

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
 - Pages damaged/
Pages endommagées
 - Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
 - Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
 - Pages detached/
Pages détachées
 - Showthrough/
Transparence
 - Quality of print varies/
Qualité inégale de l'impression
 - Continuous pagination/
Pagination continue
 - Includes index(es)/
Comprend un (des) index
- Title on header taken from:/
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
 - Caption of issue/
Titre de départ de la livraison
 - Masthead/
Générique (périodiques) de la livraison

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

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

THE CANADIAN MANUFACTURER AND INDUSTRIAL WORLD

DEVOTED TO HOME INDUSTRIES, COMMERCE, FINANCE, INSURANCE, RAILWAYS & MINING.

Vol. 2.

TORONTO, JANUARY 12, 1882.3

No 2.

THE BOILER INSPECTION AND INSURANCE CO'Y OF CANADA,

(Incorporated by Act of Dominion Parliament),

ALSO CONSULTING ENGINEERS,

late THE CANADIAN STEAM USERS INSURANCE ASSOCIATION

Authorized Capital - - - - - \$500,000.

Boilers periodically inspected, and Insurance granted against explosion, covering Boilers, Buildings, and Machinery.
General Consulting Engineers for all kinds of Mechanical, Civil, and Mining Engineering Work.

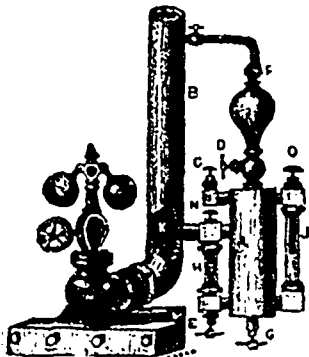
HEAD OFFICE - - - - - MECHANICS' INSTITUTE, TORONTO.

SIR ALEX. CAMPBELL, Minister of Justice, *President.*
JOHN GALT, C.E. & M.E.,
General Manager.

HON. JOHN McMURRICH, President Western Assurance Co., *Vice-President.*
GEO. C. ROBB,
Chief Engineer.
A. F. JONES,
Secretary-Treasurer.

MONTREAL BRASS WORKS.
ROBERT MITCHELL & CO.,
MANUFACTURERS OF ENGINEERS' AND
PLUMBERS' SUPPLIES

THE CONTINUOUS



FEED LUBRICATOR.

CIRCULARS ON APPLICATION.
MONTREAL.

JOHN WARDLAW,
Galt. Ont.

MANUFACTURER OF
Fingering, Wheeling,
Knitting, Tweed
& Cloud Yarns.
Woollen and Worsted
Yarns a Specialty.

Knitters supplied. Any description of
All Wool Yarns made to order.

LEATHER BELTING.

ROBIN & SADLER,

MANUFACTURERS OF

Leather Belting,
Fire Engine Hose,
& Lace Leather.

All kinds of MILL SUPPLIES.

ROBIN & SADLER make a specialty of
Double Driving Belts for mills, and in
this class of belting specially—for quality of
leather, smoothness of running on the pulleys,
and durability, they are unsurpassed on the
Continent of America.

BELTING FACTORY:

594, 596 & 598

St. Joseph Street,
MONTREAL.

Imperial Bank of Canada.

Head Office Toronto.

H. S. HOWLAND, President. T. R. MERRITT, Vice-President.
D. R. WILKIE, Cashier.

Capital Paid-Up \$1,500,000
Reserve \$503,000

Purchases Municipal Debentures.
Issues Drafts on its Branches and Agencies in the
North-West.
Transfers Monies by Telegram to Winnipeg and
Brandon.

Agents in London.

MESSRS. BOSANQUET, SALT & CO.,
73 LORDARD STREET,

with whom monies for transmission from Great Britain to
Ontario and the North-West may be deposited.

A general Banking Business transacted.

McKechnie & Bertram,
CANADA TOOL WORKS!
Dundas, Ont.

Supply complete outfits of Machinery for Railway Ma-
chine Shops, Locomotive Builders, Car Builders, Imple-
ment Manufacturers, Planing Factories, etc. CON-
TRACTS taken and fulfilled at shortest notice. Tenders
given, and Price Lists and Catalogues furnished on ap-
plication.

PATENTS

Secured in Canada, United States, Great
Britain and all Foreign Countries.

Trade Marks & Industrial Designs
Registered.

Searches made. Transfers and Contracts Drawn, and
all Patent Business carefully prosecuted. 12 Years'
Experience.

R. A. KELLOND,

Solicitor and Expert
St. James Street, Montreal.

J. C. EDWARDS,
 Manufacturer of all kinds
 Shipbuilders', Carpenters' & Coopers'
 Axes, Adzes, Draw Knives,
 Gouges, Caulkers' Tools,
 Copper Punches, Mallets,
 Surveying Rods and
 Marking Irons, Etc.
MAIN STREET, PORTLAND, N. B.

Fire Bricks, Fire Clay,-
 Portland, Roman, and Canada
 Cements,
 Drain Pipes, Plaster,
 Tiles, Flue Covers,
 Furnace Blocks,
 &c., &c., &c.
W. McNALLY & CO.,
 Importers,
MONTREAL.

THE LARGEST MANUFACTURERS OF
 STEEL AND BRASS STAMPS IN THE CONTINENT.
PRITCHARD & MINARD
ENGRAVERS
 TO THE DOMINION P.O. DEPT. & C.
OTTAWA.
 STEEL, BRASS, AND RUBBER STAMPS.
 TENCIL PLATES, SEALS, &c. &c.

PILLOW, HERSEY & CO.,
 Manufacturers of
 Cut Nails, Horse Shoes,
 Railway and Pressed Spikes,
 Tacks, Brads, and small Nails
 of every variety.
 Carriage, Tire, Plow, and other Bolts. Hot
 Pressed and Forged Nuts, &c.
 Office and Warehouse:
91. ST. PETER ST. - - MONTREAL.

KNITTING MACHINES,
 2 1/2, 3 1/2, 4 1/2 ins. diameter
 for
FACTORY USE.
 which make
 FULL FASHIONED
 SEAMLESS
 HOSIERY,
 also,
 PLAIN FAMILY KNITTING AND
 RIBBING MACHINES
 COTTON, YARNS, MIXES & COLORS, &c.
CREELMAN BROS., MANUFACTURERS
GEORGETOWN, ONT.

M^cARTHUR,
CORNEILLE & Co.,
 310 to 316 St. Paul Street,
 and
 147 to 151 Commissioners Street,
MONTREAL,
 offer at closest prices

PURE OLIVE OIL,
 WINTER-PRESSED LARD OIL,
 EXTRA FINE SPINDLE OIL,
 and a full assortment of other
LUBRICATING OILS.
 Also
CHEMICALS,
DYESTUFFS,
DYEWOODS,
EXTRACTS,
 &c. &c. &c.

Are Sole Agents in Canada for
SOCIETE ANONYME
 DES
MATIERES COLORANTES ET
PRODUITS CHIMIQUES,
 DE ST. DENIS,
 Successors to

A. POIRRIER AND G. DALSACE,
 PARIS,
 Manufacturers of
ANILINE DYES,
ARCHIL,
CUDBEAR,
 &c. &c. &c.

Prize Medal, London Universal Exhibition,
 1862.
 Gold Medal, Paris Universal Exhibition,
 1867.
 Grand Diploma of Honor, Vienna Universal
 Exhibition, 1873.
 Medal and Diploma, with Highest Com-
 mendations, Philadelphia Centennial Ex-
 hibition, 1876.
 Maintain large stock replete with all the
 new and improved colors. Will be pleased
 to furnish quotations with samples and
 directions for use.

Exchange Bank of Canada.
 Capital Paid up, \$500,000 | Rest, \$500,000.
HEAD OFFICE, MONTREAL.
 Directors.
 M. H. GAULT, M.P. President.
 Hon. A. W. OGILVIE, Vice-President.
 E. K. GREENE, Alexander Buntin.
THOMAS CRAIG, Managing Director.
 Branches.
 Hamilton, Ont. C. M. Counsell, Manager.
 Aylmer, Ont. J. G. Bilet, do
 Bedford, P.Q. E. W. Morvan do
 Sterling and American Exchange bought and
 sold. Interest allowed on Deposits.
 Collections made promptly and remitted at cur-
 rent rates.

MILLER BROS. & MITCHELL,
Machinists & Millwrights,
 Manufacturers of
IMPROVED HOISTING MACHINERY.
 Sole Licensees for Dominion for
 Gray's Patent Noiseless Roller Mills
 —AND—
 Gradual Reduction Machines.
110, 112, 114 & 116 KING ST.,
MONTREAL Que.

Chipman, Renaud & Co.,
 Manufacturers of MACHINE-STRETCHED
LEATHER BELTING,
 Engine Hose,
 —AND—
LACE LEATHER!
 Nos. 124 & 126 Queen Street,
MONTREAL.

JAMES HAY & CO.,
 MANUFACTURERS OF
CHAIR-CANE,
RATTAN & REED
Furniture.
Woodstock - Ont.

THURBER'S
BABBIT METAL,
 Nos. 1, 2, 3.
 Acknowledged superior to any made.
 Canadian Metal is far cheaper and better than
 ordinary Babbit.
 Philadelphia Metal, Nos. 1 and 2, is a very fine
 metal at the price.
JAMES ROBERTSON & CO.,
TORONTO.

THE CANADIAN MANUFACTURER AND INDUSTRIAL WORLD.

DEVOTED TO HOME INDUSTRIES, COMMERCE, FINANCE, INSURANCE, RAILWAYS & MINING.

VOL. II.

TORONTO, ONT., JAN. 12, 1883.

No. 2.

PROSPECTS IN THE NORTH-WEST.

Of all the various "futures" affecting the commercial and manufacturing prospects of Canada, the one of most present importance is that of the North-West. If the North-West develops and prospers, the prosperity will be largely diffused throughout the old Provinces, but especially in Ontario and Quebec, as being the nearest. If, on the other hand, a collapse came in the North-West, Toronto and Montreal would shake from centre to circumference. As the probabilities of a collapse there have been freely discussed of late, it may be in order to examine certain opinions advanced, and alleged facts upon which they are based.

There has been over-speculation, it is said. So there has been, and still is, in town lots. But not yet in farming lands, as far as appearances go. Say that the alleged town-plot of Buffalo-hump, situated somewhere or other in the North-West, has been sold out to simpletons at fancy prices. The town of Buffalo-hump covers probably five hundred acres. Does its sale reduce by one cent the real, substantial value of hundreds of thousands of acres of good farming land surrounding it? Scarcely, we should say. The farming land is there, and somebody will work it some day, when the name of the town of Buffalo-hump, either real or imaginary, is forgotten.

But again, it is said, there is insane speculation in farming lands too. This wants proof, and the test of proof it won't stand. Minor instances there are, many of them, but let us take the greatest of all now before the public—that of the North-West Land Company. The shares are quoted below par, therefore, it is said, the Company is going to collapse. But why are the shares below par? Is it because of unfavorable reports from the North-West, where the Company's lands are? No, but because of reports from London, inspired by financial wire-pullers who have a heavy interest in defeating the Company, and throwing it off the track. All the reports and opinions emanating from London do not decrease by one cent per acre the actual, grain-producing value of lands in the North-West. They do, however, decrease the marketable value, but only for a time, as we believe will shortly appear.

A failure to recognize the importance of figures seems to be at the bottom of the present depreciation here of land prospects in the North-West. Companies buying land at one dollar, two dollars, or two dollars and a half per acre, are to be bankrupted because it cannot be sold at a profit. Will those who argue thus take the trouble to figure up what the price of farming land is in Ontario, or Michigan, or Minnesota, or Dakotah. Put the price to settlers as high as five dollars per acre, and

then say if 160 acres for \$800 be not a bargain. You cannot get it in Ontario; where can you get it except in the North-West?

But there is land to be got in the States, it is said, and people will go there. What some people cannot be got to see is that the experience of the past is just on the eve of a great change; or, more correctly, the change has already begun in earnest, and is likely to go on with startling rapidity every year after this. As the line of advancing settlement in the North-Western States gets nearer the Rocky Mountains every year, the percentage of good land decreases to an extent that few people have any idea of. Eight thousand immigrants from the States into the Canadian North-West in a single season is one fact that tells the story. We shall hear much more about this ere the present year be over.

The opening up of the cheap water route to the head of Lake Superior next summer will work wonders. People ought to see the importance of this, if they would look at it, but they don't seem to look just now.

Another point of immense practical importance, but too little heeded as yet, is the effect of the land agitation in Ireland, Scotland, and England. The doctrines of Mr. Henry George as to the increasing value of the land and who it ought to belong to are spreading. What more natural than that a rush for land should follow? It is following even now, at a tremendous rate, but still the eyes of some people are sealed so that they cannot see it.

The prospects of the North-West depend largely on the answer that must be given to this question: Can land be sold there—actually sold for settlement—at five dollars per acre? We say, Yes, and for ten dollars ere a few years more have passed. The idea that farming land is valueless in this country of railways, lakes, rivers, and elevators, is utter nonsense. The popular pressure to get hold of land is about to be greater than it has been for centuries. Of all the great fields for settlement, the Canadian North-West is now the best advertised and the easiest to reach from Great Britain. The Government of New Zealand asks as annual rent what would buy the freehold in Canada. That emigrants will find this out may be depended upon. The inevitable overflow of the population of Europe into the Canadian North-West is a thing to be sure of; and on that basis the price of from five to ten dollars per acre for farming land is as safe and certain as anything that has not yet passed into history.

DRAWING REVENUE FROM THE LIQUOR TRADE.

The American *Protectionist* makes rather a strong appeal in favor of ceasing to draw revenue from the manufacture of in-

toxicating liquors; and shows good cause why this question should at least be re-considered. In the United States the entire abolition of internal revenue duties is advocated by some protectionists, as a means of strengthening the case for retention of duties on imports. If there were no revenue from excise duties, there would be the more need of drawing it from customs. Now, if this were the only reason that could be given, we believe it would still be a strong one, taking the ground that it is best to tax importation from abroad, letting home production of every kind go free. All home products in any particular country, Canada, for instance, pay taxes to the Government in various ways. But foreign producers, if we allowed their goods to come in free, would be having the benefit of our market while paying no toll, whereas home producers, being on the spot with all their buildings, plant, etc., cannot by any mean escape payment. On grounds of the merest fair play, therefore, it would be outrageously unjust to tax the home producer and let the foreign producer go free. And customs duties are the only means by which the latter can be reached by our laws.

On this single ground the case for the abolition of all excise duties and the drawing of the national revenue from customs duties would be a strong one. But, while not pretending to blink the Protectionist plea, our American contemporary brings forward other and very cogent reasons for abolishing excise duties on liquors. As for other home imposts they have now few defenders over the border, except among out-and-out free traders, who would make the home trade pay everything and the foreign trade nothing, if they could. With regard to intoxicating liquors, however, it is argued that they should be made artificially dear, in order to decrease consumption, also that the trade should be made to pay the expense of jails, asylums, police, etc., because it is a principal means of making the criminals or victims who render such expense necessary.

On two main grounds it is contended by the *Protectionist* that the system of drawing revenue from the manufacture of liquors should cease. One is that such duties have the effect of consolidating and concentrating powerful class interests, which become strong enough to control both legislators and executors of the law. And the other is that temperance men are in reality false to their own professed principles every day they continue to defend the deriving of a revenue from sin. We give an extract or two:—

“It is most unwise to maintain a corrupt and unscrupulous monopoly in privileges that make it strong enough to dictate the nomination of Governors and the choice of United States Senators. It is the internal revenue system that has solidified the liquor interest by confining its control to the hands of a few rich and influential men, and has thus enabled it, according to Senator Sherman and others, to carry a general election in Ohio, as it now threatens to control the choice of a Senator in Illinois. Before the establishment of internal revenue, the liquor interest was scattered and submissive to the general voice of the community. There were many comparatively poor men in the business and there was no monopoly. With internal revenue came the concentration of liquor manufacture into a few hands and its power in the country, which shortly, under the \$2 tax, became so great that for a long time through fraud and corruption it controlled the operations of departments and defied the law; and its chiefs, amassing great fortunes, were able to own the officers of the government by quadrupling their official pay. The methods of the whisky-ring are now different

and less open, but it still exists. . . . There has rarely been a greater profanation of the name of a holy cause than that involved in demanding the retention of the whisky-tax in the name of the cause of temperance. We beg the sincere apostles of the great virtue of temperance, whose principles make them irrevocably hostile to deriving revenue from sin, to reflect on these things, and to join with us in demanding that the blot of the whisky tax shall be expunged from our statutes and that its retention be not effected by foreign interests hostile to our prosperity for the sole purpose of preventing the protection and development of legitimate American manufactures.

That excise duties put the manufactures affected into few hands and create monopolies is a fact too obvious to be disputed. And equally cogent appears to us to be the argument that temperance men are on the wrong track while sustaining excise duties on liquors. As long as a considerable share of the national revenue is derived from this source, the plea that the trade must be sustained has a certain force, which it would lose at once if the reason for it were removed. To remove this reason altogether would mean the removal of one of the strongest props of the liquor interest; and would do more for the cause of temperance than any other measure of legislation which is really capable of being enforced at this time.

THE SHEARER SCHEME FOR MONTREAL HARBOR.

On December 22nd we copied among our editorial notes a Montreal despatch purporting to give the substance of a report on the Shearer Bridge and Harbour Scheme, adopted by the Montreal Harbor Board, on recommendation of Mr. John Kennedy, Chief Engineer to the Board. We are now in receipt of a letter from Mr. R. J. Henderson, Secretary to the St. Lawrence Bridge Company, in which he says that we have given incorrect statements on several points. And we are invited to make the following corrections:

It was stated in the despatch that the objections made by Mr. Kennedy were enough to crush the hopes of supporters of the Shearer scheme. But, so far from its supporters feeling crushed, they are now applying to the Dominion Parliament for a charter. A reply by the Company's Engineer to Mr. Kennedy's report (which reply we have not yet seen) has already been published.

Mr. Kennedy does not say that “the channel for rafts and river steamers will be closed entirely,” but on the contrary he does say that “the St. Lambert's channel would be equally as good as the present main channel for rafts.”

On Jan. 12, 1882, Mr. F. Foster Bateman, member of the Institute of Civil Engineers, was instructed by Hon. Sir Hector Langevin, Minister of Public Works, to report upon the Shearer scheme. In his report, dated Jan. 18, the scheme is favorably reviewed, and pronounced practicable. In October, 1882, it was favorably reported upon by two English engineers of eminence—Mr. James Abernethy and Mr. T. Frederick Bateman. The former, it is stated, has been out here and knows the country. Further, Mr. Henry Roberts, writing on Oct. 30 from Dunster House, Mincing Lane, London, says that should a reasonable charter be obtained from the Canadian Government, there will be no difficulty in obtaining there the money necessary for the work. This letter is addressed to Hon. A. W. Ogilvie, Montreal. It therefore appears that

what ought to be competent engineering authority has pronounced in favor of the Shearer scheme, also that a "reasonable charter" from the Dominion Government is all that is now wanted in order to raise money sufficient in London.

We merely copied, without note or comment of our own, a Montreal despatch which professed to give the substance of Mr. Kennedy's report, and which was published extensively in Western papers. The way the matter now stands is thus: On one hand, the Shearer scheme is condemned by Mr. Kennedy, Engineer to the Harbor Board, which has adopted his report. On the other hand, it is favorably reported on by high engineering authority, and it is stated that the money required can be raised in London, if only a "reasonable charter" be obtained at Ottawa. The action to be taken by the Government, and by the Dominion's collective wisdom assembled, is apparently the next thing to turn up in this really important matter.

THE GRAIN TRADE—ANNUAL MEETING OF THE MONTREAL CORN EXCHANGE.

(Mail's Dispatch by Telegraph.)

MONTREAL, Jan. 10.—The annual meeting of the local Corn Exchange was held to-day, Mr. Alexander Mitchell in the chair. The report says: "As to the grain trade, no conjecture as to the cause of the decrease is offered, the desire being how to rehabilitate it. Much might be done by the Grand Trunk railway to accomplish this, and in the near future the Canada Pacific railway can also assist in demonstrating whether Canada will be a grain exporting country or not. The requirements are ample warehousing facilities at the lowest rates to induce grain by rail or water, and to make Montreal a depot and mart for buying or selling. Were such the case transient vessels would be attracted hither. Of late years Montreal has been less of a trading centre than a port for transshipping cargo, and it is worthy of consideration whether the 'call board' should not be re-established. Success to the old capital in its efforts to secure the grain trade is wished." In regard to the ocean mail service it says:—"If all the lines from American ports can carry grain at so much lower rates than Montreal shippers, and without Government aid, is it wise on the part of Canada to continue the system of subsidies, seeing that the business in other ports can be carried on without them? Proper arrangements for carrying mails should be made with competent lines from the St. Lawrence on terms similar to those *via* New York." The deepening of the channel to twenty-five feet is commented upon as an occasion "the most important in the history of the country's commerce." The responsibility of common carriers for the acts of their agents was brought to the notice of Sir Alexander Campbell, and he promised to get the views of legal and commercial men upon it. Attention was called to the importance of the new line of steamships between Canada and Brazil as well as the West Indies.

The Chairman remarked that the call board had been done away with, but he would be glad to see it again in force, because of Montreal becoming a buying and selling point for grain. He reverted to a memorial addressed to the Government concerning the canal tolls reduction, Lake St. Peter debt, Sault Ste. Marie canal, and reciprocity. He trusted that the board would keep the reciprocity matter before them, and that the Government would sometime see their way clear to do something in the direction of taking the duties from breadstuffs.

Mr. Thomas Cramp, finding himself in more congenial company among corn merchants than at the Board of Trade, launched out on his favorite topic against the duty on breadstuffs. He did not charge the loss of trade altogether to that import, but he asked, who benefited by these duties? Not the farmer. He was certain if a vote of the people were taken up-

on the duties, the result would be their abolition. As to the works between Montreal and Quebec, he said there never was a time when the harbor commissioners were in need of so much support as at present. They were practically without friends, and must get them. It was only from independent bodies like the Corn Exchange that the harbor commission could receive the necessary assistance, because being really a branch of the Government the harbor commission had not the weight that an active and distinctive effort would have, backed by the strength of public opinion. He urged them to show this public opinion to be behind them, and trusted that no effort would be spared to bring about this result. In reference to the charge about high freight rates from this port, Mr. Cramp retorted upon Mr. Ogilvie that the Dominion steamship line had only 2½ per cent. from their business. He thought Mr. Ogilvie would not take anything less for running a line.

Mr. Judge said ten years ago freight could be laid down here 2 cents cheaper than at New York. This was changed now, and he thought it had something to do with the falling off in the business of the port.

Mr. Major proposed, at the suggestion of the president, and Mr. Lea seconded, the following resolution, which was passed:—"That the duties on all breadstuffs be abolished."

The *Witness*, a Liberal and anti-National Policy paper, in a lucid editorial this evening, refers to Mr. Cramp's excellent speech—if I except the beginning of it—yesterday at the Board of Trade. It places facts which no one will be more keenly alive to weigh than Mr. Cramp himself. It says:—"As to the cause of the diminution of the shipments there was a difference of opinion at the meeting. Mr. Cramp was inclined to blame the bonding system, which is the necessary adjunct of the protective tariff upon grain. Mr. White was not inclined to admit this, because he believed the year's returns would show the decrease in the shipments of grain from this port was not as large as the decrease of those from New York. The local Corn Exchange report for the year shows that Mr. White is right as to the fact. The shipments of flour from this port show an increase in 1882 over 1881 of 22.60 per cent., while those of New York show an increase of 1.14 per cent. The exports of wheat from this port show an increase of 5.47, while those of New York show a decrease of 9.53 per cent.; the exports of maize show a decrease of 79.96 per cent., while those from New York show a decrease of 71.46 per cent. It will be seen that in maize only was Montreal's trade comparatively less than that of New York, while in both wheat and flour here trade was comparatively greater this year than the preceding one. Taking the aggregate shipments of all kinds of grain and meal, Montreal has held her ground better than New York, as the decrease in 1882 as compared with 1881 of the shipments of all kinds of grain and meal from this port was 19.86 per cent., while that of New York was 26.73 per cent."

Of course the *Witness* agrees with Mr. Cramp that the bonded system is a hindrance to the trade, but its reasoning on the subject is worthless compared with the hard facts given to the public in reliable figures. The paper refers to Mr. Cramp's commendable reference to the vast development of the lumber trade from this port last year, and says that it can be still further extended by including the whole trade of the West hereafter if some changes were introduced about wharf accommodation and rates. Upon this latter point lumber exporters may rely upon the harbor commissioners meeting their views as far as practicable.

As the wool growers of the Dominion are asking for protection it may be interesting to state what has been the effect of the tariff upon the woollen interests of the United States. In the year 1860 they had 23,000,000 of sheep. In 1880, under a protective tariff, the flocks numbered 46,000,000 head. In 1860 the production of wool was 60,000,000 lb.; and to-day the production is 300,000,000 lbs. annually.—*Oshawa Vindicator*.

THE
Canadian Manufacturer
 AND INDUSTRIAL WORLD.

Published every Friday by the CANADIAN MANUFACTURER PUBLISHING Co., (Limited).

MECHANICS' INSTITUTE (corner Church & Adelaide Streets, TORONTO).

ANNUAL SUBSCRIPTION, IN ADVANCE, \$2.00.
 CARD OF ADVERTISING RATES ON APPLICATION.

FREDERIC NICHOLLS,
Managing Editor

All communications to be addressed CANADIAN MANUFACTURER,
 Toronto, Ont.

AUTHORIZED REPRESENTATIVES.

Montreal, Que.	Mr. C. R. Scott.
St. John, N.B.	Mr. J. S. Knowles.
Winnipeg, Man.	Mr. K. Graburn.
TRAVELLING CORRESPONDENT	Mr. A. L. W. Bege.

FILE FOR BINDING PRESENTED TO EACH NEW SUBSCRIBER

Editorial Notes.

The office of the CANADIAN MANUFACTURER has been removed to Room No. 5, Mechanics' Institute, corner of Church and Adelaide-streets. One stair up, turn to the right.

The St. Paul *Pioneer-Press* discredits the rumor that members of the C. P. R. Syndicate have had to sell out of the St. Paul, M. & M. to raise money to build the Canadian road.

The other day a carload of dressed beef was shipped at Belleville for Winnipeg. The operation will be reversed at an early day, when beef will be coming east instead of going west.

The San Francisco *Merchant* says that the system of dividing up large ranches into small homesteads is spreading in Southern California. Small orchards and vineyards are becoming numerous. These small homesteads are supplied with artificial irrigation, and are cultivated to the highest degree.

The Lachute *Watchman* complains of the high price of wood there. Those who have the timber think that buyers must have wood whether or no, and now the latter are beginning to think of trying coal as a relief. This seems a strange state of things in a district where wood is so abundant as along the Ottawa River.

Recently the Bank of Nova Scotia refused to take the notes of the Maritime Bank, St. John, N.B. A document expressing confidence in the latter bank was circulated among the business men of St. John, and was extensively signed by responsible parties. The Bank of Nova Scotia rescinded its order, and now the notes of the Maritime Bank are received as before.

Bradstreet's has a long letter from Vienna, drawing attention to the rapid development of petroleum production in Eastern Europe and Asiatic Russia. In Roumania, in Southern Russia, in Hungary, and on the shores of the Caspian Sea, are apparently extensive oil deposits, which are now being worked with great energy. The result is that Europe is far less dependent upon America for its oil supply than it was a year or two ago.

We copy from the St. Louis *Age of Steel* an article on "Important Subjects to Think about," which will be of interest to manufacturers generally. The absorption of small concerns into great companies, the question of strikes, and the employment of children in factories, are the subjects discussed. We quite agree with our contemporary that these are really "important subjects to think about," and worthy the attention of manufacturers. It is of interest here to observe how matters are drifting in the States.

The doubling of the Grand Trunk track from Toronto to Montreal is already begun, and will be finished during the present year. It is really something which ought to have been done years ago, but we must suppose that circumstances did not permit. The improvement will be an important one, however, when it does come; and, along with the opening up of the Ontario and Quebec line, will almost revolutionize traffic between the West and the great ocean port of Canada. At present we can scarcely realize what the magnitude of the change to be wrought by these extensions of railway facilities must be.

The *Canadian Manufacturer* has entered upon the second year of its existence. In noticing the fact our contemporary remarks: "The existence of such a journal is a permanent requirement in Canada, and it will always be the more necessary the more that manufactures grow and spread in the country. As the manufacturing interests become more diversified and expanded, the task of efficiently representing them in the press is constantly becoming larger and more important than before." The *Canadian Manufacturer* has carried out the promises made in its prospectus. We are glad to hear of its prosperity, and hope it may long continue.—*Ottawa Citizen*.

Recently a collapse came in the English tin-plate trade, and several heavy failures occurred. The principal reason why is thus stated by an English periodical, *Iron*:—"Without any regard, apparently, to the powers of consumption, the production has been rapidly increased within the last two or three years. In 1879 it amounted to 4,250,345 boxes; in 1880 it rose to 6,000,000 boxes; and in 1881 it was 6,298,960 boxes, an increase of almost fifty per cent. within two years. It is true that the exports also show a large increase; but, it may be asked, how much of this is due to a natural expansion in the foreign demand, and how much to shipments forced on account of the necessity of getting rid of the large make? Apart from this consideration, however, the fact is that the exports have not grown in anything like the same ratio as the production. In 1879 this country sent abroad 3,534,169

boxes; in 1880, 4,089,160 boxes; in 1881, 4,444,823 boxes; being an increase in the two years of 910,000 boxes, or only slightly over twenty-five per cent." The lessening of production is held to be the only remedy for this state of things. To which we would add that, if the export tin-plate trade be like some others, the probability is that pushing goods at or below cost on foreign markets has probably had fully as much to do with the recent disasters as our English contemporary indicates

Copper mining must be one of the best things going in the United States, if the following figures do not lie. The total paid-up capital of the copper mines of Michigan, which have declared dividends for 1882, is as follows:

Atlantic	\$ 180,000
Calumet & Hecla	1,200,000
Central	100,000
Osceola	880,000
Quincy	200,000
	\$2,560,000

The dividends disbursed by these companies since January 1, 1882, are as follows:

Atlantic	\$ 80,000
Calumet & Hecla	2,000,000
Central	50,000
Osceola	250,000
Quincy	520,000
	\$2,900,000

That is to say, in one single year these five companies have paid to their stockholders \$3,40,000 more than the aggregate amount of their paid-up capital.

It is said that nearly thirteen hundred individuals and firms of New York city, representing all of the principal branches of business, have signed a memorial to Congress protesting against the passage of a bankrupt law. Among other reasons assigned for opposing a measure, which has usually been held to be necessary and beneficent, it is urged that bankrupt laws fail to secure an equitable division of bankrupt estates among creditors, and seldom or never afford relief to unfortunate and honest debtors. They say there is no need for a bankrupt law because, as a rule, creditors are liberal in granting a debtor an extension of time in paying his obligations, or in compromising their claims. The memorial sets forth that the practice under previous bankrupt laws has been so expensive as in many cases to wipe out dividends to creditors. It is alleged that prior to the passage of the last bankrupt law, creditors collected a much larger percentage on what were called bad debts than was collected after the law went into force. Upon this point they say that careful estimates have revealed the fact that the average percentage of dividends from the estates of bankrupt merchants prior to the passage of the Bankrupt Act in 1867, was 35 per cent., and that during the existence of the law the average collections were less than 10 per cent., while outside the principal cities it was less than 5 per cent.

In iron manufacturing circles in the United States the belief prevails that extensive strikes are in prospect for 1883. An important difference between the strikes of recent date and

those next to come is, however, to be noted, according to the prevailing expectation. Recent strikes were for higher wages mostly, but those of 1883, to the extent that they come, will be against reductions. Working men are to be taught that Democratic success at the polls means reduced wages. Should they recognize this, and accept the situation, they will not strike this year, but will submit to lower wages until the tariff dispute is settled, to stay settled for a while. What we hear from Washington the past week seems to make it doubtful whether a complete tariff measure, or anything approaching thereto, can possibly be passed before the fourth of March; but, even if it were, the free traders would undoubtedly renew the fight in the Presidential election of 1884. Then the masses of the working men will as unquestionably vote on the Republican side, for their own bread and butter, and the free trade movement in the United States will get its finishing stroke. Just now a tariff fight extending over nearly two years appears to be in prospect. If the workmen are well advised they will let strikes severely alone in the interval. As regards strikes, the situation over the border is sure to be reflected in Canada.

The Canadian Pacific Railway Company has announced a programme for 1883 which, if carried out, as no doubt it will be, must have an immense effect on business in the Dominion generally, as well as in the North-West. On the Western Division the main line will be advanced to the Rocky Mountains, a distance of 330 miles from Point Indian Farm, which the construction reached at the close of 1882, about 940 miles from Winnipeg. Selkirk branch—twenty-three miles in length—will be completed. The branch will be completed from Emerson to the South Western branch on the Canada Pacific Railway, a distance of 22 miles. On the Eastern Division the road will be completed to a point about 130 miles west of Callender, and it is likely the Nipissing and Algoma branch from Wahnipic River to Algoma, about 110 miles, will be completed. The line Eastward to Thunder Bay will probably be completed to a point about 40 miles east of the Nepigon River, or 105 miles east of Prince Arthur's Landing. Work will be begun at all available points along the north shore of Lake Superior, and will be pushed on vigorously. All this cannot be done without the present expenditure of a vast amount in hard cash, much of which must find its way through various channels of business in Canada. Further, the effect on the settlement and development of the North-West of all this railway building must be enormous. It is highly probable that, ere another Christmas comes round, the croakers will be astonished out of their boots to see the accomplishment in two years of what in former times could not have been accomplished in twenty years. The enormous magnitude and energy of the motive power is what has to be considered. Never before in Canada, and scarcely ever, if at all, in the United States, was there such a "big push" in railway building witnessed as that to be made by the C.P.R. during 1883. Suppose the same energy to be continued during 1884, and allow for the impending revolution in transportation about to be wrought by the opening up of the Lake Superior route next summer, then the impulse given to the settlement of the North-West and to business all over will be something extraordinary.

Manufacturing Notes.

The CANADIAN MANUFACTURER will be pleased to receive items of industrial news from its readers in all parts of the country, for publication in its columns.

Notice of new machinery, improvements, increase in capacity, &c., will be of special interest. All communications must be accompanied by the writer's name as a guarantee of good faith.

Messrs. W. Bell & Co., the well known organ manufacturers, of Guelph, have now got their new additional factory in full running order. Its size is 140 x 80, 5 storeys high, and this in addition to their old factory of 108 x 100, 4 storeys, gives them a very large capacity. However we are pleased to hear that notwithstanding all this they are greatly pushed to fill all orders. This business may really be credited to the N.P., as, although it had been running for 11 years before the N.P. came in force, it has more than quadrupled in the last four years, and they are now paying over \$2,000 weekly in wages.

We are pleased to learn that the business of the Old Worswick Engine Co., of Guelph, whose premises were burnt down some years ago, and which was at that time sold out to Mr. Thos. Worswick, the original starter of the concern, and since then on account of limited means been run by him in a small way, has been taken hold of by an enterprising capitalist, and is now being vigorously pushed. Quite an extensive business is now being done, and the new owner claims to have six months' orders ahead. They manufacture the new Allan High Speed Engine as well as the renowned Brown Engine, which they were the first to introduce into Canada and which has given such universal satisfaction.

The Lachute Watchman says:—It was considered, when the paper mills were built here that one of the benefits to the place would be the market they would create for wood, but the prices of wood are so high that we understand Mr. Wilson intends using coal in the near future. He has offered higher prices for wood than he was led to understand he would have to pay when he settled on this site for his mill. Mr. Hambleton, of the bobbin factory, also finds the price of wood for his purposes considerably advanced since he commenced operations here. There is a legitimate price for wood as well as other things in demand, but the demand for wood does not warrant asking such prices as we have heard of, and we write this short article in the interest of the seller as well as the buyer, and in the interest of the whole place; for if people get an idea that wood is so scarce here that the prices asked are now obtainable and that in a few years they may be considerably advanced, it may check the growth of Lachute and so prove detrimental to all concerned. There is an abundance of wood in close proximity and it would be better for those who have it to sell, to keep their prices down as low as possible so as not to drive the trade entirely away and cause people to adopt coal which, when once adopted, is seldom given up again for wood. It is, no doubt, a serious loss to the place for Mr. Wilson to commence using coal. It will prevent the expenditure of a few thousand dollars a year in this place, as the money will be sent to a distant market.

Business Notes.

In Quebec, Oliver Begin, tanner; V. Belanger & Co., hardware dealers, and J. L. Martineau and Son, hardware dealers, are in difficulties.

Cotton, Connal and Co., Montreal, and Connal, Cotton and Co., Glasgow, Scotland, commission and general agents, have suspended, with heavy liabilities.

Joseph Jackson, a partner in the Brant Brewing and Malting Company of Brantford, has assigned in trust. The company is seriously embarrassed by Jackson's troubles.

Edward Seale, tobacconist, of this city, has assigned in trust, with liabilities of \$3,000. He commenced business about three years ago with a few hundred dollars, and now asks his creditors to accept 50 cents on the dollar.

The father of W. T. Scott, Jr., dealer in boots and shoes, Bowmanville, has obtained a judgment against his son for about \$1,000, and creditors are anxious about their accounts. A meeting of the interested ones is called for the 12th inst.

John Crow, jeweller, of Hamilton, is reported missing, and the sheriff has charge of the stock.

John Culverwell, general dealer, Barrie, has been endeavoring to compromise with his creditors. He began life as a barber, and made a few thousand dollars, but the store business has not proved a success. His liabilities are about \$4,000. Creditors are selling off the stock.

The oldest established saddler in Toronto—Robert Malcolm, is asking an extension from his creditors. His statement shows assets about \$25,000, and liabilities \$13,000. Mr. Malcolm has had a branch in Detroit the past three years, in which city he owes about \$3,000.

Daniel Rogers, who has been running the "Hub" Hotel, Winnipeg, Man., under style "Rogers and Co.," is in trouble again, the place being seized by bailiff. This is the same Rogers who failed in the wholesale liquor business about two years ago in Company with one Owen.

A statement in the Perry-Cassils affair Montreal, has been presented showing the liabilities to be in round figures \$124,000, and the assets \$62,000. The following trustees have been appointed to wind up the estate:—Messrs H. J. Fisk and E. A. Whitehead, of Messrs. Cassils, Stimson & Co, and Mr. John Cassils, of Messrs. Shaw Brothers & Cassils.

The Juvenile Novelty Manufacturing Co., (limited), have decided to wind up their affairs. The Company had scarcely got under way when the directors began to disagree, and litigation ensued. Law expenses and depreciation in plant will absorb nearly all the stock paid up, and shareholders will have to pay up their stock in order to satisfy the business liabilities.

Messrs. J. R. Hutchins & Co., manufacturers of files and springs, Montreal, have failed, and at a meeting of creditors held on Saturday, Messrs. E. A. Whitehead and N. C. Meredith, of Montreal, and A. Stuart of Quebec, were appointed trustees of the estate. The concern is a small one, liabilities reaching only \$16,000, while the assets are nearly \$12,000, the deficiency being about \$4,050.

A few months ago the firm of Davis & Urquhart commenced business in Toronto, dealing in druggists' specialties. The antecedents of Urquhart were sufficient to warn the trade, but some houses have been injudicious enough to sell the concern, and apparently there is very little chance of their being able to obtain anything on their claims. A chattel mortgage which was on the stock has been foreclosed. Liabilities about \$4,000.

In 1877 Canada shipped 13,400 cattle to Great Britain; in 1882 she shipped 43,000, an increase of 30,000 in five years. Besides sending 43,000 cattle to feed our hungry brethren across the Atlantic, we have sent during the year 79,521 sheep. Our total exports of live stock to Great Britain since the commencement of the cattle exporting business in 1877, amount to 168,288 head of cattle and 343,285 sheep. The business of exporting cattle, it is gratifying to note, promises to enlarge, for Canadian beef is living down the prejudices Englishmen used to entertain regarding it, and is taking a place on the British markets second only to that of Old England herself.

The Ontario Glass Burial Case Company (Limited) of Ridgeway, has assigned in trust. The Company was incorporated in 1880 with a capital of \$25,000, which was subsequently increased to \$50,000, \$20,000 of the capital was expended in a patent burial case, which has not proved a success, and their operations were rather large for their capital. For some time past several of the principal stockholders have been trying to induce all the shareholders to sacrifice their stock and to form another company assuming the liabilities of the present one, but a few objected, and an assignment has been made. The Company shows a surplus, omitting its liability to stockholders, but it is difficult to say what the estate will pay.

To Mill Owners and Manufacturers.

USE

F. E. DIXON & CO.'S

PURE BARK-TANNED

Star Rivet Leather Belting !

**FIRST PRIZE FOR
LEATHER BELTING**

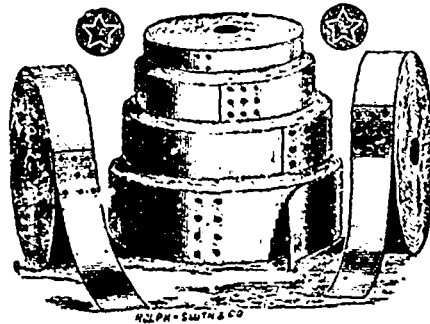
—AT—

Provincial Exhibition, Ottawa, - 1875.
 " " Hamilton, 1876.
 " " London, - 1877.
 Industrial Exhibition, Toronto, - 1879.
 " " Toronto, - 1880.

**EXTRA PRIZE FOR
Genuine Oak Tanned Belting.**

—AT THE—

Provincial Exhibition, Hamilton, 1876.



INTERNATIONAL MEDAL

—AT THE—

Centennial Exhibition,
PHILADELPHIA, 1876.

FIRST PRIZE FOR

BELTING LEATHER

AT THE

Industrial Exhibition, Toronto, 1879.
 " " " 1880.

Our Belting is Short Lap, and is warranted to run straight and even on the pulleys, and certainly cannot be surpassed in quality by any other Belting in the market at the same prices.

Our Leather is of Pure Bark Tannage, and consequently is much more durable than the chemical tanned leather of which most of the American Belting imported into Canada is made, though sold under the name of Oak Belting.

To accommodate those who desire to have a really genuine article of Oak Belting, we beg to say that we keep in stock a quantity of

Oak Leather of the Celebrated Tannage of J. B. HOYT & Co., of New York,

and as the duties on imported rough Leather are much less than on the manufactured Belting, we are thus enabled to sell the Belting made from this quality of Leather much cheaper than it can be imported.

LARGE DOUBLE BELTS A SPECIALTY.

Please note that our Price List averages Twenty to Twenty-five per cent. lower than the American Price List at which all American Belting is sold in Canada.

Lace Leather of the very best quality always on hand.

All Work Warranted.

Orders Solicited.

F. E. DIXON & Co.,

81 Colborne Street, Toronto

H. L. FAIRBROTHER & CO'S.

—AMERICAN—

LEATHER BELTING,
AND LACE LEATHER.

STAR RUBBER CO'S.

AMERICAN

RUBBER BELTING,
PACKING AND HOSE.

**Noye's Castor Oil Belt Dressing for Oiling and Preserving
Leather Belts and to prevent flapping.**

We keep a larger Stock of Belting on hand than any other makers or
dealers in the Dominion.

—ORDERS SOLICITED.—

GEO. F. HAWORTH,

SOLE AGENT FOR DOMINION OF CANADA

65 Yonge Street, Toronto.

Legal.

Liability of Principal for Unauthorized Acts of Agents.

The Chicago *Industrial World* says:—We have been requested to publish the following notice of a recent decision by the Supreme Court of Wisconsin, touching the power of agents to bind their principals in the collection of money for goods sold:

In an action to recover the goods sold, the purchaser gave in evidence bill receipted by the agent of the plaintiff from whom he bought the goods. The vendor claimed and gave evidence to show that the agent was not authorized to collect. In this case, *McKindley vs. Dunham*, the Supreme Court of Wisconsin, on September 10, decided in favor of the vendor. Judge Orton, in the opinion, said: First—An agent who merely solicits orders for goods, sending the orders to his principal to be filled, has no implied authority to receive payment for the goods when they have been sent. Second—An order solicited by and given to such agent does not constitute a sale, either absolute or conditional, of the goods ordered, but is a mere proposal to be accepted or not, as the principal may see fit. Third—The power of an agent to make contracts for his principal does not necessarily include an authority to collect the purchase price for them. Fourth—The words "agent: not authorized to collect," stamped in large, legible print upon the face of a bill sent to the purchaser of goods, will be presumed to have been observed by such purchaser, and, whether he saw them or not, were notice to him not to pay an agent.

Validity of Firm Name Printed on Memorandum.

A case deciding a point of considerable importance to business men is cited by the *Albany Law Journal* from advance sheets of the 58th volume of Maryland Reports. In this case, *Drury vs. Young*, it was held that a memorandum under the statute of frauds was sufficiently "signed" by the name being printed on a letter-head, the contract being under-written. The court cited a Maryland case, to the effect that the place of the signature in the memorandum is immaterial, and extracted from the English authorities the doctrine that the name may as well be printed as written, if the printed name is adopted by the party to be charged, and hence concluded that there was a sufficient signing if the name were in print and in any part of the instrument, provided that the name was recognized and appropriated by the party to be his.

Partnership Liability.

An interesting discussion of the legal rights of partners, or persons agreeing to assume the partnership relation, as between themselves, is contained in the recent case of *Hill vs. Palmer*, decided by the Wisconsin Supreme Court on November 21, 1882. The court, per Lyon J., stated the rule as between partners to be that if the damages resulting from a breach of a covenant or stipulation in the partnership agreement by one partner belong exclusively to the other partner, and can be assessed without taking an account of the partnership business, an action may be maintained by the injured partner against the other for such damages, although the court held to the old doctrine that one partner could not maintain an action at law against the other on account of strictly partnership transactions. As between persons who are agreed to form a partnership, the court held the doctrine to be well settled that an action at law may be maintained for the breach of an agreement to form a partnership or for a wrongful refusal by one party to such a contract to permit the other to launch the business.

Non-fulfilment of Contract.

An interesting case of non-fulfilment of contract has been disposed of in the Toronto Courts. From the evidence taken

before a jury, it appears that on October 4th Messrs. Abram, Hodgson & Sons, of this city, offered Mr. E. Smith, of Prescott, by telegraph, 55c per lb. for 55 bales of hops, which offer the latter accepted, both by telegraph and letter. Subsequently the seller requested Messrs. Hodgson to send a man to Prescott to inspect the hops, and as this was not complied with immediately, Mr. Smith wrote on October 10th stating that the bargain was off, the price of hops having in the meantime advanced considerably. Justice Cameron, however, before whom the case was tried, did not consider that Mr. Smith had any just cause for the non-fulfilment of his contract, and the jury concurring in His Honor's views, rendered a verdict in favor of Messrs. Hodgson, the plaintiffs, fixing damages at \$1,970.35 and costs, or equal to 20c per lb. on the hops which Mr. Smith refused to deliver after having sold them.

Clerical Error in Date of Lease.

A bank leased a banking-room, and the lease read as follows: "For six months, from December 6, 1881, to May 6, 1882." On May 6 the landlord entered forcibly and took possession of the room, and the bank sued for damages for a forcible entry and detainer of the premises. A judgment was entered for the bank, and the landlord carried the case, *Nindell vs. State Bank of Nebraska*, to the Supreme Court of Nebraska, who affirmed the judgment in September. The Chief Justice, Maxwell, in the opinion, said: Testimony of witnesses will be received to cure any ambiguity in a paper so as to make the terms thereof definite and certain. In this case, however, it cannot be said that there is an ambiguity; the lease was for six months, and fixing the date of its termination as of May 6 was merely an error of computation, which the court will correct.

TWO RAILWAY CASES IN CHANCERY.

JUDGMENT AGAINST THE GRAND TRUNK IN BOTH CASES—TO GO NEXT TO THE COURT OF APPEAL.

Judgment was given Wednesday morning at Osgoode Hall, by Mr. Justice Proudfoot, in the two important cases of *Hendrie vs. the Grand Trunk Railway*, and *the Grand Trunk against the Toronto, Grey and Bruce*. As will be remembered the first action was brought for the avoidance of an agreement made to lease the Toronto, Grey and Bruce to the Grand Trunk, and the second action was brought by the Grand Trunk to have the agreement to lease carried into effect and enforced. His lordship held that the bondholders of the Toronto, Grey and Bruce Railway were entitled to vote, and consequently the agreement to lease was never properly and legally ratified at a meeting of the directors, and could not now be enforced. The judgment therefore is for the plaintiffs in the first suit with costs, and for the defendants in the second suit also with costs. Messrs. E. Blake, Q.C., and Walter Cassels appeared for the Grand Trunk Railway, and Messrs. Christopher Robinson, Q.C., D'Alton McCarthy, Q.C., and E. Martin, Q.C., for the Toronto, Grey and Bruce. The solicitors of the Grand Trunk Railway were authorized to take immediate steps to have the case argued in the Court of Appeal.

It is said, however, that there is a probability of the case being settled between the parties before the Court of Appeal takes it up. Mr. Hendrie, it is known, has no public ends to serve. He merely wishes to make the best of it for himself, and that being the case he is disposed to accept any favorable offer the Grand Trunk may make him for the control of the road. Another reason why he should come to terms with the Grand Trunk is that the cartage privileges which he holds with that road are very valuable and he is not likely to jeopardize them by taking a position antagonistic to that of the Grand Trunk.

Financial.

The following are the latest quotations on the Toronto Stock Exchange on Thursday, January 12th, 1883, compared with those of a week before:—

	Jan. 4.		Jan. 11.	
	Asked.	Bid.	Asked.	Bid.
Montreal.....	201	199½	201½	200½
Ontario.....	108½	108½	110	109½
Molsons.....	172	171½	175½	175½
Toronto.....	122	121	122	120½
Merchants'.....	132½	132	132½	132
Commerce.....	136½	135½	138	137½
Imperial.....	151½	151½	154½	154½
Federal.....	196½	196	199	198½
Dominion.....	114½	114	115	114½
Standard.....	116		114	
Hamilton.....				
British America.....				
Western Assurance.....	158	156		156
Canada Life.....				
Confederation Life Association.....				
Consumers' Gas.....		149	150	148½
Dominion Telegraph.....		80		
Montreal Telegraph.....				
Globe Printing Co'y.....				
N. W. L. Co.....	46s	45s. 6d	46s. 6d.	46s.
Ontario and Qu'Appelle.....			180	

The following are the latest quotations of Wednesday, Jan. 10th, 1883, on the Montreal Stock Exchange, compared with those of same day last week:—

	Jan. 3.		Jan 10.	
	Asked.	Bid.	Asked.	Bid.
Montreal.....	201	200½	201	200½
Ontario.....	109½	109	110½	108½
People's.....	86½	85	87½	85½
Molsons.....	127	125		125½
Toronto.....	173	172	175	174½
Jacques Cartier.....	120	115	120	115
Merchants'.....	122	121½	122	121
Quebec.....				
Exchange.....		170		
Union.....				
Commerce.....	132½	132½	132½	132
Federal.....	152½	152	155	152½
Montreal Telegraph.....	124	122	124½	123
Dominion Telegraph.....				
Richelieu and Ontario Nav.....	69	68	66	65½
ex. div.....				
City Passenger Railway.....	130½	129½	130	128½
Montreal Gas.....	179	178½	180½	180
Canada Cotton.....	137½	127½	145	
Dundas Cotton.....	120	116	115	110
Ontario Investment.....	138			
St. Paul M. & M.....	142	140½	142	141
North-West Land Co.....	47s	46s.	47s 6d	46s

Hon. Justice Loranger recently rendered judgment in the case of *Cusson vs. Bourdon*, in which the plaintiff, the keeper of a foundry at Longueuil, sued the defendant, a moulder who left his service, for \$50. The circumstances of the case are as follows:—Bourdon, it was proved, is a member of the Moulders' Union, whose head-quarters are at Brooklyn, N. Y., and it was alleged made a plot with a few of his fellow-workmen in the same establishment to desert the service of their employer unless an increase of wages, to be determined by themselves, was allowed. The demand for increase was made and the plaintiff having refused to grant the request, the parties came back to Montreal, where they attended a meeting at the rooms of the Moulders' Union. Subsequently they returned to Longueuil, and upon a new refusal to a new demand left the service of Cusson. The learned judge in rendering judgment, declared these unions illegal, and pronounced the means employed by them to extort such increases of wages both illegal and unjust, and consequently condemned Bourdon to pay the plaintiff the sum of \$50.

Commercial.

During the past week an upward tendency in the grain market has been developed, with brisker demand from buyers and greater firmness on the part of sellers. Offerings have not been up to demand, and slight advances have been conceded. By some the improvement is attributed to a turn of the market in Europe; but there is room for supposing that a better demand in the home market, now secured against sudden rushes and raids from the States, is really the principal cause.

In Toronto little change is reported in provisions, and nothing to speak of in prices, except that cheese is firmer, a result to be expected for the reason that no fresh make can be put upon the market until about five months hence. The *Montreal Gazette* thus draws attention to the drop in provision values:—“The decline in the price of hog products during the past three months has been very remarkable on both sides of the Atlantic. On October 7th pork was selling in Liverpool at 102s. 6d, and yesterday (4th inst.) it touched 82s, which is a shrinkage of 20s per cwt. Lard in the same period has declined 8s 6d per cwt., from 64s to 55s 6d. In Chicago the price of cash mess pork has tumbled \$7 to \$7.50 per bbl. since the first week in October last. Parties who contracted November pork at about \$20.50 to \$21.50 in Chicago experienced a decline of \$2.50 to \$3.00 per bbl. before they could get delivery of goods. The heaviest losses in Montreal fell upon a few outsiders, who margined up so repeatedly on the down run of prices that they were compelled to sell out at a big loss. The following were the stocks of pork and lard in Chicago on Jan. 1, 1883, and on Jan. 15, last year, which shows the large decrease of 139,866 barrels of pork and 102,080 tierces of lard.”

	Jan. 1, 1883.	Jan. 15, 1882.
Pork.....	139,718 brls.	279,584 brls.
Lard.....	37,295 tcs.	139,975 tcs.

The great drop in prices, along with the fact of very much smaller stocks on hand, is certainly something remarkable.

Of the wholesale trade there is little to be remarked. The opinion is advanced that wholesale dry goods houses have not made sales to the extent expected, and that consequently many of them will have a heavy pile to carry over. We should say that if this proves a true statement they must have overloaded themselves most unreasonably, to begin with. This has been a good winter for snow, so far, with every prospect of more to come. We will venture to say that a better and more thoroughly seasonable winter has seldom been seen in Canada. While the good sleighing must be bringing farmers and their produce out from all quarters, the favorable winter season assures a large cut and delivery of logs and square timber in and from the lumbering districts. That, again, must bring a large aggregate of employment at good wages; and if sales by country storekeepers do not turn out in proportion we shall be very much mistaken. On this point we leave it for time to tell....

A Mogul engine sometimes consumes seven tons of coal in making a journey from Belleville to Toronto; a passenger engine uses four. The quantity of coal issued at Belleville station last month was 4,500 tons.

Selections.

IMPORTANT SUBJECTS TO THINK ABOUT.

(From the *St. Louis Age of Steel*.)

There are a few things connected with the rapid growth of manufacturing interests in this country which deserve more attention than is commonly given them. These things may be enumerated as follows: (1) The steady absorption or "gobbling up" of the smaller manufacturing concerns by the larger ones; (2) the question of strikes; and (3) the employment of young girls and boys at low wages to do the work of men, six days in every week.

Taking the first of these propositions, we find a very pronounced tendency in manufacturing circles to consolidate, and thereby lessen the friction of competition. Small manufacturing concerns, by stress of circumstances, are forced to do one of two things—to incorporate themselves with larger concerns, or else live out a short and unprofitable existence. Small manufacturers, of course, have always been operated at a comparative disadvantage, for the reason that a raw material is cheaper when bought in large lots than in small ones. Lately, however, this disadvantage has grown to be oppressive, owing to the heavy discounts on raw material in large lots, and the high prices asked for it in small lots. Why these discounts are so much more unfavorable to small manufacturers now than formerly it is not necessary to explain, inasmuch as the statement is not and cannot be successfully disputed. Doubtless the fact is referable, in a great measure, to the discriminations practised by transportation companies, and to an increase in the number of large, without a corresponding increase in the number of small, consumers of raw materials. Whatever may have been the causes, there can be no question as to the situation. We find an order of things which is not only very distasteful, but actually oppressive to small manufacturing concerns, and indications in every direction point to the crushing out of manufacturers with small capital. Of course the death of the small concerns would be a great advantage to manufacturers with plenty of capital, for it would reduce competition and place them in a position to form strong combinations, and to procure for their products such prices as they might choose to ask. Grinding monopolists would then flourish with more than pristine vigor.

The question of strikes is also of more importance than is usually attached to it. Every summer the country is presented with the spectacle of thousands of workmen out of employment, and scores of manufactories silent as cemeteries—capital idle and labor hungry. No suggestion looking to the settlement of the question has yet been acted upon, and no disposition shown in any quarter to secure proper action. It may be taken for granted that there will be the usual number of strikes and "lock-outs" next summer, for such things seem to be a part of the season with which they come. In most of the European countries the question has been satisfactorily settled by the creation of boards of arbitration, whose decisions in the great majority of instances, are respected and accepted by both workmen and employers. Such a system, modified and accommodated to our surroundings, would no doubt be worth something in this country—at least a trial.

The third proposition, the employment of girls and boys of tender years in large manufacturing establishments to do the work which should be done by men, is another feature of our industrial system worthy of careful consideration. In the West the percentage of children employed in manufacturing establishments is much larger than in the West or South, but fortunately the leading Eastern States make compulsory education a specialty, and children have an opportunity of resting for several weeks each year at public schools. In the

West, where compulsory education finds no favor, children who have employment in manufacturing establishments are not worked any harder, if as hard, as those similarly situated in the East—but no opportunity is afforded them of attending school. Their lives represent periods of unbroken drudgery, and their physical and mental development is sadly neglected.

Many of them, too, are called upon to do work which should be reserved for older hands, and all are made to work too many hours each day. A man may work ten hours out of every twenty four, but for a child the time is too long, and the rule is senseless and barbarous.

CANADA NORTH-WEST LAND COMPANY.

WHY THE SHARES HAVE DECLINED.

Capt. G. H. Wyatt, who takes a deep interest in matters connected with the prosperity of the Canadian North-west, and whose opportunities for acquiring information as to facts have been extensive, desires to give a word of explanation concerning the recent depreciation in value of the shares of the Duke of Manchester's Land Company. He says that in the placing of one third of the capital employed, that is £1,000,000, or about \$5,000,000, through Scarth, Osler and others in Toronto, and an equal amount in Montreal, a large number of persons made purchases beyond their means. Having no expectation that another call would be made in so short a time, as none of them had seen a prospectus, many persons actually paid from 8 to 12 per cent. to carry their shares over in hopes that they would be floated in London, and that they would sell at a profit, but their hopes were not realized. Men who, for example, having but a salary of a thousand dollars a year, took five hundred dollars' worth of shares, expecting to realize for them before the second call should be made, found themselves greatly embarrassed when the second call was made sooner than they had anticipated. The natural result of this is that so many shares have been offered for sale as to cause the depreciation referred to. Capt. Wyatt wishes to give this explanation to guard against the impression getting abroad that the depreciation had resulted in any way from a feeling of want of confidence in the quality of the lands or the certainty of the development of the country.—*Winnipeg Free Press*.

A SUBSTITUTE FOR PINE,

(From the *Ottawa Citizen*.)

The rapid disappearance of the pine forests before the lumberman's axe and the destructive fires which rage every summer, despite the efforts of legislative bodies to prevent them, have stimulated the inventive talent of our neighbors to supply a cheap material for building purposes, which will take the place of pine timber. Several inventions have been announced recently, of which three appear to be successful—paper mache, straw lumber and terra-cotta lumber. The first of these materials is largely used for the construction of houses in European countries, where its lightness, durability, cheapness and the facility with which it can be manufactured in any shape or size, commend it to builders. Straw lumber is manufactured in the Western States, where wood is scarce and straw is abundant. It is claimed that while it costs more per thousand feet than pine, its tensile strength and durability are greater, and it can therefore be manufactured into thinner boards than any kind of wood. As lumber becomes more scarce and expensive, this product will, no doubt, take its place in the western country. Terra cotta lumber is made from sawdust and a fine quality of clay known as kaolin. These materials are worked into a product as hard and incombustible as brick, yet so tough and porous that it can be sawed, bored and nailed like ordinary lumber. It is indestructible by fire or water, and can be produced at a remarkably low price. In New York it is being

used where fire-proof material is required, and as it is the best non-conductor of heat in the market, it is thought that it will be extensively used for sheathing of boilers, etc. If terra-cotta lumber can be produced at a profit at New York, it seems obvious that any enterprising man who would establish this new manufacturing industry at Ottawa, would amass a fortune. The sawdust from the immense mills at the Chaudiere, which has long been regarded as a nuisance, would furnish an unlimited supply of the principal material, while kaolin, which is scarce and dear in other parts of the continent, has been found in at least two places in the vicinity of the Capital. The patent is owned by the New York Terra-Cotta Lumber Company, whose factory is at Crow's Mills, near Perth Amboy, New Jersey.

THE SECRET OF REDUCED PRICES.

The *Northwestern Trade Bulletin* (American paper) says that the great difficulty that small manufacturers and men doing only a moderate business have in comprehending why it is that profits for some time back have been so small, and margins between the producing and selling points so slight, lies generally in the fact that there is not a sufficiently vivid common apprehension and appreciation of the great change which has taken place in our money markets in late years. As a nation, we have until recently been accustomed to high rates of interest. Every small investor, whether he loaned his savings or set himself up in industry or trade therewith, formerly obtained and still continues to look for far greater advantages from the use of his capital than are now obtainable. Whether the legal rate of interest was six or seven or ten per cent., as allowed in the different states, capital specially loaned or employed in business frequently brought much more than this. Now the situation is vastly different. The accumulated wealth of the country has made us rather a creditor than a debtor in our transactions with the other nations of the world, or at least placed us in such a position that we need not borrow unless we wish. The rates of interest in New York have declined until now they average the same as on the exchanges of London, Paris, Amsterdam and all the principal European cities, where three per cent. is about the rule for the use of capital in a large way for thoroughly safe employment. This is best shown as regards permanent investments in the fact that the Government 3½ per cents, liable at any time to be called in and paid, are now commanding a premium of 1½ to two, and on these bonds, used as a security for calls or short loans, capital can be obtained for temporary use at rates varying from two to three per cent. per annum. With this state of things in the money market, the large profits formerly obtainable in most lines of productive industry, are obviously impossible to-day, although it will be a long day from now before most of the men at present in business will cease to look back to what are called the "good old times," when money seemed to be made so much more easily than at present. Those who are inclined to indulge in these retrospective thoughts, however, are only too apt to forget that what was easily won was lost with equal facility, and that the harder earning now is accompanied by greater surety of holding.

VIBRATION IN BUILDINGS.

This is a trouble which manufacturing establishments often have to contend with. It is occasioned by the vibration of some other object, which strikes the key or note of the building—sort of responsive vibration, and is termed synchronous. An exchange in speaking on this matter, says: "At one of the print works at North Adams, Mass., a new and unoccupied building was found to vibrate in consequence of the puffing of a small steam engine sixty feet away. At Centredale, R. I., it has been necessary to change the height of the column of

water flowing over the dam, to prevent the excessive vibration of the adjacent mill. At Amesbury, Mass., out of eleven mills that are near the river, two vibrate when water in certain quantities flows over the dam, but the tremor can be wholly stopped by changing the flow of water. The most frequent cause of vibration is due to the running of the machinery, and it has repeatedly happened that a complete cessation has been obtained by increasing or lessening the speed at which the machinery is run. This is not always profitable or possible, and the fact that this vibration results in a loss of power, variously estimated at from ten to twenty per cent., is a strong argument in favor of the construction of one-story mills, which would necessarily vibrate much less than factories having a height of six or eight storeys. But it is not alone the loss of power that has to be considered, for in addition there is the straining of building and machinery, and in the manufacture of textile fabrics this unsteadiness causes a great breakage in the threads and a consequent damage to the material."

A CANADIAN'S VIEW.

A Canadian travelling in England writes his home paper some caustic remarks on English free trade. He says: "Two tenders, one for luggage and one for passengers, landed us on the docks. And then we had the delay of the customs, and an illustration of how free-trade England becomes excited over the importation of an extra plug of tobacco. It is a curious commentary upon the boasted free-trade principles of the Motherland that passengers landing from an ocean steamer have to open their baggage and subject it to the inspection of Her Majesty's customs officer. To put a duty on cottons and woollens which England manufactures is to subject the country that does it to the supercilious pity and contempt of English so-called political economists; but to put a duty on tobacco which Canada and the United States manufacture is the highest wisdom, and is quite in accordance with sound doctrine. The world is made up of paradoxes, and this is one of them."

Miscellaneous Notes.

An American exchange says:—A heavy advertisement once is more than quadrupled in value by a small card, published for a few months after, giving your address.

Persons who fancy that wetting coal increases the heat in the furnace may be interested to know that a series of tests was made recently at Bochum, Germany, to determine the values of wet and dry bituminous coal in making steam. Washed slack, holding 18 per cent. of water, and 9.9 per cent. of ash, evaporated 5.7 pounds of water per pound of fuel; while the same coal, with only 3 per cent. of water, made from 8 to 8.5 pounds of steam. Making due allowance for moisture by reducing to a standard of like quantities of coal free from moisture, there is found to be a direct loss, by using wet coal, of 14 per cent.

The effort to make a *mine* of a *prospect* is well commented upon in the following brief sententious declaration of an American exchange, which asserts that a mine is a developed property with ore in paying quantities, and has a real determined value. "A prospect is a location, with a possibility, or perhaps, probability, of some day being developed into a mine, and is worth just what you can get for it. Men are apt to think they have the first when in reality they have only the second, and put on a price accordingly. A mine is a big thing: prospects are plenty, and few people in this country are too poor to be without one or more.

As an instance of the abundance of money for investment in the United States, it may be mentioned that recently, in the Common Pleas Court at Philadelphia, no less than one hundred and twelve

petitions were presented by a Pennsylvania company for insurance on lives and granting annuities, asking leave to invest the moneys of the trusts in their hands, belonging to the estates represented by them, in United States 4 per cent. bonds. The sum embraced in these various estates amounts to over \$750,000. The petition was granted. The company had before tried in vain to procure mortgages at 5 or 4½ per cent, and therefore deemed it best that the money be placed in U. S. Government 4s. Rates are beginning to be now pretty well equalized between the great financial centres of Europe and America.—*Montreal Shareholder.*

Col. Sproat, Hon. L. Clark and R. Fuller, of Hamilton, Ont., started from Winnipeg recently to Prince Albert, on the business of the South Saskatchewan Railway. They have been fortunate enough at Ottawa to receive the usual land grant of 6400 acres per mile to aid in the construction of the line, and the intention is to commence operations at the western end next spring. Twenty miles of a line from Prince Albert will reach the river, whence steamboats can proceed from points lower down. Thus it is intended to supply a rail and water route for the people of that town before the closing of navigation in 1883. The gentlemen mentioned started out with the intention of purchasing a right of way, so that no obstacle will be in the way of the rapid construction of this railway. It is asserted that inside of three years the journey will be made by rail from Winnipeg to Prince Albert in 24 hours.—*The Winnipeg Commercial.*

SHIP-BUILDING ON THE CLYDE.

The Clyde ship-building trade in 1882 is stated, by the Glasgow *Herald*, to have been one of unusual activity. The returns present a total of 50,912 tons above the total constructed in 1881, and 129,500 tons in excess of 1874. Many of the Clyde builders are said to have more tonnage already ordered for 1883 than they have turned out during the past year, which speaks well for the prospects for 1883. There were launched

during the year by the various firms engaged in ship-building on the Clyde 291 vessels, of an aggregate tonnage of 391,934 tons, as against 261 vessels, and 341,022 tons during 1881. The use of steel in the construction of vessels is said to be on the increase. The majority of large steamers are said to be now built of that material. In 1879 the Clyde steel-built vessels amounted to 18,000 tons in 1880 they rose to 42,000 tons, and in 1881 to 66,609 tons. During the past year, the steel vessels numbered 60, of an aggregate tonnage of 108,254 tons. The use of wood for ocean-going steamers and vessels, on the other hand, is declining, only 2 being noted, and they small ones, in the entire list of Clyde construction in 1882. "As a matter of fact," adds the *Herald*, "the construction of 'wooden walls' is being monopolized by our American cousins." The vessels launched on the Clyde were made up as follows: 172 screw steamers, 37 sailing ships, 14 paddle steamers, 8 yachts, 21 barges, 5 barques, 2 war ships 2 hopper barges, 5 screw tugs, 10 steam launches, 4 lighters, 8 dredgers, and 3 cargo flats. The Tyne has a monopoly of tugs, and the east coast of England devotes its energies to cargo-carrying boats.

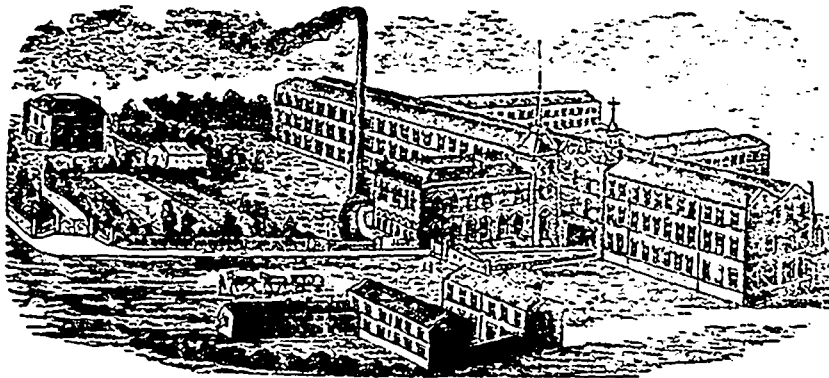
ONTARIO *Electrotype Foundry*

The Only Complete Foundry in
Canada.

ESTABLISHED 1870.

Merchants and Manufacturers wishing Business
Cuts will find it to their advantage to give
us a trial.

SMITH & VAUGHAN,
6 & 23 COLBORNE STREET, TORONTO



SAMUEL LAW & SONS, CLECKHEATON, - ENGLAND. CARD CLOTHING AND WIRE MANUFACTURER.

PATENTEES AND SOLE MAKERS OF

ROLLED DOUBLE CONVEX WIRE,

Especially adapted for Fine Spinning.

RUBBER and NANKEEN CLOTHING for Cotton Cards, VULCANIZED RUBBER for Worsted Cards, with tempered steel, or tinred wire.

G. M. CUMMINGS, 178 Devonshire Street, Boston, Mass., Agent for UNITED STATES AND CANADA.

The Canadian Bank of Commerce.
 HEAD OFFICE, . . . TORONTO
 Paid up Capital, \$6 000,000.
 Rest. 1,650,000

DIRECTORS.
 HON. WM. McMASTER, *President.*
 WM ELLIOTT, Esq., *Vice-President.*
 Noah Barnhart, Esq. James Michie, Esq.
 Hon. Adam Hope. T. Sutherland Taylor, Esq.
 George Taylor, Esq. J. o. J. Arnton, Esq.
 W. N. ANDERSON, General Manager.
 J. C. KEMP, Ass't General Manager.
 ROBT. GILL, Inspector.
 H. A. NICHOLSON, Assist Ins. ector.

New York—J. H. Goadby and B. E. Walker, Ag'ts
Chicago—A. L. DEWAR, Agent.

BRANCHES.

Ayr,	Guelph,	St. Catharines,
Barrie,	Hamilton,	Sarnia,
Belleville,	London,	Seaforth,
Berlin,	Lucan,	Simcoe,
Brantford,	Montreal,	Strathroy,
Chatham,	Norwich,	Thorold,
Collingwood,	Orangeville,	Toronto,
Dundas,	Ottawa,	Walkerton,
Dumville,	Paris,	Windsor,
Durham,	Peterboro,	Woodstock,
Galt,	Port Hope,	
Goderich,		

Commercial credits issued for use in Europe, the East and West Indies, China, Japan, and South America.
 Sterling and American Exchange bought and sold.
 Collections made on the most favorable terms. Interest allowed on deposits.

BANKERS.
 New York—The American Exchange National Bank.
 London, England—The Bank of Scotland.

H. F. IDDIOLS,
 MANUFACTURER OF
Fire & Burglar-Proof SAFES,
 Vault Doors,
 Wire Window Guards,
 Iron Shutters,
 Iron Railings, &c.

Express, Cash and Jewel Boxes made to order. Locks made and repaired, and Keys fitted. Gunsmithing executed in the best manner and with despatch.
 Also—Successor to J. B. Smthers, Electric and Mechanical Bell Hanger. Speaking Tubes fitted up at short notice.
 All Job Work in the above lines promptly attended to.

**9 WATERLOO STREET,
 SAINT JOHN, - - N.B.**

CANADIAN Pacific Railway Co.

The CANADIAN PACIFIC RAILWAY COMPANY offer lands in the Fertile Belt of Manitoba and the Northwest Territory for sale, on certain conditions as to cultivation, at

\$2.50 PER ACRE,
 payment to be made one-sixth at time of purchase, and the balance in five annual instalments with interest at Six per cent.

A Rebate of \$1.25 per Acre being allowed for cultivation, as described in the Company's Land Regulations.

THE LAND GRANT BONDS of the Company, which can be procured at all agencies of the Bank of Montreal and other Banking institutions throughout the country, will be

Received at 10 per cent. Premium on their par value, with interest accrued, on account of and in payment of the purchase money, thus further reducing the price of the land to the purchaser.

For copies of the Land Regulations and other particulars, apply to the Company's Land Commissioner, JOHN McFAVISH, Winnipeg, or to the undersigned

By order of the Board,
 CHARLES DRINKWATER,
 Montreal, May 10, 1882. Secretary.

“ELECTRIC LIGHT.”

The undersigned are prepared to receive and execute orders for furnishing the

“ARC” ELECTRIC LIGHT,
 With MACHINES of 5-LIGHT CAPACITY and Upwards.

The Lights will be fitted as required by the Board of Fire Underwriters, and will be supplied for thirty days on trial. If not then approved as satisfactory they will be removed and no charge made.
 Prices and further particulars on application.

H. SHACKELL & Co.,
 162 St. James St. - - - MONTREAL

W. & F. P. CURRIE & CO.
 100 GREY NUN STREET, MONTREAL.

Manufacturers of

SOFA, CHAIR & BED SPRINGS.
 A large Stock always on hand

Importers of

**DRAIN PIPES, VENT LININGS,
 FLUE COVERS, FIRE BRICKS,
 FIRE CLAY, PORTLAND CEMENT,
 ROMAN CEMENT, WATER LIME,
 PLASTER OF PARIS, &c**

The “ALKATINE,”

The only Preparation which extracts Stains from Marble (without friction.) and for cleaning the same.
 Extra Prize Awarded at Prov. Exhibition at Montreal, 1882, and endorsed by the best authorities in this City
 FOR SALE AT PROMINENT DRUG STORES.

The “READY CLEANER,”

For all house-cleaning purposes, and acknowledged the best preparation for cleaning Paint, Glass, Metal, &c.
 For sale at the more prominent Grocery and Housefurnishing stores.

LABORATORY AND OFFICE: 41 Radegonde Street, MONTREAL.
 RESPONSIBLE REPRESENTATIVES WANTED.

LOOM REEDS AND HARNESSSES

OF EVERY DESCRIPTION.

Patent Wire Heddles

Acknowledged Superior to all others by actual test.

FRAMES, RODS AND HOOKS,

SEPARATE OR COMPLETE.

Mending-Eyes and Twine

For Varnished Harnesses.

Very convenient for replacing broken or worn-out Eyes.

SLASHER & STRIKING COMBS OF SUPERIOR QUALITY

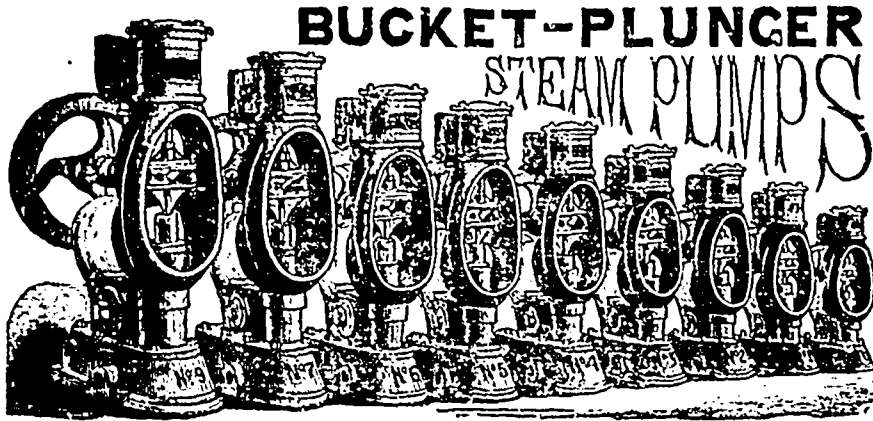
MANUFACTURED BY

D. C. BROWN,

LOWELL, Mass., U.S.A.

PRICES FOR ABOVE, OR ANY OTHER SUPPLIES, QUOTED ON APPLICATION.

Correspondence Solicited.



☞ Nine Regular Sizes Always on Hand!

PUMPS!

Suitable for all kinds of work, such as
 Pumping Hot Liquids,
 Coal Tar, Acids,
 Beer, Mash, Etc.

PERFECT PULLEYS

The Medart Patent

WROUGHT RIM PULLEYS,

☞ The Lightest, the Strongest, the Best Balanced, the Smoothest, and the Most Durable Pulley

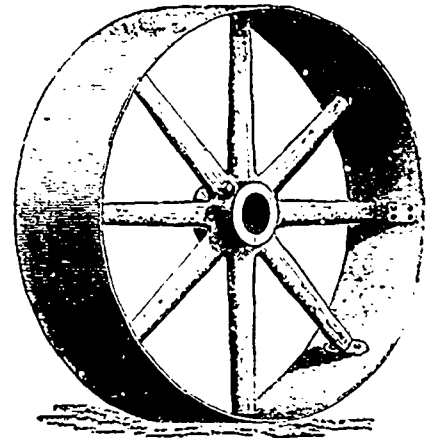
IN THE WORLD!

AGENTS IN CANADA—

MACHINERY SUPPLY ASSOCIATION
MONTREAL,

W. S. GARDNER, Manager.

W. H. NOLAN, Treasurer.



NEW BRUNSWICK
COTTON MILLS,
 SAINT JOHN, N.B.

☞ WM. PARKS & SON,
Cotton Spinners, Bleachers and Dyers,

Have been awarded "PRIZE MEDALS" for 1882—

At the TORONTO INDUSTRIAL EXHIBITION—

Four Silver Medals and Three Bronze.

At the MONTREAL EXHIBITION—

Silver Medal for "Best Exhibit."

At the KINGSTON PROVINCIAL EXHIBITION—

Silver Medal for Best Exhibit, and First Prize,

For their celebrated Beam Warps, Cotton Yarns, Carpet Warps,
 Ball Knitting Cotton, Manufacturers' Knitting Cottons and Apron
 Checks.

The smoothness and even finish of the goods, and brilliancy of colour,
 resulting from the use of the "St. John" Waters cannot be excelled.

AGENTS:

Wm. Hewett,
 11 Colborne Street,
 TORONTO.

Alex. Spence,
 Lemoine Street,
 MONTREAL.

HAMILTON
COTTON COMPANY

MANUFACTURERS OF

COTTONADES, DENIMS,
 TICKINGS,

BEAM WARPS of every variety.

HOSIERY YARNS of every description.

BALL KNITTING YARNS,

BUNDLE YARNS,

and

CARPET WARP.

First Prize, Silver Medals, for Beam Warps and Denims,
 Toronto, 1881.

Agents in Montreal,—

F. McELDERY & CO.,

Agents for Beam Warps,—

WINANS & CO., TORONTO.

THE CHATHAM MANUFACTURING CO.

(Limited.)

Capital, - - - \$100,000.

CHATHAM, ONTARIO, CANADA.

JOHN RICE, PRESIDENT.
W. M. NORTHWOOD, VICE-PRES.
D. R. VAN ALLEN, MANAGER.

W. M. BALL, ASSISTANT MANAGER
GEO. F. IRELAND, SREY. TREAS.
W. M. MILNER, SREY. WAGON WORKS.

Manufacturers of the Very Best

WHITE AND RED OAK,
WHITE AND BLACK ASH,
HICKORY, HARD & SOFT MAPLE.
WHITEWOOD, BALM, BASSWOOD,
AND ALL KINDS OF HARDWOOD
LUMBER AND WHITE OAK SHIP PLANK.

Also the Most Extensive Manufacturers of

Wagons, Carts & Sleighs, and Wagon Stock
In the Dominion of Canada.

Having ample capacity for turning out from 3,000 to 5,000 Wagons annually.

Wilkins' Metallic Belt Fastener.

IMPORTANT TO MANUFACTURERS,
MILL OWNERS,
AND ALL USERS OF BELTING.



A MOST PRACTICAL INVENTION,
SIMPLE, CHEAP,
EFFECTIVE AND DURABLE.

Lately Patented in the U. S.

A New Device for Joining together the Ends of Machinery Belting both Leather and Rubber of all Widths and Thicknesses.

Wilkins' Metallic Belt Fastener is made of fine tempered steel with small V-shaped teeth projecting from the plate at right angles. Being applied as shown in the foregoing cut with the teeth inserted into the material of the belt, and secured by copper or other rivets, it makes the strongest possible joint.

It has been thoroughly tested and is approved of, in preference to lace leather, belt hooks, and all other fastenings now in use. Send for Circular and Price List or sample package, METRIC size, which is suitable for most belts.

Manufactured in three sizes, by the Inventor, W. F. WILKINS, Adamsville, P.Q., to whom orders may be sent.

ALL ONTARIO orders should be addressed to

JOHN WILKINS,
47 Wellington St. East, Toronto.

MORRISON BROS.,

"Soho Machine Works,"
TORONTO.

Esplanade, near Union Station,

DEALERS IN

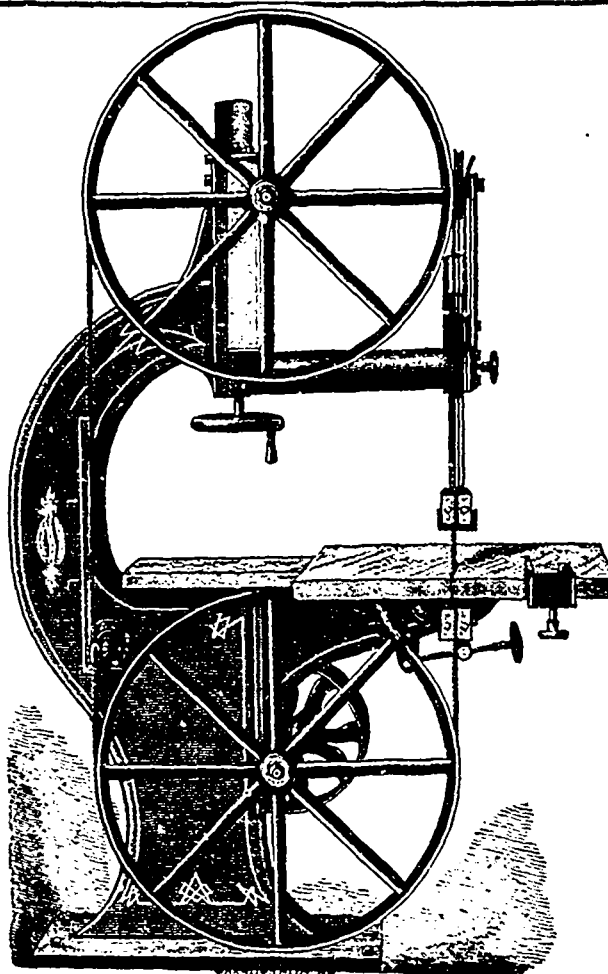
Iron and Wood Tools,
Mill Machinery,
Foundry Supplies,
Planing Mill Supplies,
&c., &c., &c.

MANUFACTURERS OF

Iron Tools,
Wood Working
Machinery,
Saw Mill Machinery,
Mill Work, &
Architectural Iron Work.

SEND FOR LISTS.

Mention this advertisement when writing.)



Machinery in Stock.

- 16 Iron Lathes, various sizes,
new and second hand.
- 5 Iron Planers, do.
- 10 Iron Drills, do.
- 1 Iron Shears.
- 1 Hydraulic Shears.
- 2 Milling Machines.
- 1 Gear Cutter.
- 2 Band Saws.
- 8 Scroll Saws.
- 5 Shapers.
- 4 Planers and Matchers.
- 4 Surface Planers.
- 1 Dimension Planer.
- 2 Daniel's Planers.
- 2 Buzz Planers.
- 7 Moulding Machines.
- 3 Tenoning Machines.
- 8 Mortising Machines.
- 10 Saw Tables.
- 4 Wood Lathes.
- 4 Dowel Machines.
- 2 Sand Papering Machines.
- Etc., Etc., Etc.

SEND FOR LIST.

Give particulars and price of any Machinery you have for sale



Tenders for Iron Stakes.

SEALED TENDERS addressed to the undersigned and endorsed "Tender for Iron Stakes," will be received at this office until the 20th of January next, for the following quantities of iron stakes for the Dominion Lands surveys, viz:

Twenty-five thousand stakes, small size.
One thousand stakes, large size.
Stakes to be made of three-eighth inch and inch and a quarter gas-pipe for small and large sizes respectively.

The above to be delivered at Regina, Assiniboia, on or before the 15th of April, 1883.

Specifications and samples can be seen at the Department of the Interior, Ottawa.
Each tender must be accompanied by an accepted bank cheque, made payable to the Hon. the Minister of the Interior, 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 fulfil his contract. 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,
E. DEVILLE,
Chief Inspector of Surveys

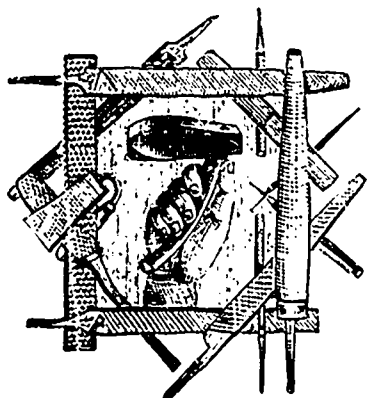
Department of the Interior,
Ottawa, 28th Dec., 1882.

FILES!

Sherbrooke File Works.

Established 1875.

J. H. CHAPMAN & CO.



ALL HAND-CUT FILES made from the Best Sheffield Cast Steel.
Warranted equal to the best Imported Brands.
Send for Price Lists and Discounts.
FILES RE-CUT.

SHERBROOKE, - QUE.

WM. CRABB & CO.,

Manufacturers of all kinds of

STEEL & PINS

AND PICKER TEETH.

ALSO

Hackles, Combs and Gills,

AND MILL SUPPLIES.

NEWARK - - - N. J.

THE BELL Telephone Co'y

OF CANADA.

-Manufacturers and Dealers in-

Telegraph & Electrical

INSTRUMENTS,

Electro-Medical Apparatus,

Fire Alarm Apparatus,

Magnets for Mills,

Electrical Gas Lighting Apparatus,

Burglar Alarms,

Hotel and House Annunciators,

Electric Call Bells, &c., &c.

For further particulars apply to

No. 12 HOSPITAL STREET,

MONTREAL.

J. C. DIXON & BROS.

MANUFACTURERS OF

FINGERING,

KNITTING

and

CARPET

YARNS.

HAMILTON

ONT

INTERNATIONAL PATENT AGENCY

FOR THE NEGOTIATION AND SALE OF PATENTS, ETC.

132 ST. JAMES STREET,

MONTREAL.

Patents sold and disposed of. Capital procured for developing inventions of merit, and Companies formed for working the same. Special attention given to the production and sale of manufactured patented articles.
H. SPUBENDORFF & CO.

MATHESON & CO.
ENGINEERS & BOILER MAKERS
ACADIA FOUNDRY
NEW GLASGOW - NOVA SCOTIA

PORTABLE & STATIONARY STEAM ENGINES & BOILERS
MILL & MINING MACHINERY

IMPORTERS OF STEAM PIPE, BOILER TUBES, IRON & BRASS FITTINGS, SAWS, BELTING & C.

SEND FOR PRICES OF PORTABLE SAW MILLS.

Boilers of either Iron or Steel,

IRON MASTS,

CASTINGS of Every Description.

F. Mumford & Sons

DARTMOUTH,

NOVA SCOTIA.

MANUFACTURERS OF

SHIPS' KNEES,

STEAM FORGING,

CAR AXLES.

MACHINE AND

BOILER WORKS.

VULCAN IRON WORKS,

OTTAWA.

ENGINE & MILL

MACHINERY

Of Every Description

MANUFACTURED.

GENERAL REPAIRS DONE.

THOS. STEWART, ALEX. FLECK, JR. STEWART & FLECK JR.

DAVID JONES'
 CELEBRATED
Cast Steel Table Cutlery!
 BEST CAST STEEL, Warranted.
 EDGE TOOL & CUTLERY
 WORKS,
WOODSTOCK, N.B.
 Awarded Diploma and Medal by the New Brunswick Government in 1871.

Patented Forge and Ship's Iron Works Manufacturing,
J. A. & W. A. CHESLEY,
 Corner of Hartwood and Strait Street East,
 Portland, N.B.
 MANUFACTURERS OF
 Shafting, Locomotive Frames,
 Ships' Iron Knees, Piston & Connecting Rods,
 Windless Necks, Frack, Engine & Car Axles,
 Windlass Breaks, Davits, Truss Bars,
 And all kinds of Hammered Shapes.
 Diploma awarded at New Brunswick Exhibition of 1880 for assortment of HEAVY FORGINGS, consisting of Locomotive Frames, Locomotive Engine Axles, Shafting, Ships' Iron Knees, &c., with Special Commendation for Excellence of Workmanship. Also Special Diploma for Hammered Ships' Knees.

H. W. LEBARON,
 (Successor to G. A. LeBaron.)
 MANUFACTURER OF
Superior Corn Brooms
 DUSTERS, MOP STICKS, ETC.
SHERBROOKE, QUE.

Woolen & Cotton Picker
 PROPER WOOLEN AND COTTON
 MILLS:—
 Having put up a Woolen and Cotton Picker on the Corner of Mary and Cannon-sts., Hamilton, am prepared to do all Custom Work that may be entrusted to me in a first-class manner, (samples of work always shown,) or will buy your Cuttings and give the Highest Price in Canada.
 Yours respectfully,
JOHN QUARRIER.

D. MORRICE & Co.,
 CANADIAN MANUFACTURERS,
MONTREAL & TORONTO.
HOCHELAGA
 Brown Cottons,
 Canton Flannels,
 Yarns and Bags.
VALLEYFIELD
 Bleached Shirtings,
 Wigans and Shoe Drills.
STORMONT
 Colored Cotton Yarns,
 Ducks, Tickings, Checks, &c.
 Knitted Goods, Tweeds, Flannels, &c., &c.
 The Wholesale Trade Only Supplied.

ROYAL NAVY
 TOBACCO WORKS.
 PARIS, ONT.
N. P. BENNING
 MANUFACTURER OF
 Royal Navy and other Standard and Fancy Brands
 —OF—
PLUG TOBACCOS.
 F. IKESATER, Representative.

THOS. L. KAY,
 MACHINIST
PATTERN & MODEL MAKER.
 —MANUFACTURER OF—
HAMILTON PRESSING MACHINE.
 All kinds of General Jobbing and Repairing.
 158 KING ST. WEST, HAMILTON

JOHN KIMBLE,
Wool : Puller,
 —AND DEALER IN—
 Wool, Wool Skins, Ox & Cow Hides,
 GOLF SKINS, &c.
ST. JOHN, N.B.
 Correspondence Solicited.

BOOTH & SON,
Coppersmiths and Metal Spinners.
 Distillers', Brewers', Confectioners', House-furnishers' and Plumbers'
COPPER and BRASS WORK
 In Stock or Made to Order.

W. B. SCARTH. R. COCHRAN
SCARTH, COCHRAN & CO.
 MEMBERS OF THE
Toronto Stock Exchange,
 Buy and sell Canadian and American Stocks on margin or for cash.
 Also Hudson Bay Stock and American Mining Stocks.
 32 and 34 Toronto Street,
TORONTO.

D. McLAGHLAN & SONS,
ST. JOHN, N.B.
 Manufacturers of all kinds of
BOILERS!
 And Ships' Tanks

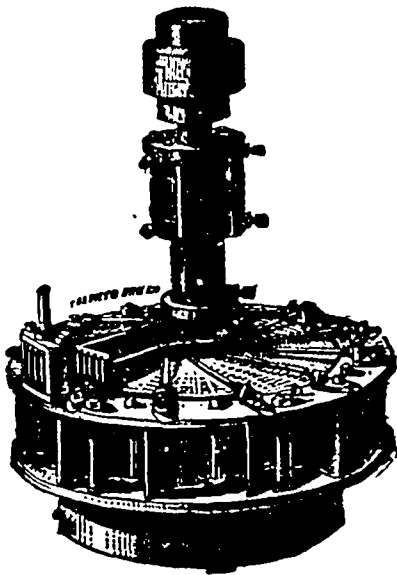
JAMES PETT,
 MANUFACTURER OF
 Colored Sheepskin Mats,
 Hearth Rugs, and
 Drum Heads.
HAMILTON, ONT.
 Office and Factory, WRIGHTINGTON ST. NORTH,
 Below Barton Street

Lamp Goods.
YOUNG & BROTHER
 Manufacturers of
 Coal Oil, Chandeliers, Brackets, &c.
 And Wholesale Dealers in
GENERAL LAMP GOODS.
 SALESROOMS: FACTORY:
 John-street North. 133, 137 King Wm.-st
HAMILTON, Ont

JOSEPH JOHNSTON,
 Manufacturer of and dealer in
Sawn & Planed Lumber,
 SHINGLES, LATH,
 And all kinds of
DIMENSION TIMBER
Bridge Timber & Dock Plank a Specialty.
RICHMOND ROAD, NEPEAN,
 Skoad's Mills P.O. OTTAWA, Canada,

FILES.
THE GRAHAM FILE WORKS,
 ESTABLISHED 1874.
 THOMAS GRAHAM, Proprietor.
HAND CUT FILES
 Made from the best Refined English Cast Steel, Warranted, Equal to the Best Imported Brands.
 Orders Solicited from Importers and Large Dealers
 OFFICE & FACTORY, 150 FRONT STREET EAST, TORONTO
 (Late of 15 Sherbourne Street)
 Files Re-cut. Send for Price Lists and Discounts.

15,000 IN USE.



**JOSEPH HALL
MANUFACTURING CO.,**
(ESTABLISHED 1851.)
OSHAWA, ONT.

Manufacture the celebrated
**James Leffel's Double Turbine
Water Wheel,**

All sizes of Stationary and Portable En-
gines and Boilers, Shafting, Pulleys,
Hangers, Gearing, Latest Improved
English and American Gangs.

The Stearns' Circular Saw Mills with Frac-
tional Head Blocks an King of Dogs—this
Mill is acknowledged in the United States and
Canada to be superior to all others—also a very
complete Circular Saw Mill with Iron Frame
and cheaper Head Blocks for Small Mill. Saw
Mill, Flour Mill, Paper Mill and Water Works
Machinery a Specialty.

For further particulars address

Joseph Hall Manufacturing Co.,
OSHAWA, ONTARIO.

ONTARIO

File Works.

G. E. HEMING,

(SUCCESSOR TO S. BEECH & CO.)

Files Re-cut and Warranted
Equal to New.

WORKS AND OFFICE:

Corner Cannon and Mary Streets,
HAMILTON, ONT

C. W. BROWN,

Manufacturer of all kinds of

Machine Screws!

Metal Punching done to Order.

530 CRAIG STREET,

MONTREAL.

James Leslie

Manufacturer of

CARD CLOTHING,

LOOM REEDS, &c.,

Dealer in

COTTON & WOOLLEN

MILL SUPPLIES,

OFFICE AND FACTORY:

Junction of Craig and St. Antoine St's.,

WEST END MONTREAL.

P. O. Box 996.

A. & T. J. DARLING & Co.,

—WHOLESALE—

HARDWARE

SPECIALTIES,

CUTLERY & "BLACK DIAMOND"
FILES, "DARLING AXES,"
"BABBIT METAL."

TORONTO.

THE

DARTMOUTH

ROPE WORK CO.,

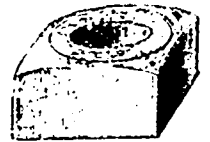
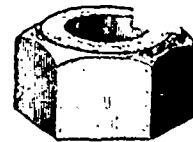
Manufacturers of all descriptions of

CORDAGE

AND OAKUM,

HALIFAX,

NOVA SCOTIA.



ONTARIO NUT WORKS
PARIS, Ont.

Brown & Co.,

Manufacturers of all sizes of

HOT PRESSED NUTS,
Square and Hexagon.

CANADA LAND-PLASTER Co

PARIS, - - Ont.

GILL, ALLAN & CO.

R. M'DOUGALL & CO.

MANUFACTURERS OF

CRESTING PUMPS

AND

WINDMILLS

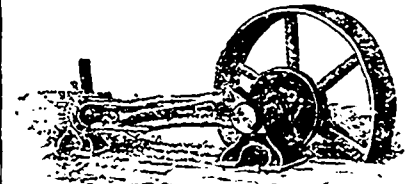
AND ALL KINDS OF

SMALL CASTINGS.

Excelsior Iron Works,

GALT, Ont.

Mention THE MANUFACTURER in ordering.



BUCKEYE
AUTOMATIC CUT-OFF ENGINE,
The most perfect Engine made in Canada.
MILL MACHINERY.
MILL SUPPLIES,
SHAFTING AND HANGERS,
BOLTING CLOTHS,
all numbers.

For information, address

R. WHITELAW,

Oxford Foundry,
WOODSTOCK,
Ont.

ROBT. W. KING & CO.,

GEORGETOWN, ONT.,

MANUFACTURERS OF

POWER KNITTING MACHINERY.

TOMPKINS' CIRCULAR KNITTER,
TOMPKINS' CONE WINDER,
SCOURING ROLLERS.

Shafting, Hangers, Pulleys, &c.,

—FOR—

Knitting Factories & Woollen Mills.

AMERICAN HEAVY Oak Tanned Leather Belting

RUBBER BELTING,

RUBBER HOSE,

RUBBER PACKING,

LINEN HOSE, and

COTTON HOSE

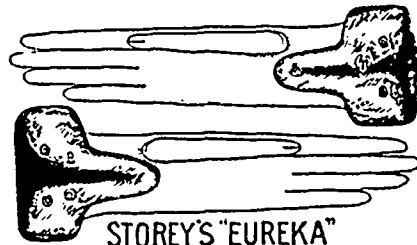
A full and complete stock always on hand.

Write for prices and discounts.

T. McILROY, Junr.,

Warehouse—10 & 12 King St. East, Toronto.

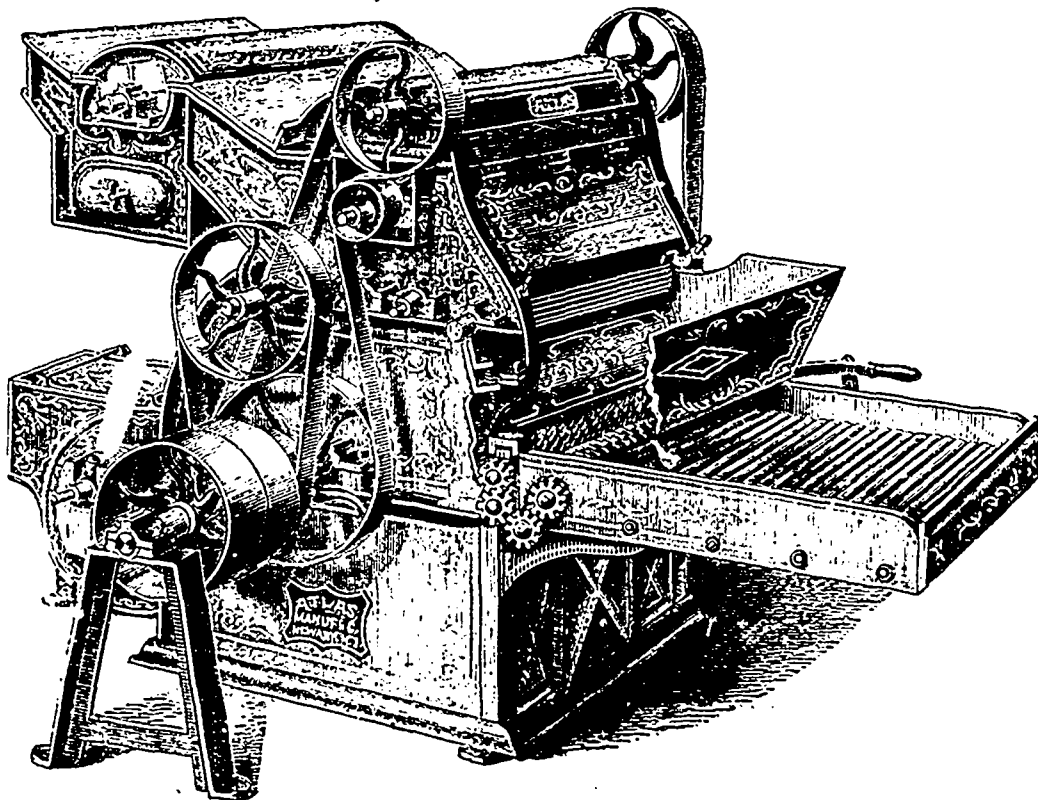
P. O. Box 556.



STOREY'S "EUREKA"
SPRING GLOVE FASTENER, PAT.

W H. STOREY & SON, Glove Manufacturers, ACTON, ONT

The quality of our Goods is unsurpassed.



Double and Single BURRING MACHINES

for First and Second
Breakers, superior to any
others made in the
UNITED STATES.

Patent Steel Ring
Feed Rollers,
Waste Cards,
Cylinders, &c.

PARKHURST'S PATENT DOUBLE CYLINDER BURRING PICKER,

For Picking, Burring and Dusting all grades of Wool. Recent Improvements, including a beater attached to the spout for the purpose of most thoroughly mixing and Cleaning the Wool without injury to the staple, make it superior to any other machine now in use.

Manufactured only by

GOLDIE & MCULLOCH, AGENTS.
GALT ONT.

THE ATLAS MANUFACTURING CO.,
NEWARK, N.J.

Industrial and Trade DIRECTORY.

Asbestos.

FENWICK & SCLATER, Montreal.—Asbestos packing, paints, and roofing.—Send for lists. Files, &c.

Agricultural Implements.

A. S. WHITING MANUFACTURING CO., Cedar Dale, Ont.—Manufacturers of scythes, forks, hoes, etc.

WELLAND VALE MANUFACTURING CO.—Lock No. 2, St. Catharines, Ont., Canada—Manufacturers of axes, scythes, forks, hoes, rakes and edge tools.

Bobbins and Spools.

THOMPSON & CO., Sherbrooke, P. Q.—Manufacturers of all kinds of Bobbins and Spools for Cotton and Woollen Mills—Special patterns made to order from sample.

Bridge Builders.

TORONTO BRIDGE CO., Toronto.—Builders of Steel and Iron, Railway and Highway Bridges.

Chemicals.

JOHN MCARTHUR & SON, Montreal.—Offer at closest figures chemicals required by soap-boilers, oil refiners, paper-makers, and by manufacturers of woollens, cottons, leather, &c.

Coal and Wood.

P. BURNS Offices cor. Front and Bathurst Sts., Yonge St. Wharf 51 King St. East, 532 Queen St. West Toronto.—Wholesale dealer in Coal and Wood. Telephone communication between all offices.

Cotton Brokers.

M. WRIGHT, next Exchange Bank, Hamilton, Ont.—Sole agent in Canada for Ordway & McGuire, cotton factors, Nashville, Tenn.

Cotton Mills.

HAMILTON COTTON MILLS CO., Hamilton.—Denims, tickings and yarns.

Dye Stuffs.

WULFF & CO., sole agents for Canada for Wm. Pickhardt & Ruttroff (B. Anilin and Soda Fabrik Sp. P.), New York. Full supply of Anilin dyes, &c.

EMIL THOURET & CO., Montreal.—Agents for K. Oehler, Offenbach O. M., Germany.

JOHN MCARTHUR & SON, Montreal.—Supply of best quality at closest prices. Every description of coloring materials required by manufacturers of woollens, cottons, silks, paper, leather, &c. Are sole agents in Canada for the celebrated aniline dyes of A. Porrier, Paris.

LYMAN BROTHERS & CO., Nos. 71 and 73 Front Street East, Toronto.—Dye Stuffs of all kinds for Woollen and Cotton Manufacturers; Warps, Shuttles, Bobbins, Card Clothing etc., etc.

Edge Tools.

R. T. WILSON, Dundas, Ont.—Manufacturer of axes, picks, mattocks, grub hoes and railway contractors' supplies.

WELLAND VALE MANUFACTURING CO.—Lock No. 2, St. Catharines, Ontario, Canada.—Manufacturers of axes, scythes, forks, hoes, rakes and edge tools.

Emery Wheels.

HART EMERY WHEEL CO., Hamilton.—Manufacturers of every description of Emery Wheels and Emery Wheel machinery.

Engines and Boilers.

G. C. MORRISON, Hamilton.—Engines, boilers, steam hammers, etc.

J. H. KILLEY & CO., Hamilton, Ont.—Manufacturer of economical, variable, cut-off, high pressure, and condensing engines. Improved boilers, portable engines for thrashing, saw-mills, hydraulic and hoisting machinery.

JOHN DOTY, Toronto.—Engines and boilers of every description and capacity, also shafting, pulleys, and hangers for factories.

THOS. WILSON, Dundas, Ont.—Manufacturer of stationary and portable steam engines, boilers and machinery of every description—cotton mill calenders, hosiery steam presses and propeller wheels, all sizes.

Files.

PHENIX FILE CO.—Hand-made files and rasps. No machines in our factory.—Fenwick & Sclater, Agents, Montreal Anchor Brand. FILE & SPRING CO., Cote St. Paul, Montreal.—All kinds of files and springs. Files recut. Sole manufacturers of Spaulding's patent concave spring.

G. OUTRAM & SON, Dominion File Works, Montreal.—Manufacturers of every description of files and rasps.

Fire Hose.

FENWICK & SCLATER, Montreal.—Canvas hose, plain and rubber lined, for fire departments and factories.—Write us before purchasing elsewhere.

Furniture.

JACOB ZINGSHEIM, Hamilton, Ont.—Manufacturer of Parlour and Bedroom Sets, Center Tables, &c.

Gas Engines.

JOHN DOTY.—Manufacturer in Canada of the new "Otto" silent gas engine, two, four, and seven horse-power and larger.

Glove Manufacturers.

W. H. STOREY & SON, Acton, Ont.—Manufacturers of fine gloves and mitts in every variety and style.

Harness and Trunks.

S. & H. BORBRIDGE, Ottawa.—The largest saddle, harness, and trunk manufactory combined in Canada. Wholesale and retail. Offer the trade and the public generally the largest assortment of goods in their line in the Dominion at lowest prices.

Hoist and Elevator Manufacturers.

LEITCH & TURNBULL, Central Iron Works, cor. Rebecca and Hughson Streets, Hamilton, Ont.—Patent safety hand and power elevators.

Hubs, Spokes and Bent Goods.

F. W. HORE & SON, Hamilton, Ont.—Manufacturers of hubs, spokes, rims, shafts, poles, sleigh and cutter stuff, etc.

Iron Works.

CANADA SCREW CO., Dundas.—Manufacturers of iron and brass screws, bolts and rivets.

COWAN & CO., Galt.—Manufacturers of every description of wood working machinery.

DOMINION BOLT CO., 139 Front St. East, Toronto.—Manufacturers of every description of bolts, hot pressed nuts, railway spikes, bridge, boiler and iron rivets.

H. R. IVES & CO., Montreal.—Hardware manufacturers and founders; iron ruling and ornamental iron work a specialty.

HAMILTON BRIDGE & TOOL CO., Hamilton.—Iron railway and highway bridges and iron working machinery.

MCKECHNIE & BERTRAM, Dundas.—Machine tools and wood working machinery.

MONTREAL MALLEABLE IRON WORKS, St. George Street, Montreal.—Manufacturers of malleable iron, steam, and gas fittings.

PILLOW, HERSEY & CO., Montreal.—Manufacturers of cut nails, horse shoes, railway and pressed spikes, tacks, brads, &c.

THE OSHAWA MALLEABLE IRON CO., Oshawa, Ont.—Manufacturers of malleable iron castings; also patent screw wrenches.

SMITH'S FALLS MALLEABLE IRON WORKS, Smith's Falls, Ont.—Manufacturers to order of agricultural, carriage, and other malleable iron castings.

ST. THOMAS RIVET WORKS (Brent & Sherman),—Manufacturers of boiler, tank, and cooper rivets, plate nails, wrought spikes, cotter pins, spring keys, &c.

COLBORNE FOUNDRY AND STEAM MILLS (J. C. Scripture & Bro.), Colborne, Ont.—Manufacturers of mill gearing and agricultural implements, and stoves of all kinds.

B. W. RICHARDS, Brockville, Ont.—Manufacturer of selected Norway iron and Lake Superior copper rivets and burs, kettle-ears, &c.

VICTORIA FOUNDRY (N. S. Blasdell & Co.) Ottawa.—Engine and mill machinery of every description manufactured. General repairs done.

HARE & CO., Oshawa.—Manufacturers of plows, land rollers, cutting boxes, and all kinds of small castings.

T. PEPPER & CO., Guelph, Ont.—Manufacturers of the celebrated Anchor brand and duplex carriage and waggon axles. Duplex axles are to be had at all the principal hardware stores in the Dominion.

GARTSHORE CAR WHEEL MANUFACTURING CO.,—Works, corner Front and Cherry Streets, Toronto.—Manufacturers of car, tender, and locomotive wheels, wheels for street railways, construction cars, &c, also chilled castings of every description manufactured from the best brands of charcoal iron.

Knife Works.

THE WHITEMAN & BARNES MANUFACTURING CO., St. Catharines, Ont.—Manufacturers of mowing and reaping machines, knives, sections, guard plates, cutting apparatus complete, spring keys and cutters, etc.

Knitting Mills.

S. LENNARD & SONS, Dundas.—Manufacturers of plain and fancy hosiery.

OSHAWA KNITTING WORKS, Oshawa.—Manufacturers of cotton and woollen hosiery, Cardigan and ladies' jackets, scarfs, gaiters, carriage rugs, mens' and childrens' jersey shirts, &c.

Leather Belting.

DOMINION BELT AND HOSE CO., Toronto.—Oak tanned belting, lace leather, etc.

Machine Brushes.

ULLEY'S BRUSH WORKS, 74 Bleury St. Montreal.—Machine brushes for cotton factories, flour mills, &c. Machine brushes of every description a specialty.

Machinists.

SHEPARD & HOYER (late with J. Doty) 26 and 28 Colborne Street (in rear of the Ontario Electrotype Foundry), Toronto.—Machinists and Engineers. All kinds of machinery made and repaired. Jobbing promptly attended to.

Manufacturers' Agents.

MCKENZIE & NOLAN, Montreal, Manufacturers' Agents, Customs Brokers. Samples of manufactured goods intended for sale in this market and correspondence solicited.

Marble and Stone.

ARNPRIOR MARBLE WORKS (P. T. Somerville), Office and Work near the C.P. Railway Station, Arnprior, Ont.—Wholesale dealer in Arnprior marble "Howe" granite and Renfrew granite.

Oils.

JOHN MCARTHUR & SON, Montreal.—Afford best value in pure olive and lard oils, also in all other leading lines of vegetable, animal, and mineral oils for factory use. Invite special attention to their celebrated crown diamond "engine" and "machinery" oils.

Paints.

A. RAMSAY & SON, St. Lawrence White Lead and Color Works, Office, to Inspector Street; Factory, Inspector, corner College Street, Montreal.—Specialties—Ramsay's patent white, twice the body of lead, mixed paints, car colors, white lead all qualities. Plate glass imported to order, and in stock all sizes.

Paper Box Manufacturers.

ALBERT GIBB, 122 King William Street, Hamilton, Ont.—Manufacturer of all kinds of paper boxes.

R. BELL & Co., 96 and 98 Foundling Street, Montreal—Manufacturers of every description of paper boxes, paper bags, tea caddies, egg cases, &c.—Orders solicited.

Paper Manufacturers.

LINCOLN PAPER MILLS CO., Merrittton Ont.—Manufacturers of every variety of paper paper bags and flour sacks.

WM. BARBER & BROS., Georgetown—Manufacturer of book and fine papers.

Patent Agents.

H. STUBBENDORFF & CO., 132 St. James Street, Montreal.—Patents sold and disposed of. Special attention given to the introduction and sale of manufactured articles.

Patterns and Patents.

JOHN HENDRY, corner of James and Rebecca Streets, Hamilton, Ont.—Pattern and model maker, solicitor of patents.

Pot and Pearl Barley Mills.

JOHN QUARRIER, Corner Mary and Cannon Streets, Hamilton, Ont.

Saw Manufacturers.

R. H. SMITH & CO., St. Catharines.—Manufacturers of all kinds of saws, plastering trowels, straw knives, etc. Sole manufacturers for the Dominion of Canada of the celebrated "Simond's Saw."

SHURLY & DIETRICH, Galt, Ont.—Manufacturers of circular and cross-cut saws, plastering trowels, etc.

Scales.

C. WILSON & SON, 45 Esplanade Street East, Toronto.—Manufacturers of the Improved Wilson Scales. Designers to the Government. Received 29 first prizes, medal and Governor-General's grand diploma.

Scythe Snaths.

THE DOMINION SNATH COMPANY, Sherbrooke, Que.—Manufacturers of Patent Swing Socket, and every variety of Scythe snath.

Silk Mills.

CORRIVEAU SILK MILLS CO., Montreal.—First manufacturers in Canada of black and colored dress silks, ribbons, handkerchiefs, &c.

Stereotypers, Engravers, &c.

F. DIVER & CO., Toronto.—Electrotypers and stereotypers. Designers and engravers on wood.

Stoves.

LARKER BROS., Toronto.—Furnaces, ranges, stoves, marble and marbled mantles. A large assortment of fireplace grate always on hand. Agents for McClary Manufacturing Company, London.

Wire Works.

B. GREENING & CO., Hamilton, Ont.—Manufacturers of wire ropes, cloth and general wire workers.

MAJOR & GIBB, 646 Craig St., Montreal.—Manufacturers and importers of wire cloth and wire goods and dealers in railway and mill supplies.

TIMOTHY GREENING & SONS, Dundas, Ont.—Manufacturers of the strongest description of steel wire cloth, malt kiln floors and general wire weavers.

Wooden Goods.

C. T. BRANDON & CO., Toronto.—Have special facilities and machinery for the manufacture of all kinds of wooden articles. Correspondence solicited.

R. McLAREN, Jr., 63 College St., Montreal.—Manufacturer of Sharpe's patent safety oil cabinets; also, refrigerators, children's carts, waggons, sleighs and general woodenware.

Woollen Manufacturers.

J. ROUTH & CO., Cobourg.—Woollen Manufacturers.

JOHN WARDLAW, Galt, Ont.—Manufacturer of Scotch fingering, wheeling and knitting yarns.

Wools and Cotton Warps.

WINANS CO., Toronto.—Dealers in wools and cotton warps.

Special Notice.

Societe Postale Francaise

DE L'ATLANTIQUE.

BRAZILIAN MAIL SERVICE.

The magnificent new Steamship "Ville de Paris" will sail from Halifax U.S., on arrival of the mails, about the 25th December, for St. Thomas, W.I., and all ports in Brazil. Splendid passenger accommodation.

ANTWERP, HAVRE & CANADIAN MAIL SERVICE.

The magnificent new steamship the "Ville de Montreal," 3,000 tons, Captain Roussel, will leave Antwerp, calling at Havre, for Halifax N.S., direct, on the 15th January, 1883. Close connection with Rotterdam and Amsterdam. Through bills of lading granted.

For rates of freight and passage, apply to Kennedy & Hunter, Antwerp; A. Pondavigne, Havre; or to,

WM. DARILEY BENTLEY,

Agent General,

317 St. Paul Street, Montreal

And at West India Wharf, Halifax, N.

Woollen Machinery

FOR SALE.

The entire contents of a complete two-set Woollen Mill, consisting of

- 40 INCH CARDS, 240 SPINDLE JACKS,
- 10 BROAD CROMPTON LOOMS,
- 6 NARROW CROMPTON LOOMS.

together with Pickers, Shears and Finishing Machinery, all comparatively new and in first-class condition, will be sold entire with shafting, pulleys and hangers, or in lots to suit purchasers.

ALSO FOR SALE SEVERAL

FIRST BREAKER AND FINISHER CARDS from 40 to 60 inches wide,

- CUSTOM ROLL CARDS,
- PICKERS, DUSTERS, GIGS,
- SHEARS, FULLING MILLS,
- PRESSES, LOOMS,

and a large assortment of other Cotton, Woollen, Worsted and Knitting Machinery, all of which are warranted in No. 1 condition, much of it nearly new.

O. B. ARNOLD,

No. 5 & 7 DEY ST.,

NEW YORK.



INTERCOLONIAL RAILWAY.

THE GREAT

CANADIAN : ROUTE !

To and from the Ocean.

For Speed, Comfort and Safety

IS UNSURPASSED!

Pullman Palace Day and Sleeping Cars on all through Express trains. Good Dining Rooms at convenient distances.

NO CUSTOM HOUSE EXAMINATION.

Passengers from all points in Canada and Western States to Great Britain and the Continent should take this Route as hundreds of miles of Winter Navigation are thereby avoided.

IMPORTERS AND EXPORTERS

Will find it advantageous to use this route, as it is the quickest in point of time, and the rates are as low as by any other. Through freight is forwarded by FAST SPECIAL TRAINS; and the experience of the last two years has proved the Intercolonial route to be the quickest for European freight to and from all points in Canada and the Western States.

Through express trains run as follows;

GOING EAST.	GOING WEST.
Leave Toronto 7.12 a.m.	Leave Halifax 2.45 p.m.
Montreal 10.00 p.m.	St. John, N.B., 7.25 p.m.
Quebec 8.10 a.m. next day.	Arrive Quebec 8.20 p.m. next day.
Arrive St. John, N.B., 7.30 a.m., day after.	Montreal, 6.00 a.m. day after.
Halifax 12.40 p.m., day after.	Toronto 10.52 p.m., day after.

The Pullman cars which leave Montreal on Monday, Wednesday, and Friday run through to Halifax without change, and those which leave Montreal on Tuesday, Thursday and Saturday, run through to St. John, N.B., without change.

All information about the route, and also freight and passenger rates, will be given on application to

R. ARNOLD, Ticket Agent, Cor. King and Yonge Streets, 72 Yonge Street, and 20 York street, Toronto.

R. B. MOODIE, Western Freight and Passenger Agent, 93 Rossin House Block, York-st., Toronto.

GEORGE TAYLOR, General Freight Agent, Moncton, N.B.

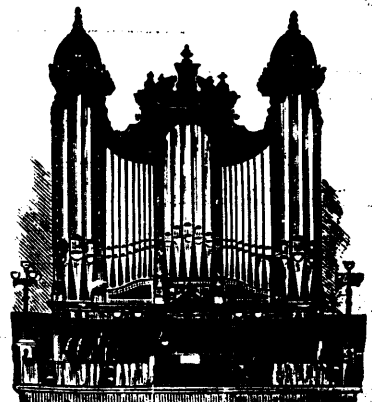
A. S. BUSBY, General Passenger and Ticket Agent, Moncton, N.B.

D. POTTINGER, Chief Superintendent, Moncton, N.B.

Railway Office, Moncton, N.B., Nov. 28, 1882.

ESTABLISHED 1836.

S. R. WARREN & SON, CHURCH ORGAN BUILDERS TORONTO.



Still take the lead in the manufacture of FIRST-CLASS INSTRUMENTS, and have great pleasure in referring to the many large organs of their manufacture in all parts of the Dominion. Correspondence solicited. Specifications and all information gladly given on application at Factory & Warehouses, cor. Wellesley & Ontario Sts.

GAS FITTERS' SUPPLIES.

Pipe Stock and Dies and Taps,

PIPE WRENCHES,

Pipe Cutters, Pipe Vises,

GAS PIPE AND FITTINGS,

RICE LEWIS & SON,
TORONTO.

H. W. BUTTERWORTH & SONS,

York & Cedar Streets, Philadelphia, Pa.

MANUFACTURERS OF

**DYEING, DRYING, AND
FINISHING MACHINERY**

For COTTON, WOOLLEN, and WORSTED GOODS.

DRYING MACHINES, with cylinders of tinned iron or copper, for PRINT WORKS, BLEACHERIES, &c.

DYEING, SIZING & DRYING MACHINES

For COTTON (CHAIN) WARPS.

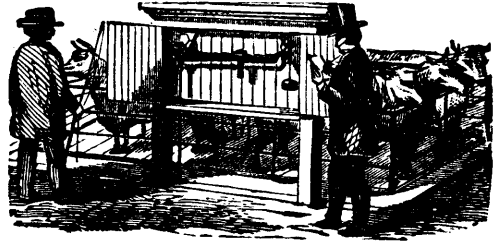
TENTERING MACHINES,
With clamp chain for Lawns, Gingham, &c.

TENTERING MACHINES,
with Pin Chain for Woollen and Worsted Goods.

SINGEING, WASHING, CRABBING,
DYEING, DRYING & FINISHING
MACHINERY, for Worsted Dress Goods

PHOTOGRAPHS AND PRICES SENT ON APPLICATION.

IMPROVED WILSON SCALE.



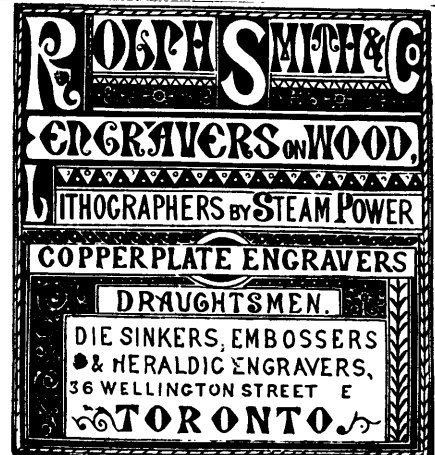
HAY SCALES, COAL SCALES, CATTLE SCALES,
PLATFORM AND COUNTER SCALES.

THE ONLY SCALES WORTH BUYING.

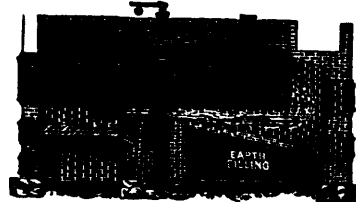
Mention this paper when writing for Price List,

C. WILSON & SON,

45 Esplanade Street E., Toronto.



JARVIS PATENT FURNACE
FOR SETTING STEAM BOILERS.



Economy of Fuel, with increased capacity of steam power. The same principle as the SIEMENS' PROCESS OF MAKING STEEL, utilizes the waste gas with hot air on top of the fire. Will burn all kinds of Waste Fuel without a blast, including screenings, wet peat, wet hops, sawdust, logwood chips, slack coal, &c.

Over 1,800 boilers set this way in the United States and Canada.

Send for Circular.

JAS. R. ANNETT, Agent,

110 KING STREET (P. O. Box 33), MONTREAL, QUE.

Please mention this paper.

ECONOMY IN FUEL!

\$3.50 per day is saved in fuel and a gain of 50 horse-power by applying

"SMITH'S PATENT FURNACE
TO YOUR BOILERS.

"THE WILSON GAS PRODUCER,"

for firing every description of Furnace and Boiler; also for Melting Pig-Iron, Heating Steel Ingots, Puddling, Re-heating, Annealing Iron, Steel, Copper and Brass Wire, &c., &c.

E. C. HOPKINS,

148 St. James Street, Montreal,
SOLE AGENT FOR THE DOMINION.



OUR CIRCULAR SAWS,
Manufactured by the
SIMONDS' PATENTED PROCESS,

Having given such general satisfaction, owing to their uniformity of temper, we have at a great expense applied the principle to the tempering of Cross-Cut Saws, and hereafter our Cross-Cut Saws will be etched and known as such. Those who like a nicely tempered Saw will do well to give them a trial.

Ask your Hardware Merchant for the Simonds Saw, and see that it is etched as such.

R. H. SMITH & Co.,
St. Catharines Ont.

SOLE MANUFACTURERS FOR DOMINION OF CANADA.

CANADA MARBLEIZED SLATE WORKS,
HAMILTON, ONT.



MARBLE
AND
MARBLEIZED
SLATE
MANTELS.

J. M. DURWARD,
SUCCESSOR TO R. HANGER.

JOHN WILSON, GLASGOW. JAS. R. WILSON, MONTREAL.

THOMAS ROBERTSON & CO.,
MONTREAL & GLASGOW.
ESTABLISHED 1855.

IRON, TIN PLATE
AND GENERAL
METAL MERCHANTS.

SOLE AGENTS FOR

"Gartsherie" and "Eglinton" Pig Iron,
"Lonsdale" Hematite Pig Iron,
"Dalzell" Celebrated Steel Boiler Plate,
"Luken's" Charcoal Boiler Plate,
'Fox, Head & Co.'s" Tank and Boiler Plate.

MANUFACTURERS OF

Wilson's Celebrated Lap-Welded Boiler Tubes,

Made from Iron or Steel. Also

WROUGHT IRON TUBING

For Gas, Steam and Water.

CONTRACTORS FOR

Cast Iron Pipes

For Gas and Water Works

Supplies for Engineers, Railways, Boiler Makers, Steam
Fitters and Plumbers.

THE GALT FOUNDRY

ENGINE and MACHINE WORKS,

FOR

Wood Working Machinery,

Engines, Boilers,

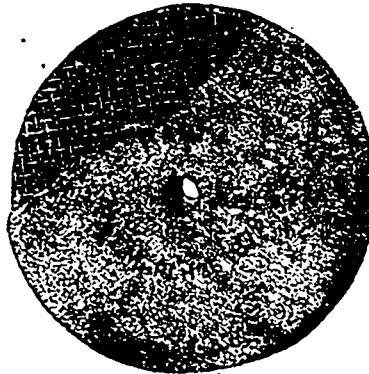
Shafting,

Hangers and Pulleys,

etc., etc.

ADDRESS—

COWAN & Co.,
Galt, Ont.



HART
Emery Wheel

COMPANY
(LIMITED),

Hamilton, Canada.

MANUFACTURERS OF

EMERY WHEELS

FOR

FOUNDRIES, MACHINE SHOPS,
SAW MILLS, & PLANING MILLS.

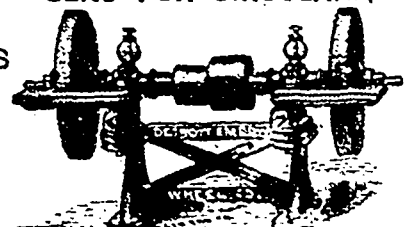
SEND FOR CIRCULAR.

Also

MANUFACTURERS

—OF—

EMERY WHEEL
MACHINERY.



Illustrated Price List Sent on Application

BARB
Wire Fencing

FIRST PRIZE

Awarded us at Exhibition held in Montreal, September, 1887, and SILVER MEDAL for the machine used in the manufacture of same

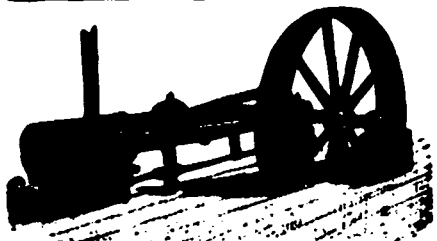
"THE MANITOBA"



Four-Point Barb Galvanized Steel Wire Fencing. Send for Circular and Price List.

THE CANADA WIRE CO.,

H. R. IVES, President & Manager.
Queen-st., MONTREAL.



Smith-Elkins
Manufacturing Co'y,
MACHINISTS,
IRON & BRASS FOUNDERS.

Engines and Boilers of the best materials and latest designs a specialty.

Board Mills,
Shingle and Clapboard Machines,
Waterwheels,
Plows, Cultivators,
Furnaces, Registers,
Mill Gearing of every description.

SHERBROOKE, - - QUE.

DOMINION BOLT CO.,

Front and Sherbourne Sts., Toronto.

FIRST PRIZE DOMINION EXHIBITION, 1886.

CARRIAGE BOLTS:

- **Best Best "N"**—Made from square and round Norway iron, the latter by patented machinery, ensuring a like full square to that made from square iron.
- **Best "N"**—Made from Best Staffordshire iron, same finish as "Best Best," and annealed.
- **Common "N"**—Made from Best Staffordshire iron, with black heads, the latter only being edged.
- Railway Track Bolts.**
Railway Track Spikes.
Quality not exceeded by any, native or foreign.
- Hot Pressed Nuts.** Machine forged Nuts.—None better. In a few weeks there will be another machine in operation for small sizes of Cold Pressed Nuts. Rivetting Bars, and very soon there will be in operation an improved machine for
Flough Bolts. Boiler Rivets.
No better and no greater variety can now be had elsewhere of
Fancy Head Bolts
for Carriage Builders and others, which always afford satisfaction to buyers.
Machine Bolts. Coach Screws.
Brace Bolts. Tire Bolts and Rivets.
Wagon Shoe Bolts. Elevator Bolts.
All of best quality and annealed, not second to any imported
Stove Bolts. Stove Rods. Rivets.

ESTABLISHED 1820.

EAGLE FOUNDRY.

GEORGE BRUSH,

14 TO 24 KING AND QUEEN STREETS, MONTREAL.

Makers of

STEAM ENGINES,
STEAM BOILERS,
HOISTING ENGINES,
STEAM PUMPS,
CIRCULAR SAW MILLS,
BARK MILLS,
SHINGLE MILLS,
ORE CRUSHERS,
MILL GEARING,
SHAFTING,
HANGERS AND PULLEYS,
HAND AND POWER HOISTS FOR WAREHOUSES, &c., &c.,

and Agent for

"Water's" Perfect Steam Engine Governor, and
"Heald & Sisco's" Centrifugal Pumps.

DOMINION

CARD CLOTHING WORKS,

York Street, Dundas.

W. R. GRAY & SONS,
PROPRIETORS.

MANUFACTURE EVERY DESCRIPTION OF

Card Clothing and Woollen Mill Supplies.

WIRE ROPE

BEST BRANDS OF CHARCOAL IRON.
BESSEMER, SIEMENS-MARTIN,
AND CRUCIBLE CAST STEEL.

MANUFACTURED BY

GREENING & CO., HAMILTON, CANADA.

S. LENNARD & SONS

DUNDAS,

Manufacturers of Plain and

FANCY HOSIERY

To the Wholesale Trade
Only.

REPRESENTED BY

MR. S. DAVISON,

16 Colborne St., Toronto.

AND

MESSRS. B. HENDERSON & CO.,

146 McGill St., Montreal.

C T. BRANDON & CO.,

MANUFACTURERS OF

WOODEN GOODS,

Central Prison, Toronto.

Washboards, Express Waggon, Step Ladders,
The Domestic, Saw Frames,
The Crown, Mops,
The Rattler, Kitchen Ware,
Union Churns, Clothes Horses, Turned Goods.

Send for our Illustrated Price List.

CONTRACT WORK A SPECIALTY.

WM. PICKHARDT & KUTTROFF,

(B. Anilin & Soda Fabrik Sp. -)

NEW YORK.

Anilin Dyes,

Azo Dyes,

Eosin, Etc.

SOLE AGENTS FOR CANADA:

WULFF & CO.

32 St. Sulpice Street,

MONTREAL.

WINANS & CO.,

CHURCH STREET, TORONTO.

FOREIGN AND DOMESTIC **WOOL.**

WOOL for Medium Tweeds,
WOOL for Coarse Tweeds,
WOOL for Knives,
WOOL for Medium Flannels,
WOOL for Union Goods of all kinds
WOOL for White Blankets,
WOOL for Horse and Shanty Blankets,
WOOL for everything.

All selected personally by our Mr. HEN. WINANS, now in Europe for the winter.

The Cheapest Wool in Canada
Knitting Wool a Specialty.

Sole Agents Hamilton Cotton Company's First Prize (Silver Medal) Cotton Wools, no other make can compare with them. Every variety at lowest Mill prices. Perfect satisfaction guaranteed. Empty bears returnable at value.

All second hand Woollen Machinery for sale in Canada, on our books.

Send for printed list, no charge.