toronto, informs us that he is meeting with great success with his boiler water-purifier, an illustration of which is shown in his card in another page. It is claimed for this purifier that it entirely prevents the formation of

scale upon either the shell or flues of the boiler, all impurities being extracted from the water after entering the boiler and before it reaches the water line. They are deposited in the purifier pans, which are placed on the top of the flues. These pans can be removed, cleaned and replaced with very little trouble and very quickly without emptying the boiler. No purger is used, heat alone effecting the deposit. Mr. Herman has a large number of testimonials from those who have his purifier in use, among which we notice the names of Messrs. Chas. Boeckh & Sons, P. Freysing & Co, the John Doty Engine Co., and Mr. J. P. Wagner, all of Toronto. He also shows a letter from Mr. Geo. C. Robb, of this city, chief engineer of the Boiler Inspection and Insurance Company of Canada, testifying to its simplicity and effectiveness.

The municipal authorities of Brantford, Ont., have offered the Cortland Wagon Company, of Cortland, N.Y., satisfactory inducements to establish their Canadian branch works in that place. The company pledge themselves to erect two two-story factory buildings 200 by 50 feet, and a blacksmith shop 75 by 50 feet, and to give employment to 200 hands, to whom will be paid wages averaging about \$10,000 per month. Of these employes fully 150 will be first-class skilled workmen, including about 120 householders. The company will invest \$100,000 in their plant, materials, etc., and will manufacture carriages, phaetons, carts, wagons, sleighs, etc. Without our National Policy, or with Commercial Union with the United States, this company, who have a very extensive plant and every facility for manufacturing their lines of goods in New York State, could, without additional expense to themselves, make all the goods there that they could sell in Canada. Under our National Policy, and without Commercial Union, this is impossible, hence the investment of \$100,000 in buildings, machinery, etc., in Canada, the employment of 200 skilled Canadians, and the disbursement of \$10,000 monthly among Canadian farmers, merchants and house owners.

Our American contemporaries have every cause to be surprised at the astonishing fact that thousands of tons of scrap iron are every year taken to the United States and there converted into the simplest of American manufactures, the sad or laundry iron, and then exported back to Europe at no small profit. There is not one corner of Europe where American small cast hardware is not on sale. The tool makers and machinists of Europe—such as Krupp of Germany, Whitworth & Armstrong of England, and Hotchkiss of France, with their vast resources are unable to produce a monkey or screw-bar wrench equal to the American wrenches, and consequently they have to import these tools from the States. It is stated that there are no less than 80,000 dozen of them exported to Europe alone every year. It is interesting to note that Charles Monkey, the inventor of this screw-bar wrench, received only \$2,000 for his patent, and is now living at Williamsburg, Brooklyn, in a small cottage bought from the proceeds of this sale. In the matter of the common pocket box-wood rules, also, the American manufacturers so far excel all others that, if not all European nations, certainly all nations outside of Europe, are supplied from America. The manufacturers there print on the rule whatever system of measurement is followed by the country for which the goods are intended. American augurs and augur bits are used the world over, no other nation being able to compete. The Americans, with such facts before them, may well be proud of their manufactures.—*London Iron.*

The problem of preserving iron from oxidation may fairly be termed one of the great issues of the present day. Hitherto it has been effected in widely opposite ways. One method has consisted in converting its surface into an oxide, another in applying paint or enamel, another in coating it with zinc—a metal more readily attacked than itself. All these methods bear the aspect of being expedients merely, and do not present a definite solution of the problem. Of all the ordinary metals, lead, which resists some of the stronger acids, such as sulphuric or hydrofluoric, may be regarded as the most durable. A new process for coating iron with an adherent layer of this metal has recently been discovered and perfected, by which the iron is covered with a uniform coating of silvery lead. The roughnesses and indentations of the iron receive the lead as well as the smooth parts. The result is a perfectly protected piece as long as the lead endures, and it is practically everlasting. No oxidation can affect the iron. We have before us some admirable specimens of work done under this new process. It is specially adapted for the protection of sheet iron for car and other roofing, and spikes, bolts, nuts, pipes, boiler tubes, water tanks, iron bridge, for wherever the protection of iron or steel, wrought or cast, is desired. Its cost is no greater than that of the ordinary zinc or galvanic process. The superior excellence of the new method, its comparative cheapness, and the wide range of its applications, mark it, in our opinion, as one of the most important of recent improvements in the useful arts.—*Scientific American.*

Textiles.

THE CANADIAN MANUFACTURER.

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A GENERAL convention of textile workers throughout the United States will be held in Philadelphia, July 2.

NOT less than 500 new ribbon looms will be started in Paterson, New Jersey, before October 1, if there are no disturbing elements to prevent.—*Dry Goods Bulletin*.

AN extension has been built to Humphrey & Snow's woolen mill at Moncton, N.B., and the capacity is being steadily increased. Some new machinery has already been added.

THE Ontario Cotton Company, of Hamilton, Ont., are putting in new looms on which to make check goods and fancy cottonades. The looms are made by the Knowles Company, Lewiston, Maine.

JOHN RIDDELL, of Moosomin, Assa., has received a letter from an English capitalist asking what prospects there are of starting a flax mill in Moosomin. The gentleman is expected to arrive in Moosomin in August.

THE Blyth Woolen Company, Peterborough, Ont., have recently introduced a Johnson & Bassett self-operator into their mills. They are also adding more looms, and will double their present capacity. They manufacture fine and fancy flannels, dress goods, etc.

MESSES. BELDING, PAUL & Co., silk manufacturers, of Montreal, are calling the attention of the trade to their lines of products, embraced in which are organzines, trams, spun silk yarns, etc. They also make to order all threads for manufacturing purposes.

MERINO wool has been greatly improved within a century. Formerly it had a fineness of 750 fibres to the inch; in 1856 an inch contained 850 fibres, and in 1886 an inch holds from 1,000 to 1,800, while the breed is still being improved in the fineness of wool.

THE Auburn Woolen Company, Peterborough, Ont., are adding a number of Crompton looms to their works, also new pickers, etc., having recently introduced new fulling machines, a new washer, a rotary press, etc. They manufacture a fine line of fancy tweeds, casimers, etc.

THE Irish flax spinners have unanimously resolved to adopt short time for three months, in order to curtail production, because of the depressed condition of trade. It has been decided to reduce, at present, the working time by ten hours per week.—*Manchester (Eng.) Textile Recorder*.

THE latest novelty in fancy wools and woolen yarns is called "Bassinette yarn." It is made from the finest Botany wool, is twelve-fold, and by a new process of spinning is claimed to possess greater durability than the best Berlin wool. It has a velvety softness, and is very light and warm.

THE cotton industry of Glasgow is stated to be in a very unhealthy condition. Some mills are said to have one-fourth of their machinery standing, and scarcely any manufacturers are working at a profit. This state of things has been brought about partly by the small demand and partly by the rise in the price of the raw material.

AMONG the latest United States custom decisions are the following: Sheets of zinc coated with nickel and intended for use in the manufacture of buttons are subject to duty at forty-five per cent. *ad valorem*. Cotton card cloth is held to be dutiable, like endless cotton blankets, at thirty-five per cent. *ad valorem*.

A NEW rule has been put into force in Swett & Orr's overall factory in Wappinger's Falls, N.Y. New operatives get no pay for the work they do while they are learning, and after they learn they are compelled to put their name to a paper, promising to work for the firm for a year, and if they quit work before the year is up they don't receive their two weeks' back time.

THERE is no change in the situation at the British hosiery mill in Thornton, R.I., except that a number of operatives who were discharged have been re-engaged on accepting the ten per cent. reduction in wages. It is believed that the plan anticipated when the first notice of the proposed shut-down was posted will be carried into effect, and the mill, which has long been running double time, night and day, will be run full time during the day throughout the season, with wages reduced.

EXAMPLES of the old silken textiles produced by the Chinese, while not many, are still sufficient to show that their style two

thousand years ago is the same still, so that the web wrought by them to-day or a hundred years ago, would differ hardly in a line from their far earlier textiles. Periegetes wrote that "the seres make precious figured garments resembling in color the flowers of the field, and rivaling in fineness the work of spiders." In these stuffs, warp and woof were of silk, and both of the best kinds.

THERE seems to be an opening for the finer cotton and woolen fabrics of Lancashire and Yorkshire in the State of Tennessee, notwithstanding the healthy growth of the industry there in recent years. A correspondent of the Manchester (Eng.) *Textile Recorder* writes: "If British manufacturers would send agents to Nashville, Memphis, Chattanooga, and other towns in the State, with samples of English goods, they might obtain orders for the same, and find the undertaking quite profitable."

FROM all over the country we get reports of woolen mills either curtailing their production by running fewer hours, stopping part of their machinery, or closing the mills entirely. This is due, in a great measure, to the large quantity of woolen goods coming into this country "undervalued"; by which process they are sold in the United States cheaper than they can be made, hence the stoppage of our mills, and idle operatives. New York being a city almost entirely dependent on its foreign trade is naturally the centre of this undervaluation. Even if the goods are entered into other ports, the scheming is done in New York. The worsted trade seems to be a continual sufferer by the schemes of those determined to evade our tariff laws.—*Wade's Fibre and Fabric, Boston, Mass.*

THE Woolgrowers' Association of Alberta met in the Royal hotel last night, with the president, Mr. White, in the chair, and George Hope Johnston acting as secretary. There were present about fifteen of the woolgrowers of the district. After some discussion it was resolved to send a bale of 200 lbs. of wool of a fair average sample to Halifax, England, to ascertain what prices might be expected for next year. Mr. Rutherford was authorized to make up the bale and to forward the same, the Association to pay all expenses in the matter. The question of this year's sale was then taken up, and the secretary was authorized to communicate with the different buyers, informing them that the woolgrowers would be in Calgary with a sample of their clip on the 15th of July, and that no wool would be sold before that time. It is estimated that the clip this season will amount to 150,000 lbs.—*Calgary Tribune*.

REPORTS from all over the country, especially from New England manufacturers, show that our woolen mills are suffering very seriously from the undervaluations allowed at the custom houses, by which foreign goods are admitted by paying a less duty than they should, and thus driving our own productions out of our own markets. From all sections it is reported that mills are shutting down, and the output is being lessened on this account. This undervaluation fraud is going on at all the custom houses persistently, and especially at the New York custom house, where the officials of the Government are in league with the foreign houses, who are thus defying the law. We say this advisedly, because it can be proven that the Government officials in New York are allowing importers to defraud the revenue, and to injure our home manufactures. This is the crying evil of our tariff at the hands of the Free Traders who now control the Treasury Department. They are not able to make laws after their own ideas, but they are able to wink at evasions of the law in this undervaluation business. A few men in the penitentiary will be the best remedy.—*Boston Advertiser*.

A REPORT of the British consul at Tokio shows that Japan is a more important producer and consumer of cotton than is generally supposed. Cotton is generally grown throughout that country, the average yield being 120 pounds per acre. The annual yield is estimated at 44,000,000 pounds (110,000 bales of 400 pounds). In addition to this 3,000,000 pounds are imported, showing a total estimated consumption of 47,000,000 pounds of cotton. A great deal of yarn is imported to be manufactured on native looms. Indian yarns and cloths are supplanting English goods in the trade with Japan. Cotton-spinning is profitable, judging from the large dividends paid by some concerns. Japanese cotton manufacturers are talking of extending their export trade so as to supply part of the Chinese demand. Cheap raw material is needed, and the consul says it is a matter of speculation as to "whether the growing trade relations between Japan and the United States by way of the Pacific will ever include the importation of American cotton." Foreign machinery is used considerably for spinning, but for weaving native looms are used. In many cases the cotton-growers manufacture cloth. The consul adds that the inferior character of English cotton goods has disgusted native consumers and has stimulated the native industry.

Milling.

THE CANADIAN MANUFACTURER.

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MILLING is simply a purification process, and anything which will render the stock in a mill purer is accomplishing the result aimed at, no matter at what stage the greater purity is attained.

THE people of Yolo and Thama counties, California, are gradually awakening to the fact that raising fruit on their land is very much more profitable than wheat raising. The same is said to be true of two other counties in that state.

THERE are between 25 and 30 mills in the counties of Essex, Kent and Bothwell, Ont., engaged in the manufacture of elm staves, hoops and headings. These mills are all clamoring for an export duty on elm logs, as they claim the Americans are taking the timber from under their noses. They want an export duty on the timber.

THE Odanah, Man., council has granted a bonus of \$5,000 to James Jermy, to aid him in changing his grist mill at Minnesota to the roller process. The conditions are that the party receiving the bonus shall for ten years grind thirty bushels of grain, annually, for each resident in the municipality.

"THE English flour trade is nowhere. Some of the largest millers are closing and becoming agents for American flour, because they cannot grind wheat at a profit under the flow of American flour. The English milling industry is threatened with extinction."—*The Mark Lane Express, London, England.*

THE Portage la Prairie oatmeal mills commenced work again on Wednesday and will run for three or four weeks, when the proprietors will reconstruct the interior of the mill to make room for the new machinery which they intend to put in. Everything will be in operation in time for the summer's harvest.—*Winnipeg Commercial.*

REV. MR. BRICK, missionary at Peace River, N.W.T., has been in Ottawa endeavoring to get the assistance of the Government for the establishment of a grist mill. He interviewed the head of the Department of Indian affairs, and has undertaken to raise \$2,500 if the Government will grant a sufficient sum to complete the work. There is no mill within 400 miles, and it costs \$16 to transport a barrel of flour to that place.

SYSTEMS of milling exist only in talk and print. There is no system of milling which is generally recognized as such by a respectable minority. Even after all these years of experimenting results have not been systemized. Nearly every miller has a system of his own, so called. The result is disorganization and discontent. There is such a wide difference in opinion as to details that it looks like an impossibility to unite on a system. It will take time to settle this business.—*Millstone.*

MR. McGAW, of the Ogilvie Milling Company, has returned from a trip through Southern Manitoba, where he found the crops in a most remarkable state of advancement for this time of year. Farmers are said to be delighted with the prospect. The increased area in that portion of Manitoba is estimated at from 20 to 30 per cent. according to the district. A very conservative estimate for the entire district would place the increase at 20 per cent. The Ogilvie Company will increase their elevator and grain storage capacity along the Southwestern very considerably during the season.—*Winnipeg Commercial.*

ANOTHER "ruined industry" is holding out its hands to the British public for sympathy and recognition. This time it is the rice miller who points to the evil of unrestricted trade. The business of rice milling was formerly very prosperous. In milling the rough rice 60 per cent. of white rice is obtained, 20 per cent. of rice flour, used by bakers and for sizing purposes, and 20 per cent. of rice meal, which is utilized as food for cattle. Now, however, cheap wheat flours and offals from Indian wheats have driven rice flour and meal out of the market, and the rice trade is leaving England for Germany, where there is a protective duty on wheat and flour.

THE request of manufacturers of barrels and staves that an export duty should be imposed upon elm logs should receive the favorable consideration of the Finance Minister, as no doubt it will. It is but carrying out the principle of the increased duty upon saw logs last year and the duty placed upon

shingle bolts in the present season. There is no reason why manufacturers in the United States should be privileged to obtain elm logs from Canada free of duty, while they have the benefit of a protective duty. Countervailing protection is due to our own manufacturers and mechanics in order to do them justice. Such is the policy we have adopted, and there is no good reason why an exception should be made in this case.—*Canada Lumberman.*

ONE of the chief drawbacks to successful milling at the present day is the ignorance of mill owners, operatives, and grain buyers, as to actual yields. With the first of these worthies the thought is child to the wish that this year the profits may be sure and ample. The second is too often satisfied with only the appearance of good yields, while the third easily flatters himself that he is buying profitable stock and not worthless trash. But when the books and business of the year are closed it may turn out that the wisher has wished in vain and the buyer bought in vain, all because the miller was incorrect in his estimate of the yield. Had he taken a yield oftener the mistake would have been discovered before serious if not irreparable loss had ensued.—*Roller Mill.*

THE prospects are said to be good for Oregon flour coming into competition with San Francisco flour in China. The *Portland News* is authority for the statement that the Canadian Pacific Company will run a steamer from Portland to Port Moody to connect with Hong Kong steamers and carry Oregon flour. In case the arrangement is carried out it is thought the alleged discrimination of the Northern Pacific against Portland will be cured. The *News* says: "It is said that the rates will be such as to enable Oregon millers to compete with those of San Francisco, and as they can deliver flour at Victoria one dollar per barrel cheaper than can the Manitoba producers, the latter will be virtually out of the field. The Canadian Company seems determined to cut into the flour export trade to China, and will offer every inducement to Oregon millers to compete."

WE are glad that Mr. Scamans combated the idea that the Brazilian flour trade was of no concern to anybody but the Baltimore and Richmond millers directly engaged in it. One point this journal has always insisted on is that the increase of our export flour trade is directly in the interest of every miller, great and small, whether he ever ships a load of flour ten miles away from his mill or not. Every barrel shipped away from our shores is a barrel removed from competing with home trade. Export millers are content to accept a small margin because they grind and ship wholesale; and steady work even at a small profit per barrel amounts to something handsome in a year's run. By all means, let the National Association and every miller in and out of it interest himself the best he knows how in building up and maintaining an export trade.—*American Miller.*

THE heavy importations of foreign wheat and flour into Great Britain, while furnishing cheap food for the masses, has worked serious injury to farmers and millers in the United Kingdom, some of whom, it is stated, are either emigrating or seeking other fields of industry. The extent of the foreign flour trade is shown by the exhibit of importations of this commodity into Great Britain from September 1st, 1886, to March 24th, 1887, aggregating 6,161,646 packages, against 3,959,070 packages for the previous corresponding period—an increase of 2,202,576 packages in about six months. This unsatisfactory state of things has induced the London Flour Millers' Association to agitate the subject of the imposition of a duty upon importations of foreign flour, and at a meeting of that organization, held recently in London, the following resolution was adopted: "Owing to the great depression in our manufacturing trade, caused chiefly by the large importations of foreign flours, which have been the means of closing several mills, and others only working half-time, it is resolved that the National Association of British and Irish Millers be asked to institute an enquiry into the cause of the depression in the milling trade, and consider whether it would be advisable to ask for a moderate duty to be imposed on imported flour." The value of the British market as an outlet for Pacific Coast flour, the exportations from this port alone for the present season reaching nearly 375,000 bbls., renders this question of a tariff on flour in Great Britain one of no little importance. Should the desires of millers in that country be favorably considered, it would, doubtless, curtail our exports thence to considerable extent. The example of France, which is about to increase its tariff on wheat to \$2.18 per quarter of 500 pounds, and in flour to about \$2.00 per sack, is cited as a good example for the British Government to follow; but the most conservative opinion in England seems to be that, despite the discontent of wheat growers and millers—at present at least—there is small probability on any departure from the free-trade policy which has hitherto prevailed.—*San Francisco Grocer.*

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THE CANADIAN MANUFACTURER.

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GEO. SMITH, of Eden Mills, lately cut an elm tree down on his farm which was 70 feet long and 6 feet in diameter. It contained 3,500 cubic feet and would make about 50 cords of wood.—*Hamilton Spectator.*

THE Chilean ship *Hindostan*, 1,542 tons, James Welsh, master, from Valparaiso in ballast, arrived in port yesterday morning in tow of the tug *Pilot*. After discharging ballast she will load lumber at the Moodyville sawmills for South America.—*Vancouver, B.C., News.*

THERE is a jam of 12,000,000 of logs on Aroostook Falls, and it is in bad condition. It is said that unless there is a heavy rain the logs will be likely to stay there. Connor's big drive on the main St. John is coming along all right, but it is probable that the Alleghash logs will hang up. Trouble is being had with the logs in that section.

MR. E. J. SMITH'S saw mill at Shediac, N.B., was thoroughly repaired last winter and a new foundation put in, and is now capable of sawing 50,000 or 60,000 feet a day. About 2,500,000 feet of logs were brought down the Scadouc this spring, and the mill is now running full blast, sawing deals, boards, laths and shingles.—*Moncton Times.*

THE Moodyville saw mills are working night and day at present to keep up with the demand for lumber and to hasten the loading of the vessels now taking in cargo at their wharf. This is rendered absolutely necessary, as a number of vessels are now under charter and are on their way to this port to load at the company's mills.—*Vancouver, B.C., News.*

UNDER the Villard management of the Northern Pacific Railway lines of hardy trees were some years ago planted along the tracks. They have had no care since, but many have lived and obtained such foothold on the soil that they can now withstand any probable severity of weather. Trees have lived in those regions that had heretofore been treeless, thus showing what may be done when civilization reaches those far-off places and the settlers make the proper effort.

THE newly announced tariff changes include the following: "Export duty on shingle bolts of pine or cedar and cedar logs capable of being made into shingle bolts, \$1.50 per cord of 128 cubic feet." This is not as important a provision as those of last year increasing the export duties on pine and spruce saw-logs, but it is a further step in the same right direction. It is also satisfactory as showing that the attention of the administration is still directed to this matter, and steps will be taken to enforce the law. It would manifestly be an absurdity to extend this principle unless it were determined to carry out its application more thoroughly than in the past, when the small amount received from these duties showed that payment must have been evaded in some cases. The protection of our own industries, instead of letting our forests be stripped for the profit of foreign mill-owners, is certainly a salutary principle, and one that should be vigorously enforced.—*Canada Lumberman.*

DETROIT mill owners don't like the Canadian export duty on elm logs. The *Free Press* of that city has been interviewing some of the lumber manufacturers there whose business is affected by the recent duty placed on exports of elm logs by the Dominion Government, and reports their views as follows. Mr. Frank Howard, of the Anchor Manufacturing Company, Detroit, says:—"Detroit manufacturers control completely the stave and manufacturing industry. The timber which we use almost exclusively is elm, and unfortunately our entire supply comes from Canada, where the timber abounds. The extent of its importation is not generally known. Our mill alone consumes 18,000,000 feet per year, and we represent not more than one-twentieth of the industry in Detroit and adjacent towns, making the entire annual consumption in this locality not less than 360,000,000 feet. Thus you will see the timber will hereafter cost Michigan \$360,000 per year for export duty. It is not a pleasant matter for Michigan's stave and barrel manufacturers to contemplate. We are reasonably certain that it is the work of influential mill owners in Canada desirous of protecting their business. Our barrels now cost two cents apiece more than they did a week ago." This is the evidence of an American manufacturer, that this Canadian duty would have been paid, if it had been levied, not by Canadian lumbermen but by American consumers.

THE lumber market is quite firm, as there is an unusual activity in real estate and building. The arrivals of spruce lumber at this market have been small and almost entirely on orders. The mills opened very late in the East this year, and stocks are very light here. The manufacturers are using unusual quantities of box stock this season. Hemlock boards are scarcer and higher in price than last year. The offering of shingles is quite limited, and prices are strong. In hard woods the volume of trade is excellent. In Western pine there is fair demand. Full prices avail, yet it is hard to secure a sufficient advance to cover the extra cost at the West, and the increase in the freight rates, owing to the operations of the inter-State Commerce Act. In the West low water is interfering with the movement of logs. The only weak and dull spot seems to be in the Saginaw Valley, where stocks are accumulating and sales somewhat light. Yard dealers in all the great centres are generally getting better prices than a few weeks ago. Dry lumber has sold very rapidly in Chicago, although the stock of all kinds of lumber there May 31 showed an increase of 53,570,361 feet over April 30, and in the stock of shingles there was an increase of 11,500,000. As compared with a year ago the stock of lumber in Chicago on June 1 was 272,000,000 feet, against 327,000,000 feet in 1886, and of shingles the stock was 153,000,000, against 246,000,000 same time in 1886. The total receipts of lumber in Chicago since January 1 foot up 508,366,000 feet, against 424,340,000 feet in 1886, or an increase of upwards of 84,000,000 feet.—*Manufacturers' Gazette, Boston, Mass.*

A BROOKLYN, N.Y., man has invented an improved veneer cutting machine, and has applied it to the cutting of logs into lumber, claiming that it will effect a complete revolution in lumber manufacture. The invention is a large steel plate with knife-like edge, a compressing roller and ingenious appliances to serve the log and remove the lumber when cut—all operated by steam power. The log is held stationary in a horizontal position. The knife-like plate, capable of from 20 to 30 strokes per minute, strike the log at an angle of 45 degrees at each stroke, passing through its entire length and cutting off a board of perfectly smooth surface and uniform thickness. It is claimed that any degree of thickness can be cut, even to the hundredth part of an inch. A machine adapted for cutting logs four feet long and averaging two feet in diameter will cut in one day 37,500 feet of inch, 60,000 feet of half inch, or 80,000 feet of quarter-inch lumber. Besides the present process of sawing, planing is also done away with, as the operation of cutting renders smooth the surface of the board. In material alone a saving is effected of from 37 per cent. in the manufacture of half-inch to 233 per cent. in the manufacture of one-sixteenth inch lumber. It is the expectation of the inventor that in the case of thin lumber, at all events, which composes 66 per cent. of United States consumption, his machine will supersede saws and planing mills. He shows barrel staves made from lumber manufactured by his machine. He says that from 1,000 feet of lumber 1,800 of such staves is the highest number now obtainable, whereas by the use of his machine 4,500 can be got.

IN a recent number of a German technical paper, Herr Gottgetrue treats of the question of dry rot by the light of a summary of known facts illustrative of the subject. He is of opinion that the problem is still to be solved, and in view of the occurrence of dry rot under some very peculiar conditions, suggests that the germs of the disease may exist in the living tree. In no other way can he explain the decay of wood from this cause when it was apparently dry and sound and properly used. In Russia there are entire forests from which no timber is now taken, experience having shown that it has always been attacked by dry rot. Sometimes a strong solution of common salt, applied while hot, has been found an efficient preservative of timber. The necessity of airing timber in its built-in position is, of course, universally recognized. Professor Farsky, of Tarbor, Bohemia, has found that salicylic acid is a preventive and cure for dry rot. At first the acid was used in dry form, but latterly great success has been achieved with a solution of salicylic acid in alcohol. This solution has efficiently protected a floor of 800 square feet in area from the spread of the dry rot, and has removed it from the spots where it seemed to have established itself. The crude acid may be used for this purpose, and its action as an antiseptic is heightened by the admixture of a little carbolic acid. Professor Poleck finds that wood cut in winter and not soaked in water is very susceptible to dry rot, which does not appear when the timber is kept perfectly dry or thoroughly wet. A somewhat high temperature and dampness are almost, though not entirely, essential to the propagation of the dry-rot mycelium. It is in contemplation to determine by experiment whether timber cut in summer cannot be rendered safe against dry rot by the removal of the bark, protracted drying and prolonged steeping in water.—*Builder and Woodworker.*

Mining.

THE CANADIAN MANUFACTURER.

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DURING the month of May last over 6,000 gross tons of coal were shipped at Parrsboro, N.S., the greater part being for Portland, Maine.

THE New Glasgow Steel Company, New Glasgow, N.S., are about to acquire and operate the Black Diamond colliery, which has not been operated for some years.

THE introduction of natural gas into Buffalo will effect the consumption of coal considerably. One gentleman in the coal trade said he wouldn't be surprised to see a falling off of 75,000 tons in the quantity consumed in Buffalo.

PITTSBURGH papers figure up 11,000 natural gas connections of the kind familiar to plumbers in that city and neighborhood, each of which is supposed to supply six fires on an average, so that there are at least 66,000 stoves, grates and furnaces in Allegheny County in which natural gas has displaced coal, according to the above computation.

AT Calgary, Edmonton, Macleod and other far western points in Canada, gold dust is frequently exchanged for merchandise. A quantity of gold amalgam was lately received by a Winnipeg merchant from a customer at Edmonton, to go to the credit of the customer. The shipment consisted of 14 ounces, valued at \$18 per ounce.

THE manager of the Kingston and Pembroke mines writes Mr. Seibert, the President: "I have just received the first report of the two cargoes of ore sent to the Joliet Steel Company. The iron is fully up to our guarantee, and the phosphorus is lower than any ore ever sent to Chicago." This makes it the best ore known for making Bessemer steel.

NATIVE hard coal, from the anthracite mines west of Calgary, will shortly be placed on the Winnipeg and other provincial markets. The advent of this coal will probably reduce prices of other hard coal. With the development of this new mine of anthracite, and the plentiful supplies of soft coal to be had, there should be little trouble in filling our markets entirely with the native coal. The only thing required to supply Manitoba with really cheap fuel is less exorbitant freight rates.—*Winnipeg Commercial*.

THE shipments of iron ore from the mines of Lake Superior for the season, says the *Marquette Mining Journal*, up to the date of closing the shipping reports for the week, had reached an aggregate of 712,599 gross tons. At the corresponding date last year there had been 627,468 tons sent forward by lake, the gain for the current season being only 85,131 tons. Of this year's shipments 132,045 tons went from Marquette and 142,600 tons from Ashland, the latter shipments being of Gogebic ore, and comparing with 96,080 tons from this range for the same time last year.

IN punching a belt for lacing it is desirable to use an oval punch, the longer diameter of the punch being parallel with the belt, so as to cut off as little of the leather as possible. There should be in each end of the belt two rows of holes, placed zigzag. In a three-inch belt there should be four holes in each end, two in each row. A six-inch belt should have seven holes, four of them in the row nearest the end. A ten-inch belt should have nine holes, in same form. The edge of no hole should come nearer the side of the belt than three-fourths of an inch, and not nearer the end than seven-eighths of an inch. The second row should be at least 1½ inches from the end. On wide belts these distances should be even a little greater.

A NOVEL way of river mining is being carried on on the Stanislaus River, California. The plan consists of a scow on which is placed a steam engine and boiler, with a powerful suction pump attached. The pump not only throws an immense stream of water, but at the same time draws the sand, rocks and gravel from the bed of the river at the rate of 50 tons per hour. The pump discharges into the head of the scow, and drops the material, less the gold, some ten feet away from the stern of the boat. Any large rocks that may obstruct the free working of the pump are hustled out of the way by derricks. As the Stanislaus river is noted for its heavy gold deposits, the results can hardly fail to meet, if not exceed, the anticipations of the capitalists who have it in charge.

THERE are only four localities where mercury or quicksilver is found in abundance. These are California, Austria, Almadon in Spain, and Peru. The mines in this latter place were discovered in a very curious manner. Cinnabar, the soft and reddish rock of which mercury forms a part, when ground very fine serves as a beautiful red paint. The Indians used this to adorn their bodies. This caused the country where they were living to be examined for cinnabar. The Romans had used it for hundreds of years in the decoration of their images. It is of great value now, in our times, and we call it vermilion. The other part of the rock is composed partly of sulphur. The cinnabar is crushed and exposed to heat. In the meantime, mercury in the form of vapor passes into a vessel framed for the purpose, where it cools. After being reduced to this liquid state it is pure and is in condition to use. In this form it is used largely to separate the metals from the rock to which they adhere. The rock having been well crushed, the material is passed through a screen and is washed to obtain all the gold and silver possible. Quicksilver is then placed in it, which appears to be absorbed at once, and as it takes up or moves with the metal in the ore, this metal is separated from the sand or crushed rock. If gold is the metal to be amalgamated, a yellowish-white amalgam will be found. This is heated in retorts and the mercury or quicksilver disappears, leaving the gold. Although mercury is so useful in many ways, it is also poisonous, its vapor being dangerous to inhale. It is not many years since the mines of Austria took fire, poisoning 1,300 laborers, many of whom eventually died. Even the water used to extinguish the flames, and which passed into a river a short distance from the mines, killed the fish. The mercury is transported in some countries in sacks made of dressed sheepskins, but is mainly carried in cast-iron flasks.—*El Minero Mexicana*.

IN actual heating power it is difficult to obtain exact figures of comparison between coal and wood, because the quantity of moisture may vary to the extent of twenty-five or thirty per cent. This would reduce the value of the wood to about the same extent. The most careful experiments show that a ton of anthracite is equal to about one cord and one-half of mixed hard woods, chiefly oak. This supposes the wood to be well seasoned. A ton of anthracite, in some cases, may be fully equal to two cords and one-quarter of soft wood, such as hemlock, white pine, etc. In Massachusetts, a number of experiments, made a few years ago, showed that a ton of hard coal was equal to one cord and six-tenths of hemlock. One ton of some of the poor western coals is not equal to a cord of good hard wood. Taking all the estimates together, a ton of good hard or anthracite coal is about the same in heating power as a ton of the best bituminous coal. A ton of 2,000 pounds of either kind may be taken as equal to about one cord and one-half of what may be called good, dry, merchantable hard wood. When wood, cut and split, sells for \$4.00 per cord, it is equal in price to coal at \$6.00 per ton. But when the price of wood in four-foot lengths is two-thirds that of coal, then the coal is much cheaper, because the sawing and splitting must be added. Economy of handling, must, in a great many cases, be taken into account. A coal fire in a magazine stove will burn all day in ordinary weather without attention. An ordinary fire needs attention perhaps twice a day. For an equal amount of heat, two or three times as great a weight of wood has to be lifted as would be required if coal were used. The following is a safe rule by which to ascertain when to buy coal: Add one-half to the cost of the wood, and, if the amount equals the price of coal per ton, coal is the cheapest, besides being more readily handled. The wood should be measured in the stick, and not after it is cut and split.—*American Agriculturist*.



NOTICE TO CONTRACTORS

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Coal Public Buildings," will be received until Monday, 11th July next, for coal supply for all or any of the Dominion Public Buildings.

Specification, form of tender, and all necessary information can be obtained at this Department on and after Monday, the 20th inst.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank cheque made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of the tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned. The Department will not be bound to accept the lowest or any tender.

By order,
A. GOBEL,
Secretary.

Department of Public Works,
Ottawa, 10th June, 1887.

IMPERIAL BANK OF CANADA.

The twelfth annual general meeting of the Imperial Bank of Canada was held, in pursuance of the terms of the charter, at the banking house of the institution, 15th June, 1887. There were present:—

Messrs. H. S. Howland, T. R. Merritt (St. Catharines), P. Hughes, T. R. Wadsworth (Weston), Robert Jaffray, Hon. Alex. Morris, Rev. E. B. Lawlor, George Robinson, W. T. Kiely, William Ramsay, John Fiskin, jun., Henry Pollatt, Robert Carswell, James Mason, John Smart (Port Hope), Thomas Walmesley, Robert Thompson, R. Wickens, S. J. Vankoughnet, J. O. Heward, G. M. Rose, R. Beaty, W. B. Hamilton, James Thorburn, M.D., A. McFall (Bolton), D. R. Wilkie, etc., etc.

The chair was taken by the President, Mr. H. S. Howland, and Mr. D. R. Wilkie was requested to act as Secretary.

The Secretary, at the request of the Chairman, read the report of the Directors and the statement of affairs.

REPORT.

The Directors beg to submit to the Shareholders the twelfth annual balance sheet and statement of profits for the year ended 31st May, 1887:—

Balance at credit of account, 30th May, 1886, brought forward.....	\$18,339 13
Profits for the year ended 31st May, 1887, after deducting charges of management and interest due depositors, and making provision for all bad and doubtful debts.....	185,067 24
	<u>\$203,406 37</u>

From which has been taken:	
Dividend No. 23, 4 P (paid 1st Dec. '86).....	\$50,000 00
Dividend No. 24, 4 P (payable 1st June '87), 60,000 00	
	<u>120,000 00</u>

	\$83,406 37
Written off Bank premises & furniture acct. \$3,656 93	
Carried to rest account.....	50,000 00
	<u>53,656 93</u>

Balance of account carried forward.....	\$29,749 44
---	-------------

REST ACCOUNT.

Balance at credit of account, 30th May, 1886.....	\$500,000 00
Transferred from Profit and Loss Account.....	50,000 00
	<u>\$550,000 00</u>

The profits for the year show an improvement over those of the year previous, and have enabled your Directors to place the sum of \$50,000 to rest account in addition to paying the customary dividends.

Appropriations have been made from contingent account in liquidation of assets therein provided for. Your Directors are of the opinion that the balance unappropriated is sufficient to cover all doubtful assets. The ultimate realisation of any considerable proportion of the assets at present covered by appropriation from this account depends upon a substantial improvement in the condition of things in the Province of Manitoba.

In view of the continued development of the North-West Provinces, a branch has been opened in the Town of Calgary.

The investments of the Bank in Government, municipal and other first-class debentures now amount to \$1,084,515.25.

The head office and branches of the Bank have been carefully inspected, and your Directors have much pleasure in expressing their satisfaction at the manner in which the officers of the Bank have performed their respective duties.

H. S. HOWLAND, *President.*

GENERAL STATEMENT 31ST MAY, 1887.

LIABILITIES.

Notes of the bank in circulation.....	\$1,058,133 00
Deposits bearing interest (including interest accrued to date).....	3,580,500 08
Deposits not bearing interest.....	1,082,436 03
Due to other Banks in Canada.....	2,532 60
Due to agents in United Kingdom.....	244,373 78
	<u>\$4,967,975 49</u>
Total liabilities to the public.....	
Capital stock paid up.....	1,500,000 00

Rest account.....	550,000 00
Contingent account.....	33,024 13
Dividend No. 24, payable 1st June, 1887 (4 per cent.)	60,000 00
Former dividends unpaid.....	1,100 61
Balance of profit and loss account carried forward....	29,749 44
	<u>\$8,141,849 67</u>

ASSETS.

Gold and silver coin current.....	\$ 235,477 65
Dominion Government notes.....	492,819 00
Notes and cheques on other Banks.....	167,717 60
Balance due from other Banks in Canada.....	187,728 89
Balance due from agents in foreign countries.....	86,352 27
Dominion of Canada debentures.....	\$356,458 05
Province of Ontario securities.....	139,477 61
Municipal and other debentures.....	588,579 59
	<u>1,084,515 25</u>

Total assets immediately available.....	2,254,610 66
Loans on call.....	162,739 15
Loans, discounts or advances on current accounts to municipal and other corporations.....	600,822 16
Other current loans, discounts and advances to public	4,751,885 09
Notes discounted overdue secured.....	52,733 57
Notes discounted overdue unsecured (estimated loss provided for).....	35,690 94
Real estate, the property of the Bank (other than Bank premises).....	61,955 01
Mortgages on real estate sold by the Bank (all bearing interest).....	35,770 35
Bank premises, including safes, vaults and office furniture, at head offices and branches.....	145,269 49
Other assets not included under foregoing heads....	60,373 75
	<u>\$8,141,849 67</u>

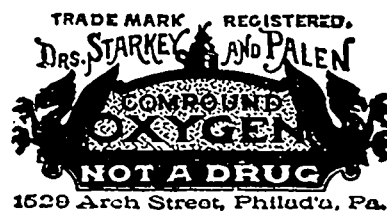
D. R. WILKIE, *Cashier.*

The report was adopted.

The usual votes of thanks were passed to the president and directors, also to the cashier and other officers for their attention and zeal in promoting the interests of the Bank.

The ballot was then taken for the election of directors, which resulted in the election of the following shareholders, viz.:—Messrs. H. S. Howland, T. R. Merritt, Wm. Ramsay, P. Hughes, T. R. Wadsworth, Hon. Alex. Morris, Robt. Jaffray.

At a subsequent meeting of the directors Mr. Henry S. Howland was elected president, and Mr. Thos. R. Merritt vice-president, for the ensuing year.



A Well Tried Treatment

FOR Consumption, Asthma, Bronchitis, Dyspepsia, Catarrh, Hay Fever, Headache, Debility, Rheumatism, Neuralgia and all Chronic and Nervous Disorders.

"The Compound Oxygen Treatment," Drs. Starkey & Palen, No. 1529 Arch Street, Philadelphia, have been using for the last seventeen years, is a scientific adjustment of the elements of Oxygen and Nitrogen magnified, and the compound is so condensed and made portable that it is sent all over the world.

DRS. STARKEY & PALEN have the liberty to refer to the following named well-known persons who have tried their Treatment:

Hon. Wm. D. Kelley, Member of Congress, Philadelphia, Rev. Victor L. Conrad, Editor "Lutheran Observer," Philadelphia, Rev. Charles W. Cushing, D.D., Rochester, N.Y.; Hon. Wm. Penn Nixon, Editor "Inter-Ocean," Chicago, Ill.; Rev. A. W. Moore, Editor "The Centenary," Lancaster, S.C.; W. H. Worthington, Editor "New South," Birmingham, Ala.; Judge H. P. Vrooman, Quenemo, Kan.; Mrs. Mary A. Livermore, Melrose, Mass.; Judge R. S. Voorhees, New York City; Mr. F. C. Knight, Philadelphia; Mr. Frank Siddall, Merchant, Philadelphia; Hon. W. W. Schuyler, Easton, Pa.; Edward L. Wills, 333 Broadway, N.Y., Editor Philadelphia "Photographer"; Fidelia M. Lyon, Waimea, Hawaii, Sandwich Islands; Alexander Ritchie, Inverness, Scotland; Mrs. Manuel V. Ortega, Fresnillo, Zacatecas, Mexico; Mrs. Emma Cooper, Utilla, Spanish Honduras, Central America; J. C. bb, U.S. Vice-Consul, Casablanca, Morocco; M. V. Ashbrook, Red Bluff, Cal.; Ernest Turner, Nottingham, England; Jacob Ward, Buzral, New South Wales, and thousands of others in every part of the world.

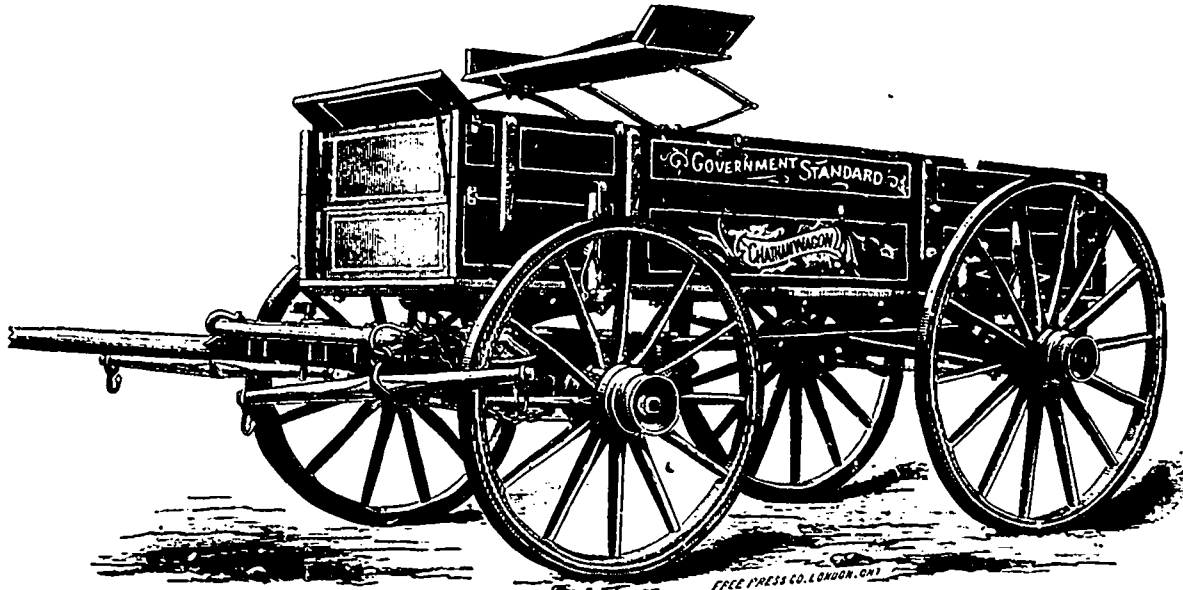
"Compound Oxygen its Mode of Action and Results," is the title of a new brochure of two hundred pages, published by Drs. Starkey & Palen No. 1529 Arch St., Philadelphia, Pa., which gives to all inquirers full information as to this remarkable curative agent, and a record of several hundred surprising cures in a wide range of chronic cases—many of them after being abandoned to die by other physicians. Will be mailed free to any address on application by addressing

E. W. D. KING,
58 Church St., Toronto, Ont.

THE CHATHAM MANUFACTURING CO. (Ltd.)

MANUFACTURERS OF

HARDWOOD LUMBER,



SHIP PLANK AND

THE CHATHAM WAGON, of which wagon the above is a faithful cut, and which the Government of the Dominion of Canada has adopted as the STANDARD WAGON.

We simply ask intending purchasers, in their own interests, to send to us for particulars of the Chatham Wagon, or if there is one convenient closely examine it before purchasing any other.

We also make Railway Platform Baggage Trucks, Farm and other Dump Carts, the Celebrated Main Bob Sleigh, the Patent Champion Hay Rack, etc., etc.

CORRESPONDENCE SOLICITED.

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PLATE GLASS

136 Cases 1-4 inch O. G. Stock Sizes.

87 " " " Silvering Quality.

We beg to advise having made very large purchases of **PLATE GLASS** before the recent extraordinary **ADVANCE** in prices.

Our Mr. PHILLIPS was fortunate enough to arrive in EUROPE and place large orders one week previous to the formation of the EUROPEAN MANUFACTURERS' COMBINATION.

We are now receiving weekly shipments, and are well prepared to place **SHOP FRONTS** in any size at a slight advance **ON COST**.

Send Sizes and Get Quotations.

COBBAN MANUFACTURING CO.
TORONTO.



TIMBER AND LAND SALE.

CERTAIN lots and the timber thereon situate in the Townships of Allan, Assignack, Bidwell, Billings, Carnarvon, Campbell, Howland, Sheguiandah, Telkumiami and Mills on the Manitowlin Island, in the District of Algoma, in the Province of Ontario, will be offered for Sale at Public Auction in Blocks of 200 acres, more or less, on the 1st day of September next, at 10 o'clock a.m., at the Indian Land Office in the Village of Manitowaning.

TERMS OF SALE.—Bonus for timber payable in cash, price of land payable in cash, a license fee also payable in cash, and dues to be paid according to Tariff upon the timber when cut.

The land on which the timber grows to be sold with the timber without conditions of settlement.

For full particulars please apply to James C. Phipps, Esq., Indian Supt. Manitowaning, or to the undersigned.

No other paper to insert this advertisement without authority through the Queen's Printer.

Department of Indian Affairs,
Ottawa, 2nd June, 1887.

L. VANKOUGHNET,
Deputy of the Supt. General of
Indian Affairs.

BELDING, PAUL & CO.

SILK MANUFACTURERS

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ORGANZINES, TRAMS,
SPUN SILK YARNS,

And all Threads for Manufacturing Purposes made to order.

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WITH PATENT BUSHING SYSTEM

Best Belt Surface, Lightest, Strongest, Best Balanced, and Most Convenient Pulley in the World.

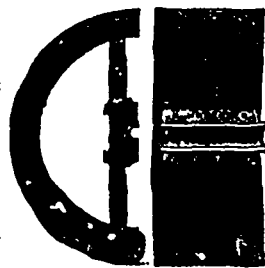
EVERY PULLEY A SPLIT PULLEY.

The hole in every pulley can be readily bushed to fit any sized shaft. Bushings furnished with each pulley. Guaranteed to give from

30 TO 60 PER CENT MORE POWER THAN ANY IRON PULLEY.

Strong enough for any power required. Made in any size and width, from twelve inches to sixteen feet diameter.

EVERY PULLEY WARRANTED.



We will furnish a Pulley for any service for 30 days free of charge, if it does not meet the warranty. Prices as low as any other good Pulley. Send for Catalogue, Price List & Guarantee

70 PER CENT. LIGHTER THAN CAST IRON

And 50 per cent. Lighter than Wrought Iron or Steel Pulleys.



READ THE FOLLOWING.

NORTHWESTERN MANUFACTURING & CAR COMPANY,
SHATTO & DENNIS, MINNEAPOLIS, MINN. STILLWATER, MINN., August 15, 1884.
Gentlemen: You ask why we use the Dodge Patent Pulley. I answer because we consider them the cheapest, most convenient and satisfactory in all particulars.
Yours truly, S. R. STIMSON, General Manager.

C. L. RICH, AGENT, CHICAGO, ILL.
OFFICE OF NEWTON WAGON CO.,
BATAVIA, ILL., Feb. 17, 1885.
Dear Sir: Replying to your favor, will say that after using the Dodge Wood Split Pulley for a year or more we are satisfied they are a good thing, if not the best Pulley made, and shall use them hereafter in preference to any other we know of.
Yours truly, NEWTON WAGON CO.

We have sold these pulleys for one year, and they have been put to every kind of service, and their popularity is wonderful. We refer to the following users for proof of the above statements: Pillsbury & Hulbert Elevator Co., Minneapolis; R. M. Pratt & Co., Elevators; Northern Pacific Elevator Co.; The Pacific Elevator Co.; Minneapolis Harvester Works; Minneapolis School Furniture Co.; M. & St. L. R. R. Co.; Willford & Northway; Washburn, Crosby & Co.; St. Paul Electric Light Co.; St. Paul Roller Mill Co.; Minneapolis Brick Co.; N. W. Mfg. & Car Co., Stillwater, Minn., and very many others.
SHATTO & DENNIS, MINNEAPOLIS, MINN.

W. H. DODGE, PREST.
DODGE MFG. CO., MISHAWAKA, IND.
THE WORLD'S INDUSTRIAL AND COTTON CENTENNIAL EXPOSITION,
NEW ORLEANS, March 19, 1885.
Dear Sir: I have a number of your Patent Wood Split Pulleys in use here at the Worlds Fair and Cotton Centennial Exposition, driving Dynamos for Electric Lighting. They are doing heavy work, and are held upon the shaft by the compression of wood on iron. They hold firmly, and do not slip. I have watched with a great deal of interest the many Pulleys of your make running at this Exposition; and I think them the best Pulley I have ever seen. I believe them to possess the following points of merit over any other Pulley: All Pulleys being split or in halves; best belt surface; best shaft fastening; best method of utilizing Pulleys to shafts of different sizes; best balance; lightest on the shaft; strong, and I believe durable. I heartily recommend them.
Yours very truly, S. H. GILMAN, Chief Consulting Engineer.

Waste of Power.

According to the best scientific authority it costs one horse power to keep in motion one ton of metal or weight; thus for every unnecessary 2,000 pounds weight on your line shaft, cost you one horse power. To maintain a horse power costs from \$25 to \$125 per year. Any manufacturer who will take the pains to investigate the unnecessary weight by Heavy Iron Pulleys, too tight belts, etc., will be surprised to find the enormous waste of power consumed in this manner. 60,000 Dodge Patent Wood Split Pulleys now in use. Our capacity being now equal to 100 Pulleys per day, we shall hereafter keep in stock for immediate shipment all sizes.

Send for Illustrated Circular and Reference List.

THE DODGE WOOD SPLIT PULLEY CO.,

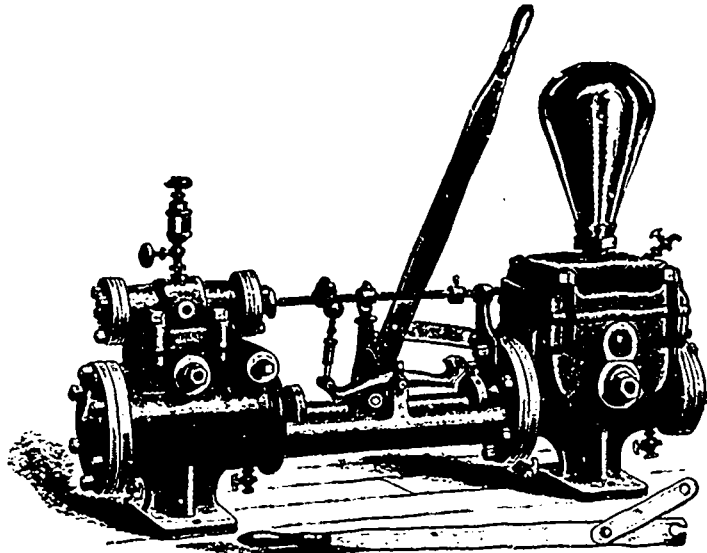
81 to 89 Adelaide Street, West, TORONTO, CANADA.

TAKE NOTICE:--Our List of Prices for the DODGE PATENT WOOD SPLIT PULLEYS is for ALL SPLIT-PULLEYS.

We beg you will note this fact when comparing our List with others which are for SOLID RIM, and NOT for Pulleys in HALVES.

KNOWLES STEAM PUMP WORKS,
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STEAM PUMPING MACHINERY IN EVERY VARIETY

**BOILER
 FEED,
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 and
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**Simple and Duplex
 PUMPING
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 for
**TOWN and CITY
 SUPPLY.**

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44 Washington St., BOSTON.

93 Liberty St., NEW YORK.

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To Users of Glue.

WE are manufacturing a reliable GLUE, and can supply a limited number of consumers only. We guarantee our glues to be made from selected stock, and to be of the same uniform quality. Glues not as represented, or not proving satisfactory, returnable at our expense.

JAMES HAY & CO.
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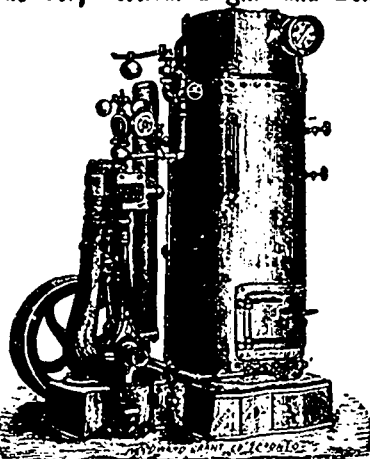
ARMSTRONG'S BUGGY AND CARRIAGE GEAR.

The "Defiance"

THIS GEAR meets the demand of the Driving Public for low-riding Buggies, and combines with this, lightness, durability, and great ease of motion. By the use of improved machinery and manufacturing in large quantities, we are enabled to make prices MODERATE. Send for our descriptive circular.

J. B. ARMSTRONG MFG. CO. (Ld.), Guelph, Ont.

The Doty Vertical Engine and Boiler.



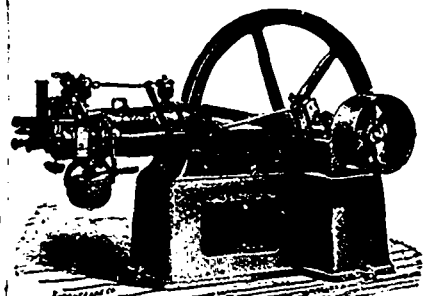
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**JOHN DOTY
 ENGINE CO.**

No. 2 Bathurst Street,
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In sizes from 3 to 10 H.P. Specially adapted to places where 3 to 10 H.P. is required. Simple, safe and durable.

THE
Otto Silent Gas Engine.



In sizes from 2 to 7 H.P. Most convenient power in the market.

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IF LIFE INSURANCE AGENTS

Want an A1 Contract, with full General Agents' Renewal Interest direct, with exclusive control of territory, then apply to the

Manufacturers' Life

AND

Indemnity Insurance Co'y.

HEAD OFFICE:

38 KING STREET EAST, TORONTO.

The Company will be in full operation by June 1st.

The plans are varied, and well suited to the wants of the insuring public.

All applications will be held strictly private and confidential. Apply

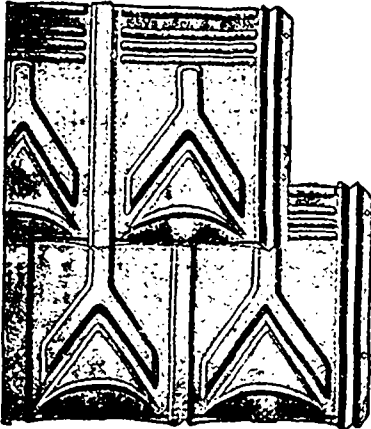
J. B. CARLILE,

Box 2699, Toronto.

Managing Director.

WALTERS'

PATENT METALLIC SHINGLES

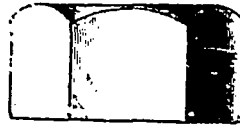


- They make the Most Durable Metal Roof known.
- They make the Cheapest Metal Roof known.
- They are Attractive in Appearance.
- They Lessen your Insurance.
- They are one-third the weight of wood.
- They are one-ninth the weight of slate.
- They can be put on by ordinary workmen.
- A good roof is as important as a good foundation.

Send for circulars and references. Sole Manufacturers in Canada.

McDONALD, KEMP & CO.

Cor. RIVER AND GERRARD STREETS, - - TORONTO, ONT.



Hexagon Nuts, Tapped

(WHITWORTH STANDARD).

TAPPED AND FINISHED BRIGHT,
TAPPED, FACED TOP AND BOTTOM.

MACHINISTS' & ENGINEERS' SUPPLIES

THE MORSE TWIST DRILLS.

CUSHMAN & WESCOTT LATHE CHUCKS.

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LECOUNTS LATHE DOGS.

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FLAT AND ROUND HEAD MACHINE SCREWS.

METALLIC PATTERN LETTERS AND FIGURES.

RICE LEWIS & SON,

Hardware and Iron Merchants,

TORONTO, - - - - ONTARIO.



CAPE BRETON RAILWAY.

SEC.—STRAIT OF CASNO TO GRAND NARROWS.

Tender for the Works of Construction.

SEALED TENDERS, addressed to the undersigned, and endorsed "Tender for Cape Breton Railway," will be received at this office up to noon on Wednesday, the 6th day of July, 1887, for certain works of construction.

Plans and profiles will be open for inspection at the Office of the Chief Engineer and General Manager of Government Railways at Ottawa, and also at the Office of the Cape Breton Railway, at Fort Hawkesbury, C.B., on and after the 6th day of June, 1887, when the general specification and form of tender may be obtained upon application. No tender will be entertained unless on one of the printed forms, and all the conditions are complied with.

Department of Railways and Canals,
Ottawa, 27th May, 1887.

By order,
A. P. BRADLEY,
Secretary.

ST. CATHARINES SAW WORKS.

R. H. SMITH & CO.,

ST. CATHARINES, ONT.,

Sole Proprietors, in Canada, of the

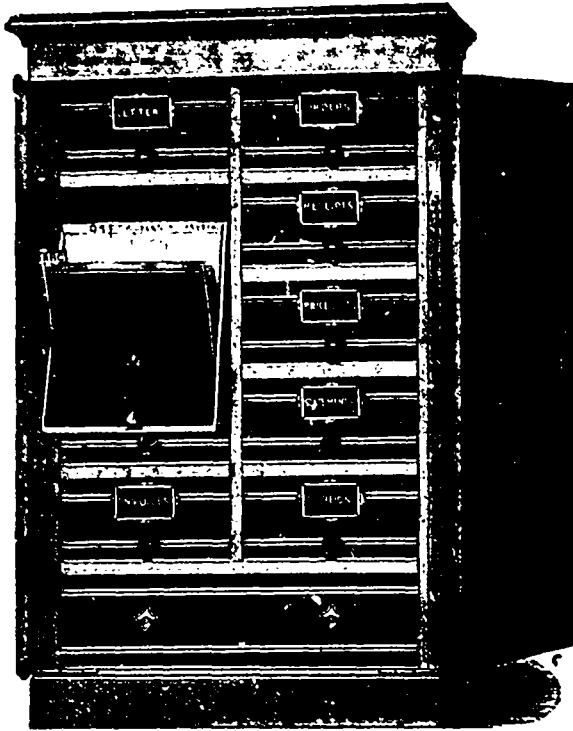
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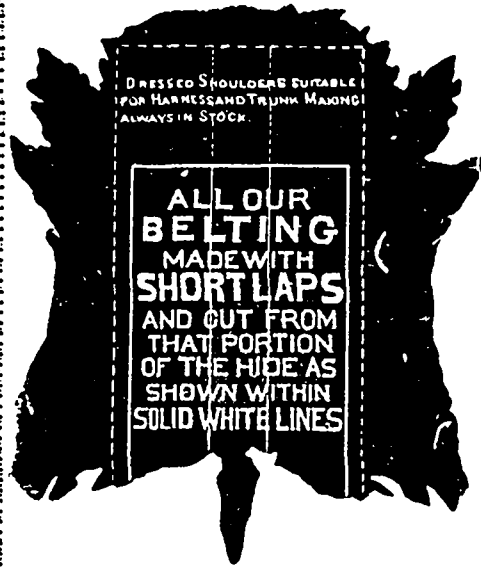
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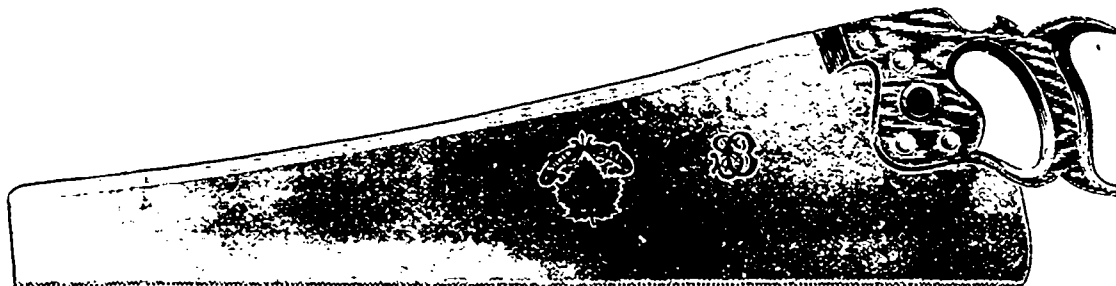
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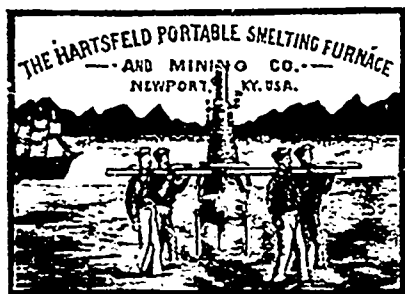
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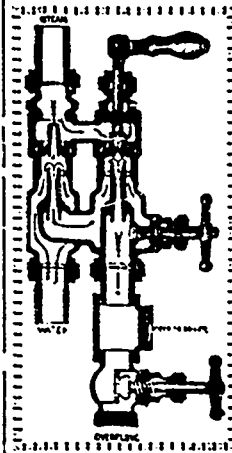
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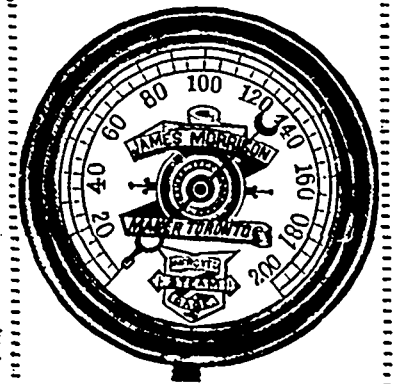
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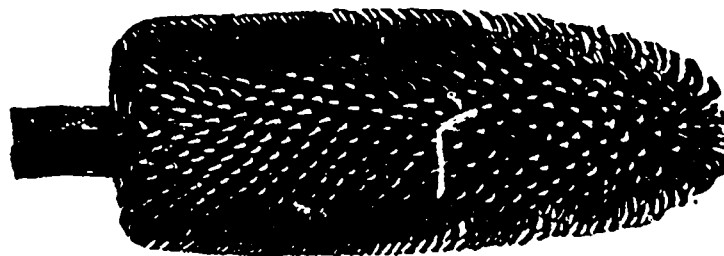
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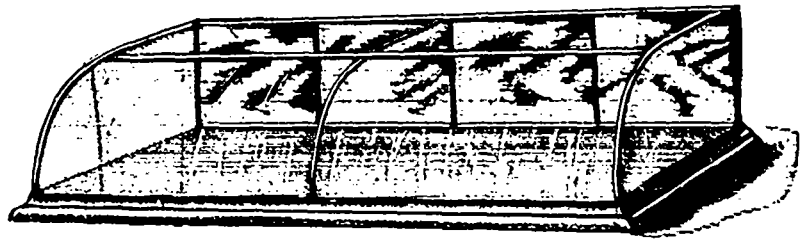
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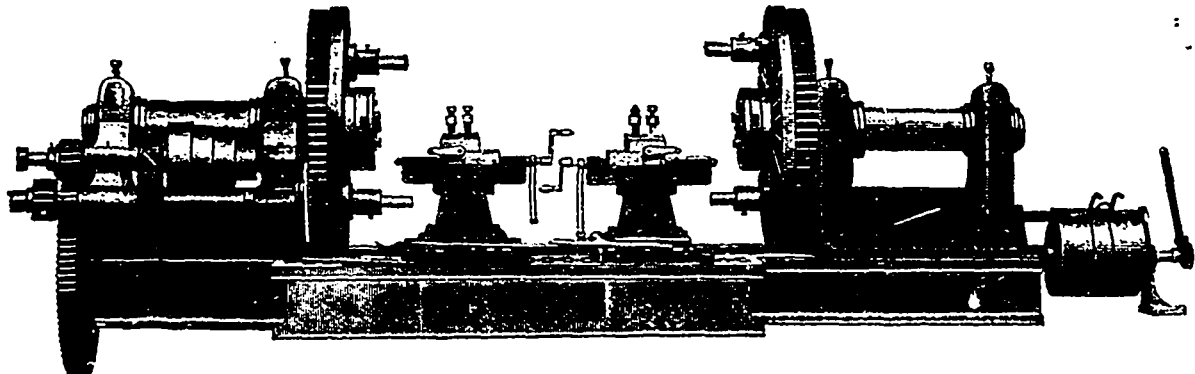
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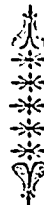
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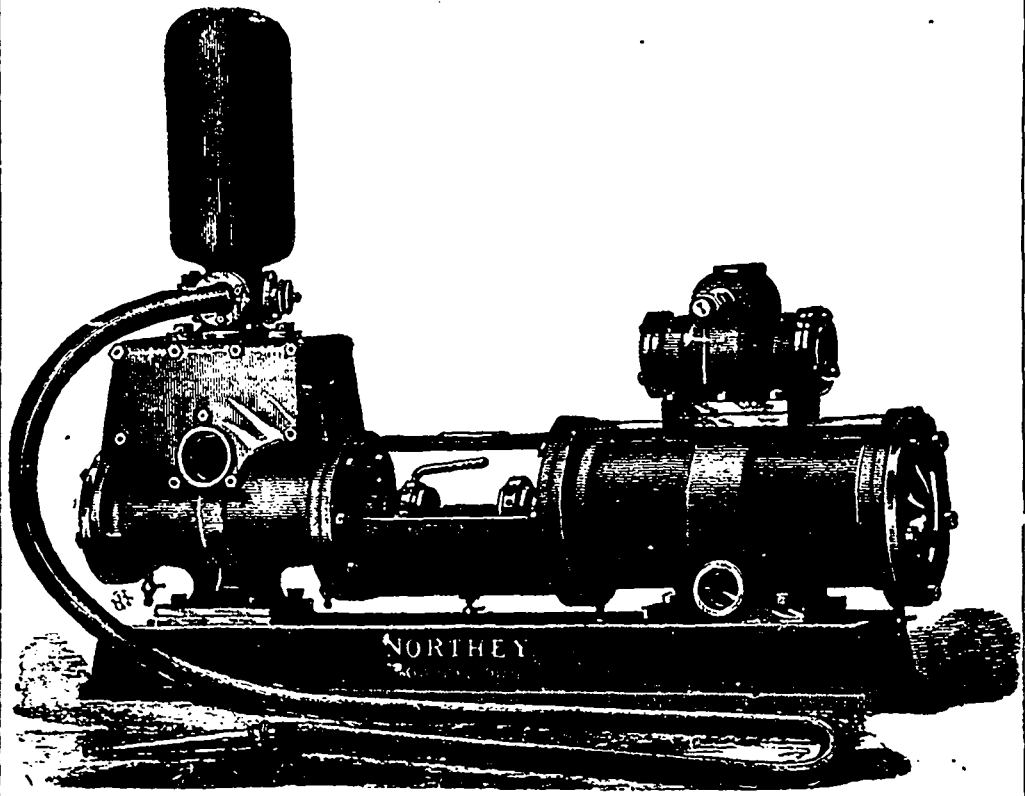
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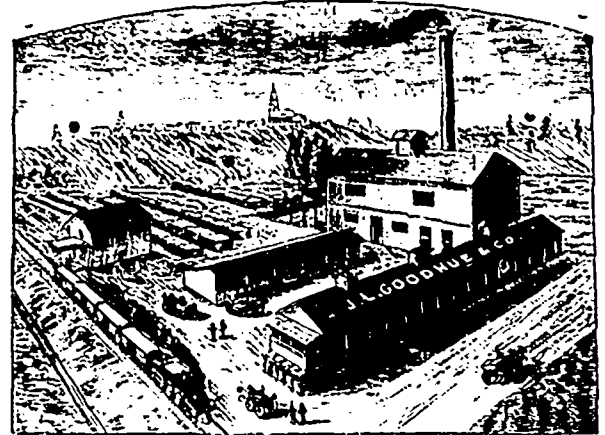
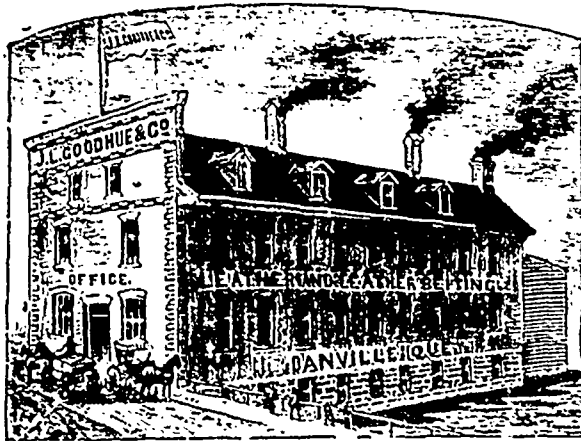
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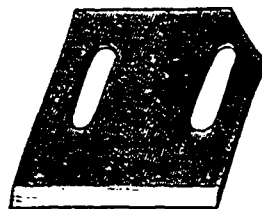
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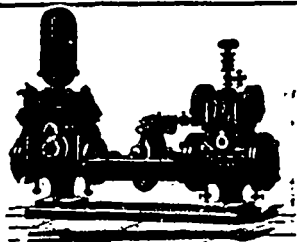
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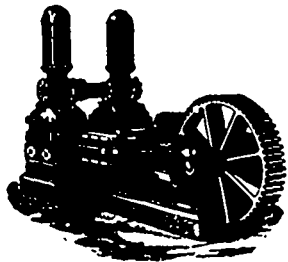
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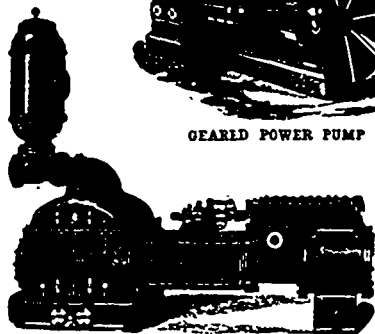
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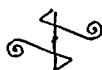
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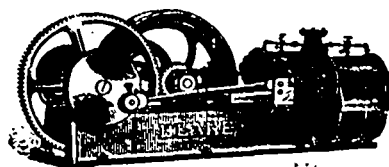


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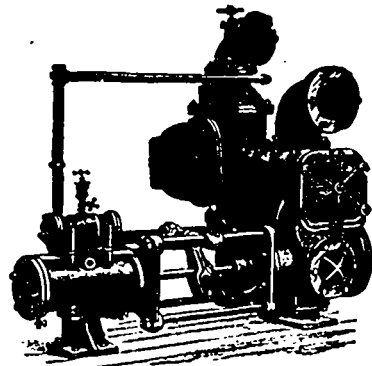


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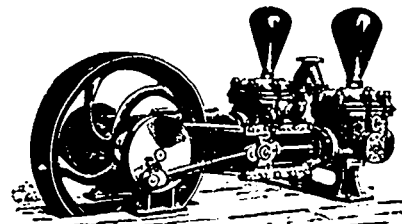
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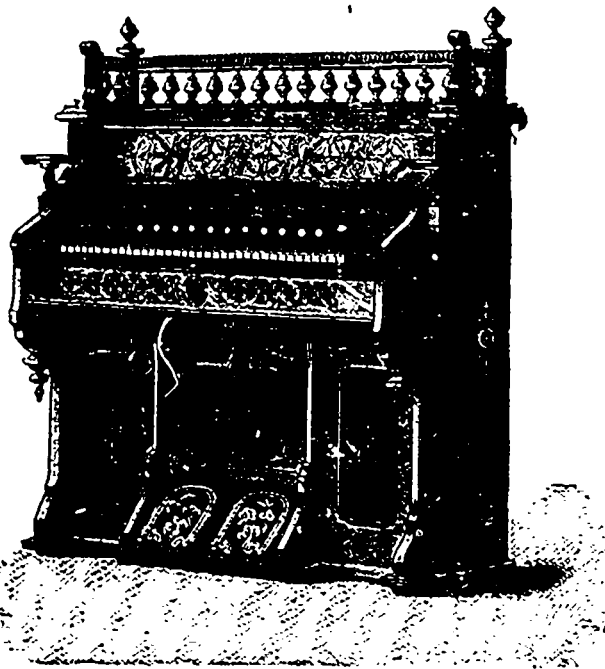


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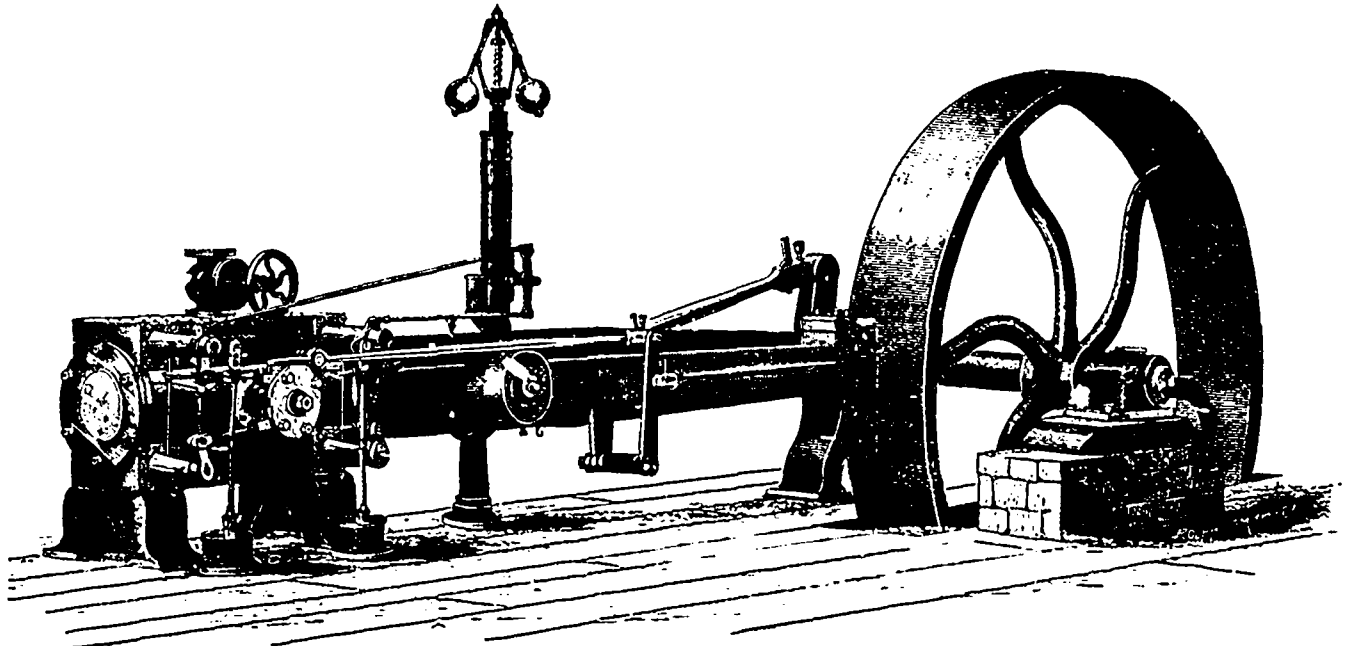
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THE HARRIS-CORLISS STEAM ENGINE

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While many Engines of the same class have been invented, built, tried and abandoned, the Harris-Corliss has steadily gained in public favor, and is now

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PLEASE NOTICE SOME OF THE ADVANTAGES OF THE HARRIS-CORLISS ENGINE :

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2nd—The success of the Harris-Corliss Engine lies in the simplicity and precise action of the governing elements, the Governor is an independent mechanism, with no extraneous load, and free to instantly respond to all variations in the angular velocity of rotating parts.

3rd—No parts of the regulating medium enter the steam chest and thereby be out of sight of the engineer, and subject to the corrosive action of steam and the oil used for lubricating the valves and piston.

4th—Regularity of Speed under varying loads of steam pressure.

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6th—Stop Motion on Regulator of Engine which effectually stops the Engine whenever the regulator by any means fails to perform its work, thus preventing the Engine from running away.

7th—Having four Valves either can be adjusted independently of the other with the greatest ease.

8th—The increased amount of power it develops.

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FROM LIVERPOOL:

Lake Superior.....	Friday, June 3
Lake Ontario (new).....	" " 10
Lake Nepigon.....	" " 17
Thanemore.....	" " 24
Lake Winnipeg.....	July 1
Lake Superior.....	" " 8
Lake Ontario.....	" " 15

FROM MONTREAL:

Lake Winnipeg.....	Wednesday, June 15
Lake Superior.....	Tuesday, " 21
Lake Ontario (new).....	" " 28
Lake Nepigon.....	" July 5
Thanemore.....	" " 12
Lake Winnipeg.....	" " 19
Lake Superior.....	" " 26
Lake Ontario.....	" Aug. 2

The steamers connect at Montreal by direct rail for all points in Canada, Manitoba, North-West Territories and United States, to which through tickets are issued.

These steamers are built in water-tight compartments, and of special strength for the North Atlantic trade.

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- The Prize Carriage Bolt,
- The Eclipse Carriage Bolt,
- The Prize Tire Bolt,
- The Eclipse Sleigh Shoe Bolt,
- The Prize Plough Bolt,
- Best Whiffletree Bolts,
- Best Shaft and Step Bolts,
- Best Eccentric Head Spring Bolts,
- Best Elevator Bolts,
- Best Norway Shackle Bolts,
- Best Railway Track Bolts,
- Black Iron Rivets,
- Boiler Rivets,
- Railway Spikes,
- Pressed Spikes,
- Hot Pressed Nuts,
- Bridge Bolts and Rag Bolts.

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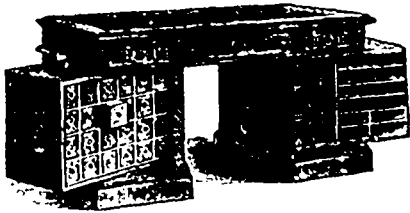
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"Water's" Perfect Steam Engine Governor, and
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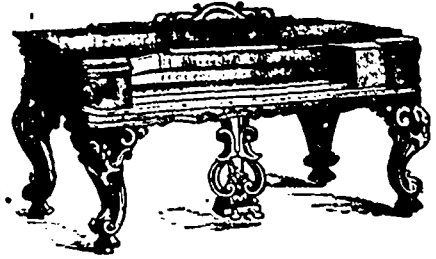


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