

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.

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

Additional comments:/
Commentaires supplémentaires: Some pages are cut off.

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

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



PUBLISHED
SEMI-MONTHLY.

The only Newspaper devoted to the Lumber and Timber Industries published in Canada

SUBSCRIPTION
\$2.00 PER ANNUM.

VOL. 6.

PETERBOROUGH, ONT., MARCH 1, 1886.

NO. 5.

FORESTRY AND FOREST PRODUCTS.

The importance of "Forestry and Forest Products" is beginning to receive that recognition to which the subject is entitled. We have received from Mr. Douglas, the well-known bookseller of Edinburgh, a copy of a work recently published by him, bearing the title quoted above. The volume, edited by Messrs. John Rattray, M. A., B. Sc., and Hugh Robert Mill, B. Sc., is the result of the public spirit displayed by the promoters and managers of the Exhibition of Forestry held two years ago in Edinburgh. Prizes were offered by them for essays on matters connected with the science it was their purpose to illustrate and advance. Out of the material supplied by the successful competitors, the editors of this work have succeeded in producing one of the most valuable contributions to the literature of wood-craft, in all its ramifications, that perhaps was ever laid before the public. The volume is alike comprehensive and succinct, and will, when a few corrections have been made, undoubtedly come to be regarded as invaluable text-books by the students in that School of Forestry which, sooner or later must inevitably be established. The subjects dealt with are numerous and varied in their nature, and have deep interest not alone for botanists and experts in a knowledge of trees, but for those who are concerned in the development of the timber trade, and industries immediately connected with that important branch of commerce. The work comprises essays on the formation of nurseries and plantations, the utilization of forest products, the supply of timber, the ravages of forest insects, the present and prospective sources of the timber supplies of Great Britain, the growth of teak in India and Burmah; paper-making from wood, and a "monograph" on the natural history and cultivation of the lacquer tree, by a Japanese gentleman who is chemist to the Imperial Geological Survey of his native land. Bearing in mind the fact that a Committee of the House of Commons has been appointed to collect facts and opinions, and that a scheme will probably be submitted to Parliament during the present session with a view to insure systematic instruction in scientific and practical forestry, it will be admitted that the appearance of this volume is singularly opportune.

With reference to the present and prospective sources of timber supplies of Great Britain, Mr. Robert Carrick, of Gefle, Sweden, has much to say in an elaborate essay on the subject. On one point of peculiar interest he observes:—

"Hewn and sawn yellow pine is a most valuable description of timber, and when of the finest grades is unrivalled for many purposes, such as house building and other wood-work. It has been largely and continuously imported into this country for over fifty years, and a fully equivalent substitute will be difficult to find. The White Sea red wood approaches nearest to it in point of quality, but the latter, in addition to its smaller dimensions and greater knottiness, has other defects that diminish its value in comparison with the former. The quantity of hewn yellow pine received at the principal port from which we receive our supplies (viz., Quebec) was, in 1876, about 19,243,733 cubic feet, whereas, in 1883, it was but 11,108,557 cubic feet; or taking average for the years 1871 to 1875 inclusive, it exceeded 14,000,000 cubic feet per annum; while for the last five seasons, 1879 to 1883 inclusive, it was but 8,412,651 cubic feet. On the other hand the supply of yellow pine deals to Quebec has not decreased in so pronounced a manner, for although in 1876 it reached 273,363 loads, and only 117,979 loads in 1883, the average of the last five years was 187,187 loads, against 238,731 loads on an average for the five years ending with 1880. Such figures, in conjunction with the history of the quantity exported of late years, bear abundant evidence to the fact that a diminished quantity is available for export to Europe."

Another matter of the highest moment is dealt with in this essay. In discussing the duration of the yellow pine forests of Canada in relation to the timber supply of this country, the writer remarks:—

"The question is fast becoming one of but secondary importance to our timber consumers, as far as the lower qualities of the wood are concerned. In spite of the fact that prices have been steadily rising in Canada for the growing wood, and that a diminished supply has at the same time been brought to this country, the prices obtainable here at present, and for some years past have left no commensurate profit to the exporters. The conclusion, therefore, to which a diminution in export points is: that, except for a small quantity of prime yellow pine, a substitute for which cannot be found in Europe, Great Britain is economically unable to pay a price equivalent to what the United States can do, and must consequently be content to see the latter country intercepting an ever-increasing proportion of this fine wood. To make this clear, reference may be made to the attempt which was made in connection with the last census of the American Republic to ascertain the quantity of mature yellow pine then existent in that country and ready for the axe. Professor Sargent, who had charge of this part of the census, reported in 1882 in these words: 'The entire supply of white pine growing in the United States, and ready for axe, does not to-day greatly, if at all, exceed 80,000,000,000 feet; and this estimate includes the small and inferior trees which, a few years ago, would not have been considered worth counting. The annual production of this timber is not far from 10,000,000,000 feet, and the demand is constantly and rapidly increasing.'

It is a reproach to the "Old Dominion" if the neglect of a due regard for the requirements of statistical science charged against the officials by Mr. Carrick, is really founded in fact. On this point he says:—

"As far as we are aware, no systematic attempt has been made by the Canadian authorities to reduce to figures the available quantities of mature spruce now growing in New Brunswick, Nova Scotia, and the immense forest belt before referred to, which lies between the Ottawa river basin in the west and Mingan in the east. All these districts, however, according to Mr. Joly, late Premier of the Province of Quebec, contain immense quantities of spruce, and it seems likely that there will be sufficient for many years' home consumption, unless it be swallowed up by the United States, after the people of that territory have used up all their own yellow pine and spruce."

In further support of the opinion expressed regarding the abundance of timber, the essayist observes:—

"The immense area of nearly primeval forest possessed by British Columbia must also be referred to, because, although not directly of importance to the timber consumers of this country, it will in the future doubtless relieve the North of Europe from what would otherwise become a very heavy demand from our fellow-subjects beneath the Southern Cross. That the requirements of Australia have already reached large proportions will be apparent from the fact that, with the exception of Great Britain, no country is now buying more Norwegian planed wood than the colonies of that continent. The most important tree in British Columbia is the Douglas fir."

It is gratifying to learn from an essay on "Paper Pulp from Wood, Straw and other Fibres, in the Past and Present," by Mr. W. J. Stonhill, of London, editor of the *Paper Trade Review*, there are grounds for believing that in British possessions where the cultivation of sugar no longer forms a profitable branch of industry, another is likely to supersede it. He says:—

"There is still a probability of the British sugar-growing possessions being of value as a field for the supply of paper stock. The fact that in 1884 capital is forthcoming to re-open the industry in Demerara—it failed in Jamaica—should remind the paper trade of the publicly expressed opinions of Thomas Routledge. In his early career, paper-makers were just as dubious concerning the possibilities of esparto, yet its advantages are admitted on all sides, and but for its very low price in 1883 many mills would never have been able to tide over the almost ruinous sudden advance in the cost of bleach. Fortunately esparto fell about £2 per ton (quoting from Ido and Christie's circular), equalizing £1 per ton of paper produced, whereas the increased cost of bleach per ton of

paper" was a shade less, even at the high 'scare price. This fact should induce paper-makers to be less reluctant to experiment in any direction where there is a large and regular supply to neglected raw material containing a good fibre."

The economic aspect of the subject, has not been strongly dwelt upon by the writer, on the ground that it must be considered, when the question of the future staple material for paper comes under review. Mr. Stonhill's concluding remarks on this branch of industry, however, deserve careful attention:—

"If the British paper trade is not to suffer severely, many authorities assert that it will be necessary to fall back upon some raw material of home growth, which can be supplied cheaply and in any quantity. Straw, and straw only, meets the requirements of the case. By Lennings' new chemical process for treating straw, the details of which are not made public, although its efficacy is vouched for by satisfactory authority, paper can be produced from straw which is hardly to be distinguished from that manufactured from cotton rags; and it can be made from about £12 a ton, not taking into account the saving produced by recovery of the chemicals employed. This process is now being adopted at a large Kentish mill, and if the published cost of manufacture be correct, it cannot be doubted that the system must introduce great and most beneficial changes in the British paper trade."

Further notice of this useful and compendious volume must stand over to a future day. Members of the timber trade, and the public at large, however, will gather from a perusal of the foregoing remarks upon, and extracts from, its pages, that the work is of considerable importance as an aid to the correct understanding of forestry in all its ramifications.—*Timber*.

Art and Design in Manufactures.

At the late meeting of the Dominion manufacturers' association it was decided to offer three silver medals for competition in the art schools of the Province, for the purpose of encouraging art design in relation to manufactures. At a meeting of the executive committee of the association, held yesterday afternoon, the schools and subjects were decided upon. The first medal will be given for competition among the students of the Toronto school of art and design; subject, best design in wall paper. The second medal will be offered to the Hamilton school of art and design; subject, best design of wrought-iron fence suitable for public buildings. The third medal will be offered to the London school of art and design; subject, best design of mantel and over mantel in wood.—*Toronto Mail*.

The Pullman Car Works pay \$600 per thousand feet for rosewood.

THE HENDERSON LUMBER CO. Limited.

DAVID H. HENDERSON, President; NORMAN HENDERSON, Vice-President; CHAR. H. WALTERS, Sec.-Treas. Dealers in, and manufacturers of, Dimension and Bridge Timber, Sawn Lumber, Clapboards, Shingles and Lath. Packing Cases and Boxes a Specialty.

OFFICE, MILLS AND YARDS: 312 to 330 William Street, MONTREAL, and at ROXTON FALLS, Q.

H. WILLIAMS, SLATE & GRAVEL ROOFER

MANUFACTURER OF AND DEALER IN

Tarred Felt, Roofing Pitch, Sheathing and Building Papers, Carpet and Rosined Waterproof Paper, Ready Roofing, &c. All orders promptly attended to at LOW PRICES.

H. WILLIAMS, 4 Adelaide Street East, Toronto

The Ontario Canoe Co, Limited.

PETERBOROUGH, ONTARIO,

Manufacturers of all kinds of PLEASURE, FISHING and HUNTING



CANOES

Patent Cedar Rib Canoes, Patent Longitudinal Rib Canoes, Bass-wood Canoes, Folding Canoes, Paddles, Oars, Tents, etc., etc.

Gold Medal, London Fisheries Exhibition, 1883.

J. Z. ROGERS,

Send 3 Cent Stamp for Illustrated Catalogue. President and Managing Director. Canoes for Lumbermen, designed to carry any amount of goods and chattels and strongly built, made to order on short notice.

HUGH GIBSON,

MANUFACTURER OF

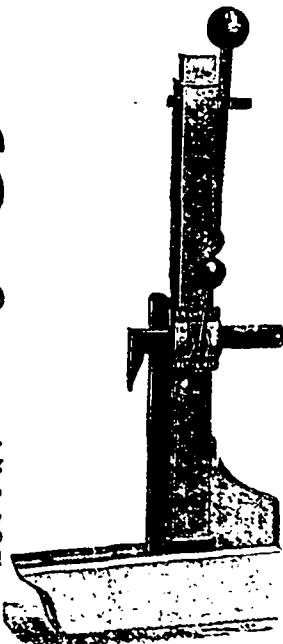
KNIGHT'S PATENT "EXCELSIOR"

SAW MILL DOGS

The Sawyer's Favorite

For Holding Logs upon a Saw Mill Carriage while being Sawn into Lumber.

These Milldogs I guarantee to give satisfaction in every case. They will hold a frozen log as well as a soft one, for cutting Scantling, Square Timber, &c. These Dogs cannot be excelled, I sell them all on their own merits, give ten or fifteen days trial, and then, if not satisfactory, return them to my order, as I have no agents on the road this year, I will sell them at a reduced price. Send for Circular and price list.



Manufactured by HUGH GIBSON, CHATHAM. EXCELSIOR DOG.

RENEW YOUR SUBSCRIPTION TO

THE CANADA LUMBERMAN.

THE UPPER OTTAWA.

The directors of the Upper Ottawa Improvement Company propose collecting for the year 1880 the following rates of toll:—

Table listing toll rates for various timber types and locations including Des Joachims Boom, Fort William Boom, Melons Chenail Boom, Passing Lapasse Boom, Mississippi Chenail, and Deschenes to Head of Hull Slide.

Table listing toll rates for Red and white pine, tamarac, spruce and hemlock, round or flatted, over 17 ft. and under 25 ft. long.

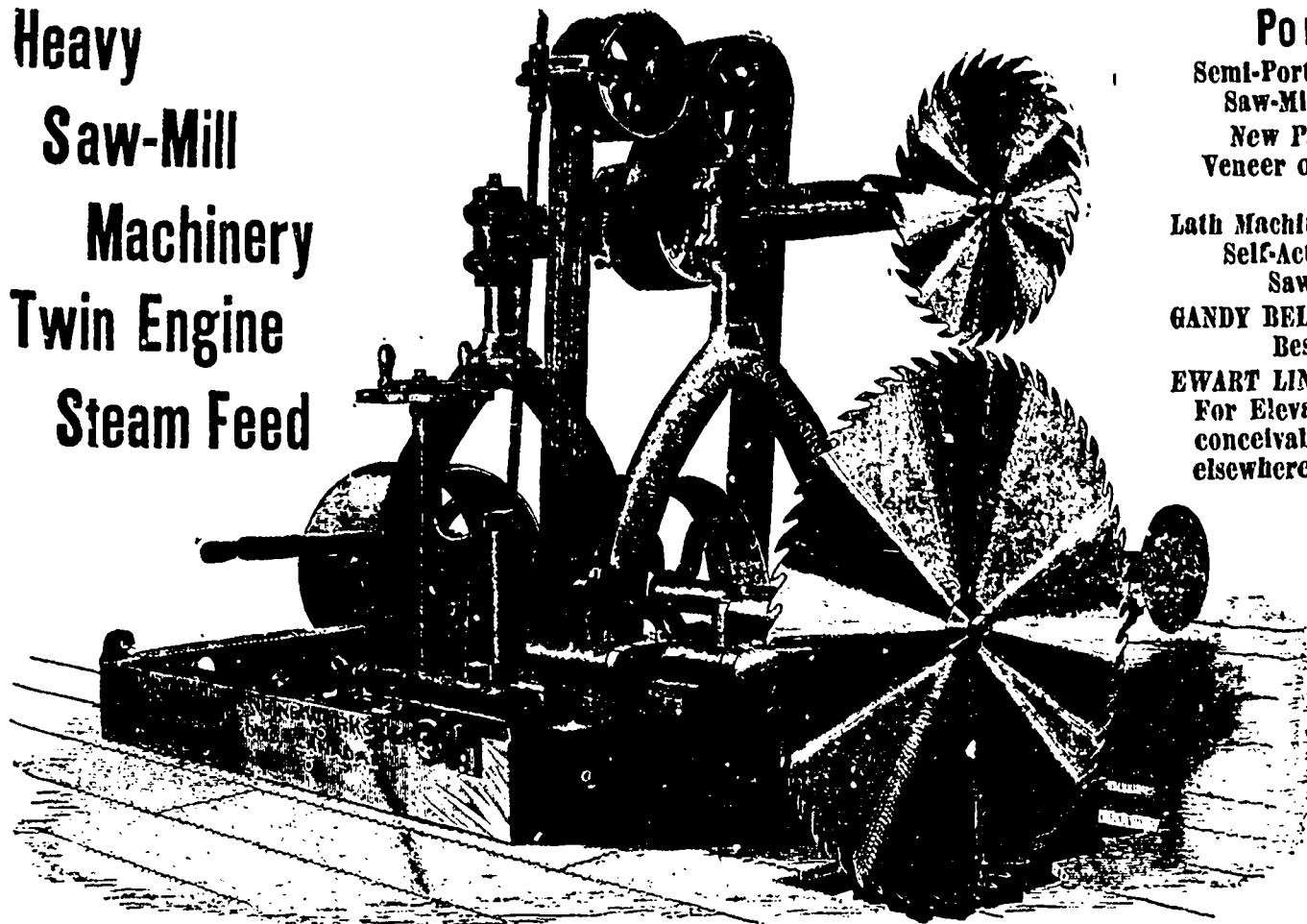
The directors also propose collecting for the year 1880, the following boom working expense rates:—

Table listing boom working expense rates for various locations including Des Joachims Boom, Fort William Boom, Allumette Boom, Melons Chenail Boom, Mississippi Chenail, and Deschenes to Head of Hull Slide.

This tariff of tolls, etc., was approved by His Excellency the Governor General in Council, in pursuance of the Act 38 Vic., chap. 77 (1875), on Feb. 17th.

SLEEPLESS NIGHTS, made miserable by that terrible cough. Shilo's Cure is the remedy for you. For sale by Ormond & Walsh, druggists, Peterborough. had been a miserable sufferer from dyspepsia and tried all known remedies and the best of medical skill of my acquaintance, but still grew worse, until unable to eat anything without great suffering, or do any kind of work. I began to think there was no hope for me, and that I must surely die; when like a drowning man catching at a straw, I determined to give McGregor's Speedy Cure a trial, I at once began to improve so rapidly that in two months I was as well as I had ever been in my life.—Wm. Evers, Leamington. Sold by J. McKee, druggist. Free trial bottles.

**Heavy
Saw-Mill
Machinery
Twin Engine
Steam Feed**



Portable Saw-Mills.

Semi-Portable Direct Action Clipper Saw-Mills. Saw-Mill Machinery. New Pattern Shingle Machine. Veneer or Cheese Box and Basket Stuff Machine. Lath Machines. Log Turners. Self-Acting Box Board Machine. Saws of all the different styles. **GANDY BELTING—** Best and Cheapest Main Driver. **EWART LINK BELT—** For Elevating and Conveying of every conceivable kind about a Saw-Mill and elsewhere.

SAW GUMMERS, \$8.0 up.

SAW SWAGES.

Knight Patent Mill Dog.

Send for New Saw-Mill Circular No. 14 and New Saw and Saw Furnishing Circular No. 12.

EASTERN OFFICE:

**154 St. James St.,
MONTREAL.**

Waterous Engine Works Co., Brantford and Winnipeg

THE FIRST TRADE RETURNS OF THE NEW YEAR.

The *Timber Trades Journal* of Feb. 13th says—Whatever our hopes, our wishes, and opinions in social life, in politics, or in trade, if the outside facts that bear upon them will not adapt themselves to our theories, we have only to reconcile our ideas to the facts, and make the best we can of them.

It was a pleasant anticipation that the new year was to bring us a revival of business. The depression in trade was to run itself out with the termination of 1885; and even men of experience and authority did not refrain from committing themselves publicly to the opinion that the dawn of a better day was already breaking ere Christmas was well over our heads. "But what do we see now? Here are the Board of Trade returns for January before us, and they tell the same tale of retrogression that was related of every month last year. 1885 was a year of declining trade all through in comparison of '84, which itself was also a year of lessening business. But this January, in our over sea trade, is nearly £8,000,000 behind the January preceding. There is, however, one redeeming point in our estimation, and that is that the bulk of the falling away has been in the import department, which has receded in the past month to the extent of £6,685,966. In our exports, if we include foreign goods re-exported, the decrease is stated to be £1,181,637, total £7,867,603. Now, the average decrease per month, last year, in the value of our exports, amounted to nearly £1,700,000, so that there was an appreciable check to the rate of diminution at least to the extent of £500,000 last month, which is a sort of peg to hang a hope upon. And it is rather strengthened by the concurrent circumstance that the volume of business done almost as great as it was twelve months ago, but at a less valuation on account of the retrogression of prices; from which it may also be argued that, although the difference is chiefly taken from the wages of the people, it does not necessarily follow that they are thereby thrown out of employment. If the same quantity of goods is turned out, the same labour, or nearly so, must be employed to produce them. The misfortune is that the workmen have to submit to smaller pay. Hence the strikes and lock-outs. When

an employer finds that he is undersold in the market, though at his current price he is hardly, to use a homely phrase, "getting salt to his porridge," he has no alternative but to reduce his expenditure or to close his works, and the ready money outflow being that which pinches hardest, it is very naturally that which demands the first restraining hand.

A constantly diminishing banking account, where a less and less balance is found with every returning Monday morning, is a state of things that cannot be trifled with, and one of the best masters in the world, like that poor unfortunate Frenchman, M. Watrin, at Deczeville, the other day, may, in trying to save his firm from ruin by reducing the people's wages, become all at once as unpopular as if he had been a persecutor of them all his life long.

In 1884 and 1885 our oversea trade decreased by about £77,000,000, export and import together that is in two years. But last month it decreased by £7,867,603 which is at the rate of £94,000,000 for one year. So that to those who regard our imports as the best standard of prosperity this will be a severe shock, as five-sixths of the deficiency falls to the import department. On the other hand it may be fairly argued that a suspension of certain imports is a good ground for hope of a trade revival. When stocks here are allowed to run off before a general replenishing comes forward, a sharp reaction may be expected to occur, as the demand will then exceed the supply, and we can always get goods from abroad when we want them. But the decay of our export trade offers us no consolation of that sort. Foreign tariffs and foreign competition with our manufacturers are increasing as shown by the statistics, which are constantly coming forward in the daily papers and the leading class journals.

The importation of Spanish lead, for instance has almost annihilated that industry at home, as we learn from *Iron*, of last week, and now it seems they are sending hematite pig-iron into Staffordshire cheaper than it can be manufactured on the spot. They have long been accustomed to send the ore here, which is really good, and was used both in the Welsh and in the north-country iron works; but in a crude form of manufacture they now presume to dare our ironmasters to compete with them, and the result may be most disastrous to that

important British industry. Not very long ago it will be remembered by buyers, that lead was worth over £20 per ton, and 30,000 people were said to be employed in our lead mines. But the Spaniards found by a few experiments that they could send their lead into England at a much less price, and do well by it, and the export from Spain to this country now is near 100,000 tons per annum. The most of our lead mines are consequently closed, while those remaining are said to be working without profit and employing but few people. It is true the price has come down to £12 15s., and the Spanish lead is offered at 10s. less. But, wherever the benefit of this reduction goes, the consumer shares very little of it, as the price of lead-pipes and fittings in the building trade appears to be very little reduced; so that a whole British industry is asserted to have been sacrificed for no appreciable benefit to the public at large. And the worst is that the iron trade is now threatened in much the same way, as the cases are precisely similar. For it is self-evident that if the Spanish ironmasters can offer rich hematite pig cheaper than the Cleveland masters, there is nothing to prevent them from turning that branch of the iron trade away from our mining districts, just as they have done with their lead.

We shall only remark on this topic that with so many people clamouring for employment among us, it must be well worth the careful study of our rulers to try and find how best such a state of things may be remedied, and that with as little delay as possible. The timber trade may have some trifling benefit from the cheapening of lead, but it is likely to be much more damaged by the ruin it has brought on a standard national industry.

To sum up the Board of Trade general returns, they amount to this: that our imports for January were valued at £25,501,030, as against £31,903,003 last year as same date; and our exports were to the amount of £17,212,781, against £18,109,525 in 1885.

Of the timber trade importation at this early period it is not customary to take much account, but as we have to exhibit the returns as they come out, a few words may not be inappropriate on introducing them.

The state of this interest for the past month, as regards importation, sympathizes with the general returns, in exhibiting a decrease in

comparison of the same month in either of the two preceding years. But when we consider the sort of weather which has prevailed, we are more surprised that so much has come forward than so little. As customary at this period of the year, the arrivals of hewn timber exceed those of sawn and split, but altogether the quantity that came into the United Kingdom during January only amounted to 104,854 loads, against 133,933 last year, and 187,941 loads in 1881. Of staves there is some increase, but of mahogany, also, the quantity imported is smaller by several cargoes; and nothing has yet come forward to interfere to any appreciable extent with the stocks already in the hands of the dealers. The severity of the weather up to the present date is likely to put back the Norway spring trade by at least a fortnight, which will be favourable to the holders of stock at home, and is likely to enable them to get clear of their winter storage at fair prices before the shipping ports are in full business for the coming season.

The role is to furnish information from which our readers can draw their own conclusions. But the old precept may occasionally be suggested "It is good to make hay while the sun shines," and to part with your timber goods when you can get a fair profit on them, at all events, the chance is very likely to occur during this and the next month; but alas! that the shrewdest calculator may find himself all at sea. No one can safely predict what turn the trade will take when all the ports of the Gulf of Bothnia and those of our Canadian possessions are clear of ice, and their shipping season fairly begun, which, from a trading point of view, may as yet be rather a remote contingency. But we may reasonably expect that there will be a good deal of business done in Norway, and the lower ports of the Baltic, before May comes round. Let us hope that another month will exhibit the trade as visibly improving.

Wax's Pain King works like a charm in relieving pain in the stomach, all bowel difficulties and colic. No traveler should be without it. Should always be in the house. Cost but 25 cents. Sold by J. D. Tully, Druggist.

WHY WILL YOU cough when Hill's Cure will give you immediate relief. Price 10 cts. 50 cts. and \$2. For sale by Ormond & Walsh, druggists, Peterborough.

A CHANGE.

The circular announcing the retirement of Mr. Henry White Castle, from the old-established firm of Browning, Castle & Co., of Abchurch Yark, is already in the hands of the trade, but will not take anybody by surprise, as the contemplated dissolution having been known for some time past. Mr. Castle was connected with the firm for the past 24 years, and has therefore established some claim to resign his duties after such a long spell of commercial activity. The retirement, however, is not altering the title of the firm, which will in future be Browning & Co., will bring about no other change, the business being continued by the remaining partners in the usual way. These will be Mr. W. Browning, Mr. H. A. Lott, and Mr. J. G. Drummond. We understand the firm have already made their usual purchases, following the plan which during the past few years they have adopted of securing large proportions of some of the leading stocks in Canada. We wish the firm under a new arrangement every success, and hope that the time will be favorable for them in the prosecution of their large and increasing trade. *Timber Trades Journal.*

LUMBER LEFT OVER.

The *Lumberman's Gazette* says:—A statement of the amounts of lumber on hand, logs sold over, logs put in 1884-5, the cut of 1885 and the intended cut of 1886, has been issued by E. S. Hotchkiss, secretary of the Lumber Manufacturer's Association of the Northwest. The figures, it is stated, were obtained from reports made by manufacturers only and supplemented by estimates in about a dozen instances, where reports could not be obtained from individuals. The secretary's statement says it is probable that 10 per cent. added for admissions would no more than cover the multitude of small operators from whom no reports were obtained, but in one instance, at least, his figures are greatly in excess of what they should be. He places the amount of lumber over in 1885 on the Saginaw river at an even 100,000,000 feet more than was reported by the manufacturers to the *Lumberman's Gazette* for the statement published January 6th, this year, and there is about the same excess in the amount for 1884. The amount of lumber reported on hand on the Saginaw river in 1884 was 449,000,000 feet, and the amount reported on hand at the close of 1885 was 329,000,000, including amount sold, some 68,000,000 feet, and the amount held for the car trade, some 60,000,000 feet. We give the totals of the amount on hand in the different states of the northwest, for what they may be worth, hoping there is not such an excess at other points as on the Saginaw river:—

LUMBER CARRIED OVER.

	1884.	1885.
Michigan, lower peninsula....	1,540,303,201	1,265,244,526
Michigan upper peninsula....	101,028,201	143,655,800
Wisconsin.....	814,179,564	916,221,775
Minnesota.....	615,068,000	515,162,000
Iowa (Mississippi river)....	327,175,000	323,630,639
Illinois (Mississippi river)....	75,650,000	62,200,000
Missouri (Mississippi river)....	57,000,000	99,000,000
Total.....	3,450,404,365	3,325,105,690

LOGS FOR 1886.

The statement gives the amounts of logs left over and the intended cut of 1886 at the various points, and suggests very properly that allowance must be made for the operations of outside parties who are not mill owners and have not reported. There are comparatively few of them in Michigan, but they abound in Wisconsin and Minnesota, and the Mississippi river mills depend upon such operations largely for their supplies. Following are the reports:—

	Logs over 1886.	Intended cut, 1886.
Michigan, lower peninsula....	236,450,000	2,944,500,000
Michigan, upper peninsula....	89,370,000	480,000,000
Wisconsin.....	281,833,000	1,611,950,000

Minnesota.....	55,684,800	535,523,300
Iowa mills (Mississippi river)....	110,519,670	141,000,000
Illinois mills (Mississippi river)....	27,845,231	26,000,000
Missouri Mills (Miss. river)....	12,070,480	24,500,000
Totals.....	819,273,206	5,661,473,300

The total amount of logs over in 1884 in the states named was 1,266,066,176.

LUMBER MANUFACTURED IN 1885.

The report of lumber and shingles manufactured in 1885 in the states named is undoubtedly somewhat below the total cut of the year. Many small mills exist at outside points the products of which can not well be obtained.

The report of Secretary Hotchkiss gives the following figures to which he suggests an addition of 10 per cent:—

	Lumber.	Shingles.
Michigan, lower peninsula....	2,985,493,097	2,350,627,000
Michigan, upper peninsula....	545,264,589	188,657,000
Wisconsin.....	1,884,814,753	1,051,604,350
Minnesota.....	882,053,908	338,573,080
Iowa.....	550,569,432	226,018,000
Illinois.....	134,200,000	29,689,750
Missouri.....	48,656,000	18,300,000
Total.....	7,030,591,779	4,203,399,180

MICHIGAN HARDWOODS.

It is a very common thing to find in the columns of the contemporary press, says the *Michigan Tradesman*, exhaustive articles deprecating the rapid destruction of the pine timber in northern Michigan, accompanied by startling statistics showing that, at the present rate of denudation the supply of pine will be practically exhausted in a few years. While in many instances these statistics and conclusions are very wide of the mark, there is pith in the main idea underlying them, and ample material for reflection. But the apostles of forestry in their eagerness to inveigh against the wholesale conversion of pine forests into lumber, too often overlook a species of waste which is infinitely more mischievous than the operations of the pine industry, viz., the waste of hardwoods by the logging operations of settlers. If this destruction were confined to legitimate lumbering processes the case would at least have mitigating features. But in many instances the waste is purely wanton; and wanton waste is under all circumstances to be deplored. The soil which grows hardwood timber is well known to be richer, and more perfectly suited for agricultural purposes, than that on which pine is commonly found. For this reason the hardwood lands suffer most severely from the hands of the settler. The fact that the ultimate value of Michigan hardwoods is but imperfectly, and not generally, understood, also favors the destruction. The average settler knows that the immediate revenue to be derived from his hardwood lands will be greater if he brings them under cultivation than if he leaves the forests inviolate; hence he proceeds to get rid of the timber as quickly as possible, by gathering into log-heaps and reducing it to ashes.

The exigencies of agriculture, of course, are not to be ignored. It is absolutely necessary that a certain proportion of the land should be cleared and placed under cultivation. But American farmers too often labor under the mistake that the measure of successful husbandry is in the area of land under tillage. Many of them have yet to learn that a small farm, well cultivated, may be made more profitable than a large farm carelessly cultivated; and that it would be true economy to clear a much smaller proportion of their hardwood lands than is customary, leaving the timber on the remainder to increase in value, as it will inevitably do in the near future.

Northern Michigan possesses magnificent possibilities (which can be realized if she husband her resources) for the manufacture of hardwood products. Situated in the central portion of the vast northwest, between two great inland seas, which afford easy and cheap transportation to the markets both of the east and west, her facilities for the profitable disposal of her wares are all that can be desired. Her forests abound in an excellent variety of

woods suitable for manufacture, and her numerous streams, flowing through the heart of the hardwood regions, afford cheap and abundant power for manufacturing purposes. In short, the natural advantages of northern Michigan for wood manufacture are unsurpassed, and only await the enlistment of extensive capital and enterprise to raise them to an important position. Already the good work has begun. Handle factories, bowl mills, spoke and hub factories, basket factories, etc., have been established at various points with favorable results. But the development of these industries is yet in an incipient stage. For the full realization of the manufacturing possibilities of northern Michigan, we must look to the future. A large proportion of the smaller class of articles manufactured from hardwoods, now comes from Maine and other New England states. There is no good reason why the markets of the west and northwest should not be supplied from the vast reserve of raw materials lying at their thresholds; and they certainly will be so supplied in the not distant future, if the settlers of northern Michigan do not, in the meantime, render such a result impracticable, by the wanton destruction of the vast tracts of forest wealth which are indispensable to the establishment of an extensive manufacturing system in the line of hardwood products.

MODERN LUMBERING.

A correspondent writing from Osego Lake, Mich., to the *Detroit Free Press*, furnishes the following interesting account of lumbering operations thereabout:—

This place presents a scene of more than ordinary business activity this winter. Twenty-five lumber camps are in operation, the supplies for which come here. There will be about 100,000,000 feet of logs "banked" by these 25 camps.

The extent of the lumber operations of Michigan are understood or appreciated by very few; what it means to be a lumberman at the present time differs materially from that of twenty, or even ten years ago. There is probably no business that has made more rapid advance or has seen greater improvements in the mode of operating than lumbering.

Only a few years ago the best pine standing away from a stream was of little value, the only method of marketing logs being the "drive" down the stream; now, railroading in connection with any large lumbering operation is considered a necessity and by this means the most remote tracts of pine are brought into the market.

A lumberman twenty years ago was a man who went into the woods in the early fall with a crew of men, rarely numbering 50, built his camps, surveyed and cut out his log-roads, leading to the inevitable stream where his logs were to be hauled and banked. These operations he superintended himself, often remaining in the woods the entire winter and only coming out with the drive at the mouth of the stream late in the spring. The logs were then turned over to the mill owner and either sawed on shares or purchased outright. The mill men and the lumbermen were as distinct a class as the farmer and the owner of the grist mill who ground his grain. It was necessary for the woodsmen simply to understand his part of the profession; the mill men then took the logs, manufactured the lumber and again turned over their product to the eastern dealer, who conducted the mercantile part of placing the lumber on sale.

Now, to be a successful lumberman, means that a man must have more requirements than for almost any other business. As nearly all heavy lumbering operations are conducted with a railroad, he must understand railroading. Several plants in this state are now operating from twenty to thirty miles of well constructed and ballasted track, with good rolling stock. He must be a thorough woodsman, for upon his own judgment of the quality and quantity of the pine it will yield he purchases large tracts of land. He must understand the river work, and know when his interests are properly served on the drives, and that his logs may not be hung-up ere the flood subsides. He owns his own mills; he must therefore be a mechanic, and as this is very important he

must be a good one. He must be a navigator and a vessel owner, as after manufacturing his lumber he transports it in his own monster steam barges to his yards in the east. As he requires large quantities of supplies he raises them himself, and some of the model farms of Michigan are owned and conducted by the lumbermen. He is therefore a farmer. He must, furthermore, be a close observer of human nature, understanding and being able to control large bodies of men, for the heavy lumber firms of this state have in their employ from 500 to 1,500 men each. To control and manage them successfully requires a diplomat. How successfully this is done one illustration will show. Messrs. Henry Stephens & Co. are extensive lumbermen at St. Helen, Roocommon county. From one of the proprietors the following facts were obtained. There are at present employed 400 men. Of this number 150 have been in their employ over six years, 25 over 10 years, 15 over 15 years, 10 over 20 years, and five over 30 years. In these days of change and dissatisfaction, strikes and lock-outs the above figures are indeed refreshing, and there are many other firms whose records would prove equally complimentary to employer and men.

There is no term that implies a greater knowledge of business methods, of a greater diversity and development of abilities, than the modern "lumberman."

MECHANISM OF A TREE.

A tree receives its nourishment from the roots. These correspond to the mouth in the human frame. Now, as in the human frame the nourishment received is, after being supplied to the blood, exposed to the operation of air in the lungs before it is fit to give material to the body; so in a tree, the nourishment taken in at these tree mouths, the roots, passes to the lungs of the tree, and there, by contact with the air, is rendered fit to supply fresh material to the tree. These tree lungs are the leaves. This operation is affected by the passage upward from the soil around the roots, through the trunk, the branches, and every twig of the tree to the leaves, of a large quantity of water, containing in solution the nutriment for the tree. Arrived at the leaves, a process takes place which separates, by means of contact with the air, the most of the water the roots had taken in from the valuable nutriment, and throws off, in vapor, the surplus water into the air. At this time certain constituent portions of the air are utilized and mingled with the nutriment retained. This is all, now a small portion in comparison with what had arisen from the roots, yet retaining enough water to serve as a vehicle back, returned towards the roots, depositing in its way, in leaf, bark and root, what is needed there for the growth of the tree. In these they undergo, especially in the bark, further fitting and digesting processes before they assimilate with the substance of the tree. The water which was retained to carry them down, being no longer needed, passes out at the roots. . . In the back of the leaf are numerous stomates or mouths. . . Of the extent of the provision made for evaporation by the leaves, some idea may be formed from a consideration of the number of stomates or stomates to be found in the leaves of plants. The number varies in different plants, for which variation a reason may be found in the different conditions of growth to which they are subjected in their several natural habitats. In the back of the leaf of the apple tree there are about twenty-four thousand stomates to the square inch. In the leaf of the lilac there are one hundred and sixty thousand of them to the square inch. In the leaves of the cherry laurel there are none on the upper surface of the leaf, but ninety thousand have been counted on the lower surface.—*Exchange.*

A Washington Treasury Decision.

WASHINGTON, Feb. 17.—The Treasury Department has declined to grant the request for permission either to re-aw in bond certain lumber imported from Canada or to export for a drawback, under 3,019 of the revised statutes the lumber re-sawed after the payment of the duty.

A MYSTERIOUS FIRE.

In a former article on the subject of lubricating machinery we refer to some of the villainous compounds that were sold under the name of lubricating oils. In this case only the damage to machinery was considered. This, however, is not all the danger that grows out of the use of those adulterations. Illuminating oils, with the adulterations that are put upon the market are still worse, for while only the damage to machinery may arise from the adulterations of lubricating oils, the danger to life and property from illuminating oils is still greater. The discovery of petroleum is no doubt one of the blessings of the present age, and when honestly and properly prepared, is the best for illuminating purposes of anything we have outside of gas, but the rascally mixture of benzine and other inflammable substances that are put upon the market is a fruitful cause of nine-tenths of the accidents that occur. A fellow with no character, knowledge or principal, goes into the oil trade; his stock consists of a barrel of benzine, a barrel of kerosene oil, a few pounds of rosin or some other stuff to give it body, and then advertise a new illuminating oil, made upon scientific principles, and warranted to give a brighter light and stand a high fire test, and no danger of explosion, etc., and cheaper than any oil ever put on the market. He will pour some of it into a shallow dish, and drop a burning match into it to satisfy his customers that it will not explode and in this way people are humbugged into buying a compound that is more dangerous than gunpowder.

It is well known to any who has given this subject any attention, that even clear benzine, when put into a hollow dish, will not explode; it will burn rapidly, but is easily put out by throwing a cloth over it; but when it is confined in a tight vessel, only partly filled, then is the time when it becomes dangerous, for the gas which it generates, from the volatile nature of it, soon fills the can, and if the cork is removed and it comes in contact with fire, it will explode like dynamite, and is about as dangerous to have it around. Even the best oil needs care, for it is impossible, with all the care that can be had in refining, to entirely deprive it of volatile matters, that will generate gas if left standing in a warm place. A lamp that has been used in the evening and stood over night, partly full of oil, should never be lighted in the morning without allowing the gas to escape. Blowing out lamps in the evening is another practice that should never be indulged in; the air that is blown down the chimney is often forced down the tube, carrying the blaze with it, and if the oil should happen to be low, an explosion is likely to take place. The only safety is by buying nothing but the best, no matter about the price, a few cents on a gallon of oil is a small matter when compared to the destruction of life and property that almost every day occurs from the careless use of kerosene oil. Kindling the fire in the morning with kerosene is another practice that has cost many lives and a great destruction to property; and if Bridget must light the fire with kerosene oil, by pouring it out of the can, impress upon her mind the oil must be poured upon the wood, and the can corked up and put away before the match is lighted. Kerosene oil is not the only element of danger that we have in our factories and dwellings to guard against. There are many other fruitful sources that are entirely overlooked, that cause most of the mysterious fires.

The careless use of matches is one constant source of danger; not but which the matches may be harmless enough in themselves, if left alone, but when dropped upon the floor of a wood shop, covered with shavings, or in a barn where hay and straw is chattered about, if stepped on or picked up by mice, they become one of the sources of mysterious fires. It is well known that rats and mice will carry off matches for the phosphorus which they contain, and of which they seem to be fond; but if one of them ignites while Mr. Rat is endeavoring to extract the phosphorus, he never stops to sound the alarm of fire, but takes himself off to some place of safety, and as no fire has been used in the building it is considered a clear case of incendiarianism, but Mr. Rat is the last one to be suspected of being the incendiary. Spontaneous combustion is another cause of mysterious fires, that

are put down as incendiary, but I believe that nine-tenths of them are from this cause.

That there are some fires that can be traced to incendiarianism there is no doubt, but I am not willing to believe that mankind are so depraved as to be guilty of all the arts of incendiarianism that are laid to their door.

Vapors arising from volatile matter take fire with less heat than many suppose. A steam pipe running through a box of pine saw dust has been known to take fire several times, and the heat of the steam was probably never over 300, the inflammable vapor that was distilled out of the turpentine contained in the saw dust furnished in the means of ignition.

Oily rags or cotton waste used around machinery, and saturated with oil, is another fruitful cause of mysterious fires, that occur where no fire is used. The statistics show that a great majority of the fires that take place in manufacturing establishments happen between Saturday night and Monday morning, and as it is the custom in all well regulated mills to require the operatives to clean up their machines on Saturday afternoon, unless the oil waste used for that purpose is carefully collected and removed to some safe place, the chances are that before Sunday night, fire may be generated from spontaneous combustion.

In a discussion of this subject a few years ago in order to satisfy ourselves on this subject, we made a number of experiments with different fibrous substances and oil. We found that cotton waste that had been used in cleaning machinery, and well saturated with oil, when covered up with iron turnings and dirt, which is found under the laths of all machine shops, took fire so as to smoke in two hours, and when partially uncovered and a portion of it is exposed to the air it burns up freely until the waste is all consumed. When saturated with linseed oil it took fire much sooner.

Some painters were at work in a house where a portion of the wood work was being finished in oil, and rags rubbing it were thrown into a closet. At noon, when all the workmen were absent to their dinner except one, who happened to have his dinner with him, and while sitting in the room adjoining the closet, discovered smoke issuing from it. Upon opening the door he discovered the rags on fire, which blazed up lively, until the timely application of a few pails of water, which as good luck would have it were near at hand. The fire was extinguished with but little damage, whereas if the building had been left alone at the time, or the fire broke out at night, in all probability it would have been consumed, and another mysterious fire would have been recorded, "probably the work of an incendiary."

Another case of spontaneous ignition occurred in a store. A bottle of olive oil was spilled upon the floor, a quantity of saw dust was thrown over it to soak it up. The sun happened to be shining in upon it at the time, and in less than an hour it took fire.

In planing mills where the machinery is scarcely ever cleaned up, I will admit that there is little danger for greasy waste being thrown around, but there is an element that is quite as dangerous as waste. The fine dust that collects around and under the machines becomes saturated with oil and grease, together with the villainous compounds, under the name of lubricated oils, and as they scarcely ever are cleaned up they are only waiting for favorable conditions to develop into a first class fire.

The statistics of the insurance department in most states show the average time for planing mills, sash and door factories, furniture factories to burn in eight years; while foundries, machine shops, black smith shops and other working establishments is about twenty. Now why is it so many wood-working establishments is burned up? There is no reason why a planing mill should burn any more than any other shop, if proper precaution is taken. It is true that there is a great deal of combustible matter in and around it, but even that is no good reason why they should burn up so often. With the improved devices for taking away the shavings and dust, a planing mill can be kept as clean as any other shop, and if the machines were brushed off and the accumulations of dust and grease scraped off every day

there would be but little danger from that source.

Most of the mills that are built at the present time are well protected from fire, so far as the engine is concerned, with fire-proof shaving room, but with all the care that may be bestowed upon these two important parts of the mill unless proper precaution is taken to keep the machines free from those accumulations of grease and dust, mysterious fires will still continue to break out when they are least expected, and planing mill owners will be obliged to continue to pay double the insurance which they ought to pay.—[C. R. Tompkins, M. E., in Journal of Progress.

NORTHWESTERN ONTARIO.

Year by year the operations of the lumber men in Muskoka are becoming less and the pine limits are decreasing or rapidly disappearing.—Herald.

A man named Dennis, of Detroit, has taken his mill machinery to Lynch Lake, Joly town ship, where he intends cutting birch lumber for the Toronto market. He will ship by the N. & P. J. R.

Two large saw mills are to be built on Casp's farm, near Katrine, to cut lumber for the firm of Platt & Bradley. The pine around Doo Lake is said to be sufficient to last twenty years—if not too rapidly consumed.

Messrs. R. & G. Strickland, of Lakefield, are carrying on a large lumbering business in Oakley this winter. They have four camps in operation in which forty four teams are employed; in the one camp alone—that of which James Taylor is foreman—there are nineteen teams. The depot for supplies is Wood Lake camp, presided over by Mr. R. Kail. Mr. Alex. Moffatt, their managing clerk, lives here, and fills the position to the entire satisfaction of the company. Mr. Ketching, of Draper, has the contract for supplying the above camp with oats, pork, flour and other provisions. Mr. Jackson Foster is engaged to assist Mr. Ketching in teaming in the supplies from Gravenhurst.—Banner.

Mr. Martin, the timber and lumber inspector for the N. & P. J., returns next week from Bracebridge and Huntsville, where he has been looking after the erection of the fine station buildings nearly completed at those points, to lay out the work for the Burk's Fall's station.—Arrow.

"What Say You to a Piece of Roast Beef and Mustard?"

Well, there is much to be said. The question being asked of the banqueter at the average boarding house, calls up reminiscences of close contiguity to the horns, and beefsteak three parts south thereof. He, of course, will pass unless it occurs to him that he needs a hinge for his trunk. Should there be any suffering the effects of an indulgence in such sinuous fare, use McGregor's Speedy Cure, a sure and effectual remedy for dyspepsia, constipation and affections of the stomach and liver. Sold by J. McKee. Trial bottles free.

Advice to Mothers.

Mrs. Winslow's Soothing Syrup should always be used when children are cutting teeth. It relieves the little sufferer at once; it produces natural, quiet sleep by relieving the child from pain, and the little cherub awakes as "bright as a button." It is very pleasant to taste. It soothes the child, softens the gums, allays all pain, relieves wind, regulates the bowels, and is the best known remedy for diarrhoea, whether arising from teething or other causes. 25 cts a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.

Perhaps the most extraordinary that success has been achieved in modern science has been attained by the Dixon treatment for Catarrh. Out of 2,000 patients treated during the past six months, fully ninety per cent. have been cured of this stubborn malady. This is none the less startling when it is remembered that not five per cent. of the patients presenting themselves to the regular practitioner are benefited, while the patent medicines and other advertised cures never record a cure at all. Starting with the claim now generally believed by the most scientific men that the disease is due to the presence of living parasites in the tissues, Mr. Dixon at once adapted his cure to their extermination; this accomplished the Catarrh is practically cured, and the permanency is unquestioned, as cures effected by him four years ago are cures still. No one else has ever attempted to cure Catarrh in this manner, and no other treatment has ever cured Catarrh. The application of the remedy is simple and can be done at home, and the present season of the year is the most favorable for a speedy and permanent cure, the majority of cases being cured at one treatment. Sufferers should correspond with Messrs. A. H. DIXON & SON, 205 King street west, Toronto, Canada, and enclose a stamp for their treatise on Catarrh.—Montreal Star.

J. K. POST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y.

The American Hotel,
BARRIE, ONT.
Collier St., Adjoining Market.
RATES REASONABLE, CENTRAL LOCATION,
FREE BUS TO AND FROM ALL TRAINS.
Every accommodation for Commercial and
LUMBERMEN.
W. D. McDONALD, Proprietor.

J. T. LAMBERT,
Lumber and Commission Agent.
ORDERS FOR DIMENSIONS AND ALL OTHER
KINDS AND GRADES OF

American Lumber
PROMPTLY ATTENDED TO.
Timber Limits and the Square
Timber Trade a Specialty.
Office, Wellington Street, OTTAWA. 114

Johnston's Fluid Beef



The nourishing, palatable and warmth giving qualities of Johnston's Fluid Beef has caused this invaluable preparation to become a favorite and fashionable beverage for the winter season. It is now obtainable on draught at the leading hotels and restaurants throughout the Dominion 1897

PHOENIX
FIRE INSURANCE COMP'Y
Of London, England.

Established in 1782. Canada Agency established 1864.
LOSSES PAID since the establishment of the Company have exceeded.....\$20,000,000
(Sixty Millions of Dollars.)
BALANCE held in hand for payment of Fire Losses (ready and kept up too) exceed.....\$2,000,000
(Three Millions of Dollars.)

Liability of Shareholders Unlimited
All classes of Fire Risks taken in town and country at the lowest current rates, and losses promptly adjusted and paid.
H. H. HENDERSON
R. W. TYRE, AGENT
Manager for Canada, Montreal. Peterborough distd. 2

DO YOU WANT



Examine the list of
"FARMS FOR SALE" AND "FARMS WANTED"
in the
DAILY AND WEEKLY MAIL
THE MAIL has become
The Recognized Medium for Farm Ad-
vertisements
And contains more of them than all other Canadian papers combined. It has 300,000 readers of the right class.
ADVERTISERS of "Farms for Sale" and "Farms WANTED," "Stock" or "Seed for Sale" or "Wanted" inserted in THE WEEKLY MAIL, for one week each insertion, or twenty cents per word for longer insertions, or in THE DAILY MAIL at two and a half cents per word each insertion.
Address—THE MAIL Toronto, Canada.



THE CANADA LUMBERMAN

DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY THE Peterborough Review Printing and Publishing Company (Limited), Peterborough, Ont.

Terms of Subscription:

One copy, one year, in advance..... \$2 00
One copy, six months, in advance..... 1 00

Advertising Rates:

Per line, for one year..... \$0 00
Per line, for six months..... 50
Per line, for three months..... 30
Per line, for first insertion..... 10
Per line, for each subsequent insertion to 3 mo's..... 05
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00
Cards not occupying more than 6 lines per annum..... 5 00
Cards not occupying more than 6 lines, for 6 mo's..... 3 00

Special rates will be made for page, half page and column advertisements.

Advertisements intended for insertion in any particular issue should reach the office of publication at least four clear days before the day of publication, to insure insertion.

All communications, orders and remittances should be addressed and made payable to THE PETERBOROUGH REVIEW PRINTING AND PUBLISHING COMPANY (LIMITED), Peterborough, Ont.

Communications intended for insertion in the CANADA LUMBERMAN, must be accompanied by the name of the writer, not necessarily for publication, but as a guarantee of good faith. Communications to insure insertion (if accepted) in the following number, should be in the hands of the publishers a week before the date of the next issue.

The CANADA LUMBERMAN is filed at the Offices of Messrs. SARGENT, DRACON & CO., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., MAR. 1, 1886.

The Chicago & Grand Trunk railway recently purchased of White & Henner, Lapeer, Mich., 16,000 feet of choice black walnut lumber, and shipped it to Port Huron for use in car building.

The William Hamilton Manufacturing Company, of Peterborough, has ready for shipment to the Royal Planing Mill Company, of New Westminster, British Columbia: two mills and one engine, ordered January 11th. The boilers are 42 inches in diameter and the engine 16x20. It is also filling an order from New York state for saws.

LUMBER men report, according the Kingston News, that the quantity of railway ties taken out along the line of the Kingston and Pembroke railway, this season, has been very large, while considerably less hemlock lumber has been cut this year than last. Cedar posts are a drug upon the market, as the supply greatly exceeds the demand.

BEAUCE, P. Q., lumberers complain of the absence of sufficient snow for their operations. The following are the approximate numbers of saw-logs that are being taken out this winter on the Chaudiere river and its tributaries:—Mr. John Breaker, 200,000; Mr. Hall, 100,000; Mr. Crawford, 100,000; Mr. Cahill, 30,000; Mr. A. Beaulieu, 30,000; total, 460,000.

The last issue of the London Economist notices among new companies in Britain, Miller's Tanning Extract Co., Limited.—Issue of 3,000 shares of £10 each, of which 2,000 shares, fully paid, are allotted to the vendors. This company is formed to acquire and extend the business of Messrs. J. & J. Miller & Co., the inventors and original makers of tanning extracts. The price to be paid for the business, &c., is £41,750, of which £20,000 is represented by paid up shares.

A TELEGRAM from Duluth, on Lake Superior, states that the Duluth Lumber Company has contracted to ship 30,000,000 feet of lumber to Chicago by lake, most of which is to find a west and southwest market. The roads west and southwest of Chicago are to give rebates enough to pay for the lake freight from Duluth to Chicago, thus depriving the railroads leading southwest from St. Paul from getting this business with the high tariff. Last year 5,000,000 feet of lumber was shipped from Duluth to Saginaw by water and nearly 1,000,000 bushels of wheat to Milwaukee.

CAN England produce good axes? This seems to be a question over which there is some dispute. A correspondent of the Ironmonger recently criticizes severely those of English make, and is somewhat curious to know what American manufacturers would think of having five-twelfths of their product returned as worthless. One of the English journals thinks that the case is not so bad as stated in the Ironmonger, and that their tool makers and inventors need only know that a strong and perfect axe is wanted for the Colonial market, for which a higher price than the average one will be paid, to set themselves to work to take the wind out of the sails of their American cousins.

THE Bobcaygeon Independent says:—Mr. J. M. Irwin, lumberman, has had trouble with diphtheria. And one of his shanties near Haliburton, a man became ill, and went home. The report was circulated that he had diphtheria and though it was afterwards proven that it was not, a scare took possession of the shanty and a number of men and teams left. As the men and teams left without notice, and as Mr. Irwin considered without sufficient cause, and demoralised the shanty, he declined to pay them. Timothy Crowley and some others entered action against Mr. Irwin at Peterboro. An arrangement was arrived at with all except Crowley and the magistrate dismissed the cases with the exception of Crowley's. This is yet to be heard as time is required to obtain witnesses. His claim is for \$40. [This case is also withdrawn.]

THE SALE OF TIMBER.

The following table shows the amount and value of the timber sold at the office of the Quebec Provincial Government during the past year:—

	Lots.	Price.
January.....	11,159	\$ 9,335 00
February.....	11,122	8,767 00
March.....	12,783	11,028 90
April.....	11,678	9,777 10
May.....	11,441	10,231 30
June.....	11,203	9,339 30
July.....	7,479	5,382 20
August.....	7,879	53,444 80
September.....	13,940	11,750 30
October.....	14,281	10,076 00
November.....	12,712	10,629 90
December.....	11,831	9,840 20
Total.....	137,558	\$112,601 50

THE EXPORT DUTY.

THE removal of the United States import duty on lumber is still so remote a contingency that the question of increasing the export duty on logs has not lost interest, and may still be considered apart from the contingency referred to. The Ottawa Free Press, having interviewed the Commissioner of Customs, returns to the subject. It represents the Commissioner, in the interview, as saying that it was almost impossible to collect the export duty. The Free Press drops its former contentions entirely, and wisely does so, and relies now altogether upon the alleged difficulty of collecting the duty.

The chief difficulty—the one on which greatest stress is laid—is thus stated by the Free Press:—

"Until the lumber crosses the line of demarcation it is in Canadian territory, and cannot be held for duty, so that the service of collecting this duty if strictly followed up would be far in excess of what could be collected."

If the logs could not be held for duty until they were into the centre of the lake, and there

was no other remedy, the difficulty would be great. But has it not occurred to the Free Press that vessels going to the United States are required to take out clearances, and that the regulations is enforced? The United States lumbermen who export logs from Canadian territory are owners of limits in Canada, and were the Government to take up the matter earnestly, a way would be found of enforcing the law, and of compelling them to respect the laws of this country. The small quantity of logs that have heretofore been exported was not of sufficient importance to attract a great deal of attention, and the export duty may not have been enforced as it should have been. If the Commissioner is correctly reported in the Free Press it has not been. But when logs are exported wholesale, and Canadian lumbermen are placed at a disadvantage in their own country, to the advantage of foreigners; and when the country is losing largely through another country receiving the benefits connected with the manufacturing of her logs into lumber, the matter can no longer be ignored and it becomes of such importance that it merits the most careful attention of our rulers.

Since writing the above we have received a communication from the Customs Department, in answer to a letter sent there, which puts a different face on the alleged interview and makes the alleged difficulty in collecting the export duty simply an idea of the Free Press.

The letter concludes as follows:—

"As respects the export duty, I can only say that is the law is to collect the same at one dollar per thousand feet upon all logs of pine or spruce, and that the officers of Customs have the most particular instructions with reference to this as well as all other duties; and I have no reason to suppose that its collection will be neglected by any of them under whose survey the exportation may take place."

This is sufficiently explicit, as we have pointed out above, the collection of the duty is not as impossibility by any means, and it is absurd to suppose that the Customs Department would neglect to carry out the law. The objections urged against the increase asked for are very weak, and the arguments in its favor are strong and indisputable.

THE MORRISON BILL.

THE bill which Mr. Morrison has introduced into the United States Congress to change the tariff rates on many articles going into that country has attracted a great deal of attention. In the first place it is very doubtful if the bill will become law. It will take a hard fight to pass it through the House of Representatives, and if it is not strangled there it will have then to be passed through the Senate, with it Republican majority.

If this bill is not adopted by the American Congress, there will, for some time, be little hope of a reciprocity treaty between Canada and the States. It does not go so far as a comprehensive reciprocity treaty would go, and if its provisions are not acceptable a reciprocity treaty that would be beneficial to Canada would scarcely be accepted by them. And the proposition of the President to appoint a Commission to consider the fishery question and reciprocity, appears to meet with disfavor.

The part of the Morrison bill that our readers will be interested the most in is its provision for placing certain kinds of lumber on the free list. The telegraphic summaries of the bill led us at first to believe that all kinds of lumber were, if this bill was adopted, to be placed on the free list, the only proviso being that countries which levied an export duty should not be included. If this was the scope of the bill—and it may be the intention of its promoters—Canada would scarcely hesitate to remove the export duty on logs and thus reciprocate with our neighbors. It might be feared that the removal of the duties would tend to the depletion of our timber resources, but the benefits to be derived from the removal of the duties, thus freeing the trade from restriction, and increasing the value of the timber, would be of such a character that our Government and people would undoubtedly consent to the proviso.

Fuller particulars regarding the proposed

changes, however, appear to show that they are not of such a character as to be so interesting to Canada as was at first supposed. Mr. Wm. Little, of Montreal, takes this view of the bill and writes:—

"We were led to expect would place pine and spruce lumber on the free list, but should the bill pass in its present shape the only kinds of lumber made free are those specially mentioned—hemlock, whitewood, sycamore and basswood—which now pay a duty of a dollar per 1,000 feet, board measure, or half the duty levied on pine and spruce.

"The first line of the bill leaves the impression that the intention is to have lumber hewn and sawed free; but this applies only to lumber and timber used for spars and in building wharves. The words hewn and sawn are simply descriptive of the lumber so to be used.

"A subsequent paragraph mentions the particular kinds of lumber that are to be free, viz: sawed boards, plank deals and other lumber of hemlock, whitewood, sycamore and basswood, and all other articles (not kinds) of sawed lumber.

"The only sawn articles in pine and spruce to be free are specially mentioned, such as clapboards, pickets, palings, lath, and shingles.

"This intention of the bill is clearly shown by a charge of 50 cents per 1,000 feet for each side planed or finished of all articles made from the particular kinds of lumber specified—hemlock, whitewood, sycamore and basswood.

"So that as regards Canadian lumber, the bill will have no effect whatever, but to give free admission to the limited amount of hemlock now going to the U. S., the other woods—whitewood, sycamore and basswood—not being produced in Canada in excess of home requirements."

The Montreal Herald believes, from the wording, that the intention was to include pine and spruce, but the bill, as reported by the newspapers, does certainly appear to sustain Mr. Little's construction of it. If the bill becomes law, it is to be hoped that its intention will be made plain, but if Mr. Little's view is correct, even if it does become law, in its present shape, it will not be of great importance to Canadian lumbermen, although it will be a step in the right direction, inasmuch as hemlock, shingles, etc., will be placed on the free list.

LUMBER DEALERS AND RAILWAYS.

To the Editor of the Canada Lumberman.

SIR,—Had the Toronto lumber dealer no means of knowing the season of the year the railroad officials would supply the information. No sooner do storms prevail than cars are weighed and excess charges from 60 cents to \$10.00 each car are presented to dealers.

These charges are something positively appalling. The mere sight of a freight advice note, ornamented with red ink figures, causes the dealer to sigh deeply as he sees all the profit on the car load gone at one fell swoop.

It is beyond the ken of ordinary mortals how the charges are made. True, the gross weight is given, tare deducted, and the net weight, claimed to be the actual weight of the lumber, stands forth in all its immensity. To compare these freight advice notes will show the most glaring variations in the weight of lumber.

Permit us to present a few of these with their sanguinary figures:

1. Gross.....	53,800 lbs.
Tare.....	18,000 "
Net.....	35,800 "
Amount on car.....	10,000 ft.
2. Gross.....	62,000 lbs.
Tare.....	18,000 "
Net.....	44,000 "
Amount on car.....	10,704 ft.
3. Gross.....	56,600 lbs.
Tare.....	18,400 "
Net.....	38,200 "
Amount on car.....	10,610 ft.
4. Gross.....	48,000 lbs.
Tare.....	17,800 "
Net.....	30,200 "
Amount on car.....	10,021 ft.
5. Gross.....	45,800 lbs.

Tare	17,200 "
Net	28,000 "
Amount on car	10,197 ft.
6. Gross	58,000 lbs.
Tare	18,000 "
Net	35,000 "
Amount on car	10,084 ft.
7. Gross	58,000 lbs.
Tare	18,000 "
Net	40,000 "
Amount on car	10,016 ft.
8. Gross	58,000 lbs.
Tare	18,000 "
Net	40,000 "
Amount on car	10,046 "

So far as the above cars are concerned there is no deduction appearing on the notes for snow and ice. The lumber with which these cars were loaded is white pine, cut about six months, and piled to dry, everything being practically equal with regard to these car loads.

It will be seen that the lowest weight of the lumber on the above cars is about 35.75 lbs. to cubic foot and the greatest is 48.75 lbs. to cubic foot, showing a difference of 15 lbs. to a cubic foot.

The quantity of ice and snow brought down on cars loaded with lumber is not correctly estimated, nor are the employes of the railroad qualified to judge, at a glance, of the weight of the snow and ice, and never make any allowance for the amount of moisture absorbed by the lumber, a very important item in the weighing of lumber.

What does an inch of ice on the car imply? It means that the lumber dealer has to pay an increased rate. Ice one inch thick, covering a car 8x30 ft., weighs about 1,160 pounds; snow packed as is found on flats, same sized car, weighs about 620 lbs.; snow as it falls, same dimensions, about 270 lbs.

Let an impartial person examine a flat car and he will find from 1 1/2 to 3 in. of closely packed snow and ice. Take into consideration the snow on top of the lumber with that which is lying in the centre, between the two lengths of lumber as well as that on the ends, and there will be found a weight not by any means covered by the allowance sometimes made.

An estimate made from actual measurement of several cars give an average depth of snow and ice to be about 2 in. and of snow on top about 4 in.

Take the average weight of the packed snow and ice, allowing the snow to be 3/4 and the ice 1/2 covering a flat car, we have a weight of about 1,572 lbs. Again, taking the snow on top, centre and ends, we have another weight of about 1,060 lbs., or a total weight of about 2,632 lbs.

The length of time intervening between date of shipment and that of arrival is anywhere from three days to two weeks, during which the lumber is exposed to all the variations of temperature. The melting snow or rain finds its way between the courses of the lumber, by which a very considerable amount is absorbed.

The quantity of fluids absorbed by white pine, partially dry, is about 25 per cent. of its weight. Taking the weight to be 32 lbs. per cubic foot, by exposure to rain, etc., the weight will increase to 40 lbs., or equivalent to a car loaded with 10,000 feet, weighing about 34,000 lbs., instead of nearly 27,000 lbs.

The railroad authorities make no allowance but compel the dealer to pay excess charges on the amount of moisture absorbed by the lumber, which in the majority of cases has been caused by their neglect or inability to forward the lumber in a reasonable time.

Their is not that consideration shown to the dealers by railroads which is their due. From the nature of their business their goods are exposed to all the changes of weather, and it is manifestly unfair to take advantage of effects produced by causes beyond the control of the lumberman.

The lumber, when loaded, may weigh no more than 25,000 or 26,000 lbs., excepting in rare cases it never goes over, as no dealer will place green lumber on the market for obvious reasons, but through no fault of either seller or buyer, by the time it has reached its destina-

tion the weight is increased by 4,000 to 6,000 lbs.

There are many other grievance existing in the present unsatisfactory relations between the lumbermen and railroads. It is about time that our manufacturers and dealers combined to form an association in self-defence.

The railroad companies dealing with the lumberman individually can, and do, compel him to pay excessive charges, or throw away 2 or 3 days in attempting to obtain a reduction. On the other hand, were they united, the railroad officials would be much more inclined to moderate their charges, and, on proper representation of the actual state of affairs, would no doubt come to some understanding as to the quantity, in feet, of what constitutes a car load of lumber, thereby enabling the dealer to know the exact amount of their freight bills.

The great injustice in charging by weight lies in the fact that the lumber is weighed at the point of arrival instead of that of departure.

The writer trusts he has not encroached too much on your valuable space, nor on the patience of your readers.

Toronto, Feb. 22nd, 1886. LUMBER.

THE LUMBER DUTIES.

To the Editor of the Canada Lumberman.

Sir,—It is highly gratifying to see the press of this country almost unanimous in advising the country to adopt the very sensible suggestion of the Hon. H. G. Joly, of raising the export duty on saw logs to at least that of the duty imposed by the United States on sawn lumber, otherwise we had better remove our mills across the line, the comments of the Hamilton Spectator on this subject as published in the LUMBERMAN, being especially commendable.

Of course no one that knows anything about the subject anticipates a removal of United States duties from pine and spruce lumber, till the lumbermen of that country have at least bought up sufficient Canadian pine and spruce timber to make it to their interest to allow their Government to throw off the duty.

Even should Congress pass a measure with this end in view, it would be tricked out of its intent by their hirings in Washington before it became a law.

Knowing the men and the means they would adopt to thwart any attempt at a removal of the duty from pine and spruce lumber, I was fully prepared to find, notwithstanding the Hon. Mr. Morrison's spirited speech last year on the subject, and the almost unanimous desire on the part of the press and people of the United States for free lumber, that unless he was especially careful he would be tricked into proposing a measure that did not apply to pine or spruce lumber at all; and such I find to be the case, he proposed bill not affecting any Canadian lumber but hemlock, which is placed on the free list, while pine and spruce are to be still subject to a duty of \$2 per M feet as heretofore, being included in the clause which will still remain on the tariff, not having been repealed under the heading of "boards, planks, deals, and lumber sawed from other varieties of wood not elsewhere specified," and if you will examine the existing U. S. tariff and note what additions only are made to the list you will see that my conclusions are correct.

To show to what a length the tools of the lumbermen will go to satisfy their patrons, it is only necessary to revert to the bill proposed by the late Hon. Fernando Wood in 1878, putting a duty of \$1 per M feet on pine, spruce and other sawn lumber, which appeared, when ready for passage, in these words: "Lumber of hemlock pine, whitewood, sycamore and basswood, \$1 per M ft., board measure," spruce having been dropped, and the comma omitted between hemlock and pine, so that if the bill passed, they could insist it was hemlock pine, and not white or red pine that was placed at the reduced rate of duty.

It is to be hoped, however, that the answers to the enquiries made by the Committee of the Statistician, as to what extent the proposed changes would effect the existing tariff, will plainly show the fact that, as regards Canadian lumber, the proposed additions to the free list

only effect hemlock. The other kinds mentioned, whitewood, sycamore and basswood being mere surplussage, as little or no lumber of these kinds of wood is imported into the United States, and that pine and spruce lumber are still subject to the existing tariff of \$2 per M feet, board measure.

WILLIAM LITTLE.
Forestry Chambers, Montreal, Feb. 25, 1886.

WOOD-WORKING PATENTS.

The following list of patents relating to the wood-working interests, granted by the United States Patent Office, February 16th, 1886, is specially reported by Franklyn H. Hough, solicitor of American and Foreign patents, 925 F. Street, N. W., Washington, D. C.

- 336,782—Edger, gang—E. H. Barnes, Brooklyn, N. Y.
- 336,813—Lathe for turning irregular forms—O. Kromer, Sandusky, Ohio.
- 336,674—Plane—J. A. Traut, New Britain, Conn.
- 336,697—Saw—C. N. Clemson, Middleton, N. Y.
- 336,739—Saw—J. J. Parker, Aitkin, Minn.
- 336,661—Saw hanging—T. W. Peck, Milwaukee, Wis.
- 336,671—Saw mill head blocks, nose guard for—C. Esplin, Minneapolis, Minn.
- 336,693—Sawing machine, band—J. J. Bowen, San Francisco, Cal.
- PATENTS ISSUED FEB. 16.
- 336,193—Edger and cant sawing machine—W. M. Wilkin, Erie, Pa.
- 336,511—Lumber drier—J. J. Curran, Chicago, Ill.
- 336,222—Edge guard for planes—J. H. Ferguson, Brooklyn, N. Y.
- 336,500—Re-sawing machine—G. Tittle, Newark, N. J.
- 336,380—Saw—A. Bertram, Toronto, Ontario, Canada.
- 336,208—Saw and lathe combined—F. J. Buckner, New York, N. Y.
- 335,407—Saw mill, band—F. M. Hanks, & H. N. Sibley, Midway, La.
- 336,194—Saw mill dog—W. H. Wilkin, Erie, Pa.

OTTAWA EXCITED.

According to the news columns of the Ottawa Journal, the capital seems to expect the Morrison bill to become law. We fear the Journal has allowed itself to become unduly excited in the following:—

"It is confidently expected here by lumber merchants that the duty on lumber will be removed at the present session of the Congress.

"The abolition of the present duty will result in the introduction of the Canadian mill owners as a factor in the American dressed lumber market, to be detriment of thousands of smaller American dealers who procure lumber in an undressed state in Ottawa. The extensive lumbermen here propose to manufacture dressed lumber here on an enormous scale and several of them are already talking of adding the necessary machinery to their respective mills. Messrs Branton & Weston have already commenced to cut a tail-race, while a number of other manufacturers are about to follow their example. It is intended to manufacture dressed lumber of every grade, from the heavy stick of square timber, down to plane boards, and window sashes for which there is a growing demand across the lines. The proposed planing mills, according to the present intentions, will be run the year round, giving employment all winter to at least one thousand men otherwise obliged to go to distant shanties. The advantage that will be derived from the adoption of the measure by Congress can not be overestimated. An appreciable feature of the shipment in dressed lumber, will be to accomplish a considerable saving, owing to the removal of the shavings. The freight rates will also be proportionately reduced, as fifteen hundred feet of prepared lumber will be equivalent to the space occupied by one thousand feet of lumber in its undressed state.

"It is expected that next summer there will be considerable decrease in the output of the mills at Whitehall, Vt., Richford, Vt., and Burlington, Vt."

The Greatest Preparation Yet.
"Eureka," Dorenwend's world renowned Hair Destroyer, destroys all superfluous hair on the face or arms of Ladies or Gentlemen. It is harmless, causes no pain in using, and leaves no discolorations; can be easily applied, and works quickly and surely. Thousands have used it and pronounce it to be the best article of the kind before the public. To be had from J. D. Tully, Druggist, agent for Peterborough.

GEORGE GALL
WHOLESALE and RETAIL
HARDWOOD LUMBER
MERCHANT

Car Lots sold on Commission, railway switch in to yard and plenty of room for storage. Yard corner of Stachan and Wellington Aves. Office, 9 Victoria St. Telephone Connection.

FOR SALE
VALUABLE

Timber Limits
AND
50,000 SAW LOGS
ON SEVERN RIVER

The undersigned being desirous of confining their operations to their Lakefield Mills on the Trent waters, offer for sale the following Limits:—

- Township of Hindou, 70 square miles.
- Oakley, 45 " "
- Redout, 22 " "
- An area of 137 square miles.

These limits are estimated to contain 180 million feet of Logs, well watered, and afford means of short hauling from all points, and quick and cheap driving to Georgian Bay. Are offered for sale together with plant, depots, farms, 1,200 acres deeded lands and 60,000 logs, nearly all of which are on the main river, a large proportion of which are 16 feet long. Apply to

R. & G. Strickland,
3ML LAKEFIELD, ONT.



Welland Canal Enlargement.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the Welland Canal," will be received at this office, from mechanical, skilled, practical contractors, until the arrival of the Eastern and Western mails on TUESDAY, the NINTH day of MARCH next, for raising the walls of the locks, weirs, &c., and increasing the height of the banks of that part of the Welland Canal between Port Dalhousie and Thorold.

The works throughout will be let in sections. A map showing the different places, together with plans and descriptive specifications, can be seen at this office on and after Tuesday, the 23rd February instant, where printed forms can be obtained. A like class of information relative to the works will be supplied at the Resident Engineer's Office, Thorold.

Parties tendering are requested to examine the locality and bear in mind that the season and circumstances under which the works have to be done render some of them of an exceptional nature. Tenders will not be considered unless made strictly in accordance with printed forms and, in the case of firms, except there are attached the actual signatures, the nature of occupation, and place of residence of each member of the same; and further, a bank deposit receipt for the sum of Two Thousand Dollars or more according to the extent of the work on the section—must accompany the respective tenders, which sum shall be forfeited if the party tendering declines entering into contract for the work at the rates of prices stated in the offer submitted. The amount required in each case will be stated on the tender.

The deposit receipts thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.
By order,
A. F. BRADLEY,
Secretary.
Department of Railway & Canals,
Ottawa, 17th February, 1886. 2446

PROFITS IN THE LONDON TIMBER TRADE.

Dealing in lumber after the English method appears to be a very profitable business, judging by the promises of the scheme of organization of two timber corporations which have recently been formed in London. The particulars of the organization of Powis, Bryant & Powis, limited, under the companies act, were given some weeks ago. The capital stock was £200,000 (\$1,000,000) divided into 200,000 shares at £1 (\$5) each. One of the inducements to invest was the promise (implied, at least) that the shareholders would receive a dividend of 10 per cent each year. This enterprise has been followed by another, namely the incorporation of William Oliver & Sons, limited, on a similar basis. The house is old one in the timber trade. The prospectus states that "the company is formed for the purpose of acquiring and still further developing the lucrative business of Wm. Oliver & Sons, mahogany, wainscot, timber merchants and importers, and dealers in every kind of wood in use, which has been carried on in London for two generations and has now a world-wide reputation." The capital stock of the proposed company is £200,000 (\$1,000,000) in 200,000 shares at £1 (\$5) each. Of this amount 175,000 shares are offered to the public at the premium of 10s. (\$2.50) per share, the vendors taking the remaining shares in part payment of their good will, etc. The directors are Thomas Oliver, Harry Webb, Joseph Aldridge Oliver and Edward Aldridge Oliver, who will have power to add to their number. The vendors are Edward Aldridge Oliver and Thomas Oliver who transfer to the company their stock in trade as valued by them at the ordinary stocktaking purpose of the firm and the sum so ascertained will be paid by the company, with interest thereon at five per cent per annum until paid. The good will, leases, appliances, plant, etc., will be transferred for the 25,000 shares, as fully paid up shares, together with £75,000, being the proceeds of 50,000 of the shares offered for public subscription. The premiums on the remaining 125,000 shares will belong to the company.

The lucrative character of the business will be inferred from the statement that "for three years the vendors guarantee a dividend of 10 per cent. per annum on the paid up share capital of the first or present issue of \$200,000, it being understood that the surplus over 10 per cent in any year is to be credited as against the guarantee of the following or preceding year. The vendors will deposit securities to be approved by the company's brokers to the value of \$30,000 with the company's bankers as a running security for the due performance of their guarantee." What American corporation dare undertake to have a dividend of 10 per cent. per annum on its capital stock and put up the bonds to secure the payment! The vendors undertake not to receive during the first three years any remuneration whatever for their services until the shareholders have received 10 per cent. on the paid up share capital. This promise seems superfluous in view of the deposits of bonds to secure the payment, but the security would be devoured should there be a failure for more than one year to pay the dividend.

Northwestern manufacturers of lumber (American) are suspected of making more than 10 per cent. profit, but they are those who have purchased the timber lands and get their stock from the stump. American lumber dealers generally would be well pleased, we believe, with a guarantee of ten per cent. dividend on the capital invested. The impression we have of England is of a land where money is cheap and the people satisfied with small profits, but that must be a mistaken notion if the profits in the English timber trade afford a fair sample of the earnings of capital invested in trade over there.—*Lumberman's Gazette*.

The *Forester* says:—We learn that the timber in the townships to the east of Huntsville, which as yet has never been tapped by the lumbermen's axe, is likely to be put on the market by the Ontario Government next year. Already several lumber firms have had men ranging through the bush spying out the best limits.

THE CHEAP AND THE DEAR SELLER.

It is not the first law of economics that the cheap seller will supersede the dear seller and get all his market away? Certainly that is true in the long run, but is not true in five minutes. The difficulties in the way of the "undercutter" or underseller are very great indeed. In the first place "the trade" hate him, and the hatred of the trade is unpleasant—good assistants shunning the banned shop—effort after effort has been made to beat the bakers, who hold very closely together, but with very little result. They will let down prices to a point, but no further, being quite aware that in all trades which take room there limits to competition. Two half-pence on two loaves are not equal to a penny on one loaf. When the ovens will only hold so many loaves. Then the buyer who cares about the fall of a penny is always wanting credit, and does not like to quit the man who will give it, and who regards desertion as the unpardonable sin. Moreover, he, or rather she, believes in the customary price, and, whatever the newspapers may say, cannot get rid of the impression that somehow the underseller is giving her, in some way, inferior quality for her money—a belief diligently encouraged by the regular tradesman. And lastly, the underseller being anxious mainly for accidental custom, is neither so obliging, nor so patient, nor so careful about deliveries as his established rival. So strongly do these three causes work together, that we have heard of instances in which bakers in populous districts have bought their underselling rival's stocks, and sold them at their own prices without their customers either knowing or resenting the tax so directly levied. The force of habit, which even arrests downfalls in bread, is much stronger as to articles less needed and less accurately understood, till we arrive at cases in which, as in the milk trade, cheapness is positively suspected or disliked, as if it must of necessity be based upon some fraud. Of course, in the end, if wholesale prices are low, the undersellers win, and the new price establishes itself, in which case we to the retailer when wholesale prices rise. They have to endure a storm of inquiries, oburgations and epithets which must take the sweetness of their previous gain quite out of them, and very often are compelled to yield and compensate themselves by unsuspected reductions in quality. As a rule, however, the demand that a customary and low price should be lower still comes with surprising slowness, and the distributors, when their wholesale market has given way, enjoy unexpected profits continuously for months. The public will not, in this instance, grudge the shopkeepers their gains, for they had previously been suffering greatly from different causes—one being the difficulty of meeting the competition of the stores, but they certainly for some time past have had cause to bless the "general depression."—*Exchange*.

THE NEW WAY AND THE OLD.

How natural it is for a man who assumes a position to criticize the condition in which he finds things, and the work and arrangement of his predecessor. How many times in visiting manufacturing concerns have we had the faults, neglects and errors of "the fellow who was here before me," diated upon by some new broom whose sharp corners and trim edges were already, we could see, beginning to wear off, and whose "head," as the politicians say, would doubtless some day "come off" with quite as many faults upon it to be diated upon by his successor. Very few of us indeed could step down and out upon short notice and leave the affairs of our office in a state which could not be criticized with some degree of truth by our successor.

With these facts in mind an engineer who accepts a situation should find all the fault which there are about it, seek for all the points where improvement can be made, and then set quietly about having the requisite changes made. He will not gain any particular respect to himself, nor any special reputation for smartness, by parading his superior knowledge and ability, and will make the best impression even

upon his employer by quietly calling his attention to the advantages to be derived from a change without finding fault with the condition in which you found it, or by respectfully insisting that an element of danger be removed without any uncomplimentary allusions to the man who preceded him. In suggesting improvements it is well to commence with small and inexpensive changes, which will pay a large percentage upon the amount expended in making them. If in such matters the employer finds the advice of his engineer to be good, his judgment sound, and that his cash balance is heavier for having followed them, he will be more ready to trust him with the handling of more important matters. He should, at the first opportunity, make a thorough inspection into the condition of his boilers in regard to their freedom from corrosion, scale and dirt, see that the passages to the water gauge are free, that the gauge cocks are clean, that the safety valve is large enough to clear the boiler of all the steam which it can possibly make, is in no danger of sticking from corrosion, and is not pipe so that the water of condensation can stand upon its back. The safety valves for many boilers are figured from the grate surface alone, and this is frequently increased after the boiler has been in use, without a corresponding increase in the safety valve. Having determined the boiler to be in a safe and economical condition, or make it so if it is not, the engine should be looked over carefully for signs of wear, for errors in the setting of the valves, or for any chance of improvement as regards economy or safety. The same attention should be paid to the piping and accessories, never having sufficient confidence in your predecessor to take it for granted that he leaves things all right, while exercising sufficient charity towards him not making his failings your chief topic of conversation.—*Boston Journal of Commerce*.

BOSTON BUSINESS.

The local railway are buying absolutely nothing, a somewhat unusual circumstance for this season. At this date they have always been about with their plans for the coming summer and fall, but the most diligent inquiry can elicit nothing yet in prospect for depot, bridge or car work. Per contra, the Baltimore & Ohio has just closed up its Boston negotiations that foot its purchase of nearly four million, while the Pennsylvania and some of the western roads are gathering in about the same oxaggregate, with one well known Boston road that runs west of Chicago wanting about 2,000,000 feet in one lot for new car works.

"Nothing doing" is the ready response in every lumber office to the inquiry "How's the trade?" Yet at no time for several years has there been so many schedules floating about as now, and not often so many large ones. One new mill, to take over 2,000,000, is hanging around, while a host of small mills from 30,000 to 100,000 are looking for a hook to hang upon. The mills both south and north are bulls in the market, and decline to take orders except at full, and in some instances advanced, prices.

A couple of random cargoes of hemlock surprised the market the first of the week, the skipper snapped \$13, his first bid, and then "blowed great guns" an hour afterwards because he was 50 cents behind high water mark. However this little Doans-street episode established a value, filled an anxious gap, and puts the market rather softly on \$13 for random and \$14 to \$14.50 for such dule.

Builders have idled away the week gossiping over the prospect. They find lumber, labor and hardware disposed to inflate, and some who have deservingly suburban schemes in hand profess to believe that any advance over last summer's values will break up their plans. The new circuit of the Boston & Albany roads round and through the Newtons, that was to open last spring, and then in October, and now procrastinates until April, gave evidence of getting a \$100,000 syndicate to build and boom this desirable locality, but the cost of the land and the lumber, they say, has already boomed them out of sight.—*Manufacturer's Gazette*.

SHILOH'S CATARRH REMEDY a positive cure for Catarrh, Diptheria and Canker Mouth. For sale by Ormond & Walsh, druggists, Peterborough.

PREVENTION OF FIRES.

There are some things quite interesting in a late circular issued by the Home Insurance Company of New York. A graphic diagram is given showing at a glance the proportion of causes to the whole number of fires that occurred in the United States for the year of 1894. From this diagram, it appears that most of the causes are incendiary, though a large portion of them are from defective flues, carelessness and other things that might be classed as preventable. Five-ninths of the fires are traceable to incendiary, two-ninths to defective flues, one-twelfth to matches, the same to explosions of lamps and lanterns and general carelessness and one-fifteenth each to lightning, spontaneous combustion and stoves and stove pipes. Many of these, it can be readily seen, could have been avoided by the exercise of ordinary prudence and foresight. Incendiary is referred to as its "proportions could be materially reduced if each agent would be careful to ascertain the just value of property offered for insurance, and then firmly decline to insure or permit other insurance in excess of three-fourths of such value." No doubt many fires from this cause could be prevented by such a course of action but the eagerness on the part of agents receiving commissions on the amount of business done by them, greatly militates against carrying anything of this kind into practice to its full purpose. Fires caused by boilers and steam pipes are of infrequent occurrence, yet the location of the latter is of sufficient importance to speak of, in that they should not be allowed to come into contact with wood or anything liable to combustion, and should be so placed as not to serve as a convenient respectable for various odds and ends about the factory. The best plan to pursue is to suspend the pipes overhead at a proper distance from the ceiling, as they are then out of the way, in as safe a position as possible, and capable of heating the space allotted to them as well as if placed in any other position.—*Boston Journal of Commerce*.

MALAYAN TIMBERS.

The advocates of the use of jarrah wood ought not to be too sanguine regarding the alleged pre-eminent qualities of that kind of timber, if any confidence is to be placed in the following extract from a recent issue of the *Australian Register*:—

"It would appear that the Western Australia jarrah wood is just as susceptible to the attacks of the cobra (*teredos navalis*) in water as it is to those of white ants on shore. The Whampoa, on her southern trip, took down a piece cut from one of the trial piles of the jetty, planted some months ago, which was thoroughly perforated by the sea worm. As the jetty piles are to be sheathed with copper, and the wood has otherwise proved to be very serviceable for piles, we do not suppose any alteration of timber will be ordered, as, as yet, the cobra has found it just as difficult to eat its way through metal in the water as the omnivorous white ants have on shore. True, it may be only a question of time and education, but until it is proved that iron and copper are no protection against the insects' encroachments it may be as well to chance it."

It is surprising that the enterprising contractors and engineers of numerous docks and jetties in Europe, as well as in countries less favored with valuable timbers, have never directed their attention to the serviceableness and proved capability of Ballow, Rassak, Billion, and Tumbusao for such purposes. Those timbers have been entirely used in the construction of the Singapore and other East Indian piers and docks, and have given the utmost satisfaction. Ballow seems, however, to be the timber in greatest request, and large quantities of it have been exported from Singapore to India, China, Ceylon and Australia for this special purpose.

A PORT Sound paper gives the scale of a single tree, cut at a Skagit river camp, as follows, the tree being cut into three 24-foot logs; Butt, 7,512 feet; second log, 5,732 feet, and top 5,826 feet—a total of 20,080 feet of lumber in the tree. The diameter at the small end of the logs was 78, 71, and 64 inches, respectively.

Chips.

The ship Mercury, from Chatham, N. B., at Sydney, N. S. W., December 12, lost part of deck load of timber in a gale some days before.

The schooner Lizzie K., St John, N. B., for Boston loaded with lath, was rapidly going to pieces February 5 on Folly island, off Cape Provoise.

SINCE August 1 last it is estimated that 1,500,000,000 feet of standing pine in Michigan has changed hands, the consideration for which approximates \$5,000,000.

NOTICE of application is made in the Canadian Gazette by parties for incorporation as a railway bridge company, to build a bridge across the St. Lawrence at Brockville.

J. G. McELWEE & Co., of Big Rapids, Mich. are shipping shavings from that point to Brunswick, N. J., the freight thereon being \$80 per ton. It is not stated to what specific purpose the shavings are put.

At Middle River, N. S., George Kerr & Son's "Burnside" Woollen Mills and steam sawmill, burned down in 1883, have been rebuilt four miles further down the river and fitted with cross-cut saws and shingle machines. It is in better condition than ever.

WORK at the Deseronto Cedar Mill is very brisk; shingles, posts, &c., are being turned out in great quantities. Carloads of cedar from the line of the Central Ontario railway arrive daily. Mr. G. W. Walker, formerly shipper on the east dock, is now attending to the packing and sorting room of the shingle department, while Mr. James Gorman takes charge of the first floor.—Tribune.

A DISPATCH from Bancroft, Hastings county, Ontario, says:—Lumbering operations are progressing favorably in this district, and a large amount of the produce of the forest, both in square timber and saw logs will be floated this spring. A quarter of a century ago it was supposed that ten years would exhaust all the merchantable timber in this part of the country, but those prophets were like the weather wise—they knew little about it.

MR. PETER McLAREN, the well known Perth lumberman, says the Brockville Recorder, while in town on Saturday gave a striking instance of his liberality. He has large quantities of mill wood which makes excellent fire-wood, and is sold exclusively for that purpose. He offered to send three carloads to be distributed among the poor in the town provided the authorities paid the freight. It is needless to say the offer was accepted.

MR. ALEX. GIBSON, of Marysville, N. B., will make a special exhibit of the produce of his settlement, at the Conolian Exhibition in May, consisting of lumber, timber, cotton, cotton batting, bricks, etc. The educational exhibit from New Brunswick will also be a large one. A trophy of wood is being prepared by the Government. It will occupy ten square feet and represent all the woods and shrubs of the province. The shipbuilding interest will be represented by models of vessels and several applicable to the same. There will be a large fish and vegetable exhibit.

AUSTRALIAN HARDWOODS.

An Australian paper says:—"Probably no country in the world possesses finer or more durable hardwoods than New South Wales. Her iron bark and black-butts rank for durability second to none. Singularly enough all the principal hardwoods used in the colony belong to the great Myrtle family, which, according to Professor Balfour, contains 75 genera, and as many as 1,800 species. Some of the genera, such as the eucalypts, which constitutes at least three-fourths of the timber-producing trees, furnish the bulk of colonial hardwoods, iron-bark, black-butt, blue gum, stringy bark, swamp mahogany, tallow-wood, and yarrah all belong to the same remarkable genus, although differing in many ways, and in none more than their rate of growth, the blue-gums and black-butts being very rapid growers, while the iron-bark and box take much longer to mature. The

remainder of hardwoods are principally angophoras or "apple trees," most of which are subject to gum veins; tea-trees, tristanias and syncarpias, better known as turpentine trees, but all members of the Myrtle family, and all growing in the open forest—very rarely in the bush or scrub."

U. S. TARIFF CHANGES.

WASHINGTON, Feb. 15.—Morrison's Tariff Bill will reduce the revenue about \$20,000,000 a year. Of this amount probably one half is taken off sugar, a little more than one-fourth taken off additions to the fee list, and a little less than one-fourth comes from various items scattered through the list. All wood and lumber not dressed is put on the free list with this provision, that the abolition of the duty is not to apply to any wood or lumber imported from a country that imposes an export duty on those articles. The other additions to the free list are hemp, jute butts, sisal, and other fibre grasses, coal, salt, iron, lead, copper and other ores, unmanufactured stone, chicory and other substitutes for coffee, corn, oats, hay, potatoes, extract of hemlock, and other barks, crude glycerine, indigo extract, sulphate of barytes, unmanufactured crude borax, saltpetre, log-wood, and other dye woods, ochery earths, and unwrought clays. On the various grades of sugar there is a general reduction of 20 per cent, but the reduction does not apply to any sugar on which there is an export duty is levied, as is now the case in Cuba. On the finest grades of cotton goods, the duties on which are *ad valorem*, no changes are made. The rates of duty are highest on the cheapest grades of goods, and on cotton yarns, and on the coarse cotton cloths some reductions are made. When existing duties are under 40 per cent *ad valorem*, they are not touched, but the duty on coarse cotton is reduced from 40 to 35 per cent. The duty on pig iron, is reduced from \$6.72 to \$5.60 per ton. The rate on steel and iron rails is reduced from about \$17 to \$12.50. There is a slight reduction in bar iron, and some varieties of boiler and hoop iron, while others are not touched. The rate on structural iron and steels, is reduced from one and a quarter to one cent a pound. The three highest classes of crockery now pay duties of 60, 55, and 50 per cent; the new bill reduces them to 50, 45, and 40 per cent. Those grades cover all ordinary crockery.

The World's Best.

It is certainly remarkable the wonderful cures effected by West's World's Wonder or Family Liment. This remedy has not an equal in the world for the speedy cure of Rheumatism, Sprains, Cuts, Bruises and all diseases requiring external application. Price 25 cents and 50 cents per bottle. Sold by J. D. Tully

AN EXTRAORDINARY OFFER.

To all Wanting Employment.

We want Live, Energetic Agents in every county in the United States and Canada to sell a patent article of good merit, on its merits. An article having a large sale, paying over 100 per cent profit, having no competition, and on which the agent is protected in the exclusive sale by a deed given for each and every county he may secure from us. With all these advantages to our agents and the fact that it is an article that can be sold to every householder it might not be necessary to make an "extraordinary offer" to secure good agents at once, but we have concluded to make it to show, not only our confidence in the merits of our invention, but in its saleability by any agent that will handle it with energy. Our agents now at work are making from \$150 to \$300 a month clear and this fact makes it safe for us to make our offer to all who are out of employment. Any agent that will give our business a thirty days' trial and fail to clear at least \$100 in this time, above all expenses, can return all goods unsold to us and we will refund the money paid for them. Any agent or general agent who would like ten or more counties and work them through subsequent ninety days and fail to clear at least \$750 above all expenses, can return goods unsold and get their money back. No other employer of agents ever dared to make such offers, nor would we if we did not know that we have agents now making more than double the amount we guaranteed, and but two sales a day would give a profit of over \$125 a month, and that one of our agents took eighteen orders in one day. Our large descriptive circulars explain our offer more fully, and these we wish to send to every one out of employment who will send us three one cent stamps for postage. Send at once and secure the agency in time for the boom and go to work on the terms named in our extraordinary offer. We would like to have the address of all the agents, sewing machine solicitors and carpenters in the country, and ask any reader of this paper who reads this offer, to send us at once the name and address of all such they know. Address at once or you will lose the best chance ever offered to those out of employment to make money.

RENNER MANUFACTURING CO.,
116 Smithfield St., Pittsburg, Pa.

LUMBER DRIVERS' CALKS

FOR USE IN STEAM DRIVING.

Made from the Best Refined Tool Steel and Forged. The method used in tempering leaves every one of the same temper rendering them stronger and more durable than any other Calks made. Samples and prices free on application to the undersigned.

THE

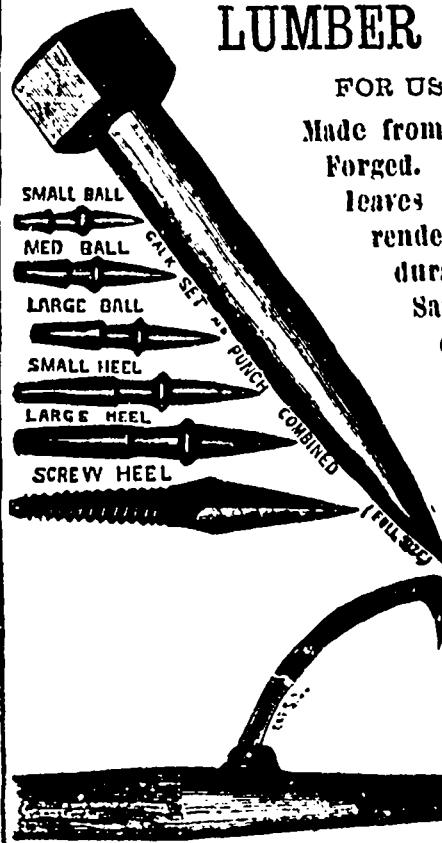
Orono Cant Dog

Strongest and Lightest in the market. Made of Best Cast Steel by drop forging process. The Handles are made of best quality straight grained split and turned Rock Maple, 5 to 6 feet in length, bored specially to suit the pick. Prices on application.

MANUFACTURED BY

T. McAVITY & SONS,

ST. JOHN, N.B.



L2

A FULL LINE of all Size Single and Double Belting constantly in stock. All ORDERS Filled same days as received.



Factory and Wareroom. 3:—2518, 2520 and 2522, Notre Dame Street.

MONTREAL, QUE.

GET YOUR STATIONERY SUPPLIES

AT

THE "REVIEW" STATIONERY STORE

MARKET BLOCK, GEORGE STREET.

Noted for BEST QUALITY GOODS at LOW PRICES!

PAPER, ENVELOPES, PENS, INK and PENCILS,

And every house and office requisite always kept in stock, and sold retail in BOTH SMALL OR LARGE QUANTITIES.

A LIBERAL DISCOUNT will be allowed to Bankers, Lumbermen, Manufacturers, Clergymen, School Teachers, Township Officers and others buying their Stationery in large quantities, and also to cash buyers. Estimates given and contracts made for yearly supplies at lowest rate.

Market Reports.

TORONTO.

From Our Own Correspondent.

FEB. 22.—The retail and wholesale trade continues fair, considering the wintry weather we are now having. Prices remain firm. Offers are now making for next cut of logs, but millmen are high in their demands, evidently expecting a boom in lumber on the opening of the cutting season.

Considerable annoyance and loss to holders of stocks on the line of the N. & N. W. R. R. has resulted through the failure of the above road to meet the cut rates made by the G. T. R. R. Co. to points in western Ontario from off their Midland division.

Mill cut boards and scantling..... \$10 00
Shipping all boards, promiscuous widths..... 12 00
Stocks..... 13 00
Scantling and joist, up to 16 ft..... 13 00

Cutting up planks to dry..... 20 00
boards..... 20 00
ound dressing stocks..... 16 00
Picks Am. inspection..... 50 00
Three uppers, Am. inspection..... 35 00

MONTREAL.

From Our Own Correspondent.

FEB. 23.—As usual at this season of the year the market is very quiet, but the prospects are encouraging, and there is a bright outlook in the building line. Enquiries are already being made by some contractors for large bills, and the retail trade also promises fairly.

Prices of all grades are very firm, with a prospect of higher figures. Basswood is weaker than last year, as there is a good deal offering,

Cull deals are scarce and prices high. Prices in Ottawa are steady, but our next report will probably show an advance all around, as there is very little stock unsold, and holders are looking for higher figures.

The demand during the past year appears to have been very good, as compared with the year before, as the receipts for the local trade were nearly \$5,000,000, against 76,000,000 in 1884. The following were the actual receipts by the various channels:—

Table with 2 columns: Channel, Receipts. Includes Grand Trunk Railway (19,557,000 feet), Canada Pacific (10,540,000), Lachine Canal (43,709,000), River St. Lawrence (9,871,620).

Prices are as follows:—

Table with 2 columns: Item, Price. Includes Pine, 1st quality (835 00@340 00), Pine, 2nd (25 00@320 00), Pine, shipping culls (14 00@310 00), etc.

CONDWOOD.

The cordwood market is very dull, prices are high, but fair:—

Table with 2 columns: Item, Price. Includes Long Maple, per cord (8 00@30 50), Long Birch (8 00@30 00), Long Beech (5 00@35 50), Tamarack (5 00 0 00).

CHICAGO.

AT THE YARDS.

The Northwestern Lumberman of Feb. 20th says:—Interest now centres in the attitude of trade in regard to prices. Thus far the dealers have acted commendably. They have fairly adhered to the policy of firmness declared at the year's beginning.

There is considerable inquiry for good lumber for factory work. As yet this call has not become very pronounced, but it is looking up in a manner that indicates a good future demand. The extent of the near-by demand for better grades of lumber this year will depend on the extent of building.

The brightest outlook for the lumber trade this year is in the direction of railroads. The call for car stuff is active, and prices for strips suitable for this purpose are a dollar or more higher than for other lumber of corresponding grade.

given employment to the surplus labor of the country, we may expect higher prices for farm products, and a consequent increased rural demand for lumber. This cannot come for several months. Farmers will not realize the benefit of railroad construction before next fall.

It is evident that the yard dealers feel more than usually cheerful and confident in view of the prospects. They evince a disposition to wait the natural and healthy movement of lumber, and do not manifest that feverish haste to crowd off stocks that has been witnessed in former seasons.

According to the report of stock on hand February 1st, as made to the secretary of the exchange, a decrease of 4,674,482 feet was shown in the total, as compared to amount on hand at a corresponding date the year previous. Stocks decreased during January to the amount of 41,924,891 feet in spite of adverse weather conditions.

Receipts of lumber and shingles for the week ending February 18th, as reported by the Lumberman's Exchange:—

Table with 2 columns: Year, Receipts. Includes 1886 (5,235,000 Lumber, 1,500,000 Shingles), 1885 (900,000 Lumber, 182,000 Shingles).

Table with 2 columns: Year, Receipts. Includes 1886 (26,444,000 Lumber, 7,938,000 Shingles), 1885 (21,480,000 Lumber, 4,650,000 Shingles).

Table with 2 columns: Item, Receipts. Includes Lumber & timber (584,707,532), Shingles (418,839,295), Lath (77,926,452), etc.

EASTERN FREIGHT RATES. FROM CHICAGO AND COMMON POINTS ON CAR LOAD LOTS OF HARD AND SOFT LUMBER. IN EFFECT NOV. 1.

Table with 2 columns: Destination, Rate. Includes To New York (30c), Boston (35c), Philadelphia (28c), Baltimore (28c), Washington (38c), etc.

OSWEGO, N.Y.

From Our Own Correspondent

The demand since our last has been very good, though we cannot advance our quotations. Country dealers are only purchasing to keep up assortments, most of them have run on very short stocks during the winter.

Table with 2 columns: Item, Price. Includes Three uppers (42 00@240 00), Picking (32 00@355 00), Cutting up (24 00@220 00), etc.

ALBANY.

Quotations at the yards are as follows:— Pine, clear (83 00@55 00), Pine, fourths (45 00@30 00).

Table with 2 columns: Item, Price. Includes Pine, selects (45 00@47 00), Pine, good box (22 00@43 00), Pine, common box (11 00@18 00), etc.

TYNE.

The Timber Trades Journal says:—The frost and snow which have held everything in their grasp for several weeks past have at last disappeared, and outdoor employments are now to some extent being resumed.

None of the saw mills have run more than three quarter time, and a considerable part of them not even that. Now that the weather is a little more favorable, operations will be resumed, but the look-out is not at all inviting.

So far the shipbuilding dispute is unsettled, and apparently no nearer to a solution. The iron and coal trades are also very quiet, while the building trade is apparently, if one may judge from the sign of empty houses here and there, a little overdone.

Stocks of wood goods still continue high, and in all likelihood the importation for this year, if confined to the requirements of the trade, will be but small. A few ships are being asked for, but in amount they are not large.

The importations for the past seven days have been mainly per steamers, and are not of much importance either in number or amount.

GLASGOW.

The Timber Trades Journal of Feb. 13th says:—Our wood import list for the past week is almost a blank. There have been no arrivals at Greenock or Grangemouth, and only a few staves, &c., (about 30 loads) at Glasgow; but though not entered in this week's list, there has just come to hand a cargo of spruce deals from Dorchester, N. B., the first of this year's import of spruce deals at Glasgow, and consigned to Messrs. Edmunson & Mitchels.

The change we are beginning to experience from the late severe weather will have a favorable effect on the timber trade, as the protracted wintry weather had stopped outdoor building operations, and was a hindrance to the inspection of timber in ponds.

An auction sale of timber and deals, result of which is given below, took place at Greenock on the 4th inst., when transactions were to a fair extent, over 400 logs changed hands besides deals. Birch timber of small squares (stock of which is heavy) is not in demand, and prices obtainable are low.

A public sale of mahogany and cedar, as will be seen from our advertisement columns, is announced by Messrs. William Connal & Co. to take place at Queen's Dock, Glasgow, on 23rd inst.

AUCTION SALE.

On 4th inst., at Greenock, Messrs. Singleton, Dunn & Co. brokers:—

Quebec waney boardwood— 40 c. ft. av. per lo.	Per c. ft. 1s. 8d. & 1s. 8d.
Quebec yellow pine— 35 & 40 c. ft. av. per log	1s. & 11. 0jd.
Quebec red pine (100 logs)— 45 c. ft. av. per log 25 & 30 "	1s. 3jd. 10d. and 10jd.
Miramichi yellow pine deals— 9 to 20 ft. 13/19x3	9d.
9 " 20 " 12x3	9jd.
15 " 20 " 11x3	9jd.
9 " 14 " 11x3	9jd.
14 " 20 " 10x3	9jd.
9 " 13 " 10x3	9d.
12 " 20 " 9x3	9d.
9 " 11 " 9x3	8jd.
9 " 20 " 8x3	8jd.
9 " 20 " 7x3	8jd.

LIVERPOOL.

The *Timber Trades Journal* of Feb. 13 says:—At the time of writing there have been no public sales held this week; hence the business done has been quiet and uneventful. Some life may yet be infused into the trade, as two sales are announced, one of pitch pine, &c., by Messrs Price and Pierce, and Messrs Edward Chaloner & Co's sale of mahogany and fancy wood.

There is no great disposition shown to enter into contracts for future supplies, and it is reported that the efforts of the Swedish and Quebec goods have not met with any great measure of success.

So long as trade of this district continues to be in the unsatisfactory condition it now is, so long will there be a desire to act with commendable caution and resistance. Unfortunately there seems little prospect for any marked improvement at any rate for the immediate future, in the face of wage disputes now pending between the manufacturers and operatives in Oldham and other cotton spinning centres, and which have considerably effect the disturbing of other branches of business, so long as they exist.

The freight market here is very quiet, as may be supposed from what is said above, and we do not believe that any vessel has yet been positively fixed for Quebec and this port. The rates offered are about 20s. per load for timber, and 50s. per standard for deals.

Matters did not improve at the sale of pitch pine held by Messrs. Price & Pierce, the result showing a further decline in prices, which in a measure may be attributable to the extensive sale of this wood announced to be held next week by Messrs. James Smith & Co.

No fault could be found with quality and condition of cargo per Woodfield, and the result may be taken as a fair measure of the value of this wood as Mr. T. B. Neale, the auctioneer let no opportunity pass of bringing out the best in bringing out the best possible result. The plank per Megisature are mostly of very short lengths and narrow widths; still they were very cheap at the prices obtained.

The following prices were realized:—

Feet Long.	Inches Wide.	Per c. ft.
20 to 25	17x19 to 20x22	1 0j
19 " 23	17x15 " 18x18	1 4
20 " 30	15x16 " 16x18	1 1
20 " 42	16x17	1 2j
19 " 43	10x12 " 16x17	1 1
22 " 40	16x16 " 16x17	1 2j
24 " 45	14x16 " 16x18	1 1j
17 " 42	12x15 " 15x18	1 0j
20 " 46	12x12 " 14x15	1 1j
20 " 34	12x12	1 1
23 " 51	9x10 " 11x12	1 1j
23 " 30	10x13 " 13x14	1 0j

Beam fillings 11d. & 0 11jd.

Beam fillings	Per c. ft.
3x9 to 4x15	0 9j
4x9 " 5x12	0 10j
5x13 " 6x16	0 11
Ex Legislator.	
6x9 to 6x12	0 9j
4x5 " 5x8	0 9

LONDON.

The *Timber Trades Journal* of Feb. 13 says:—Messrs Churchill & Sim had a moderate attendance at their sale on Wednesday last; the room was tolerably full, but those who occupied the their seats with a fixed determination to bid were hardly so numerous as on the previous occasion. The day being fine the avenue leading to the room was thronged by various mem-

bers of the trade, but the riots at the West End rather than the disposition of prices seemed to be the topic most frequently discussed.

The effect of the continued frost on the dock deliveries is again apparent; and this, together with the stagnation in building, rioters—though perhaps, good for the glaziers—has certainly imparted a less hopeful tone to the market.

Building was very dull, and Mr. Churchill had some difficulty in getting buyers to advance on their opening offers, many lots getting no further than that limitation; one fact, the broker seemed to consider it useless to linger over the lots in a general way, and it did not take very long to see whether there was a chance for getting a bidder to go on when once a pause ensued.

Prices on Wednesday may be set down a very poor, and illustrative of the sensitiveness of the market to the depression, which recent events have rather agitated than otherwise.

Stowage goods, of which many of the deals now and again offered by auction consist, though bearing all the characteristics of the leading shipments and qualities, at least as far as description goes, and nevertheless not equal to the rest of the cargo, and when we see first-rate stock selling under price it will be safest to set it down to some such cause. There can be no question that 3+11 in. in prime quality are very scarce at present, and though undoubtedly feeling the effect of the depression, yet nothing like to the same extent as more general sizes. One reason why speculation is so dead is that there is nothing to look forward to; it would not matter so much at the present if there was anything like a probability of things mending, but nobody can point to the direction that the improvement is to come from.

The disturbance here, though further checking trade now, may perhaps be the foundation of a better state of things by awakening the authorities to the necessity there is for taking some steps to stimulate the industries of the country, which have for a long time been on the decline. It is only in this direction—unless we can find a solution to the question in the promotion of emigration—that the wished for recovery in commerce can be arrived at.

The timber sold on Wednesday seemed to partake of the same inactivity, and bidding was slow, yellow pine or Terpeichore, from Quebec. This hung fire at 45s., and it was some time before the brokers got a bid at all. After lingering awhile, the hammer had to fall without any body caring to advance on the opening figures. There were only about three buyers in the room that cared to offer for it, and in a kind of a saw fashion, first up and then down, the parcel was disposed of, the best price being, 57s. 6d., which one lot of wavy realized. The time certainly does not seem propitious for shippers on the other side to be demanding higher values free on board. If they can succeed to place their f.o.w. stock at last year's quotations they will have done well. Of course we are only alluding now to London Market, but we assume the provincial ports to be pretty much the same position, viz., full stock and a slack demand.

The week dock deliveries again compare favorable with last year, though not much materially on deals and battens (51 standard). On flooring the difference is highly significant of the times, no less than 158 out of an average weekly consumption of 4,000 standards representing the shortage on this one item. The comparison with the corresponding week's consumption last year of floating timber leaves our present record short 249 loads. We hope the weather will prove to be partly the cause of this decline; but we must not attribute it all to that account, for with a week or two's return to mild weather we did not find the improvement we expected.

On Thursday Messrs. Churchill & Sim had a pretty good muster of buyers in and out throughout the wholesale. The plan seemed to be to drop in when something the intending bidder was going in for was likely to be coming under offer, hardly any body seemed to care to it the whole programme through. There were, we noticed, plenty in the room to lift prices if the demand from outside had afforded them any excuse. But when bidding became brisk, which it did at times, it was prompted almost solely by the low price that the goods were fall-

ing at. This was very noticeable when the finish parcel, ex Dowdrop, was submitted, the boards especially going remarkably low.

THE LUMBER OF 1900.

The lumbermen of the present hour is a sharp business man—quick to note advantages in the market alike of labor, produce, or lumber, and enterprising in opening new channels of production or sale. He can "size up" a timber berth, lumber pile, or gang of men with almost unerring judgment. He deals with the seen and tangible, and sharp perception, quick decision are qualities daily requisite. He is apt from his vocation to be rather positive of his knowledge and autocratic in his management of business. He is a great improvement to the happy-go-lucky jobber of half a century ago, who hunted up a grove of pine in some accessible position, found a supplier to carry on the necessary expenditure, hired a gang, and came out in the spring a little ahead or a good deal behind, as the weather and market might determine.

The lumbermen of the year 1900 will be still another style of man, and a great revolution in methods of operation will be the result. "The white pine like the Indian is doomed to extinction; neither can bear cultivation" is the dictum of a philosophic lumberman. Assuming that the present mode of lumbering is pursued twenty years longer, little pine will remain in either Michigan or Ontario, and we must look to some means of supplying our daily needs for houses, cases, etc. That this may be by pressed pulp and peat there can be but little doubt; and we trust that the change will even be to our benefit. The range of timber suited to pulping is annually extending, and the applications to the finished product to domestic use rapidly increasing. That ultimately all kind of timber will be pulped and pressed into required forms, without any loss of material, may be regarded as certain. Instead of saws, boring, mortising machines, planers, moulders, glue pots, etc., we will see extensive ranges of hydraulic presses, steel moulds, and trunnings for the pressed goods they procure. The man that directs all will be a trained chemist, who can call all the appliances of modern science and technical skill to his aid—who can unroll the mazes of natural handwork in vegetable life, and grasp the fibre at the stage suited to his purpose. Asbestos, talc, mica, graphite, kaolin and other mineral bodies will play a part in his operations; oxides and chlorides of the metals will be used to indurate the pulp board and render it incombustible—its hues may vie with rainbow tints, and its durability outlasts the Egyptian granite. Such we believe to be the coming lumberman and his material. There will be then little running of rapids, booming and all the romantic routine of the raftman's life. Whole sections will be devoted to the cultivation of pulp timber and fibrous grasses; and thus the gallant, adventurous raftsmen will subside into the scientific farmer, and reap his laurels (and his profits) from the flowery field instead of the foaming flood.—*Toronto World*.

PROPOSED CHANGE IN THE U. S. TARIFF.

The following is a somewhat clearer statement of the charges proposed by Mr. Morrison, after July 1st, 1886, as far as they affect Canadian interest:—

FREE LIST—ADDITIONS.

Lumber, hewn and sawed, and timber used for spurs and in building wharves; timber, square and sided, not specially provided for; sawed boards, plank, deals and other lumber of hemlock, whitewood, sycamore and basswood, and all other articles of sawed lumber; huls for wheels, posts, last-blocks, waggon blocks, car-blocks, gun-blocks, head-blocks, and all like blocks or sticks, rough hewn or sawed only; staves, or wood of all kinds, pickets and palings laths, shingles, pine clapboards, spruce clapboards, wood, unmanufactured, not specially enumerated or provided for (proviso—imperative when imported from a country laying an export tax); salt in bags, sacks, barrels or any other packages; salt in bulk; hemp, Manila, and other like substitutes for hemp not specially enumerated or provided for; jute butts; jute—sunn; Sisal grass and other vegetable sub-

stances not specially provided for; iron ore, including manganiferous iron ore; also the dross residuum from burnt pyrites; sulphur ore, as pyrites or sulphuret of iron in its natural state, copper imported in the form of ores; lead ores and lead dross; chromate of ore, or chromic ore; mineral substances in a crude state and metal unworked, not specially enumerated or provided for; coal, slack or culm; coal, bituminous and shale; Indian corn, or maize; oats, hay, potatoes; chickoery-root, ground or unground, burnt, prepared; acorns and dandelion root, raw or prepared, and all other articles used or intended to be used as coffee, or as substitutes therefor, not specially enumerated or provided for; briarles, grease; tallow; grindstones, unfinished; stones unmanufactured or undressed freestone, granite, sandstone and all building or monumental stone except marble, not specially enumerated or provided for; beeswax; glycerine, crude, brown or yellow, for the specific of one and twenty five hundredths or less at a temperature of sixty degrees Fahrenheit, as purified by refining or distilling; extract of hemlock and other bark used for tanning, not otherwise enumerated or provided for; indigo, extracts of, and carmined; Lec's brystales; baryta, sulphate of or harytes, unmanufactured borate of lime; crude borax, potash; nitrate of or salt petere, crude; logwood and other dyewood and extracts and decoctions of; coal tar, crude; ochro and ochry earths, umber and umber earths and sienna and sienna earths, when dry; all earths or clay, unwrought or unmanufactured, not specially enumerated or provided for.

The bill provides that from and after July 1, 1886, the following rates of duty shall take effect:—

WOOD.

Sawed boards plank, deals and other lumber of hemlock, whitewood sycamore and basswood and other articles of sawed lumber, when planed or finished, for each side so planed or finished, 50 cents per 1,000 feet, board measure.

LEAD, ZINC, ETC.

Lead, in pigs and bars, molten and old refuse run into blocks and bars, and old scrap lead, fit only to be remanufactured, 1½ cents per pound. Lead, in sheets, pipe or shot, 2½ cents per pound.

Zinc, spelter, or tutenague, in blocks or pigs, and old worn out zinc, fit only to be remanufactured, 1 cent per pound; zinc, spelter, or tutenague, in sheets, 2 cents per pound.

*BENDRIES.

Marble of all kinds, in blocks, rough or square, 50 cents per cubic foot; veined marble, sawed, dressed or otherwise, including marble alabs and marble paving tiles, \$1 per cubic foot.

Stones, free stone granite sand stone and all building or monumental stone, except marble, when hewn, dressed, or polished, 20 per centum ad valorem.

BOARD OF TRADE RETURNS.

The following are the returns issued by the Board of Trade, for the month of Dec, 1885:

MONTH ENDED 31ST JAN., 1886.

Quantity Loads.	Value.
Timber (Hewn).	
Russia	507 3,810
Sweden and Norway.....	17,998 26,875
Germany.....	1,231 3,035
United States.....	8,232 31,441
British India.....	3,608 45,017
British North America.....	1,358 3,740
Other Countries.....	27,357 46,950
Total.....	61,699 163,918
Timber (Sawn or Split, Planed or Dressed).	
Russia	3,640 6,774
Sweden and Norway.....	21,787 48,401
British North America ..	7,310 13,982
Other Countries.....	1,567 6,424
Total.....	43,155 101,176
Staves, (all sizes)	4,665 30,584
Mahogany (tons)	2,671 23,555
Total of Hewn and Sawn.....	109,554 265,094

TONAWANDA.

CARGO LOTS—MICHIGAN INSPECTION.

Three uppers.....	\$42 00@44 00
Common.....	18 00@24 00
Culls.....	10 00@13 00

THE band saw boom is rising, Messrs. Churchill, of Alpena, will have one planed in their mill this season.

BAND SAWS—JIG SAWS—SHAVING VAULTS.

The band saw mill has not yet been brought to perfection, and probably will not yet for years to come. If it were perfect we would have no further use for jig saw, and the jig saw is generally a rattling, jumping nuisance. The saw is always getting out of square; the crank shaft is out of balance and jumping around about as it has a mind to, while if the saw is a gate saw the gate gets loose and ricketty, the sawer gets demoralized and your jig-saw work falls into disrepute in the market.

The band saw is not a perfect tool, because we cannot do inside work with it. No practical method has yet been found for joining a saw so that it may be connected and disconnected at will, to enable it to be used for inside work. There is a device whereby a band saw may be unhooked and hooked together again, but it is not of much value. It breaks easily and often, and it costs considerable to repair it. Good jig saws are very scarce. They are not found in every shop, and even every other shop does not have a first class jig-saw.

A saw which has the over-head portion bolted to the floor-joist above, independent of the table—that saw is a tool that you want to sell before you are a day older. Perhaps the maker of that saw came to the shop and set it up himself. It did work nice, there was no mistake about that. It cut square, fast, and smooth, and what more can a saw do? The next morning Bob nailed up four inches thick of gingerbread work and began to saw it. The narrow parts of the scrolls were about one-eighth inch wide. The saw cut quick and smooth and Bob cut around the piece. While he was sawing Tom loaded a truck and took it upstairs on the elevator. When Bob got the pieces sawed he naturally turned them over and looked at them. The narrow part of the scroll was cut completely off. That two thousand pounds of stock on the truck had sprung the floor enough to throw Bob's jig saw one-sixteenth inch out of line. As long as that saw stayed in the shop you could count on its being ready for "inlaid work" and it never could be depended on to cut two bevets alike. The best jig saw we have yet seen is in the shop of Mr. J. W. Cooper 17th street and Washington avenue, Philadelphia. He has eight or ten of these saws. They were built expressly for his own use, and the designs were also his own. They are built on a frame similar to that of some hand saws.

The frame was shaped like the letter C. The crank shaft was in the lower part of the back of the frame, and actuated a double segment rocker arm, which gave motion to two straps, one of which went to the upper end of the saw the other to the lower end. The direction of the straps was changed to perpendicular by two light pulleys, the lower one fixed to the upper pulley hung in a frame. This frame rested upon a wedge. To take out the saw the wedge was withdrawn. To strain the saw the upper pulley and its carriage were raised with one hand while with the other the wedge was pushed into position. These saws worked well. They did not shake enough to displace a five-cent piece when set on edge, upon the saw cutting two inches of black walnut.

"How is your shaving vault rigged?" we asked Mr. Cooper after we had inspected his jig saws. "Well, I'll show you," said he. "There it is, you will see that it is simple, a big brick well. There is nothing about its construction that can be burned. The walls are brick. It is 25 feet up to the iron roof, and if the shavings got on fire the whole thing acts like a big fire place. The shavings burn up and that's all there is about it." "Ever have a fire there?" "Oh yes. The shavings will get on fire once in a while, but it never cost the insurance folks anything yet."

Why is this not a good idea?—Cabinetmaker.

Bright Outlook

New York, Feb. 15—It is stated that the outlook for the lumber trade this spring is decidedly bright. The stock of all kinds of lumber and timber on the market is smaller than it has been for some years, and in view of the good demand and brisk building outlook, there is every prospect of a bright season ahead.

EXPORT DUTY ON LUMBER.

The question of placing an increased duty on logs exported from Canada has attracted considerable attention of late and some with a view to further protect the lumbering industries of the Dominion are urging that the duty be increased. A *Free Press* reporter waited on Mr. Johnston, commissioner of customs, to-day with regard to the matter.

"I wish to ascertain if there is any duty on logs exported from Canada?" asked the reporter.

"Yes," answered Mr. Johnston, "There is an export duty of \$1 per M on spruce and pine logs."

"I suppose you are aware that American firms are proposing to ship logs this season from Georgian Bay section to the Michigan mills?"

"I am not aware of that."

"How does the export duty work?" queried the reporter.

"Well I cannot say that it works satisfactorily; it is so surrounded with difficulties to enforce the regulations. Our frontier line is so long, and the territory to be covered so extensive, that it cannot be otherwise. I see that a measure for taking off the duty on Canadian importations will come up before Congress, and I trust that it will pass, as it would be the means of equalizing things."

"The duty of collecting this export duty is found to be difficult is it?"

"Most difficult. Take for instance New Brunswick. There is only an imaginary line there and Americans come in and draw logs away and what can we do. To enforce the duty it would be necessary to place a man at every lumber camp, and this would be altogether too expensive. In fact the cost of so doing would far exceed the revenue derived."

"What about Ontario?"

"Well take the lakes for instance. The line of demarcation is supposed to be in the centre of the lakes, you cannot make any seizures for duty while the lumber is in Canadian waters and it would be necessary to have a man on the line to enforce the regulation, which is utterly impossible. The outlets are so numerous for this kind of thing that no body can fancy the difficulty with which it is encompassed."

"What do you think would meet the case?"

"I am as strong for protection to our native industries as anybody, but I think the only way the case can be made satisfactory is reciprocity in lumber. If the Americans would take off their duty on sawn lumber everything would be all right. An export duty is a two edged sword."—*Ottawa Free Press.*

Scott's Emulsion of Pure Cod Liver Oil with Hypophosphites.

For Anaemia and Marasmus in Children.

Dr. W. G. Gentry, Kansas City, Mo., says: "I have used Scott's Emulsion for years, and for consumption and anemic patients and children with marasmus, have found it very reliable. Have frequently given it when patients could retain nothing else on the stomach."

A Bad Case.

A lady writes: "I had almost given up all hope of having my natural growth hair back, as I tried most everything advertised for the hair. I can now thank Dr. Dorewend's Hair Magic for not alone restoring the growth, but also the color. I have used two bottles and my hair is in a state of perfect satisfaction to myself." For sale by all reliable Drug stores. J. D. Tully, Agent for Peterborough.

Health is Wealth



DR. E. C. WEST'S NERVE AND BRAIN TREATMENT, guaranteed specific for Hysteria, Dizziness, Convulsions, Fits, Nervous Neuralgia, Headache, Nervous Prostration caused by the use of alcohol or tobacco, Wakefulness, Mental Depression, Softening of the Brain resulting in Insanity and leading to misery, decay and death, Premature Old Age. One box will cure recent cases. Each box contains one month's treatment. One dollar a box, or six boxes for five dollars; sent by mail prepaid on receipt of price. We guarantee six boxes to cure any case. With each order received by us for six boxes, accompanied with five dollars, we will send the purchaser our written guarantee to refund the money if the treatment does not effect a cure. Guarantee forced only by J. D. TULLY, Druggist, Sole Agent for Peterborough.



F. E. DIXON & CO.

Manufacturers of Patent Lap-Joint Star Rivet



LEATHER BELTING

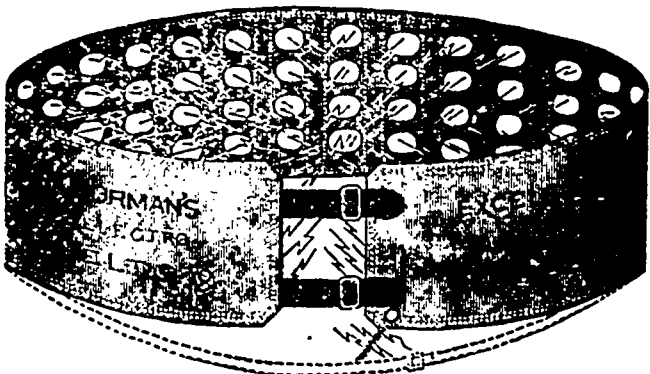
70 KING ST. EAST, TORONTO.

To Mill Owners, Manufacturers & others requiring Leather Belting

Do not buy any Belting unless with DIXON'S PATENT LAP JOINT. It will last longer and do more service than any other. Please note the address, 70 KING ST. EAST, and send for Circulars and Latest Discounts.

Norman's Electro-Curative Belt!

4 QUEEN ST., EAST, TORONTO.



This Belt is the last improvement and the best yet developed Curative Appliance in the world for

INDIGESTION, NERVOUS DEBILITY, RHEUMATISM,

and all diseases of men, and is a grand remedy for Female Complaints also. Circular and consultation free.

LUNG INVIGORATORS KNEE CAPS.

SPINE BANDS, SHOULDER BANDS.

A. NORMAN, Medical Electrician

4 QUEEN STREET EAST, TORONTO.

N. B.—Mr. Norman has had long experience in the Treatment of Diseases by Electricity, and will give his personal attention to every case, by letter or examination

ESTABLISHED 1856

OAK TANNED BELTING

Acknowledged by all to be the

Best Belt ever offered IN CANADA

EVERY BELT GUARANTEED

The Best Mills in the Country use it.

QUALITY is what I aim at, the result being the Generous Support of all Manufacturers.

For Discounts and Terms, Address

JNO. C. McLAREN, MONTREAL.

292 & 294 ST. JAMES STREET WEST,

Lace Leather, American Rubber and Cotton Belting, etc., always on hand.

— RENEW YOUR —
SUBSCRIPTION

FOR THE

Canada Lumberman

IT WILL PAY YOU, BECAUSE :

1. It is the only newspaper published in the Dominion of Canada devoted to the lumber and timber industries.
2. It is devoted to the development and utilization of our forest wealth.
3. It furnishes complete and reliable quotations of prices of lumber in all the leading markets.
4. Its columns are filled with interesting reading matter, valuable alike to the land owner, manufacturer or dealer.
5. It costs only \$2.00 per year to have it sent, post-paid, to any address in Canada, and no land owner, lumber dealer, manufacturer or individual in any way connected with timber industries, can afford to do without it.

TO ADVERTISERS.

It has a circulation among saw mill owners, manufacturers, lumber and timber dealers and all classes connected with the timber business.

Examine the field, count the cost, and you will at once decide that the CANADA LUMBERMAN is the

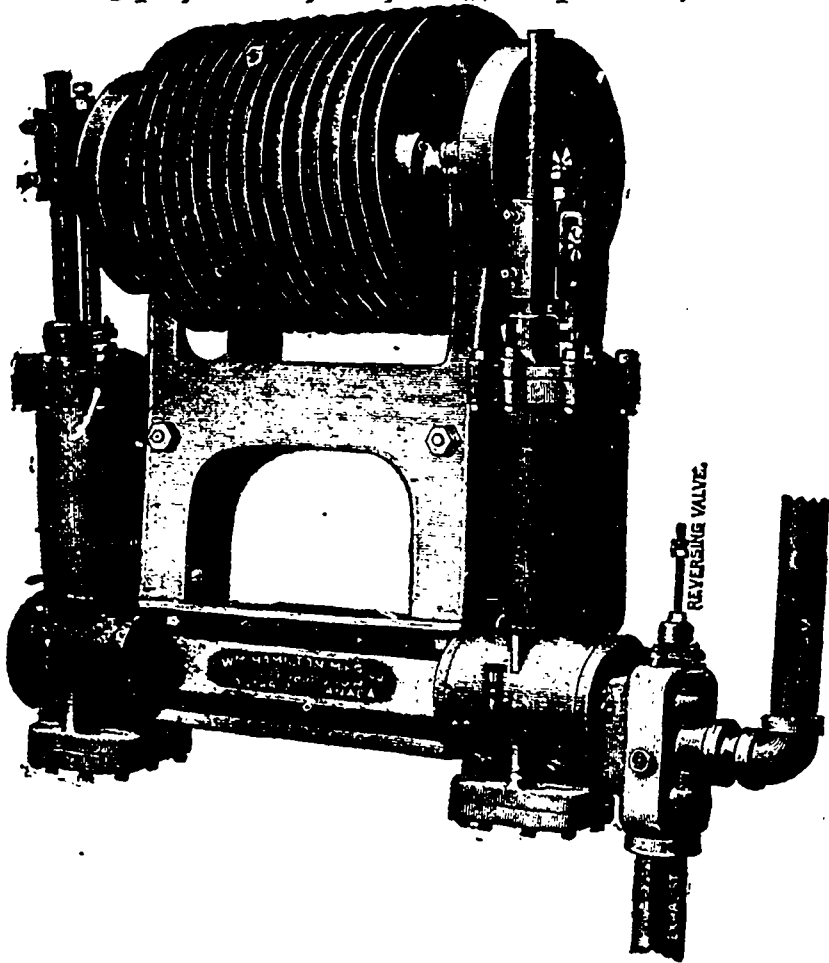
—CHEAPEST, BEST, MOST RELIABLE and ONLY TRUE MEDIUM—

for placing your goods or wares before the saw-mill men and lumber and timber dealers of the Dominion.

CUNNINGHAM'S PATENT OSCILLATING TWIN ENGINE

FOR STEAM FED IN CIRCULAR MILLS WITH RACK OR ROPE.

This Engine has practically but two moving parts, aside from cranks and shafts. The whole array of eccentrics, valves, valve rods, connecting rods, cross heads, slides, levers, rock shafts, bell cranks, etc., is done away with, and the very perfection of simplicity, compactness, durability and cheapness attained.



The above engraving illustrates the Twin Engine, 10x16, for Rope Feed, for Saw Mill Carriages. The spool is 27 in. diameter, 30 in. face, is grooved 2 in. pitch for 1½ in. rope. The shaft is steel, 4½ in. diameter, with disk cranks. No connecting rods, eccentrics or valve rods to get loose and out of order. The ports are in the trunions, and worked by an oscillation of the cylinders, and are held in their place in the downward motion by a steam cushion below. The sawyer's valve is a perfect balance, and by moving this valve the engine can be reversed, stopped or started almost instantaneously if necessary, as the sawyer has perfect control of it by his lever either to go fast or slow. Should the sawyer let go of his lever either by mistake or any other cause, it is balanced so that the valve will come to the centre and cut the steam off both cylinders and stop the feed. When standing, the lever is locked or fastened, so that it is impossible for it to start off itself. The engine stands upright below the carriage, and bolted to two upright beams, placed on the mill for the purpose. When a rack is preferred in place of the rope, we put on a steel wheel 30 in. in diameter, and the engine placed high enough to work into the rack on carriage bar, or if the beams come in the way, an idler wheel can be used between engine and rack segs; or, the engine can be placed at a distance and have a shaft

from it to the carriage; or it can be placed in the engine room, where it is under the control of the engineer for oiling, thence by shaft and pinion to carriage rack bars. These engines are well adapted for cutting long logs, or where the logs are mixed, the advantage of this feed will be apparent to mill men. When the carriages are used in two or more sections, the couplin and uncouplin of each section is quick and simple.

There were two of these feeds working this summer and giving the best of satisfaction, one with rope feed at James Playfair & Co's Mill, Sturgeon Bay, near Waubaushene, and one at the new mill furnished by us to Francis Carswell & Co., at Calabogie Lake, on the Kingston and Pembroke R. R. This mill is working with the Rack and Pinion feed, and drops from fifteen to seventeen stock boards per minute. We have also sent one to the Rathbun Company, Deseronto, to put in to feed their heavy Circular Mills. They will also commend themselves for various other cases, especially for running Elevators, hoisting Engines, and wherever a simple and easily reversible motion is required.

We would also call attention to our Improved Hand Saw-Mill for cutting logs

We guarantee this to be the best Mill of its kind got up, and would ask any one wanting a good Band Saw-Mill to communicate with us. We would also call the attention of Mill Men to our new IRON GANGS, CIRCULAR MILLS and MILL MACHINERY. For further information, prices, &c., address the Manufacturers,

The Wm. Hamilton Manufacturing Co'y, Limited

PETERBOROUGH

NORTHEY & CO'S STEAM PUMPS, TORONTO, ONT.

Pumps for Fire Protection a Specialty.

SAVE INSURANCE.

Our Combined Boiler Feed and Fire Pumps are a NECESSITY IN EVERY WELL ORDERED STEAM MILL or FACTORY.

Cheap.

Cheaper than any Pump built.

Our Independent AIR PUMPS and Condensers will effect a saving of 30 to 50 per cent. when applied to high pressure Engines.

Simple.

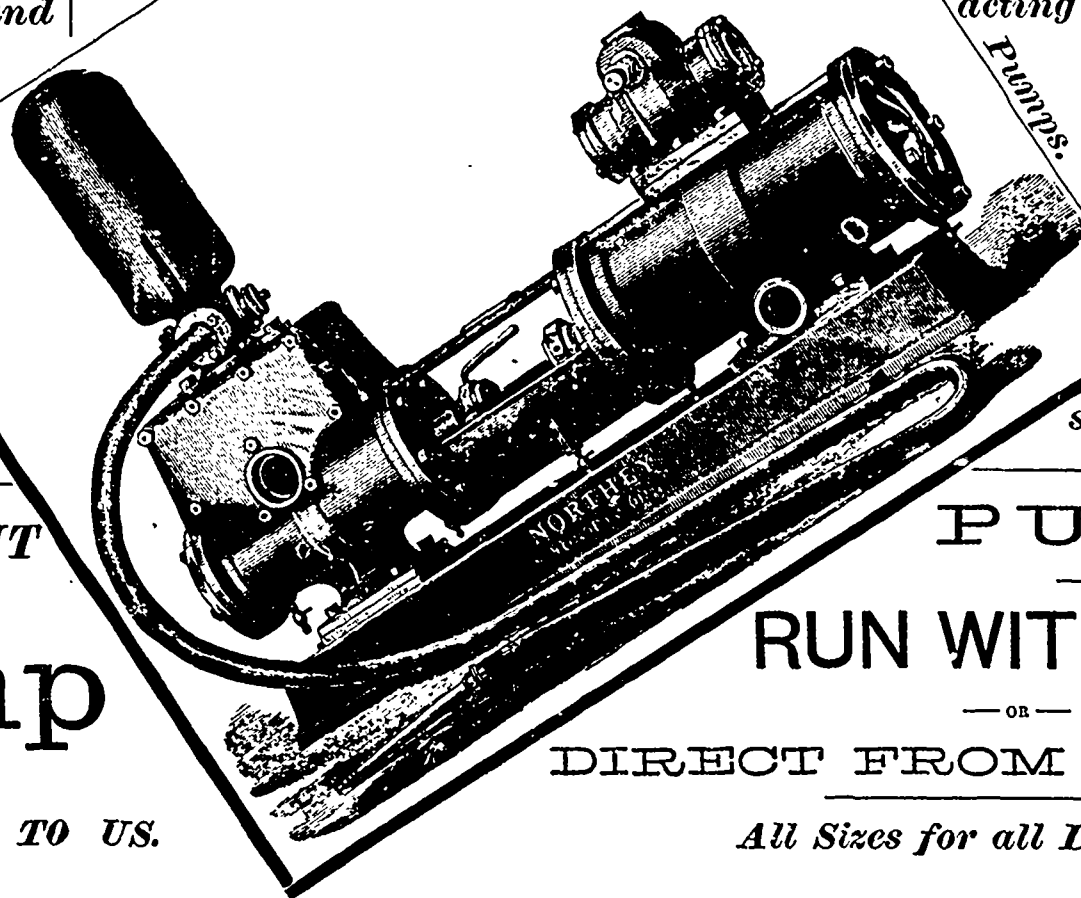
Only two moving parts in Engine.

Compact. Durable.

Having the well known compactness of direct acting Pumps.

Guaranteed the most durable Pump made; impossible to break down.

Our PUMPS for general water supply give the greatest satisfaction.



IF YOU WANT

Pump

FOR ANY PURPOSE

WRITE TO US.

PUMPS

— TO —

RUN WITH BELT

— OR —

DIRECT FROM POWER

All Sizes for all Duties.

Our make of Pump is specially adapted to Mills in out of the way places, as they can be absolutely relied on, and occasion no vexatious stoppages for repairs.

WE INVITE CORRESPONDENCE ON ANY POINT CONNECTED WITH PUMPS.

SEND FOR CIRCULAR AND STATE YOUR REQUIREMENTS.

NORTHEY & COMPANY,

Corner FRONT & PARLIAMENT STS,

TORONTO, ONT



THE TANITE COMPANY

STROUDSBURG,

MONROE COUNTY PENNSYLVANIA, U.S.

MANUFACTURERS OF

SOLID EMERY WHEELS

AND SHARPENING MACHINERY.

The products of the Manufacture of the Tanite Company have, for almost 18 years enjoyed a great reputation, and have been recognized for a long while, in all the countries of the world as a type of excellence in this class of work. In order to increase in Canada their already widely extended use, the Co'y has recently added to the liberality of its terms and conditions, and has chosen the following Houses, so extensively known, to be its Agents:

BEAUDET & CHINIC	} QUEBEC.	MONTREAL SAW WORKS	} MONTREAL
F. H. ANDREWS & SON		MACHINERY SUPPLY ASSOCIATION	
G. A. PONTBRIANT	} SOREL.	R. H. BUCHANAN & CO.	} MONTREAL
A. R. WILLIAMS,		TORONTO.	

Dominion Saw Works!

JAMES ROBERTSON & CO.

253 to 267 KING ST. EAST, TORONTO, ONT.

MANUFACTURERS OF SAWS

Circular, Shingle, Gang, Cross Cut,
Concave, Mulay, Drag, Grooving.



THURBERS ROYAL

Anti-Friction Babbit Metal

IMPORTERS AND DEALERS IN

Band Saws, Emery Wheels, Files,
Saw Swages, Rubber Belting, Saw Sets,
Saw Gummars, Leather Belting, Iron Pipe, &c.

EVERY SAW FULLY WARRANTED.
Prices on Application.