

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

Coloured covers/
Couverture de couleur

Covers damaged/
Couverture endommagée

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Cover title missing/
Le titre de couverture manque

Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Additional comments:
Commentaires supplémentaires:

Coloured pages/
Pages de couleur

Pages damaged/
Pages endommagées

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Pages detached/
Pages détachées

Showthrough/
Transparence

Quality of print varies/
Qualité inégale de l'impression

Continuous pagination/
Pagination continue

Includes index(es)/
Comprend un (des) index

Title on header taken from:
Le titre de l'en-tête provient:

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

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

| | | | | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 10X | 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. 3.

PETERBOROUGH, ONT., DECEMBER 1, 1883.

NO. 23.

WHICH WAY IS THE MARKET TENDING?

The *Timber Trades Journal* of Nov. 3, says. If any inquirer doubts the activity of the timber trade of the United Kingdom in a general sense, we commend to him the perusal of the provincial reports in our last impression. It is true they are not all equally favorable, but he would probably rise from the investigation with the impression on his mind that, whether people were getting money by it or not there was certainly a great deal of business doing.

Liverpool has been for some months past on what may be termed "the croak," on account of the importation of wood goods being much in excess of the demand; but a more hopeful tone then began to prevail. Large quantities of goods were going away into the country, and the worst that could be said of the market was that "the imports kept pace with the consumption." So it will be admitted they ought to do, at this time of year, and something more, else where would be the stock to carry the building and other trades on till next season came around? There was no further retrogression in the price of spruce at the public sales, and it was admitted that buyers were coming forward more readily than had been their wont of late, for which sufficient reasons were assigned, chiefly in the tempting prices at which goods were to be secured, and the approaching close of the import season, when they will no longer be obtained so cheaply. Birch timber and sawn pitch pine, but especially the former, fetched fair prices, and showed that there were plenty of buyers still in the market.

Hull reported diminishing arrivals, but plenty of deliveries, as "the railway company and the river sloops were very busy." The same state of things was also announced from Hartlepool, which was "enjoying in most departments of the trade a fair amount of work;" and what can be pleasanter to record than this? "A very fair trade is doing in sawn wood goods, which are mostly going out of the stocks in the yard. A large number of orders for deals, battens, and floorings are daily loaded up, and are evidently intended for immediate use among joiners and builders, as distinguished from the huge quantities sent from time to time on ship into the interior for stocking purposes;" and the saw mills of the neighborhood were said to be working very briskly.

No slackness of business, excepting in the import department, is reported from Grimsby, Sunderland, or Newcastle, and the abatement of the supply is likely to stimulate the demand. Only mining wood seems to be in excess about these regions, and a fair trade was doing in timber with the ironworks, collieries, and manufacturing around. Leith was by no means overstocked, and the importation was slackening, while at Glasgow, which, as we stated last week, has been importing very freely, the prices realized at the public sale were such as to make

a London importer's mouth water. Quebec 3rd pine deals of good sizes fetched £11 to £12 per standard at Messrs. Singleton, Dunn, & Co.'s sale of the 18th Oct., and Michigan, 1st £26 to £27, and 2nds £20 2s. 6d. at the sale by Messrs. Edmiston & Mitchell on the 24th—prices unknown to the London market, even when times were much better, and indicating that there is great life in the trade, notwithstanding the abundant rate of supply that has hitherto prevailed, and the expectation of a good deal more to come forward before foreign shipments cease for the year.

If we had only these reports before us, the unpaying prices of the London public sales would seem unaccountable, but other bodements are singing in the winds which it would be imprudent for the trade to ignore. An increasing number of vessels, our Stockholm correspondent tells us, are arriving to load at the lower Gulf ports, and it is already perceptible that a considerable number of ships are still afloat, timber-laden and destined for these islands, as well from America as from Europe. A single sentence sometimes divulges more than a whole column of beating about the bush; and such we find in the Cardiff report of last week. A number of market cargoes were then and there announced, with the following information added:—"Some have gone to Bristol, others to Sharpness, and some have been taken in here to be landed, we understand, for shippers account."

Coupling this with the Swedish statement (under date of 20th October), wherein our correspondent expresses his belief that the fall shipments from the Gulf ports "will reach very near an average, in spite of assertions to the contrary so frequently heard a month ago," it may be safely inferred that there is yet a good deal of timber produce to come forward, and that the trade will be fortunate if it is not burdened with something more than an average fall importation ere the setting in of winter closes the timber shipping season. It is satisfactory though, in the midst of its unwonted importation, that the retail trade of Cardiff continues in a prosperous state, as confirmed by the following sentence—"Retail business is very brisk; all our timber merchants are exceedingly busy, sending away as fast as they can deliver, and we hear of nothing but contentment regarding the trade." What more could be said, if we were in the midst of those good times which are always coming but never acknowledged till a succession of commercial disasters undeniably prove to us that they have just gone by.

Last week we traced briefly the progress of importation throughout the land, in comparison of 1882, and on the present occasion we have attempted to show what kind of markets the goods had come to; and so far from finding it in a normally depressed condition, there are not wanting evidences that it is maintaining its

ground, and even going ahead through all the countervailing influences which were acting to its disadvantage, and were it for the rest of the year restricted to the legitimate business of buying abroad and selling at home by the established houses in the trade, there is nothing to show that is not in the way to a measure of prosperity quite equal to that of any period in the best records of the past.

The worst sign of the times may perhaps be found in these market cargoes, which are the bane of an established trade. When firms have imported all that they are likely to require for the connection they rely on, and by which they expect to realize a fair profit, nothing can be more vexatious than to see the cut from under them as it were by a crowd of cargoes sent into their port on speculation, which they have either to buy, at some inconvenience probably either as to money or space for storage, or to allow to be sold piecemeal to the very customers on whom they depended, to relieve them of the stocks they had already imported.

Money is however easy, and trade is evidently in good heart as a whole. Only in London do we see sacrifices made, which are quite inconsistent with the state of trade elsewhere; and even in London, should the supply not very much exceed moderate bounds, it will surprise nobody to witness a great change for the better, before the end of the year.

TAPER GROUND SAWS—THIN SAWS.

The majority of all millmen and filers know but little of the changes that have been made in saws in the last twenty-five years. When the circular saw was first introduced no one knew anything about hammering them open; it was thought the stiffer the plate the better. Then they were all made straight gauge. Following came the taper ground saw, which has been in use twenty years, and is still in use by majority of mills. Now I would like for some one to bring proof that it is better to have the plate thicker in the centre than elsewhere, and convince me of any benefit to be derived therefrom. It would be much easier to convince me that I am wrong than to convince the great number of mill-men who are using taper saws that they are wrong. Since the motion of circular saws has been increased, the extra steel in the centre is a detriment instead of benefit. It is well known that a saw will not run well when it is stiff in the centre. I would by all means prefer it thinner there than otherwise. My reasons are these: First, a straight saw will run with less set; second, it requires less hammering to put the saw in good condition for running. The less set the less power it takes to drive it, the lighter it cuts, and the less liable it is to buckle and dodge. Everything that will lighten the running of a saw should be sought for by all interested in its use. For a long time there were, but few changes made, but within

the last five years there has been much discovered that nearly doubles its capacity. And other things, when better understood, will add to this efficiency 25 per cent more than is now realized by the majority of mills.

Many mills are now running thinner and straight gauge saws. Some are making a success of straight 8 gauge 60-inch, and some do well with 10 gauge 72-inch. I have faith and confidence that five years hence 10 gauge saws will be run with as much success as 8 gauge saws now.

This using of thin saws is a subject of much interest to all persons engaged in the manufacture of lumber. Timber is becoming too scarce and expensive to waste 25 per cent of it in sawdust. All that can be saved by the use of thin saws over thick ones is clear gain. Many try to run thin saws, but fail for lack of knowledge how to run them, and how they should be made. There are several causes why millmen are not running saws three or four gauges thinner than those now in use. Thin saws can be run if they are properly handled. One prominent cause of their failure to run satisfactorily is in not having the proper number of teeth. It is not all in filing; much depends upon the hammering of the saw. I have seen gauge 72-inch saws run in hardwood and carry as much feed as was carried ten years ago in soft timber by 8 gauge, and with good results. (M. Corel.)

Conversion of Prairie into Forest.

Attention has lately been called to the fact that the numerous small prairies that were common in the Wabash basin at the time of its first settlement have become transformed into woodlands, and that owing to this gradual change of prairie to forest, the actual forest area of some of the counties of Southern Illinois is greater at present than fifty years ago. Extensive woods of oak and hickory more than eighty feet in height, and with trunks of nearly two feet in diameter, are now growing on what was open prairie within the memory of some of the present owners of the land. This is interesting as a slight indication of the solution of the mystery which involves the origin of the prairies; while the rapidity with which these new woods have sprung up, shows that the re-production of our failing forests can be accomplished in a shorter time than is generally supposed, if proper consideration and attention can only be given to the subject.—*Lumber World*.

A Small Fortune at Twelve.

By the sale of timber limits on Saturday last, at Ottawa, from which the sum of \$37,000 was realized, a young boy 12 years of age, named Taggart, becomes the possessor of about \$10,000, in cash, besides a very valuable farm. He is a son of the late Mr. Taggart, lumberman, Pembroke, who died seven or eight months ago. Young Taggart is at present in attendance at the Pembroke public school.

THE DEMAND FOR OAK.

Ten years ago it would hardly have been admitted by dealers who handled Michigan and Indiana oak that in a decade there would be a thinning out of the "monarchs" of the forest that a scarcity would be felt. Oak was in too great abundance in some sections of those states to suit the fancy of the owners of the land upon which it grew. Much of it was cut simply to get it out of the way, and the owners of it thought they were fortunate if they could sell it to mill men who would cut it, and thus, themselves, be saved that trouble. There was less call for it then than now. As the building of railroads has increased, the demand for oak increased proportionately, until now the once great oak states, Michigan and Indiana, can not justly lay claim to being called such. Oak in those states has not boomed in price like walnut—it is not an excessive price that bars a supply—but heavy contractors are looking elsewhere for it for the very reason that they are obliged to. There is a large amount of Tennessee and Kentucky oak, upon which heavy freight rates are paid, distributed from the Chicago market, and the amount coming forward from those states will increase year by year.

Fashion has little to do with the use of oak. From the start it has demanded to be used, and it holds its place with a grip as strong as the wood itself. The two kinds of pine may jostle each other; whitewood may take the place of white pine; walnut may be crowded out by the other kinds of hardwood, and often by soft woods; in fact, most of the woods, in their uses, are subject to the caprice of taste, but oak stands sturdily by and refuses to yield. For cars, staves, agricultural implements, for a hundred and one things, in fact, it must be had. The discovery of forests of other woods does not affect its value. There has never yet been any material discovered or invented that will take its place, and we feel tolerably safe when we say there never will be. It is one of the few indispensable woods.

We doubt if to-day there is a market in the world that is not demanding good oak. Throughout the foreign countries the call is so large that it cannot be filled. English car builders are buying car sills on track in Canada, and their operations would be extended to the States if they could find responsible parties with whom to make contracts. The inspection is severe, and that stands in the way of the American manufacturer, for, as a rule, he does not like to be bound by specific specifications. He delights to take a go-as-you-please gait and the result is that his lumber often is not up to the requirements of the purchaser. The exact methods of the white pine manufacturers of the Northwest he has not learned.

The oak of Arkansas, Mississippi, Tennessee and Kentucky will in large part, in the shape of timber and staves, find its way to southern ports, and thence to Europe. On the Mississippi river and its tributaries the stave business is picking up, and with cheap water transportation to New Orleans, the business will not only be a large one, but it ought to be very profitable. On the same rivers the getting out of oak timber for the foreign market will become a large business, spurred on by northern push and capital. Alabama, we believe, is yet destined to send a good deal of oak abroad. Some of the English dealers object to the oak of that state, but they must overcome some of their objections, for to get all the oak they want from Canada and Michigan is out of the question. There is certainly no tougher oak than grows in the South, and this quality is the one needed.

Red oak, a few years ago thought to be worthless, is no longer despised. Its value has become known, and the uses to which it will be put will increase. That the manufacture of it into staves for the West India market will grow into an important industry admits of little question. Taking everything in consideration, the owner of oak swampage ought not to feel that he has a very big elephant on his hands.—*Northwestern Lumberman.*

THE St. John Telegraph learns that the Government of New Brunswick is preparing to have the province represented at the Forestry Exhibition in Edinburgh next year.

THE LUMBER TRADE OF RIGA.

From an article in *Le Marchand de Bois* on the lumber trade of Riga, Russia, we take the following: Of the ports of the Baltic provinces, Riga exports more lumber and timber than all the others, consequently a statement of the amount of this trade done at Riga will give some idea of the extent of the lumber trade of Russia in Europe. The details of the exports of Riga for a series of years from 1871 to 1882, are taken from a recent official document issued from the bureau of commerce. The timber and lumber reaches Riga by the Duna and its tributaries and comes from the provinces of Lovonia, Esthonia, Courland, Mahiton, Minsk, and Sithuanic. Notwithstanding the extensive devastation of the forests, carried on with no assurance of their renewal, the vast forests which formerly covered these provinces yet contain large reserves of timber of the best quality, but their continued depletion with no provisions made for their future restoration should give serious apprehension. The transportation of the wood from the forests to the rivers, which is made by log waggons during the snow and frosts of the winter season is attended with increased difficulties and costs when the winters are usually rainy, which are quite common; and the transportation by water is also difficult on account of the shallowness of the waters and strength of currents; and, additional to this it is peculiarly difficult to safely run the rafts which are constructed to suit the special navigation of the streams. The large timbers are bound together and form the raft proper. On these are then placed laths, staves, clapboards, etc. It is said the manufactured stuffs brought to market in this way are limited in quantity. This is to be regretted as persons who are acquainted with the interior of Russia state that it would be much to the interest of the proprietors if they would put more on their places in the interior the greater portion of the flooring, laths, deals, scantling, etc., as it is well known that large quantities of timber useful for these purposes are left to rot. It is also stated that the debris left by the loggers in the pine forests might be profitably distilled; but to bring about such necessary improvements and progress, the interior must have the benefit of better methods of communication with the markets than by the inefficient and tedious rafting system.

The rafts are formed on the ice before it begins to break up in order that advantage may be taken of the first rising of the waters. When this occurs the rafts usually arrive at Riga from eight to fifteen days thereafter.

During the period above mentioned from 1871 to 1882, there were exported from Riga 87,377,512 pieces of timber and lumber, or an average of 7,281,456 pieces per annum. The progress made in this trade since 1871 is shown by the fact that in that year only 4,542,155 pieces were exported; whereas, in 1882, 9,184,199 pieces were exported.

The total value, in silver, of the wood exported in that time was 122,342,708 roubles (\$91,750,000); a yearly average of 10,195,225 roubles (\$7,646,000). The value of the exports of 1882 was placed at 12,911,072 roubles (\$9,683,000). A silver rouble is worth about 75 cents.

Of the leading articles exported during the twelve years, were in pieces, 3,651,095 staves and clapboards; 30,382,666 sleepers. 49,491,155 posts and flooring. With the exception of 47,769 pieces shipped to Africa, the whole amount was cleared for European ports. England received 58.7 per cent of the total exports; Holland 14.1; Germany 10.1; France 5.6; Belgium 5. and Portugal 2.2 per cent. The balance was taken by Denmark, Sweden, Norway, Spain and Italy. During the year 1882 the average charges, per St. Petersburg standard, to French ports were as follows: Dunkirk, Boulogne and Dieppe \$9 to \$9.50; to Havre, Honfleur and Rouen, \$10.50@ \$11.50.

On the whole the timber and lumber trade of Riga, for the past several years, has made notable progress, and the movement in 1882 was especially favorable. The trade of France with this port, though not near so heavy as it is with Norway, yet it is of no mean importance as the transactions for 1882 reached the sum of about \$835,000, and is susceptible of considerable expansion.

THE ADIRONDACK FORESTS.

The forest region popularly known as the Adirondack wilderness extends over a territory of nearly 2,600 square miles, including within its limits large areas of swamp, lake, and bare mountain tops. Nearly 1,000 square miles of this territory are probably already owned by the State of New York, which has gradually become possessed of the lands through the failure of former owners to pay taxes upon them.

It has long been the custom among owners of Adirondack forest property to cut off the forests as rapidly as a market could be found for the logs, and then abandon the worthless land to the State. It follows that the State lands are not in one or more large, compact bodies, but are widely scattered throughout the wilderness, and are not now covered with any considerable forest growth. The possessions of the State, therefore, great as they are in the aggregate, cannot at present greatly influence the water supply of the upper Hudson basin. In spite of the fires, however, which have swept over such portions of the wilderness as now belong to the State, destroying what little fertility the soil once possessed, forests will grow up again upon these lands in the natural course of events. Years, however, must elapse before these new forests, even if successfully protected from further damage by fire, can be expected to exert any considerable influence upon the water supply of the State.

The law which prohibits the sale of any portion of these lands is a step in the right direction. It is only a step however. In order to insure a permanent flow of water from the northern part of the State, the whole Adirondack region must be preserved in perpetual forest. As long as bodies of timber, the property of private individuals, remain scattered among the State lands, it will be hopeless to undertake the preservation of the detached portions of the forest belonging to the state. Fire follows the axe of the lumberman, and nothing can prevent the spread of fire from private to public lands. If the private owners of the forest in the Adirondack region continue the lumbering operations now projected, the destruction of the entire wilderness is inevitable. The fires, which will find abundant material in the dry tops and branches of trees scattered by the lumbermen about their camps, will sweep year after year over the entire territory now occupied by the northern woods, gradually converting it into a barren desert, incapable of producing again even the most insignificant forests, until the growth and decay of generations of humble plants shall have returned to it some portion of its lost fertility. Nature heals such wounds made upon the earth's surface very slowly even in a climate of our own, and centuries, perhaps, will elapse before the forests of northern New York, once thoroughly destroyed by fire, can be made to flourish again. During such a transition period, possibly extending through centuries the Erie Canal will remain useless for the want of water; the upper Hudson will no longer be a navigable stream; towns and villages now rich and prosperous will be deserted; and the commerce of a mighty nation will be diverted from its natural channels.

If it is desirable to prevent such far-reaching calamities, no half-way measures should be adopted. If our water supply is to be maintained, the state must speedily acquire control of the whole Adirondack wilderness, and govern it in a manner to insure it against the danger of total destruction by fire. Nothing short of entire, absolute control can produce the desired results. The Erie Canal and the Hudson River cannot be placed beyond danger by any ill-considered measure or the makeshifts of mistaken economy.—*N. Y. Sun.*

GIGANTIC FAILURE.

MONTREAL, Nov. 21.—The news of the suspension of the oldest lumber firm in Canada, established over seventy-five years, struck financial circles here to-day as if a thunderbolt had fallen within their midst. No one could believe at first that the house of John Sharples, Son & Co., of Quebec, that had never in its long career been embarrassed, should be in financial trouble with half a million dollars liabilities. It was more than astounding, yet it was true. The cause of the sudden embarrassment arose

out of the failure of the firm's agents in London and the downward turn of the English market for spruce deals, of which they have a quarter of a million dollars' worth awaiting sale in Liverpool and London. It appears that the English market has depreciated 20 per cent standard for the spruce, and if the house was compelled to sell the loss would be enormous, whilst by waiting some time the market is bound to return to its normal condition, and they would come out all right. The firm has shown the Merchants', the Union of Lower Canada, and the Quebec banks a statement with an estimated surplus of \$90,000 of assets over liabilities, and asked for an extension, which was readily granted by all the banks interested to-day.

Mr. Charles Sharples retired in 1870, when the present firm was established, being composed of Mr. John Sharples, of Quebec, and Mr. George Oswald. Mr. Sharples died leaving a fortune of a quarter of a million of dollars, which was divided among his wife and family, and a large portion of which was invested in the present firm. The stock of the Union Bank, which is most largely interested, fell ten per cent this afternoon. It is expected that more lumber firms in Quebec, New Brunswick, and Nova Scotia will have to succumb, as the English market is very depressed at present.—*Mail.*

LATER.

The Montreal correspondent of the *Mail*, writing under date Nov. 22nd, says:—Although commerce is dull here at present, yet business men and banks are cheerful, and take a sanguine view of matters coming out all right. It is true there is a shortage in the winter wheat crop, and that the lumber market abroad was against exporters, but these misfortunes must be borne. In an interview with a leading banker to-day, whose bank is interested in the failure of the old firm of Sharples, Son & Co., of Quebec, he assured me that a better or more satisfactory statement he had never seen presented to creditors in his career than had been furnished. At least 60 per cent of the assets can be realized at once. The firm is only asking three months extension, and my informant hazarded the opinion I heard expressed by a leading merchant this morning that the extension would never have happened only to get rid of a partner in England whose social habits were such as to prevent their great business being looked after and pushed as vigorously as they required. One of the brothers has started already for Liverpool to take the management there. The liabilities are distributed among the following banks:—Union, \$140,000; Nationale, \$10,000; Quebec, \$35,000; Merchants', \$10,000. Added to this is the family claim, estimated at \$110,000, which is not expected to be pressed. The firm's losses in England are reported to be very heavy.

SAVE THE FORESTS

Our esteemed contemporary, the *Sun*, calls upon its associates of the press to come up and help save the forests of the country. We respond with pleasure. We welcome the light of the *Sun* on this point, and are willing to help get up a blaze on the subject. The importance of our forests cannot be overestimated. Their money value is enormous. The raw materials they yield—lumber, fuel, bark, etc.—are worth \$800,000,000. No other single crop equals the forest crop in value. Two millions of working men are employed in harvesting this crop and working upon it. But the money value of the forests of the country, as shown by their annual products, is small when compared with their value as the great modifiers and equalizers of temperature and moisture. It is an unquestioned fact that, at the present rate of destruction, our great preserves of valuable timber will all pass out of existence within a few years unless some means are taken to moderate the consumption. It is equally true that the destruction of the forests is hastened by the waste of careless proprietors and by the failure of the Government to protect those still in its possession. There is not a great deal that can be done by law to preserve our forests, but there is something, and it should be done without delay, while we have left some forests to protect.

We have spoken of the duty on lumber—that should be taken off at once. We ought to,

encourage Canadian lumber to come in, instead of shutting it out. The Government, national or State, should preserve forests at the head of important streams like the Mississippi, the Hudson, Connecticut, Merrimac, Penobscot, Kennebec and Androscoggin, for instance, allowing the large lumber to be cut at stated periods, but leaving the smaller growth to cover ground and grow up. The forest lands in the possession of the Government, where such conditions do not exist, should be surveyed and sold at auction, because private proprietors will at least protect their property from waste. Where practicable, these timber lands might be sold with restrictions. The Timber Culture Act, which was an honest attempt to encourage the of forests on the naturally treeless plains, has yielded no fruit, and might as well be repealed.

A wise measure would be the establishment of a Commission of Forestry, made up of men who know something on the subject—of whom the number is so limited that selection would not be difficult—to consider the whole question and report what should be done. If at the head of such commission we could have such a man as Prof. Sargent of the Arnold Arboretum, assisted by the intelligent arboriculturist, Mr. Charles A. Dann, editor of the Sun, and others whose studies have been in this direction, we should be sure of a report of great value, and so ably presented that even the average Congressman might be stirred to action for the preservation of our forests. — *Boston Herald*

READY MADE HOUSES.

The manufacture of ready-made houses is a business which has attained considerable prominence eastern and Canadian points. Few people unacquainted with the facts have an intelligent idea of this business, and the following concerning the Kennebec Framing Company, of Bangor, Maine, from a local journal, may be interesting.

Dwelling houses are made like boots and shoes—in any quantity or of any size or style, and for any market in the wide world. Not long since this firm received a shingle order for fifty houses for Cape May, to be delivered speedily and in complete finish. These houses were not to be sheds, nor shanties, but regularly ordered dwellings, and they were made accordingly, and so delivered, and contain hundreds of occupants at this moment. An order will be received for a \$50,000 hotel, or an ornate French roof cottage for a country estate, and these are as easily and expeditiously furnished as an ordinary boarding house for a country village or a barn for a ranch in Kansas or Colorado. It is not to be supposed that only a coarse, rough frame is thus sent out, to be trimmed into shape on the spot where it is delivered. On the contrary the house is complete when it leaves the factory, and as ready to go together as a musket when it leaves the armory in Springfield: all the parts being found, even to the knobs for the doors, and the screens and shades for the doors and windows, according to specifications. Great trains of freight cars stand waiting about, and are freighted almost daily here. The refuse trimmings and edge cutting of the lumber are carted off to a neighboring pulp mill, and there speedily turned into material for paper, or other product. Machinery for almost every conceivable use in connection with wood is at hand, and house materials, of any kind, or size, or shape, seem to drop out like meal from a hopper. In a recent instance, where a large building was furnished for a southern order, the parts were thus made, and when put together in the city where the building is now standing, its length was found to vary not the eighth of an inch from the original specifications, although its length on the front numbered hundreds of feet. Every inch of this building, from the sill to last shingle, was sent ready prepared from the factory, and "set up," as readily and almost as quickly as a nail cask. — *Wood-Worker.*

CARE OF SAWS.

Ewing D. Craddock, in a letter to the Cincinnati *Arizan*, says:—The saw is one of the most essential and sensitive tools used. A saw to do the work requires it should be kept in a condition to do work. First, the saw

should be well balanced on the mandrel, and hang true, presenting a straight face on the log side; hang the saw plumb up and down; second, keep your saw well pointed, so that every tooth will do the same amount of work that is required of it, these are the first elements of a successful mechanic; these, too should always be closely observed, third, is the shape of the teeth, to which, as a rule, but little attention is paid by the majority of sawyers. Every man has his own ideas about putting his saw in order, therefore, all cannot be right. My idea is this. A saw tooth should come in contact with the kerf that is to be removed at an angle of 45 degrees. This will produce a thin cutting edge, and will be found to produce the desired result, cutting with the least power, and to economize power is a matter of interest to all. It makes the lightest running saw. As to swaging the teeth, or spring them, I sometimes run one, then the other, but the spring tooth is, by far, the lightest running and cuts smoother lumber. The full swage, with plenty of power, will do as good work as any. The objections I have to the full swaged tooth is that it takes more power to drive it; consequently there is more strain on the plate of your saw; besides it cuts more kerf than the spring tooth, making your saw more liable to buckle. All sawyers know the wider the kerf the more power it takes to drive the saw, and the less feed can be carried; but a spring-tooth will cut a quarter less than full swaged, and, as a matter of course, makes the lightest running saw. Still, each tooth cuts the same distance into the timber, and, therefore, I recommend the spring-tooth. I always spring the teeth at the extreme points, to prevent them from losing their set, for the nearer the point a tooth is set the longer it will retain its set; and file the under sides of each tooth a little beveling, say 12 or 15 degrees, and the back straight, and you will find this kind of dress will give satisfaction in all kinds of timber. In this country, most all the sawyers run the chisel-tooth, or, as some call it the full swage, no set, and meet with good success. The reason of this is that a full swaged tooth is easier used than a spring-tooth. Yet a spring-tooth does not require half the work to keep it up that a full swaged one does, and will make great saving in files and emery wheels.

The "Tribune" On Forestry Laws

Speaking of the rapid destruction of forests, the *New York Tribune* says: The usual practice appears to have been to cut down all the trees on a section, except the young shoots, and leave the bush and branches to dry, and most likely catch fire the next year. And thus what the axe may have left, the fire consumes, so that it really looks as though every precaution had been taken to destroy our forests as rapidly as possible. It is the custom of the Americans to speak rather patronizingly of the Canadians, but in this matter they are wiser than we. There is a law in the Province of Quebec which forbids the cutting of pine trees unless they are 12 inches or over in diameter at the butt, and the same timber dues are charged upon the small logs as upon the large ones, which has had the salutary effect of discouraging the cutting of small trees."

Our North-West Forest.

The *Winnipeg Times* of Nov. 17, says.—Mr. Robert Gunn, Crown Timber Inspector, has examined the Riding Mountain country, and says that it contains a plentiful supply of spruce, poplar and jack pine, which will be amply sufficient for the wants of Northwestern Manitoba for many years hence. He leaves on Monday to inspect the Duck Mountain country north of Birtle and Shoal Lake.

W. E. EDWARDS paid \$37,000 at Ottawa for three timber limits, containing 100 square miles, situated near the headwaters of Lake Id. Quinze, near the boundary line between the provinces of Ontario and Quebec, on the Upper Ottawa.

SINGERS and public speakers are always benefited by using DOWNS' ELIXIR, as it removes hoarseness and increases the power of the voice. Take small doses often. Price, 25c., 50c. and \$1.00.

HILLOCK & KENT,
Wholesale and Retail Dealer in
Fine and Hardwood Lumber, Lath, Shingles,
Veneers, Wave Mouldings & Fancy Woods.
103 Albert Street, TORONTO.
27122

LUMBER
Shingles, Doors, Sash, Flooring, &c.,
WANTED,
STATE QUANTITIES AND PRICE TO
SHORE & DAVIS,
Head Office, 614 Main Street, Winstipeg, Man.

HENDERSON BROS.
LUMBER AND TIMBER.
Building & Bridge Timber Sawn to Order.
Pine, Spruce and Hemlock Lumber by
the Cargo.
277 Steam Saw Mills, Box Factory and Yards—342
to 390 William St., and 130 St. Constant St., Montreal.
Steam Saw Mills, L'Assomption, P. Q.
P. O. Box 504. 13121

GRATEFUL—COMFORTING.
EPPS'S COCOA
BREAKFAST.
"By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr. Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctor's bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—*City Service Gazette.*
Made simply with boiling water or milk. Sold in tins only (4-lb. and 1-lb.) by Grocers, labelled thus:
JAMES EPPS & Co., Homeopathic Chemists,
13121 London, England.

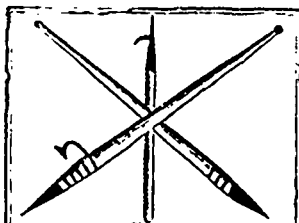
HILL'S
English Extract of
BUCHU,
One of the Best
KIDNEY
INVESTIGATORS IN USE.
It is a specific in the cure of all diseases of the Kidneys, Bladder, Prostatic Portion of the Urinary Organs, Irritation of the Neck of the Bladder, Burning Urine, Gleet, Gonorrhoea in all its stages, Mucous Discharges, Congestion of the Kidneys, Brick-dust, Deposit, Diabetes, Inflammation of the Kidneys and Bladder, Dropsy of the Kidneys, Acid Urine, Bloody Urine, Pain in the Region of the Bladder, PAIN IN THE BACK, Urinary Calculus, Renal Calculus, Renal Colic, Retention of Urine, Frequent Urination, Gravel in all its forms, Inability to retain the Water, particularly in persons advanced in life. IT IS A KIDNEY INVESTIGATOR that restores the Urine to its natural color, removes the acid and burning, and the effect of the excessive use of intoxicating drink.
PRICE, \$1; or, Six Bottles for \$5.
Send for Circular. Sold by all Druggists
W. JOHNSTON & CO.,
161 Jefferson Ave., DETROIT, MICH.

THE KEY TO HEALTH:
BURDOCK BLOOD BITTERS
Unlocks all the clogged avenues of the Bowels, Kidneys and Liver, carrying off gradually without weakening the system, all the impurities and foul humors of the secretions; at the same time Correcting Acidity of the Stomach, curing Biliousness, Dyspepsia, Headaches, Dizziness, Heartburn, Constipation, Dryness of the Skin, Dropsy, Dimness of Vision, Jaundice, Salt Rheum, Erysipelas, Scrofula, Fluttering of the Heart, Nervousness, and General Debility; all these and many other similar Complaints yield to the happy influence of **BURDOCK BLOOD BITTERS.**
T. MILBURN & CO., Proprietors, Toronto.

DODGE & Co.
Pine & Hardwood Lumber
Office. Cor. East Falls Avenue and Stiles Street,
BALTIMORE, MD., U.S.A.
Correspondence Invited. 13412

VULCAN IRON WORKS
(ESTABLISHED 1842.)
STEWART & FLECK, Jr.,
Manufacturers of every Description of
Saw and Grist Mill Machinery,
Water Wheels, Steam Engines, Derricks,
Boilers, Steam Pumps, Mining Machinery
20L REPAIRS PROMPTLY EXECUTED. 13
Wellington Street, OTTAWA, Ont.

McCraken, Gall & Co.,
WHOLESALE AND RETAIL
LUMBER MERCHANTS
And MANUFACTURERS,
227 Dealers in WALNUT, BUTTERNUT, CHERRY,
CHESTNUT, ASH, OAK, WHITEWOOD, and all kinds
of Hardwood and Pine Lumber. PICTURIA, JACKSON,
HOLLY, EBONY, LIGNUM-VITAE, RED CEDAR, &c.
American and French VENEERS.
Orders for Lumber and all kinds of Factory Work
promptly attended to. Lumber Kiln dried to order.
Yard. Cor. Wellington & Strachan Aves.
Factory. Corner Soho and Phoebe Streets.
Office. 39 Adelaide Street East, (First Floor, nearly
opposite the Post Office.
15 TORONTO, ONT. 13

WM. AHEARN
MANUFACTURER OF
HAND SPIKES **CANT DOGS**

Lumberman's Tools, etc.,
HIGHEST AWARDS IN CANADA and U.S.
120-13 **CHAUDIERE, OTTAWA.**

REST not, life is sweeping by, go and
dare before you die, something
mighty and sublime leave behind
to conquer time." \$50 a week in
your own town. \$5 outfit free.
No risk. Everything new. Capital
not required. We will furnish you everything. Many
are making fortunes. Ladies make as much as men,
and boys and girls make great pay. Reader, if you
want business at which you can make great pay all
the time, write for particulars to H. HALLITT & Co.,
Portland, Maine.

THE
GREAT
CANADIAN
PAPER
The
EIGHT
PAGES
WEEKLY
MAIL
BEST
AND
CHEAPEST
ONE DOLLAR
YEAR
THE MAIL
ADDRESS
TORONTO
CANADA
THE MAIL
Toronto, Canada.
It has the Largest
Circulation; the
Latest News, both
Local and Foreign.
A Splendid Story
Page. First-class
Agricultural, Live-
Reliable Market Re-
ports. Legal Column
Household Depart-
ment, Children's De-
partment, etc.
THE MAIL
is the great medium for
advertisements of
FARMS FOR SALE
Agents Wanted
ADDRESS
THE MAIL
Toronto, Canada.

FOREST PROTECTION.

The following article by our esteemed correspondent Mr. Edward Jack appears in the St. John, N. B., *Globe*, and we are happy to reproduce it:—

During the present autumn, when in the forests of the interior of New Brunswick, my attention was attracted by the brownish red color of the tops of the spruce trees on a ridge not very far distant from the hill on which I stood. To my astonishment I found that fire had penetrated these woods for a distance of from 12 to 15 miles, its average breadth being 2 miles, involving the loss of at least \$50,000 to the owners in the way of stumpage, to say nothing of that to the country in the money which would have been spent in hauling, driving, sawing and shipping so many trees.

The fire in this instance had been the result of carelessness of two men employed as cooks on a river drive. They had set it in a bush pile on the shore of Burnt Hill stream and neglected to extinguish it.

During the time when logs are being driven fires are very apt to run even in hardwood lands, owing to the masses of dry leaves which at that time cover the surface of the ground; when once plants and low shrubs are in full leaf, there is very little to dread from forest fires until late in the season, after long droughts when every green thing is dried and parched up.

Forest fires are usually started by river drivers, hunters, fishermen, or free grant and labor act settlers, who have allowed to occupy what is usually called, among lumbermen "black land;" in other words covered chiefly by a soft-wood growth.

To meet these special cases there is no legislation, although it is urgently demanded. I propose to take up each of these cases separately and show, in so far as at least as the valuable Crown Lands of the Province are concerned, how the danger of destruction from forest fires can be reduced to a minimum by wise legislation and the adoption of cheap precautionary measures.

Before doing so and by way of preface I will quote the words of W. Little, Esq., of Montreal, a gentleman who has ever been foremost in the advancement of forest interests:—

"If the timber land owner would annually expend the same percentage he is willing to spend to insure other property of like value, towards putting his timber property in safe condition, he could so place it that it would be difficult to set it on fire so as to do any serious injury."

First mentioned and perhaps as important as any in the subject of forest fires caused by careless river drivers, a class largely composed of reckless and sometimes unprincipled men. Log drives are yearly becoming more consolidated, and the work which was formerly undertaken by half a dozen parties, is now frequently executed by one, since the greater quantity of lumber driven, the cheaper the work can be done, all other things being equal.

Such being the case one expects the party in charge of a large drive to see that proper care be bestowed on his neighbor's property, through which he is passing, and here legislation should interfere and require him to do something like the following manner:—

He should be required to appoint one trusty man to see that no fire be left burning when the driving parties leave the spot where they have been encamped over night or when the men leave the spot where any may have been kindled for the purpose of lunch, dinner or any other meal; should the chief river driver fail to make such appointment of fire ward he should in such case be liable to a penalty and be made chargeable by law for any loss through forest fires which might occur by or through the neglect or carelessness of his men. Further, if any forest fire should happen by or through the neglect of the driving crew, that the party or parties guilty of such neglect or carelessness should forfeit his or their wages, provided damage be done to the surrounding forest to the extent of \$10 or more, such party or parties being also subject to fine or imprisonment.

In order to compel the holder of the timber license to take an interest in this matter a clause should be inserted in the same, that in case the

whole or part of any logs cut on such lease should be driven without the appointment of such fire ward by the man in charge of the drive, that all the blocks on which such logs may have been cut shall, or may be, declared vacant, and be again offered for sale at public auction.

The next class of people who sometimes are the cause of forest fires are hunters. As this business is uncertain and precarious, it would be as well for the interest of the individual, as well as for that of the country, to discountenance the professional hunter as much as possible, more especially as he frequently kills moose and cariboo for their hides alone, leaving the carcasses in the woods to rot.

It has been suggested by Mr. Henry Braithwaite, and I entirely concur in the idea, that it would be well for the Government to make a large game reserve of the forests on the north side of the South West Miramichi, extending to the Tobique and Nepesiguit, and to place the same under the management of some competent woodman, with competent assistants, whose duty it should be to see that the game on these be protected. There are yet in this part of New Brunswick plenty of cariboo and many moose, and protection of game means protection of the forest.

In order to meet the expenses attending such reserve and its protection, hunting and fishing permits could be issued to parties giving bonds to hunt according to law, such parties to pay such reasonable sum as might be demanded. I have no doubt but that in a short time permits enough would be sold to more than pay all expenses, while the game would suffer no decrease, the production keeping the stock up.

QUEBEC PUBLIC FORESTS.

We take from the report in the Montreal *Herald* of the proceedings at the annual meeting of the Province of Quebec Forestry Association the following extract from the discussion on the President's report. It will be seen that the Quebec Commissioner of Crown Lands takes an intelligent interest in the subject:

Mr. J. X. Perrault referred to the great importance of education in the matter of forestry, and expressed the hope that the association would encourage the distribution of forestry literature throughout the Province. He would like to know, from the Minister of Crown Lands, if his department intended taking any steps to assure a proper distribution of forests in districts, so that the cutting of the forests should be done systematically, and that when one portion was cut the lumbermen should not return to that district for say twenty years, when it would be restored. This was the system followed in Europe and he thought steps should be taken to procure the same here.

THE COMMISSIONER OF CROWN LANDS.

Hon. Mr. Lynch, in reply, said that the progress that had been made in forestry matters since last year must prove a source of the greatest encouragement and satisfaction to the members of the society, and especially to the president, Hon. Mr. Joly, who had gone to much trouble. He did not think that persons generally realized the difficulties that attended the foundation of this society and the establishment of what was known as "Arbor Day." When the idea of having such a day was inaugurated he himself had thought there was very little in it, that it was more of an idea that would never become a reality. Practical experience had, however, shown him that it was a reality which could not fail to be the source of much future good to the country. There had been not a few difficulties attending the inauguration of such a day, but he was glad to be able to say, that from one end of the Province to the other a beginning had been made, and not only in the large cities and districts, but also in the smaller hamlets and villages, had the day been celebrated with much success. This, he was pleased to notice, was one of the results of that combined associated effort that had led to the foundation of this Association, and to the adoption of legislation regarding the protection and separation of our timber and colonization lands. He firmly believed that the latter was one of those pieces of legislation that would be of great good to the country. The object of the legislation in question was in the direction to which Mr.

Perrault had referred. He had only occupied, he might say, the position of Minister of Crown Lands for a few months, but in this short period he had learnt that it was a most responsible position and that upon it depended very greatly the future prosperity of this province. He thought that they should protect their natural resources; about all that they had now was their forests, and they were a legacy handed down to us to preserve, not to destroy. He might add that there was no legislation of the nature spoken of by Mr. Perrault, and he did not know that he was in a position to bring such legislation before the approaching session of the legislature for the reason that it covered the whole ground and had to be most carefully considered. The aim of the Association, he thought, should be to encourage whatever Government was in power to preserve and protect their forests, and he was in hopes that before long the Association would deputize one of its members to co-operate with the Minister of Crown Lands, and in this way such legislation might be effected as would assure the object spoken of by Mr. Perrault. He referred to the great need there was for education on this subject, as there existed, to a great extent, in the minds of the masses, an idea that this movement was one of no practical effect, and this idea would have to be dispelled. It had been said that a conflict might arise between the Government and the lumbermen. He, however, believed that the great majority of the lumbermen would aid them, as it was to their interest to do so. The importance of the subject was great—so great, in fact, that when the meeting adjourned it would do so with the understanding that the members should meet again at an early date to discuss the question. Legislation was imperatively needed. He would like to see it well and carefully considered, but he would also wish to see it passed as speedily as possible. The future prosperity of the Province depended largely, he was convinced, upon the action they took now, and there should be no delay in the matter. (Applause.)

Mr. J. Y. Perrault suggested that a committee be appointed to take the matter of legislation into consideration and report to the Association.

THE FORESTRY EXHIBITION.

We referred a few days ago to the International Forestry Exhibition proposed to be held next year in Edinburgh. The forest productions of Canada are such as to enable her to take a very high place, if not the highest, in some of the departments embraced within the scope of the Exhibition. In this connection it may be interesting to refer to the report of the Royal Commissioners upon the exhibit made by Canada at the International Exhibition held in London in 1862. The Commissioners say that "in point of size of specimens, excellent selection and information given, the Upper Canada collection of models is undoubtedly the finest in the exhibition building. It is contributed by sixteen individuals, and consists of planks, logs, squared logs, transverse sections, polished specimens, veneers, and a very extensive series of scientifically collected and named leaves, flowers, shoots etc., etc." This collection the Royal Commissioners refer to in very high terms of praise, such as "magnificent," "beautiful," "noble specimens." Some of the wood specimens were five feet in diameter. One of white oak which reached London too late for exhibition, was six feet in diameter and six feet long, from a tree with a trunk sixty to the first limb. There were planks of extraordinary dimensions one of white pine and one of white oak, each fifty inches broad; black walnut thirty inches; hickory, thirty-six inches; and a beautiful plank of soft maple twelve feet long by forty-five inches broad. Of the scientific collection the Commissioners speak in equally high terms of praise. Amongst the exhibitors was the Hon. James Skead, of this city, who sent five specimens of timber from the Ottawa region. Samples of these were given to the leading Governments of Europe, to the scientific societies, to the Admiralty, to the British Museum, to Kew Gardens, to Lloyds, and Lloyds added several kinds of Canadian woods to their A No. 1 ships. The Kew Gardens' authorities erected a building expressly for the woods from the exhibition,

giving the Canadian woods the place of honour. The Royal Commissioners state that the Canadian collection derived much of its exactness and scientific value to the exertions of the commissioner, Dr. Hurlbert, and they refer to the collection generally as one of the most complete illustrations of the resources of a colony ever exhibited. It is of the utmost importance that Canada's forest products should be properly represented at the Edinburgh Exhibition. There is not too much time at disposal for making the necessary arrangements and for urging those interested to go to work to prepare their specimens. If the Government decide that the country shall be represented on the occasion, and no doubt they will so decide, we feel sure that Parliament will cheerfully vote the necessary sum of money to pay the expenses of the exhibition. There never was a time in the history of our country when so much attention was paid to Canada and her resources as the present. The Dominion is being advertised in the United Kingdom and in Europe as it was never advertised before. The visits of prominent Englishmen; the favourable reports of agricultural delegates and of men of such high standing as Professor Tauxer, which we have noticed recently; the varied services of our late Governor-General; the exertions of the Canadian Pacific Railway Company; and the Canadian display at the International Fisheries exhibition, all have had the effect of bringing Canada and Canadian affairs before the British public. The approaching Forestry Exhibition will afford another favourable opportunity for making the country still better known. Whatever is to be done for having the Dominion represented on the occasion should be done without delay.—*Ottawa Citizen*.

FORESTRY IN ENGLAND.

We take the following from the London *Times*:—

On Thursday, the 2nd of August, Sir John Lubbock found the opportunity he has for some time been seeking of calling attention, in the House of Commons, to the important question of establishing a forest school in England. He did so when the House went into Committee of Supply and the vote of £23,232 for the office of woods and forests came on for discussion. Sir John asked the Government to consider during the autumn the question of forest education in this country, and whether the natural forests might be utilized for this purpose. He said:—

"So much, indeed, had forestry been neglected, that in Scotland the words suggested deer, but no trees; while the idea of foresters in England was associated with the members of an excellent provident institution. Of course, the Crown forests formed but a small part of the subject. There were altogether, in round numbers, 2,500,000 acres of woods and plantations in this country, so that the subject was one of vast importance. Moreover, it was calculated that in Scotland and Wales they were 5,000,000 or 6,000,000 acres at present almost valueless, and which, if judiciously planted, would give large results. In the science of forestry we were, he feared, far behind, most foreign countries, especially France and Germany; and he was very anxious that our landed proprietors should benefit by the experience which other nations had acquired. But let him ask where was a country gentleman who owned woodlands to obtain information as to their management or to procure trained assistants? We had no forest school in this country; we had no class of persons specially trained and instructed in the formation and management of woods. It was, he feared, still true that, as the House of Commons' Committee of 1864 reported, timber is "everywhere worse managed than any other species of property." Unless something were done this state of things would continue. On the other hand, the highest authorities had expressed a very strong opinion that we might make our woodlands much more profitable; they show one step which was a necessary preliminary. The highest English authorities were strongly in favor of the establishment of a forest school, and had forcibly pointed out the loss which our present system of management, or rather mismanagement, entailed on landowners. Mr. Brown, in his standard work on forests, observed that "if our forests had been judic-

iously managed we should not find so great a part of the woodlands of Great Britain in the unprofitable state in which they are."

"We were the only important nation in Europe," argued Sir John Lubbock, "without a forest school, and yet, if we included our colonies, our forests were the largest and most valuable in the world. It appeared to be a very strong argument in favor of the establishment of a forest school in this country that at present the young men who were going out to manage our Indian forests had to be sent for instructions to the great French school at Nancy. No doubt that was a most excellent institution and we were indebted to the French Government for the courtesy with which they had received our English students: but the system of education given there naturally contained some branches, as, for instance, the study of French law, that were not adapted to English students, while there were many other considerations, such as climate, which rendered a Continental school less suitable for English requirements. He might add," he said, "that no young Englishman, as a matter of fact, went there excepting the intended for the Indian service. For our colonies, again, the establishment of a good forest school would be of very great importance. A judicious management of their woods would add considerably to their income. French foresters had recently been sent to the Cape of Good Hope and Cyprus, it has been found impossible to obtain any communication of our own with the necessary knowledge. Perhaps, however, he should be asked why the establishment of such a forest school, if it were so urgently needed, should not be left to private enterprise. The reason was clear. A properly equipped forest school must have attached to it a large extent of forest in various stages, and having a variety of climates and soils. This, it was obvious, no private institution could supply. He did not, however, say that this would necessarily involve the establishment of a Government school. He understood that the Government contemplated an arrangement with the Cooper's Hill College, but he trusted that before instituting a Government school they would inquire whether such colleges as Cirencester could be made available for the purpose, and possibly some arrangements might be devised by which, under careful regulations, the professors and students attached might periodically visit our national forests. He might mention, in illustration, that lately the Cape of Good Hope Government determined to appoint a Forest Commissioner, with an income of £500 a year. They could not, however find any qualified Englishman, and were obliged to appoint a French gentleman, even though he could not speak English. The Society of Arts had memorialised Her Majesty's Government on the subject, and the presence in this country of Dr. Brandis and Colonel Pearson rendered the moment one of which it was desirable to take advantage. He hoped, therefore, Her Majesty's Government would not think him unreasonable if he asked them to consider this important question."

TREE PLANTING.

A meeting, fairly attended by both ladies and gentlemen, was held last evening in the school room of St. George's Church, Carleton. The Rev. Mr. Dowling presided, and Mr. A. Rankine Bedell acted as secretary. Mr. Dowling, in an appropriate speech, put forward the object of the meeting which was to make arrangements for planting trees around the church grounds. He mentioned several matters of historic interest current with the affairs of the church. There are thirty-nine trees to be planted and thirty-six of them are already provided. Formal resolutions passed approving of the proposed memorial tree planting in the church grounds, providing that it should take place on Friday afternoon, weather permitting, at 2 o'clock, the committees and tree planters to meet at the school room at 1.30 p. m., to complete the final arrangements, and also providing for an appointment of a committee of five to arrange all details. The committee appointed were the churchwardens, and Messrs. Mosher, Cowie and Sowell. A vote of thanks passed to the rector and wardens the Church for the use of the room and for their services in

connection with the proceedings. It was decided that if Friday's weather is not favorable the tree planting shall take place on the first fine day afterwards. A very hearty feeling prevailed at the meeting. Trees are to be planted to the first bishop of New Brunswick, to the first rector, and the various rectors of the church, etc., but the list was not complete last evening.

The tree planting which was to be done on King Square on Nov. 26th, Evacuation Day, under the direction of the New Brunswick Historical Society, has been postponed until the 18th of May next. Two trees will be planted on the 26th—ono to George III, and ono to Queen Victoria.—*St. John, N. B., Globe.*

Arrivals in London.

The *Timber Trades Journal* of Nov. 3rd, says:—The arrivals this week to London are very heavy, evidently stimulated by the cheap freights we have commented on lately. Forty-six steamers and twenty nine sailing ships with wood cargoes in the Thames the last week in October is something unusual in the annals of the timber trade. It all points to the immense difference steam has made in the carrying trade. Formerly the opportunity of chartering at a low rate, so near the close of the shipping season, would have been very rare, and the chance of getting the stuff home very doubtful, yet probably all the steam cargoes reported have been secured within the past few weeks. Of this week's London list Sweden contributes 25 cargoes, Russia comes next with 24, Canada 9, Norway 5, Germany 4, and other countries 8. Flooring cargoes are limited to two; of deals, &c., there are thirty-nine cargoes, 11 of firewood, and seven of lathwood, sleepers, mahogany, &c., completing the list. There is not a complete cargo of square timber among the arrivals.

The timber is being dressed and foundation partly laid of the new Rainy Lake Lumber Co.'s mill at Rat Portage.

Advice to Mothers.

Are you disturbed at night and broken of your rest by a sick child suffering and crying with pain of cutting teeth? If so, send at once and get a bottle of Mrs. Winslow's Soothing Syrup For Children Teething. Its value is incalculable. It will relieve the poor little sufferer immediately. Depend upon it, mothers, there is no mistake about it. It cures dysentery and diarrhoea, regulates the stomach and bowels, cures wind colic, softens the gums, reduces inflammation, and gives tone and energy to the whole system. Mrs. Winslow's Soothing Syrup for Children Teething is pleasant to the taste, and is the prescription of one of the oldest and best female physicians and nurses in the United States, and is for sale by all druggists throughout the world. Price 25 cents a bottle.

If you are troubled with a "hacking cough," Down's ELIXIR will give you relief at once. Warranted as recommended, or money refunded. Price, 25c., 50c. and \$1.00 per bottle.

A QUERY ANSWERED.—People often ask when is the best time to take a blood purifier? We answer, the best time is now. Burdock Blood Bitters does its work of purifying, regulating, and toning the system at all times and all seasons. Purity in all things is always in order when required.

A GOOD INTRODUCTION.—J. Kennedy, a merchant in Dixie, about three years ago introduced Hagyard's Pectoral Balsam to his customers by trying it in his own family for Coughs and Colds. Being pleased with results, large sales followed, and it is now the favorite remedy in that neighbourhood.

DOWNS' ELIXIR

N. H. DOWNS'
VEGETABLE BALSAMIC
ELIXIR

Has stood the test for FIFTY-THREE YEARS, and has proved itself the best remedy known for the cure of
Consumption, Coughs, Colds, Whooping Cough and all Lung Diseases in young or old. SOLD EVERYWHERE.
Price 25c. and \$1.00 per Bottle.

DOWNS' ELIXIR

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. 1117

How Many Miles Do You Drive?
The
ODOMETER
Will Tell.

This instrument is no larger than a watch. It tells the exact number of miles driven to the 1-100th part of a mile; counts up to 1,000 miles, water and dust tight, always in order; saves horses from being over-driven; is easily attached to the wheel of a BUGGY, Carriage, Sulky, Wagon, Road Cart, Sulky Plough, Reaper, Mower, or other vehicle invaluable to FARMERS, PLEASURE DRIVERS, PIONEERS, FARMERS, SURVEYORS, DRAYMEN, EXPRESSMEN, STAGE OWNERS, &c. Price only \$5.00 each, one third the price of any other Odometer. When ordering give diameter of the wheel. Sent by mail on receipt of price, post paid. Address

McDONNELL ODOMETER CO.,
2 North La Salle St., Chicago.
Send for Circular. 11110

IRWIN & PHILP

Commission

Lumber Dealers

FORWARDERS,

Shipping & General Agents

PORT HOPE. 1117

D. FOWLER'S
EXTRACT-WILD
STRAWBERRY
CURES
CHOLERA
CHOLERA INFANTUM
DIARRHOEA.
AND
ALL SUMMER COMPLAINTS
SOLD BY ALL DEALERS.

The American Hotel,
BARRIE, ONT.

Collin Street, Adjoining the Market.
RATES REASONABLE, CENTRAL LOCATION,
FREE BUS TO AND FROM ALL TRAINS.
Every accommodation for Commercial and LUMBERMEN.
W. D. McDONALD, Proprietor.

J. K. POST & CO.
LUMBER MERCHANTS
And Shipping Agents.
OSWEGO, N. Y. 111

AXES
And LUMBERMEN'S
HARDWARE

Broad, Scoring, Blocking, Timber and Chopping AXES,
(Of Superior Shape and Quality.)

Chalk Lines, Rassing Knives, Timber Gunges, Cross Out Saws, Files, Sleighshoe Steel, Chains, and general line of HARDWARE at the LOWEST PRICES.

SOLE AGENT IN CANADA for the Sale of the following CELEBRATED AXES:—B-A-N-Y, RED MANN, and WETMORE'S HAND MADE, warranted. The Best in the World. 111

GEORGE STETHEM
IMPORTER OF HARDWARE,
PETERBOROUGH, ONTARIO.

A MAN
WHO IS UNACQUAINTED WITH THE GEOGRAPHY OF THE COUNTRY WILL SEE BY EXAMINING THIS MAP THAT THE



CHICAGO, ROCK ISLAND & PACIFIC R.R.
By the central position of its line, connects the East and West by the shortest route, and carries passengers, without change of cars, between Chicago and Kansas City, Council Bluffs, Leavenworth, Atchison, Minneapolis and St. Paul. It connects in Union Depots with all the principal lines of road between the Atlantic and the Pacific Ocean. Its equipment is unrivaled and magnificent, being composed of Most Comfortable and Beautiful Day Coaches, Magnificent Horton Reclining Chair Cars, Pullman's Protector Palace Sleeping Cars, and the Best Line of Dining Cars in the World. The Trains between Chicago and Missouri River Points. Two Trains between Chicago and Minneapolis and St. Paul, via the Famous "ALBERT LEA ROUTE."

A New and Direct Line, via Smecca and Kankakee, has recently been opened between Richmond, Norfolk, Newport News, Chattanooga, Atlanta, Augusta, Nashville, Louisville, Lexington, Cincinnati, Indianapolis and Lafayette, and Omaha, Minneapolis and St. Paul and intermediate points. All Through Passengers Travel on Fast Express Trains. Tickets for sale at all principal Ticket Offices in the United States and Canada. Baggage checked through and rates of fare always as low as competitors that offer less advantages. For detailed information, get the Maps and Fold-crs of the
GREAT ROCK ISLAND ROUTE,
At your nearest Ticket Office, or address
R. R. OGLE, E. ST. JOHN,
Vice Pres. & Gen'l Mgr. Gen'l Trk. & Pass. Agt.
CHICAGO.



DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

PUBLISHED SEMI-MONTHLY BY
TOKER & Co. PETERBOROUGH.

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 90
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 TOKER & Co., 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. SAMUEL DEAN & Co., 154 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., DEC. 1, 1883.

ANNOUNCEMENT.

WE have for the last few days been sending out subscription and other accounts. There is a very large sum on our books in these small amounts, which, though of trifling importance, taken singly, make altogether a very considerable aggregate. We would therefore invite those who are in our debt for these small sums, which they can pay individually without inconvenience, to remit the amount to us promptly, and thus collectively give us the benefit of a very satisfactory account at our bankers'.

It may be seen how large the total of these comparatively insignificant amounts must be, from the fact that we have sent out about 1,500 of these amounts during the last fortnight.

Another reason why we desire a prompt settlement, is that in pursuance of the arrangement by which our business is to be conducted after the end of this year by the Peterborough Review Printing and Publishing Company (Limited), it is necessary that the books of our firm should be closed as soon as possible.

We feel confident that under these circumstances our request will meet with ready and speedy compliance.

TOKER & CO.

THERE is said to be a machine in Glenn Falls, N. Y., which successfully makes pulp for paper out of sawdust.

CHARLES BARTLETT, of Hanover, and Mr. J. R. Hall, of Andover, Me., will put 2,000 cords of poplar into the east branch of Ellis river this winter.

THE Kingston *Whip* says:—The raft caught in the Rideau Canal ice is W. McRorie's and the timber is needed to fill his penitentiary contract. He will be a heavy loser and fervently pray for a thaw.

A LARGE timber-laden vessel has been lost on the Cape Breton coast, but no trace of the crew can be obtained, nor can the ships name or dimensions be made out.

JOHN H. MONTKITH of New York city, recently cut up a log of Mexican mahogany, which made 25,000 feet of veneers, and two other logs averaged the same.

THE superintendent of a large planing mill at New Haven, Conn., writes us that they have more orders for planed yellow pine lumber than they can fill in six months.—*The Wood-Worker*.

McDONALD & SHIELDS' new mill at Vermilion Bay has been closed down for the season. Gangs of men will be put into the woods, and about six million feet of lumber will be taken out this winter.

CHAS. E. FRANCIS, of Cincinnati, O., writes that his gravity cross-cut saw is becoming very popular. He lately sent one to a Minnesota firm, and received an order for two more from the same parties last week.

THE Nupane Beaver has this item from Queensborough:—The Rathbun Co. have now some four shanties located on the waters of Black Creek. The Gilmour Co. have stopped business in this district. It makes things dull.

THE *Wood-Worker* says:—For years past millions of feet of oak staves have been cut in Arkansas and shipped to Europe by way of New Orleans. The French and Germans think that in all the world there is nothing equal to Arkansas oak for making wine casks. It is stated that all other wine making nations use the same wood.

A Washington despatch says that the attention of the Government has been invited to the International Forestry Exhibition to be held at Edinburgh in the summer of 1884. The exhibition will be open to contributors from all countries and is designed to include everything connected with or illustrative of the forest products of the world.

THE Indiana Lumber Co., whose saw and planing mill at Nashville, Tenn., was totally destroyed by fire last month, has taken steps toward the immediate erection of an extensive mill. The new saw mill will contain both circular and band saws. It is proposed to make the new establishment one of the most complete in that vicinity.

TEXAS, Arkansas and Louisiana are said to contain 190,000,000,000 feet of standing pine. If this is so, a timber famine is not probable in this generation at least, when we remember that several other southern states are well timbered. In comparison with these states the stock of timber in Michigan, Wisconsin and Minnesota, the three great lumber producing states sink into something approaching insignificance.

ENGINEERS at Mayence have met with remains of the bridge erected over the Rhine at that point by Charlemagne near the close of the eighth century. It rested on 28 buttresses, and was destroyed by lightning, burning down to the level of the water. The engineers have removed over 50 piles of from 15 to 18 feet in length, and the timbers are well preserved, though nearly 1,100 years old. In fact, the timber is still fit for use in building. The same is true of the iron which was riveted to the posts.

Two St. John gentlemen, Capt. Calhoun and Mr. Wm. Hanson, have purchased a tract of timber land in the vicinity of Spruce Lake, St. John county, New Brunswick. They intend to set up a steam saw mill on the lot between the outlet of Ludgate and Spruce Lakes, and cut dimension timber for the American market. There is, says the *St. Croix Courier*, an abundance of spruce and cedar on the property surrounding these lakes, and good facilities are afforded by the Grand Southern Railway for getting it to market.

THOUGH considerable yellow pine is shipped from South Mississippi to Boston and other eastern ports, yet the largest part goes direct to foreign ports, Europe, England, Africa, Central and South America and Mexico.

THE *Timber Trades Journal* says:—The shipments of spruce at St. John, N. B., seem to be dwindling away. Sellers are of opinion that it would be a sound speculation to buy what remains there at the present market price. They believe the time is not remote when there will be an active demand for these goods. Nor is that opinion singular. It is whispered in other quarters that the price of spruce must go up and that soon.

A SUPERINTENDENT writes:—"The best workmen I have ever known are those who give a little attention to their machinery after stopping time, just as a good groom takes the best care of his horse when it is the hardest worked, seeing that it is cared for before he gets his own supper. The result in the one case is that the horse is always fresh and ready for hard work, while the machine is always turning off a good quantity and a good quality of work."

THE Laminato Wood Company of Chicago, is about to introduce some specialties that are of interest to dealers in that line. They will consist of the French scoop for grocers, druggists, and millers; the Chapman elevator bucket, for flour and grain; and the Caldwell pulley, for all mechanical purposes. These goods are made of layers of veneers peculiarly built up according to several patents lately issued, so as to make light, strong, cheap and durable goods.

A PROPOS of the recent cotton failures, the *Timber Trades Journal* says:—"Though there is no great affinity between the cotton and the timber trades, we do not hear unconcernedly of large failures in the former, because in point of fact important suspensions in any trade unfavorably affect every other, as they tend to destroy commercial credit and render the necessary accommodation which trade requires more difficult to obtain, and have a generally depressing influence."

GRAVENHURST.

From Our Own Correspondent.

Nov. 24.—The weather set in very severe here about two weeks ago, accompanied by a heavy fall of snow, in consequence of which the saw mills have all shut down. The weather has, however, moderated since and the snow has all disappeared. The following is a list of the saw mills in Gravenhurst and the immediate neighborhood, and the quantity of lumber and shingles cut by each during the season just closed:—

| Name. | Lumber. | Shingles. |
|--------------------------|------------|------------|
| G. W. Taylor & Co..... | 5,000,000 | |
| Chas. Mickle..... | 5,000,000 | 2,500,000 |
| Woodstock Lumber Co..... | 5,000,000 | |
| H. DeBlaquie..... | 1,500,000 | 9,000,000 |
| J. Cockburn..... | 5,000,000 | 3,500,000 |
| Thompson & Baker..... | 3,000,000 | |
| Croze & Patton..... | 2,000,000 | 3,000,000 |
| J. Davidson..... | 1,000,000 | |
| Tasker..... | 2,500,000 | 1,000,000 |
| T. H. Carr & Co..... | 2,000,000 | |
| J. H. Hull..... | 1,000,000 | 7,000,000 |
| Hazard..... | | 1,500,000 |
| T. Tall..... | | 4,000,000 |
| King..... | | 1,000,000 |
| P. Bartholomew..... | | 7,000,000 |
| Eatle..... | | 3,000,000 |
| Sundry small mills..... | | 2,500,000 |
| Total..... | 33,000,000 | 45,000,000 |

Besides the above there are a number of small mills up the lakes which send their lumber to this point in scows to be shipped hence by rail. The amount cut by these mills will be about 4,000,000 feet of lumber and 15,000,000 shingles, making the total amount shipped, or to be shipped, from this point 37,000,000 feet of lumber and 60,000,000 shingles. Of the above amounts nearly all the shingles have been shipped, and about one-fourth of the lumber, leaving about 27,000,000 feet of lumber to be shipped. Should this prove off very slowly during the winter (as there seems every prospect of) there will be a great rush to ship in the spring, and a repetition of the old cry "no cars," the rolling stock of the Northern &

North Western Railway being totally inadequate to meet the extra demands made upon it at that season of the year. Looking back, the past season may be said to have been rather an unfavorable one for mill men. In the first place owing to the severity of the winter and the high rate of wages then prevailing, stocks cut at \$1 per M more than on any previous season. Wages have also continued high during the past summer, thus adding materially to the cost of manufacture, while those mill men who have sold their stocks *en bloc* have had to accept prices ranging from \$1 to \$2 per M less than last season. Over production seems to have been the main cause of this, and it will be well for the lumbermen, if, taking a lesson from the past, they confine their operations during the coming winter, and each one take out one-half, or even less, of what they have been accustomed to take out, for, unless the production is largely curtailed, the prospects are that prices will rule even lower next year. The pine in this section of the country is generally of poor quality only a small percentage of it being suitable for the American market, thus throwing the great bulk of it on our local markets, and as our markets are naturally limited over production immediately makes itself felt by causing a glut, and down come prices. There is, however, a class of lumber the demand for which always seems to exceed the supply; I refer to bill stuff, and it seems to me that mill men would be wise in turning their attention more to the manufacture of this kind of stuff, as they can always command a ready sale for it at good prices, with the advantage that it can be immediately turned into cash, without having to carry it for eight or ten months after it is manufactured as has generally to be done under the present system.

WHITE CEDAR BARK.

To the Editor of the *Canada Lumberman*.

SIR,—We have a little industry here, just started—that of making paper from the bark of conebearing trees—principally the white cedar bark. Can you give me, or put me in the way of getting, any statistics as to the amount of cedar sawed in the different States and in Canada? As we rely on the bark that is a waste at the mill, incidental to the sawing or getting out of the cedar lumber, we might get some idea of the amount of bark if we know the amount of wood used or manufactured. Our process is patented in Canada, and we are showing a very fair business here, with bark brought from Maine by vessels. A mill in Canada ought to do very well.

Yours truly,

JOHN M. ALLEN.

343 Purchase street, New Bedford, Mass.

OUR WOODS AND FORESTS.

Now that by gracious permission of the *Toronto Globe* the subject of forestry is open for discussion, we beg to call attention to one important branch of this question, not, however, for the first time. In spite of the great inroads that have been made upon the forests of Ontario, and, in spite of the large expanse of woodland that has been alienated from the Crown, there still remains a vast extent of land more or less valuable for its timber. In fact this class of property is a very large asset in the capital of the Province.

It cannot be said that this public property has been well managed in the past, or that it is being well managed now. It is not a party question, for with the exception of the point of treating the proceeds of sales as income instead of capital, the same want of good management has existed under both political parties. The property has not been utilized to the best advantage or to the greatest profit possible.

It seems to us, as we have already suggested, that there should be, if not a separate department, at least a distinct sub-department or bureau of Woods and Forests for Ontario. One of its first duties should be to subdivide, in consultation with the Crown Lands Department officials, the public domain yet remaining unappropriated. After the necessary surveys and examinations are made the Crown Lands should be divided into areas open for agricultural settlements and areas to be reserved for forest. Of course this division need not be

permanent in its details, for it may hereafter be found advisable to open forest land for agricultural purposes, or to withdraw additional areas from settlement to extend the forest. But from time to time the limits should be fixed and should not be encroached upon irregularly.

This system would offer several advantages of importance.

1. It would open the way for the scientific cultivation of our public forests and for their permanent preservation, a policy that should be at once adopted.

2. It would facilitate the treatment of these public forests as real estate expected to produce an annual crop—as capital from which a yearly income should be derived—and not as a source from which might be derived casual receipts to be treated as revenue, even though the property is alienated.

3. It would diminish the risk of fires spreading through our present forests or those to be planted—a risk against which it is very hard to guard under the ordinary method of clearing land—so long as agricultural settlements are interspersed with forest.

4. It would put an end to much of the divergence of interests, the disputes and contentions between settlers on wooded land and holders of timber limits and licenses. The lumberman need not intrude on the settler's lands or the settler upon the lumberman's limits.

5. It would prevent settlers from being tempted to clear and expend their energies, time and money upon land that is poorly fitted for agriculture, and that would be far more economically and profitably devoted to the production of timber.

Without the adoption of some such system Ontario will soon experience the financial disadvantage of having a large portion of its capital, its forests, vanish for ever, to the impoverishment of the country, with nothing to show for the receipts that had been used to meet current expenditure. It will also experience the economic disadvantage of no longer having any timber to export or even for its own use, but will on the contrary have to import from abroad.

It is urgently necessary that our remaining forest should be reserved and in part renewed before it is too late, and we would invite thoughtful consideration of the policy we have outlined.—*Peterborough Review.*

WASHINGTON TIMBER.

The Seattle, W. T., *Post Intelligencer* thus describes the timber of a locality in Washington Territory: "A man from Illinois, who recently visited the Quiloute country with a party of land seekers, returned a day or two ago, and called to tell us what he found there desirable to seekers of government land. A number of little prairies were seen that for beauty and fertility cannot be excelled, while the bottom land is as rich as the best anywhere. Game and fish are also very abundant, so that a settler of very ordinary ability as a sportsman need not trouble about meats for his table. The timber, though, is the crowning glory of that country. It consists of fine maple, cedar, alder, fir, and spruce—principally the two latter varieties. Our informant saw great tracts of spruce that average four and a half feet in diameter, with trees here and there nine and 10 feet through. Trees rise 250 and 200 feet above the ground. Altogether, it is the best timber country he ever saw or heard of, the only disadvantage to it, or depreciation of its value, being the absence of saw mills and local demand and the lack of an outlet to the trade abroad. A continuance of immigration there, however, will greatly change matters and appearances during the next two years."

NORTH OF LAKE SUPERIOR.

A reporter of the *Ottawa Citizen* has had an interview with Mr. H. J. Hubertson, an old journalist, who has been taking a trip on the C. P. R., north of Lake Superior. From the published account we take the following extracts:—

"Did you learn anything as to the extent of the timber district remaining?"

"No. Nothing definite. Still it must be enormous, as the headwaters of the streams emptying into the Ottawa and Lakes Nipissing

and Huron are not yet encroached on. Mr. Klock is making a raft of square timber near Vouvo Station, and Mr. James Worthington is making two rafts of square timber at Sudbury Junction, for shipment by rail."

"Where do the Construction Company get their timber?"

"They have erected two portable steam mills west of the Sturgeon and saw the boards and dimension timber required. They own oak and other timber lands near there, and it is thought will also erect saw works at Sturgeon Falls, where there is good water power."

"The country is all under timber license along the line of railway, I believe?"

"Yes, along the stream emptying into Nipissing and French rivers. Worthington has the license of McKim township at Sudbury Junction. The licenses do not extend very far back, however."

"Will not this interfere with settlement?"

"I think not; rather otherwise. The timber will be cut, and the settler will work for the lumberman in the winter and on his own land in the summer, and all his farm produce will be immensely valuable."

CHOICE LUMBER.

One of the choicest lots of lumber that has been brought to the Chicago market for many a month, and we might reasonably say year was seen upon the docks of Messrs. Cutler, White & Boice. It had just been received from the mills of White, Friant & Co., Grand Haven, Michigan, and comprises upwards of a million feet which is running 75 per cent. better than common, Chicago yard grading. Fully 40 per cent. of it is thick uppers, and 45 per cent. is grading better than C.—The lumber bears the "diamond" brand adopted by the manufacturers and was sawed from Grand river stock, which, according to the timber statistic sharps, should be entirely played out. The rule was laid across any number of pieces of three-inch plank, from 21 to 23 inches wide, clear as a quill and handsome as a picco of rough lumber could well be. The lot contains a very desirable 1 1/2-inch stuff that is especially sought after in this market and altogether it ought to prove a veritable bonanza to its holders. They may be confidently assured of one thing, which is, that every inch of it will not only be wanted, but eagerly sought after before the saws that made it get half their next season's revolutions made. The yard of Messrs. Cutler, White & Boice presents altogether one of the finest and best selected stocks of lumber we have ever seen in pile. The amount now in hand is about 9,000,000 feet, and so well arranged that an order for anything that enters into the construction of a building can be filled to the last stick without going off the premises for any of it.

Fores: Last Flat.

BANGOR, Me., Nov. 15.—The first reports of the damage by the gale gave but a slight idea of the havoc wrought. The calamity appears to be of great magnitude. The greatest damage appears to have been within a belt some miles wide crossing Piscataquis county and northern Penobscot into Aroostook. Great stretches of forest were levelled to the ground and millions upon millions of valuable timber destroyed. Whole townships in some instances are said to be nearly flat. The loss is certainly several hundred thousand and one well known lumberman estimates the total damage throughout the state at a round million.

The Cardiff correspondent of the *Timber Trades Journal* of Nov. 3, says:—This week we have again had a large number of arrivals with Canadian goods. A good many of the deal vessels, both from the Baltic and Canada, have had to wait four to six days in the roads before they could be admitted into dock, as our docks are so crammed, that it is even difficult for vessels to move in them. Of course this is very detrimental to the trade, and shipowners demand higher rates of freight than otherwise would be the case. Business is good; all our importers are very busy, both in receiving and delivering, and the prospects appear to be very satisfactory.

THE *Madoc Review* says:—Mr. Blount informs us that Gilmour & Co.'s suspension of the past few weeks was only temporary, and they are again going on with work both at headquarters and in the woods. Large gangs have gone to the shanties during the past day or two, many men having never come out when work stopped, expecting to go to work again shortly. The firm's operations this year will be quite as large as usual. This will be very gratifying news. We regret, however, losing Mr. Blount and the company's office from Madoc, both of which will be sorely felt.

E. S. VINDIN,

Commission, Shipping, Forwarding and General Agent.

LUMBER MERCHANT

Office, Tempest's Block, Port Hope. 111

PRITCHARD & MINGARD

GENERAL ENGRAVERS.

Stencil Plates, Steel Stamps, Rubber Stamps, &c., OTTAWA, ONT. 123

WHITE PINE BLOCKS WANTED

For MATCH SPLINTS, 4 and 6 in. long by not less than 3 in. by 1 in., free from sap or knots, or plank for same. Quote price f. o. b. to

AGNEW & SCHULTZ

TITUSVILLE, N. J., U. S. 1123

A. & T. J. DARLING & Co.

TORONTO, ONT.

Specialties—"Darling" Axes, Saws, Cutlery, "Black Diamond" Files.

HARDWARE.

FOR SALE.

SPALT MACHINE

For saving Lumber refuse, second hand, but all complete and in good order, taken out to replace one of greater capacity. Address,—

THE RATHBUN COMPANY,

61.19 DESERONTO, Ont

\$72 A week made at home by the industrial. Best business now before the public. Capital not needed. We will start you. Men, women, boys and girls wanted everywhere to work for us. Now is the time. You can work in spare time, or give your whole time to the business. No other business will pay you nearly as well. No one can fail to make enormous pay, by engaging at once. Costly outfit and terms free. Money made fast, easily and honorably. Address TRAV & Co., Augusta, Maine.



ST. LAWRENCE CANALS.

Notice to Contractors.

THE LETTING of the work at the upper entrance of the CORNWALL CANAL, and those at the upper entrance of the RAPIDE PLAT CANAL, advertised to take place on the 15th day of NOVEMBER next, are unavailably postponed to the following dates:—

Tenders will be received until TUESDAY, the FOURTH day of December next.

Plans, specifications, &c., will be ready for examination at the places previously mentioned on and after TUESDAY, the TWENTIETH day of NOVEMBER.

For the works at the head of the Galops Canal tenders will be received until TUESDAY, the EIGHTEENTH day of DECEMBER. Plans and specifications, &c., can be seen at the places mentioned on and after TUESDAY, the FOURTH day of DECEMBER.

By order, A. P. BRADLEY, Secretary.

Department of Railways and Canals, Ottawa, 20th October, 1888. 1103

FOR SALE: A LATH TRIMMER, NEW, and in good order, will be sold Cheap. Address, THE RATHBUN COMPANY, Deseronto, Ont. 61.19

SHINGLE MILL MACHINERY.

Parties requiring New Machinery for Shingle Mills, will do well to communicate with us before purchasing.

THE RATHBUN COMPANY, Deseronto, Ont. 61.19

WATER POWER TO LEASE.

THE UNDERSIGNED having largely extended their raceway at Lakefield, are desirous of corresponding with parties who wish to go into manufacturing, and they are prepared to sell or lease water power on the most favorable terms, or would erect buildings of any size suitable for factories.

R. & G. STRICKLAND

1050 LAKEFIELD, ONT. 1161.9

SAW MILL MACHINERY FOR SALE.

STEEL AND IRON

Slabbing and Stock Gang Gates

WITH OSCILLATING MOTION, ALSO, -

IRON PITMANS, FLY WHEELS, Driving Pulleys, and other Saw Mill Machinery.

In Good Order, which has been taken out of Mills that have been closed. Address,

The RATHBUN COMPANY,

81.20 DESERONTO.

MACHINERY,

ENGINE, BOILER,

ROTARY MILL, &c.,

IN THE

St. Martins Manufacturing Co's Factory and Saw Mill at St. Martins,

CONTAINING

A Waterous 80 H.P. Engine and Boilers, Rotary Saw Mill,

Saw Tables, Planors, Shafting, Hangers, Pulleys, Bolting, Lathes, Pumps, etc.

One Fleming & Sons' 50 H.P. Engine and Boiler,

Waterous Saw Mill, Daniel Planor, Band Saw, Planer and Matcher, Saw Tables, Shafting, Bolting, etc.

If not sold en bloc by the 10th of October, will be sold in lots to suit purchasers.

Catalogues giving particulars of the Machinery, etc., can be had from the liquidators, or at the offices of W. H. OLIVE, No. 107 Prince William Street; T. MCNEIL & SONS, 13 King Street, St. John, and W. E. SKILLEN, St. Martins. 4121.

FORESTS OF ONTARIO.

We continue our extracts from Mr. R. W. Phipp's report:

THE POSITION IN WHICH FORESTS WOULD BEST REPLY TO THE ONTARIO CLIMATE.

To produce their best effect on climate, three points are to be observed. 1st. To occupy the heights, firstly that they are generally of poor land well spared for that purpose; secondly, that wooded elevations preserve rain, feed springs, and continue water-courses in regular action. 2nd. They should be of considerable depth as well as length, as a thin line of forest will not by any means preserve the moist and humid atmosphere within their bounds on which their beneficial action depends. For such purposes, they should not, if it could be avoided, be less than a mile in depth from front to rear, and they had better be ten or twenty. To act as reservoirs of humidity they must be of fair extent, otherwise they will neither be able to feed the water-courses, nor to send upwards to the clouds those moist currents which, it appears by all experiment, meeting with a differently constituted atmosphere of the air, produce rain at those seasons when it is most needed. 3rd. If possible, such forests should stretch across Ontario in lines from northwest to southeast. They would then be in position profitably to intercept the southwest wind, which is the great bearer of moisture hither from the Gulf of Mexico and the tropical seas. For instance, as has been observed, the great forest northeast of Ontario does not bring much rain relatively to Ontario. Most of the rain a forest obtains will fall northeast of that forest. The exceptions are when an east or northeast wind, meeting the southwest current, produces rain, and is sufficiently strong to carry before it the rain bringing current; but this is not to be depended on, the intention in endeavoring to preserve the forest in the line mentioned, being that the ascending currents shall meet and produce rain from the moisture-bearing winds, which are mostly southwest in reality, though often deflected and turned away by local or other influences. Of course it is not expected that Ontario can be mapped out in field and forest at this late day. But we can know in what direction to strive here, and where forest overpreads the whole country, as in part of our territory elsewhere, very much indeed can be done.

It must always, however, be remembered that east, and even northeast winds, can and do bring rain of their own force from the Atlantic direction. But the southwest wind is the chief rain bringer. The others may be called with reference to Ontario, local. The southwest wind brings moisture to the whole northern hemisphere.

TREES BY THE ROADSIDE.

Premiums have been very properly offered here, in a Bill just passed through Parliament, to those farmers who shall plant and maintain in growth certain descriptions of trees. The Bill refers principally to lines of trees set along the highway and the dividing lines of farms. These, or small plantations of any sort, are valuable, but by no means fulfil the functions of deep belts of forest. Their great value is, if planted over sufficient sections of country, that they preserve the land from drying winds, and in that way, if they do not, as the forest does, bring rain, they preserve the effects of rain for a much longer period. Secondly, and a very important benefit indeed, they prevent the wind from drifting the snow off the fields they inclose, and the roads bordering them. Left evenly on the ground, the snow is a vast benefit to the soil and the coming or existing plant; driven into great heaps by the wind, it not only injures both, but also renders transport over the roads difficult or impossible.

A WORD ON THE PRESENT AMOUNT OF FOREST IN ONTARIO.

It will be seen by the accompanying list that the state of Ontario, as regards possession of forest land, is as follows:—On the northeast she has a large forest, and in Muskoka and Georgian Bay District forests of some size. These are all the Province possesses to feed the streams, we may say, east and northeast of Toronto, and they largely at present perform that function. But the whole great peninsula to the west is destitute of most of the original

forests on the elevated lands which gave her rivers water, and has little in the way of woods save the small reserves farmers have kept for themselves on their farms. As I pointed out previously, these are being rapidly used; one after another they fade away from the land and are not replaced. The accompanying lists will show exactly the acreage under wood still left in each county, and when we remember that but a century ago all was forest, we shall be amazed at the rapidity of destruction; and, noticing how fast the small reserves is disappearing, we shall be quite convinced that in a very few years, unless remedial measures are successfully applied, the great peninsula of Ontario—our chief territory in a farming sense—will be to all intents and purposes a deforested land. And I may here observe the fallacy of the statement sometimes ventured, "Oh, we cannot be in want of forests, there are so many million acres in Ontario, and of them only so many are cleared!" May I ask what this has to do with the question? Neither the woods of Keowatin nor Muskoka can in any degree assist the farmers of the great Ontario peninsula, from Windsor on the west to Toronto and Collingwood on the east. Nor will the small patches left on each farm assist them. They are too small and too isolated, and far too certain to vanish, to maintain the proportion of shaded land necessary for climatic influence. But these districts, it is said, give fair crops now. They do not yield so easily as once, nor is the sky so propitious now, as the careful investigations of Dr. Bryce and Prof. Dawsey, some pages back show. But the great point is this,—they soon will, in all human calculations, suffer severely. Now, if the matter be commenced in time, we have yet space before it is too late, to carry out what all civilized countries have acknowledged the necessity of and are to-day engaged in,—the work of making provision for a continuous forest area, and constant supply of merchantable timber.

Something can be done, and no doubt should be done, in certain parts of Ontario towards replanting our destroyed forests—destroyed in localities where forest, to improve climate and subserve agriculture, should especially be allowed to remain. But the great opportunity which yet remains is that of preservation. This is found to be the case in India. The Government of that great country, expending yearly its hundreds of thousands of pounds sterling for preservation and replanting, has not yet planted a hundred thousand acres, while it has improved, is improving, and has to a very great extent, already changed for the better, the character of many millions of acres of forest land. If we pass through much of the forest which Ontario still retains in governmental hands, we shall find, here and there, many a large expanse desolated by fire and growing up again, a brush-wood chinking itself to uselessness, covering a burnt and impoverished soil. We shall find great areas of forest the lumbermen have culled of pine and spruce, of ash and oak. Every here and there are the relics of their operations—the close hewn stump, and, a goodly distance therefrom, the great pile of decaying branches where the head of the tree had fallen; while the whole distance between, if round timber had been got out, shows nothing but a few scattered side limbs, but if square it is paved with immense pine fragments—short thick slabs whose deep clean cut show the force of the scorcher's arm, and long lengths of those peculiar chips, slightly connected, thin and broad, smooth on one side, the depth and straightness of which show how deftly the handler of the broad-axe has plied his unwieldy tool; and if you come near the stump, and it has been heavy timber squared for the English market, you will find in great masses, hewn off, thrown away and rotting, as much clear timber as, sold at Toronto prices, would go far towards the whole sum the lumberman will ever get for the log. The piles of debris are everywhere, and form a most inflammable portion of the touchwood of a forest. Then before the strong oxen could drag the great log to the river down which it had to be floated an avenue of smaller trees had sometimes to be cleared from the way, and these likewise piled in desolating heaps, their skeleton branches protruding among the green undergrowth, like the

ghastly relics of mortality on a forgotten battlefield, cumber the forest floor.

You will find many places where trees are choking one another for want of air and light, until in lapse of years some stronger one will tower above their fellows. You will find places where hurricanes have cut their way through the forest, and the trees lie for miles, as the ranks mown down by the mitrailleuse. You will pass the solitary bush road, the trees which once grow therein chopped right and left into the forest by the makers of the track, where they lie in a dry heap for miles on miles, forming as pretty a fire track as one could wish to see. And everywhere you will find millions of young trees giving full promise, if spared axe and fire, of becoming trees as sturdy as any the lumberman has carried away, but never thence, the impression produced on you by the whole pilgrimage will be that, if no preventive measures be used, the fire which has taken so much already will sooner or later take the rest. When one compares the state of our forests with that of those in some parts of Europe, and thinks of two long avenues of fire breaks, the forest-rangers on the watch, the careful management, the incessant thinning and replanting, the long succession of goodly trees yearly ready for the axe, and the certainty, with equal care, of such a succession for all time to come, one is apt to think it full time that some such system were introduced here.

RAVAGES OF FIRE.

To show what loss is being incurred by the fires which run through our forests, let us take up the report of the Commissioner of Crown Lands for 1882. There are 9 reports of surveys. Let us see what they say in succession:—

TIMBER BELT NORTH OF FRENCH RIVER.

—The greater part of my line passed through a burnt country, the fire having gone over some parts a second time. Over this burnt country all the timber has been killed."

"TOWNSHIP OF DUNNET.—Over one-half of this township has been burnt."

"TOWNSHIP OF HUGEL.—The greater portion of this township has been overrun by fire and the timber destroyed."

"TOWNSHIP OF RATTEL.—About one-sixth of the township has been burnt over, all the timber being destroyed by fire."

"TOWNSHIP OF KIRKPATRICK.—Nearly the whole of the township has been burnt over."

"TOWNSHIP OF HAGAR.—Bush fires have destroyed nearly all the timber."

"TOWNSHIP OF FIELD.—No mention of fire."

"TOWNSHIP OF DRYDEN.—The greater portion of the timber has been destroyed by fire."

"TOWNSHIP OF WILKES.—Not injured by fire."

In last year's report, out of fifteen surveyor's statements eleven speak of the ravages of fire. THE PINE LUMBER REMAINING.

The latest opinions of value procurable on this head are perhaps those given by Messrs. Drummond, Little, and others who have studied this subject, at the last year's Forestry Convention. Maine and Michigan were mentioned. At Bangor, long famed for vast lumber mills, only fourteen million feet were procurable in 1877, against over one hundred million in 1850. The whole Saginaw valley, Michigan, the very home of the lumber trade, is nearly culled. What this means may be imagined when we learn that it has been cutting with mills of six hundred million feet capacity. Their lumber journals declare that in all Michigan, Wisconsin and Minnesota—the western pine States, there is not ten years' supply with the present demand. We may, I think, consider that the demand is likely to increase, perhaps to double. With this, and especially if they have a recurrence of their terrible fires, there may not be five years' supply. Concerning Ontario, we are told that Mr. Little has consulted the best authorities, and is persuaded that in Canada (5,000, Quebec; 3,500 Ontario; N. B. and N. S. 1,500) we have but ten thousand million feet of pine, while we are at present cutting a thousand million feet yearly, leaving ten years' supply. Consider this in the same light, and look at some Canadian fire statistics further on, and we may well doubt whether we have five years' supply. In Newfoundland

there is little good pine left. It must be noted that a well known lumberman, Mr. J. K. Wood, puts the amount manufactured yearly in Canada at nearly two thousand million feet, adding to pine spruce and other woods. If we count the pine timber remaining in the States, we shall find that, after Michigan, Minnesota, and Wisconsin are exhausted, say in seven years, there will probably be twice as much, say fourteen years' supply in the other States, such as the large and slowly decreasing forests still standing in Arkansas, Louisiana, and California.

In view of these facts, let us observe what will, in a few years, be our position in Ontario, or even in Canada. We have but between five and ten years' supply. The Americans have their Southern and Pacific States as a reserve, where, though at great cost of carriage, they may obtain pine. But Ontario has no such reserve. In a few years we shall have but some districts of woodland to our north and northeast, culled of their best pine, and alternated with great sections over which the fire has swept, while the rest but wait for it to arrive, that the destruction may be complete. As one of the late forestry gentlemen, Mr. Thistle, a lumberman and surveyor, gave it as his decided opinion that ten times as much lumber was destroyed by fire as by the axe. Let us carry this to its conclusion. We have been exporting perhaps twenty million of dollars worth yearly. What if we have been losing two hundred million—would it not still pay—to give the care to preserve our forests that Europeans give theirs? It was thought that this was a wooded country, and that there was no such danger. I would ask my readers to study the descriptions of European forestry in other of these pages. They will not be able to avoid the conclusion that, in a few years, Germany, Prussia, and other European countries will be better wooded than Canada. We will glance a moment at what is told us of the forest when the lumbermen have culled it. Here is one description by Mr. Ward, a Canadian lumberman:—"To the uninitiated traveller through the woods, after the shantymen have taken all they think worth taking, he would hardly notice the chopper had been there, except for seeing an occasional stump, a few chips, or the top of a tree." Now we will take another, Mr. Smith, in the "Flora of Michigan":—"The valuable trees were felled years ago, and the lumbermen moved on to fresh spoils, leaving behind an inextricably confused mass of treetops, broken logs, and uprooted trunks. Blackberry canes sprang up everywhere, forming a tangled thicket, and a few scattering poplar, birch, and cherry trees serve for aboreal life, above which tower the dead pines, bleached in the weather, and blackened by fire, destitute of limbs, and looking at a distance not unlike the masts of some great harbor. Thousands of such acres, repelling alike to botanist and to settler, can be found in any of our northern countries." What we had better conclude, I fancy, concerning the difference between the two, is that the second had undergone a second and yet sharper and more reckless culling, after it had passed the stage described by Mr. Ward. It is evident that the time has passed when it was a matter of choice to attend to forest preservation in Ontario. If we are to retain any, it is now an affair of immediate necessity.

In fine, if we wait longer, our forests will be gone, and can then not be renewed, except at the vast expense of time and money required in planting.

If we move energetically now, we can preserve great forests, the maintenance of which is most necessary to our prosperity, and shall also have time to plant, where no other means exist.

FOR a hard cold, with pain in the head, bones, or through the chest, take DOWNS' ELIXIR, at once and in liberal doses, cover up well in bed, and our word for it, you will soon be well.

BAD DRAINAGE.—There is nothing more productive of disease in a neighbourhood than bad drainage. Open the culverts and sluiceways and purify the locality. The objections in the human system may be remedied in a similar manner by Burdock Blood Bitters, which opens all the outlets of disease through the Bowels, Liver and Kidneys.

THE OTTAWA VALLEY OUT.

In summing up the lumber trade of last year it was said to exceed by far that of any previous season. This was caused by the early breaking up of the ice, steady flow of water, brisk demand and long open season. This supplied the mill owners with plenty of water and opportunity to get their logs down, which was all they wanted for a good season's harvest. Favorable as last year was, it was hardly more so than this, though the season opened a little later in '83 than the previous season. Since last year, only one serious misfortune has occurred; viz. the burning of Messrs. Gilmour & Co.'s steam saw mill, across the river, on the evening of the 8th of August last. By this conflagration the firm lost directly in the neighborhood of \$125,000, partly covered by insurance, and in addition to this large amount have lost ten weeks of their season's cut. To counter balance, in this advance, as it were, extensive improvements have been made. Mr. E. B. Eddy, whose establishments were burnt on the 3rd of November 1882, has rebuilt on a grander scale and can if he chooses double his last year's capacity. Messrs. Bronson & Weston built a new dam during the winter and made other valuable improvements. Messrs. Sherman, Lord and Hurdman erected another mill, and have doubled their capacity, while all other mill-owners added more or less to the working arrangements of their mills. The demand for lumber has been somewhat duller than last year though a larger quantity has been shipped. The piling ground has been extended and at the present time there is more lumber in the city and suburbs than at any previous time. Below will be found estimates of the year's cut by the principal mills in this vicinity, the figures being obtained after diligent search by a reporter of this paper among those who have a good opportunity of knowing the state of the trade:

| | |
|---|--------------------|
| Sherman, Lord & Hurdman's mill, Hull..... | 35,000,000 |
| E. B. Eddy's, Hull..... | 80,000,000 |
| Bronson & Weston's, Ottawa..... | 60,000,000 |
| J. R. Booth, Ottawa..... | 65,000,000 |
| Perley & Falco Ottawa..... | 40,000,000 |
| Capt. Young, Ottawa..... | 20,000,000 |
| Rochester's, Ottawa..... | 10,000,000 |
| McLaren's, New Edinburgh..... | 20,000,000 |
| McClymonts, New Edinburgh..... | 25,000,000 |
| Gilmour & Co., Hull..... | 40,000,000 |
| Conroy Bros., North Shore..... | 35,000,000 |
| Allan Grant's South Shore..... | 10,000,000 |
| McLaren's Carleton Place..... | 30,000,000 |
| McLaughlin Bros. Amprior..... | 80,000,000 |
| Gilles Bros. Braside..... | 35,000,000 |
| Pembroke Mills..... | 29,000,000 |
| W. O. Edwards & Co. Rockland..... | 60,000,000 |
| McLaren & Co..... | 65,000,000 |
| Gilmour's Outneau Mill..... | 25,000,000 |
| Hillman's Rock Cliff..... | 4,000,000 |
| Total..... | 747,000,000 |

There are a number of other mills, whose cut could not be accurately estimated, but with the cut will doubtless equal that of last year which was estimated at 800,000,000 feet. The estimate on an average is probably lower than the actual figures, and as none of the mills have stopped running yet the quantity at the close of the season, may be much larger, as the mills cut 30,000,000 per week. In last year's estimate the production of the North Nation mill was given as 25,000,000. During the winter this mill was demolished, Mr. Edwards having decided to work the Rockland mills only.—*Free Press.*

The Coming Forestry Exhibition.

The regulations of the Forestry Exhibition to be held at Edinburgh next year state that the exhibition is intended to include everything connected with, or illustrative of, the forest products of the world, and that it will be open to exhibitors from all countries; that the entries will close on the 1st of March, 1884, and that exhibitors will be charged 1s. per square foot of floor space. Arrangements will be made by the committee for the reception of exhibits at a date to be fixed, but all fulminating and explosive substances all dangerous materials will be absolutely forbidden to be sent. Medals, money prizes, and diplomas for exhibits and essays will be awarded by competent jurors. Contributors to the loan department are requested to communicate with the secretary Mr. G. Cadwell, 3, George IV. Bridge, Edinburgh, who will supply special forms to be filled up. The committee, it is further stated, will endeavor to obtain from the various British railway companies special terms for the conveyance of exhibits to and from the exhibition, and such arrangements as will be duly intimated to exhibitors.

deavor to obtain from the various British railway companies special terms for the conveyance of exhibits to and from the exhibition, and such arrangements as will be duly intimated to exhibitors.

St. John, N. B.

The *News* says:—From information of a reliable character at the *News* command, it would appear that the lumber harvest for the present season will not exceed 225,000,000 a falling off of fully 33 1/2 per cent from the usual crop. The above quantity is made up as follows: Upper St. John 15,000,000; Arnsbrook 40,000,000; Tobique, Medernakeag and other streams, 25,000,000; Nashwaak 20,000,000; St. Croix, 15,000,000; Bay of Fundy, 12,000,000; Miramichi (N.W. & S.W. branches), 80,000,000; scattering lots on north shore, 18,000,000. Total, 225,000,000. Last season, 334,000,000 comprised the total output. In 1874, 389,000,000 of spruce were cut in this Province and Annapolis, Maine, townships, which was almost entirely handled by provincial operators who in recent years have almost monopolized the rich Annapolis log areas.

Joinery in New South Wales.

There are in this colony, says a contemporary, several large joinery works, fitted with the best labor-saving machinery and the most modern appliances used in the trade. The establishments of Messrs. Hudson Bros., Messrs. Goodlet & Smith, and Mr. John Booth, at Sydney, employ a large number of hands to meet the requirements of the colonial contractors. At Messrs. Goodlet & Smith's establishment about 100,000 feet of timber are sawn weekly, nine-tenths of which consist of colonial hardwood, cedar, beech and pine. Nearly every sort of building materials is manufactured by the firm. They have two large potteries, where sawage pipes from 3 in. to 24 in. in diameter, building and paving brick, and all descriptions of stone-ware are made. The total number of saw mills, &c., rose from 112 in 1871 to 213 in 1880.

Submerged Forests.

The Mississippi river runs through a delta of made soil from Cairo to the mouth, 180 miles below New Orleans. This has all been formed by deposits of silt, or soil from the upper rivers. Close geological explorations disclose the fact that for hundreds of miles through these deposits, immense forest trees are buried, one over the other, with interspaces of sand. Ten distinct forest growths have thus been observed which it is thought have succeeded one another. Of those known as the baldheaded cypress, some have been found more than 25 feet in diameter. One contained 5,700 rings. In other cases huge trees have grown over the stumps of others exactly as large. Taking these facts for data, the antiquity of the whole is estimated at 100,000 years, or an age of ten thousand years for each forest.—*Lumber World.*

On Thirty Days Trial.

The Voltaic Belt Co., Marshall, Mich., will send Dr. Dye's Celebrated Electro-Voltaic Belts and Electric Appliances on trial for thirty days to men (young or old) who are afflicted with nervous debility, lost vitality and kindred troubles, guaranteeing speedy and complete restoration of health and manly vigor. Address as above.—N.B.—No risk is incurred, as thirty days' trial is allowed.

ANOTHER WITNESS.—A. Chard, of Sterling, testifies to the efficacy of Hagyard's Yellow Oil, which he used for a badly injured knee joint. It is now the great household remedy for inflammation, pain, soreness, lameness, etc., and is used both internally and externally with infallible success.

A WRONG OPINION.—Many a dollar is paid for prescriptions for some disease that never troubled the patient, and when the sole difficulty was worms, which a few of Freeman's Worm Powders would remove. Those Powders are pleasant, safe and sure, contain their own cathartic, and are adapted for children or adults.

A WONDERFUL RESULT.—A single bottle of Dr. Low's Pleasant Worm Syrup has frequently destroyed from 100 to 300 worms. It is pleasant to take—no other cathartic being required. Tape worms have also been removed by it, of 15 to 35 feet in length. It is effectual for all varieties of worms afflicting both children and adults.

National Manufacturing Co.

160 Sparks Street, Ottawa,

THE MANUFACTURERS OF



TENTS!

Camp Furniture and Hosiery.

OUR GOODS ARE THE BEST IN THE WORLD!

Four Gold and Silver Medals and Thirty-two First Prizes at the Toronto and Guelph Exhibitions, 1883.

Highest Awards at Sydney, New South Wales: Exhibition, June, 1883.



Lumbermen's Tents

A SPECIALTY!

At Prices Lower than ever before.

HEAVY SOCKS

Our own make, and at Prices Very Low!

SHANTY BLANKETS

IN GREAT VARIETY.

Liberal Discount to Large Buyers. Send for Catalogue.

National Manufacturing Co.

160 Sparks Street, Ottawa.

Market Reports.

TORONTO.

From Our Own Correspondent.

Nov. 23.—The lumber trade in this city is at the present time exceedingly dull, at the retail yards men and horses standing idle, and, as a necessary consequence, wholesale dealers are in about the same depressed condition.

The amount of lumber arriving by rail is quite small and the roads dependent on the lumber traffic for a large portion of their earnings will make a poor showing for the remaining portion of the year, and before the end of the coming year, 1884, I venture to predict, without laying claim to the title of prophet, that the petty question of charging one dollar for shunting cars to the various sidings within the city limits, will be overlooked by the more serious and imperative considerations of how to make both ends meet.

The shipping season is now over and we expected to have been able to give the totals of shipments both to South America and Britain, the latter we cannot give till next report. The exports by the Export Lumber Co. from the St. Lawrence to the River Plate during 1883 were as follows:—

Table with columns for lumber types (Pine, Spruce, Ash), quantities, and prices. Includes sub-sections for 'CORDWOOD' and 'SHIPMENTS'.

years, for, although a good deal of lumber has been moved, prices have not left so much margin. We have again to notice an advance in the price of laths, which are selling at \$2.00, but \$2.25 is expected to be the price in future.

The weather for the past two weeks has been very mild and there has been very little demand for wood, but prices, though unchanged, are firm, and are quoted ex cartage as under:

Table listing lumber types (Long Maple, Short, Long Birch, etc.) and their prices.

The consumptive demand for the month of October was considered satisfactory, but great caution is recommended on the part of shippers here, owing to the shadow hanging over the political atmosphere.

Table titled 'LIVERPOOL MARKET' showing lumber quantities and prices for various years (1882-1870).

Prices at the yards are nominally the same, at all events so far no cutting in figures that would justify me in altering previous quotations:

Table listing lumber types (Mill cull boards, Shipping cull boards, etc.) and their prices.

MONTREAL.

From Our Own Correspondent.

Nov. 21.—As the dullness consequent upon the coming of winter is again upon us, business has been pretty slow for the past two weeks. Navigation is now closed for this year and nothing but a retail trade is looked for till spring.

and commencing a life amongst the maples. In some places here they have to build the walls of their houses with maple, for want of small pine or any other sort of soft wood.

ALBANY.

Table titled 'ALBANY' showing quotations at the yards for various lumber types (Pine, Spruce, Hemlock, etc.) and their prices.

BOSTON.

Colton, Wool and Iron of Nov. 24, says:— There is no particular change in the market, but a little hull is noticeable, probably preparatory to arranging business on a winter basis.

CANADA PINE.

Table listing lumber types (Selects, Dresseds, etc.) and their prices.

BUFFALO.

Table titled 'BUFFALO' showing quotations for various lumber types (Uppers, Common, Culls).

CHICAGO.

The Northwestern Lumberman of Nov. 24th, says:—The sudden termination of active shipping operations on the lakes, consequent on the disastrous gales last week and the week before, has given a quiet appearance to the market docks the present week.

lake to come forward, and were counting on a continuance of navigation season to get it over here, and now find themselves in rather bad shape. The demand for dry common stock is so active, and it is generally so meagre in supply, that the difficulty of procuring vessels to bring over the little remaining at east shore ports is likely to be sensibly felt.

Receipts of lumber, shingles, etc., for the week ending Nov. 22, as reported by the Lumbermen's Exchange:—

Table showing receipts of lumber and shingles for 1883 and 1882, including stock on hand for Nov. 1, 1883.

OSWEGO, N. Y.

From Our Own Correspondent.

The receipts of lumber since our last have been very light, lake rates having advanced beyond the views of dealers. Vessels are now fully occupied in the grain trade.

Table showing receipts of lumber and shingles for 1883 and 1882, including stock on hand for Nov. 1, 1883.

TONAWANDA.

CARGO LOTS—SAGINAW INSPECTION.

Table showing cargo lots for Saginaw inspection (Three uppers, Common, Culls).

LEITH.

The Timber Trades Journal of Nov. 10, says:

The only arrival of importance during the past week is the Nicksburg, from Quebec, for Messrs. Park, Dobson & Co., with an assorted cargo of waxy yellow pine and American hardwoods.

LIVERPOOL.

The Timber Trades Journal of Nov. 10, says:

The import during the past week has again been moderate, and the quays are beginning to wear a bare aspect compared with the busy and overcrowded condition which they have shown for some time.

condition, and hence the consumers are inclined to go on purchasing only for their immediate wants, so long as the market here remains in its present steady position, rather than lay in stocks and hold them, with their accumulating charges of interest, rent, and other expenses.

Spruce deals show no further advance in price, at the same time shippers appear to have confidence in the future, and are looking forward to an increase in prices.

On Wednesday Messrs. James Smith & Co. offered by auction a cargo of Bathurst pine and spruce deals now landing, and a cargo of sawn pitch pine timber and planks about now due, together with sundry other parcels of wood in store.

The attendance of buyers was very meagre, and there was no bid for any portion of the deals in the former cargo, only a few spruce deal ends being sold at 25 7s. 6d., and pine deal ends at 25 per standard, and of the pitch pine cargo only about twelve lots found buyers at from 15 1/2d. to 17 1/2d. per foot.

GLASGOW.

The *Timber Trades Journal* of Nov. 10 says: Transactions during the past week by public auction have been to a fair extent, as will be observed from the statement under noted. At the sale on the first inst. (Messrs. Edmiston & Mitchells, brokers) a good company was met, and a large quantity of square timber and deals changed hands, a portion of the catalogue being exposed without reserve.

With reference to the American pine wood trade it is to be noted that stocks are certainly accumulating, and prices, over all are rather lower. Deck plank wood is not moving off so freely, as fewer new shipbuilding contracts are being made now in this district.

On 1st Nov., at Greenock, Messrs. Edmiston & Mitchells, brokers:—

| | |
|-------------------------|-------------------|
| Quebec waney boardwood— | Per cub ft |
| 59 c ft av per log | 1s 6d |
| Do yellow pine timber— | |
| 45 c ft av per log | 1s 4d & 1s 4 1/2d |
| Do red pine— | |
| 47 & 57 " | 1s 5d & 1s 6d |
| Do oak— | |
| 85 " | 2s 5d |
| Do elm— | |
| 40 " | 2s 2d |
| 30 to 40 " | 1s 8d & 1s 9d |
| Do ash— | |
| 35 " | 2s 2d |
| 19 " | 1s 10d |
| Sawn pitch pine— | |
| 35 c ft av per log | 1s 3d |
| 30 " | 1s 2 1/2d |

The following goods without reserve:—

| | | |
|--------------------------|------------------------|--|
| Quebec waney boardwood— | | |
| 37 to 59 c ft av per log | 2s 0 1/2d to 2s 2 1/2d | |
| Quebec 3rd spruce deals— | | |
| 13 & 14 ft 9x3 | 10 1/2d & 11d. | |
| 10 " 11 " 9x3 | 9 1/2d " 10d. | |
| 10 " 18 " 7 1/2x3 | 8 1/2d " 9d | |
| Do 3rd spruce deal ends— | | |
| 0 to 9 ft 6 9/16x3 | 7d & 7 1/2d | |
| Do 4th spruce deals— | | |
| 12 ft 9x3 | 9 1/2d | |
| 10 to 14 ft 7 1/2x3 | 9d & 9 1/2d | |
| 12 " 6 9/16x3 | 8 1/2d | |
| Do 4th spruce deal ends— | | |
| 0 to 8 ft 6 9/16x3 | 7 1/2d & 7 3/4d | |
| Do 4th pine deals— | | |
| 0 to 18 ft 6 21/32x3 | 9d | |
| Do 4th pine deal ends— | | |
| 0 to 8 ft 7 1/2x3 | 7d | |

On 6th Nov., at Glasgow, Messrs. Edmiston & Mitchells offered some States black walnut, and sold a few lots (av. square 15 1/2 in.) at 3s. 10d. to 4s. 3d. per cubic foot.

LONDON.

The *Timber Trades Journal* of Nov. 10, says: The tone of the timber market is undoubtedly bolder than it was a short time ago. People give a favorable opinion of the future without fear of being heard with sneers or met with smiles, for the belief is becoming pretty general that affairs are mostly on the mend. If they do not actually advance, the time for making concessions in prices has evidently passed, and those who hold good stocks can sooner or later depend on getting their price, if they do not look too high.

No attempts on the Stock Exchange seem to succeed in making money dearer, and when this latter commodity is cheap trade ought to flourish. Neither is there any excess of imported timber as yet in the country to make its weight felt. The supply has been plentiful, but so have the deliveries to the consumers, and few seasons have perhaps shown a steadier demand throughout than that which is now hastening to its close. There has been a general deal of bad business doing among builders, and the suspension of some large firms has stayed the hands of

many smaller ones, which reflected unfavorably on the timber merchants, but there has been so much good and legitimate business done that the other was only a drag on the wheels of the

THE AUSTRALIAN TRADE.

Messrs. N. Roberts & Co.'s report on the timber trade of Melbourne, just received, under date September the 19th, says:—Timber continues very dull, and we have no hope of an improvement unless shipments should prove to be very moderate indeed.

The arrivals of flooring boards have been excessive, and as importers show no inclination to hold, prices are declining. Red deals.—Imports "nil." The cargo ex *Monarch*, which has been in store for six months, was sold on 10 inst. by auction, at an average of 5d. per foot 9x3, and to day several parcels of deals ex London vessels were sold at an average of 4d. per foot 9x3. Russian deals ex *Noel* a few were sold at 5 5-16d. for deal sizes, and 4 5-8d. for battens. As the stocks in hand are very large the prospect for cargoes arriving is not a good one. Spruce deals.—Imports, 3,453 pieces. The parcel ex *Scottish Prince* from Boston was sold at from 4 1/2d. to 4d. per foot 9x3, ex *Froeman* from Boston, deals 11x3 fetching 4 1/2d. to 4 1-16d. The bidding for 9x3 being only 3 1/2d. they were withdrawn from sale.

Under date Sydney, August 23rd, the report says:—The unsatisfactory position of Scotch and Baltic timber, reported for some time past still continues, and the sales during the month are unimportant. In American timber there is a good demand for redwood, both rough and dressed. On July 25th, at auction, the following prices were realized:—Spruce deals, 3x9 to 11, 12s. 9d. per 100 ft.; white lining, t. g. & b., 6x 1/2, 10s.; Baltic, t. & g., 6x 1/2, 13s., 8x 1/2, 13s., chamfered weatherboards, 6s. 6d.; red Baltic doors 6 ft. 6x2 ft., 6x1 1/2, s. m., 6s. 9d., 6 ft., 6x2 ft., 6x1 1/2, 9s., 6 ft., 6x2 ft., 6x1 1/2 d. m., 9s. 3d. On the 1st inst. Baltic deals sold at 13s. 6d. to 17s. 6d.; spruce deals, 10s. 6d. to 16s. 9d.; white Baltic flooring, 1 1/2x6, t. & g., 20s. On the 8th inst., t. g. & b. white lining, 6x 1/2, 10s.; white lath, 6 ft., 4s. 3d., 4 1/2 ft. 3s. 9d.; Baltic deals, 7x3 13s. 3d., 8x3 13s.

QUEBEC CULLERS' OFFICE.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, &c. measured and culled to Nov. 23:—

| | 1881. | 1882. | 1883. |
|---------------------|------------|------------|------------|
| Waney White Pine... | 3,065,274 | 3,104,048 | 3,781,742 |
| White Pine..... | 6,029,041 | 7,901,095 | 7,405,523 |
| Red Pine..... | 1,945,720 | 1,150,850 | 498,111 |
| Oak..... | 2,001,477 | 1,313,109 | 1,910,322 |
| Elm..... | 1,027,070 | 714,510 | 809,631 |
| Ash..... | 408,798 | 310,769 | 263,448 |
| Basewood..... | 3,049 | 1,471 | 2,244 |
| Butternut..... | 3,033 | 2,639 | 1,118 |
| Tannaro..... | 27,150 | 51,975 | 37,736 |
| Birch & Maple..... | 161,774 | 209,061 | 123,503 |
| Masts..... | 51 pcs | 33 pcs | — pcs |
| Spars..... | — pcs | 51 pcs | — pcs |
| Std. Staves..... | 415,929.26 | 564,000.22 | 680,433.26 |
| W. I. Staves..... | 595,72.10 | 1429,62.7 | 663,33.21 |
| Bri. Staves..... | | 60,83.0 | 115,70.15 |

JAMES PATTON,
Supervisor of Cullers.

RAFTS ARRIVED.

The *Chronicle* gives the following list of rafts, etc., arrived at Quebec:
Nov. 15.—Price Bros. & Co., pine lumber, Town Wharf.
O. Latour (2), white pine, &c., Cap Rouge.
B. C. L. & T Co., white pine, &c. St. Michael's cove.
S. J. Bennett, deals, &c., Mill cove.
Cook & Bros., white pine, &c., St. Michael's cove.
J. J. Calvin & Co. (2), oak, &c., sundry coves.
Stakes & Son, staves, Bowen's cove.
Price Bros. & Co., deals, Trois Saumons.
Ross Bros., deals, Montreal.

Lumber Yards on Fire.

OSHKOSH, Nov. 15. The lumber yards of Stanhiller, Arnos & Co., and A. D. Peck caught fire this evening, and a fire broke out in the Morgan block near by. The flames got beyond control, and the Mayor telegraphed to Fond du Lac for aid. It burned over a large territory and consumed a large amount of lumber, G. W. Pratt's yard was consumed. Their loss is \$75,000. The other losses are unknown.

WILLIAM COOK & SONS,
GLASGOW STEEL and FILE WORKS,
SHEFFIELD,
Manufacturers of Best Quality Steel, Files, Saws & Crucible Steel Castings.
AGENTS FOR CANADA:—
RAE & WATSON, 22 Church Street, TORONTO, Ont.

JONES & SON,
Wholesale Lumber & Timber Dealers
39 Broadway, NEW YORK.

Oak, Ash, Cherry, Black Walnut, Poplar, Butternut
And all other kinds of HARDWOOD LUMBER.
White and Yellow Pine Lumber and Timber.
Oak Ship Plank and Timber. Pine Deck Plank and Ship Stock Generally.

J. S. MAYO
IMPORTER AND MANUFACTURER OF
MACHINE OILS
OF EVERY DESCRIPTION.
9 Common Street, Montreal.

AMERICAN LUBRICATING OILS A SPECIALTY.
As I carry the LARGEST and BEST assorted Stock of OILS in the Dominion, I am prepared to fill all orders Promptly and at LOWEST MARKET PRICES.

Canadian Timber Sales.
The *Ottawa Citizen* says:—One of the best sales in timber this season was that made recently by Messrs. Bernard & Mackay, of Pembroke, who disposed of a white pine raft consisting of 21,000 sticks to Dobell & Co., of Quebec at 2 1/2 cents per foot.
New Brunswick Lumber.
The St. John, N. B., *News* reports that the lumber harvest for the present season in that province will not exceed 225,000,000 feet, a falling off of fully 33 1/2 per cent. from the usual crop. The total is made up as follows:—Upper St. John, 15,000,000; Aroostook, 40,000,000; Tobique, Madunabec, and other streams, 27,000,000; Nashwaak, 20,000,000; St. Croix, 15,000,000; Bay of Fundy, 12,000,000; Miramichi (northwest and southwest branches), 60,000,000; scattering lots on North Shore, 18,000,000.

WISE
people everywhere on the lookout for chances to increase their earnings, and in time become wealthy; those who do not improve their opportunities remain in poverty. We offer a great chance to make money. We want many men, women, boys and girls to work for us right in their own localities. Any one can do the work properly from the first start. The business will pay more than ten times ordinary wages. Expensive outfit furnished free. No one who engages fails to make money rapidly. You can devote your whole time to the work, or only your spare moments. Full information and all that is needed sent free. Address: S. S. S. & Co., Portland, Maine.

WATERBURY'S
PHEUMATISM
SORE THROAT
FROST BITES
BURNS, SCALDS
DEAFNESS

BURDOCK
CURES
RHEUMATISM
GOUT
DYSPEPSIA
CONSTIPATION
HEADACHE
URINARY COMPLAINTS
BLOOD BITTERS



THOS. GRAHAM & Co.,
File Manufacturers

ETC.,
150 FRONT STREET EAST
TORONTO.

FILES FOR SALE. FILES RE-OUT

F. E. DIXON & CO.

MANUFACTURERS OF



STAR RIVET

LEATHER BELTING

70 King Street East, Toronto.

SPECIALTY:—Belting made from J. B. HOYT & Co's American Oak Tanned Leather. Send for Price List and Discounts.

EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Sts, MONTREAL,

MAKER OF

Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps,

CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,

Water Wheels, Mill Gearing, Shafting, Hangers and Pullies,

Hand and Power Hoists for Warehouses &c., &c.

Also, Sole Manufacturer of BLAKE'S CHALLENGE STONE BREAKER.

AND AGENT FOR

17221

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

Established 1874.



Established 1874.

NORMAN'S ELECTRO CURATIVE APPLIANCES

RELIEVE AND CURE

Spinal Complaints, General and Nervous Debility, Nervousness, Rheumatism, Gout, Liver, Kidney, Lung, Throat and Chest Complaints, Neuralgia, Bronchitis, Incipient Paralysis, Asthma, Sciatica, Sprains, Consumption, Sleeplessness, Colds and Indigestion.

Ask for NORMAN'S ELECTRO BELTS and you will be safe against imposition, for they will do their work well and are cheap at any price.

A. NORMAN, ESQ.—Dear Sir,—Please send me a waist belt. Enclosed find price. Head band I got for my wife has almost cured her of neuralgia. Yours truly,
C. L. TILLEY, WATERVILLE, N.B.

Numerous of such testimonials can be seen at my office, proving that they are doing a good work and worthy the attention of all sufferers. Circulars free. No charge for consultation.

A. NORMAN, 4 Queen Street East, Toronto.

NORMAN'S ELECTRO CURATIVE TRUSS is the best in the world. Guaranteed to hold and be comfortable. Circulars free. N.B.—Trusses for Rupture, best in America, and Electric Batteries always on hand at reasonable prices. 1727

SAW MILLS!

Having POLE ROADS to their Timber keep up the Mill Stock and run the year round.

Pole Roads are Cheap, Durable and Speedily built. The Cars can be built by any handy man in a couple of days, and will carry 2,000 feet of Hardwood Logs at a Load, drawn by one Span of Horses.

The Wheels are adjustable on the Axles to accommodate themselves to any bend in the poles.

The Iron Work complete, including Bolts and Washes, with a diagram of Car, are supplied by the undersigned. Prices on Application.

As to cost and utility of Pole Roads we will refer without permission to E. WATT, Gesto, P.O.; W. EDGAR, Kilroy, P.O.; DUNSTAN & IRWIN, Essex Centre, and JAMES NAILOR, Oil City, who are now running respectively 10, 8, 5 and 3 miles, and are stocked with our Cars.

C. NORSWORTHY & CO.,
ST. THOMAS, ONTARIO.

Patentees and Manufacturers of Moore's Improved Taper Cone Feed Saw Mills 1711

MONTREAL AXE WORKS

MOCOCK & SON

St. Gabriel Locks, - Montreal,

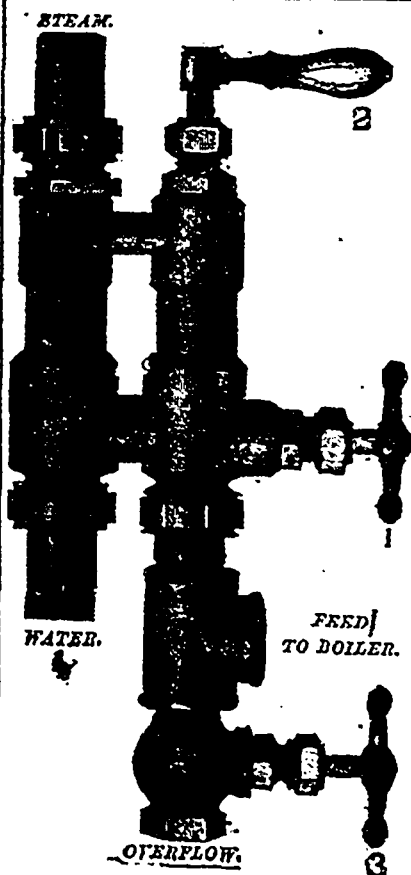
—MANUFACTURERS OF—

AXES and EDGE TOOLS

OF EVERY DESCRIPTION.

Old and Reliable, the Best Axes made in Canada.

12126



THE

Hancock Inspirator

The Best Feeder known for Stationary, Marine or Locomotive Boilers.

THE INJECTOR PERFECTED!

All Sizes lift water 25-feet. No adjustment required for varying Steam Pressures.

Over 50,000 Now in Use.

MANUFACTURED BY THE

Hancock Inspirator Co'y

5 CUSTOM HOUSE SQUARE,
MONTREAL, P.Q., CANADA.

Manufacturers of Inspirators, Injectors, and General Jet Apparatus. 12127

The William Hamilton Manufacturing Co'y

MANUFACTURERS OF

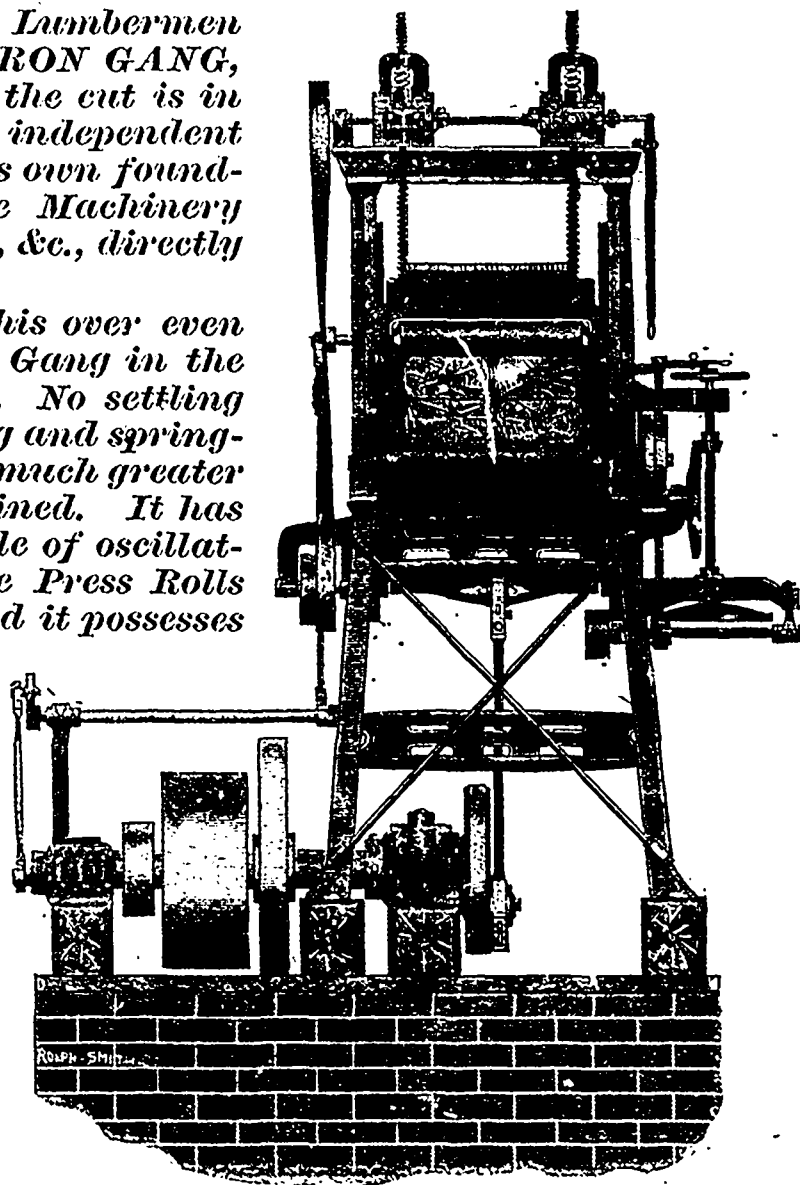
(LIMITED)

Saw Mills and General Machinery

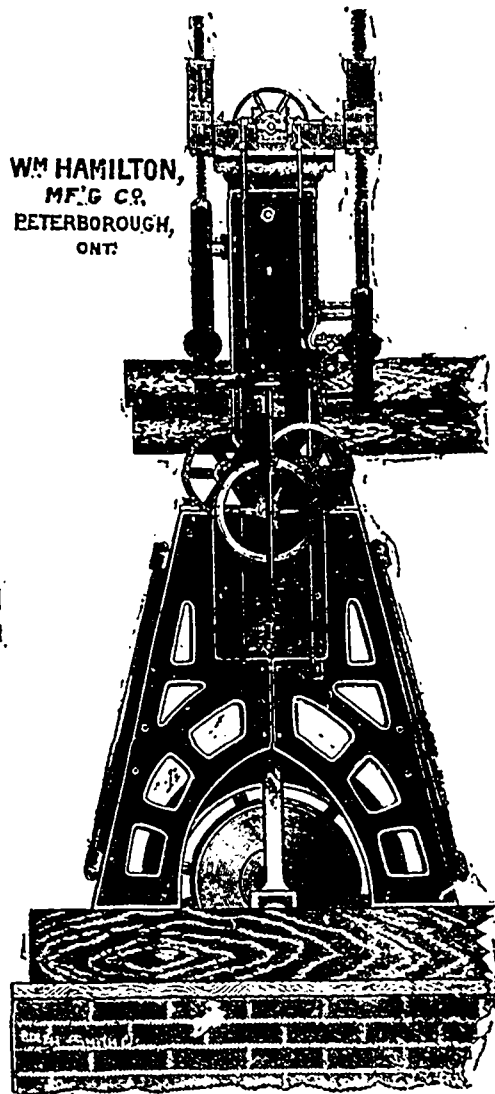
PETERBOROUGH, - - - ONTARIO.

We introduce to the Lumbermen of Canada our New IRON GANG, which will be seen by the cut is in itself a complete and independent Machine, resting on its own foundations, having all the Machinery for operating, feeding, &c., directly attached.

The advantage of this over even a well built ordinary Gang in the mill frame is evident. No settling out of line, no yielding and springing of timber, while a much greater working speed is obtained. It has the most improved style of oscillating motion, it has the Press Rolls operated by power, and it possesses generally all the good features of best American Gangs, with heavier frame work and heavier shafting, all with a view to rapid, steady & correct working. A good look at one of these massive machines satisfies the sawmill man that they are in every way capable of continuously performing heavy duty throughout the season.



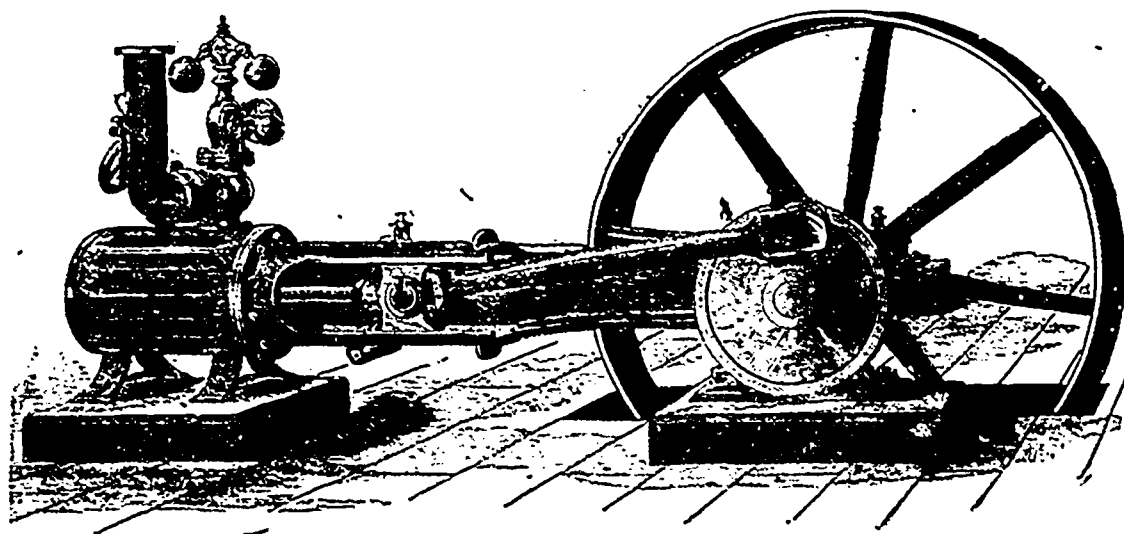
WM HAMILTON,
MFG CO,
PETERBOROUGH,
ONT.



We make these Gangs one of our specialties and manufacture them of different sizes.

— ALSO —

ENGINES AND BOILERS.



This cut represents our SAW MILL ENGINE, of which we make the following our Standard sizes, 12x16, 16x20, 18x24, and 24x30, built Strong and Substantial for Heavy Work. The Piston Rod, Cross-head Pin, and Wrist Pin, are made heavy and of the best steel; the Connecting Rod has solid ends and is tightened up by screw and wedge, avoiding all danger of keys getting out; the Slide Valve has a simple balance valve, requiring no attention from the Engineer, as it is self-adjusting. The Engine Shaft and Fly Wheel made very heavy. Belt Pulleys put on when required in place of Fly Wheel, and all regulated by the Judson Governor.

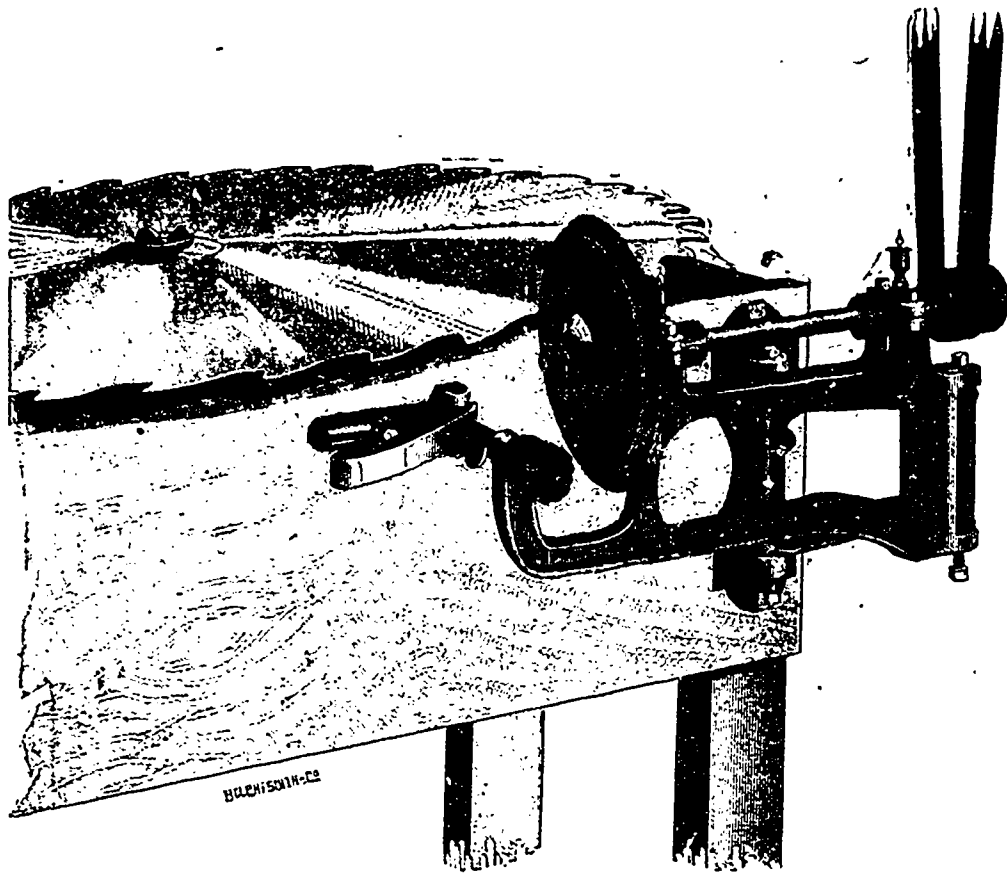
ROGERS' PATENT SAW GUMMER and SHARPENER

The Handiest Machine for these purposes ever Invented.

Won't Heat!

Cheap!

Very Simple!



Accurate!

Works Fast!

Complete!

Lumbering Season, 1884

Saw Mill Owners in providing for the season of 1884, ought not to lose sight of ROGERS' SAW GUMMER for it will save them more money in proportion to the amount invested than any other machine.

Only \$30, including Emery Wheel; Table and Countershaft, \$10 extra.

A few of ROGERS' SAW GUMMERS were put on the market last season, and we quote some of the commendations received:

JAS. HADDEN, Foxmead, says:—
"Your machine is all I expected."

CHAS. ANDERSON, Anton Mills, says:—
"I have given it a good trial, and am well pleased with it. I find it is one of the indispensables in a saw mill." * * *

ROBT. R. WEIR, Orillia, writes:—
"It works like a charm, and is very accurate in its work."
CRONE & PATTON, Hoc Roc Mills, Gravenhurst, says:—
"The Rogers' Saw Gummer purchased from you gives "good satisfaction, * * it cannot be beat."

D. DAVIDSON, Pentanguisheno, writes:—
"We are well pleased with the Gummer."
W. W. BELDING, Wyevale, writes:—
"I have the Gummer running and it is giving good "satisfaction."

ADDRESS ALL ORDERS TO THE

Hart Emery Wheel Company, Limited - Hamilton, Ont.

Manufacturers of Hart's Celebrated Patent Wire Strengthened Emery and Corundum Wheels.

—IT WILL PAY YOU—

TO SUBSCRIBE

FOR THE

Canada Lumberman

FOR THE FOLLOWING REASONS:

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

AMERICAN SAWS: We represent Four of the Best American Saw Factories

SAVE YOUR TIMBER
By using **THIN SAWS.**

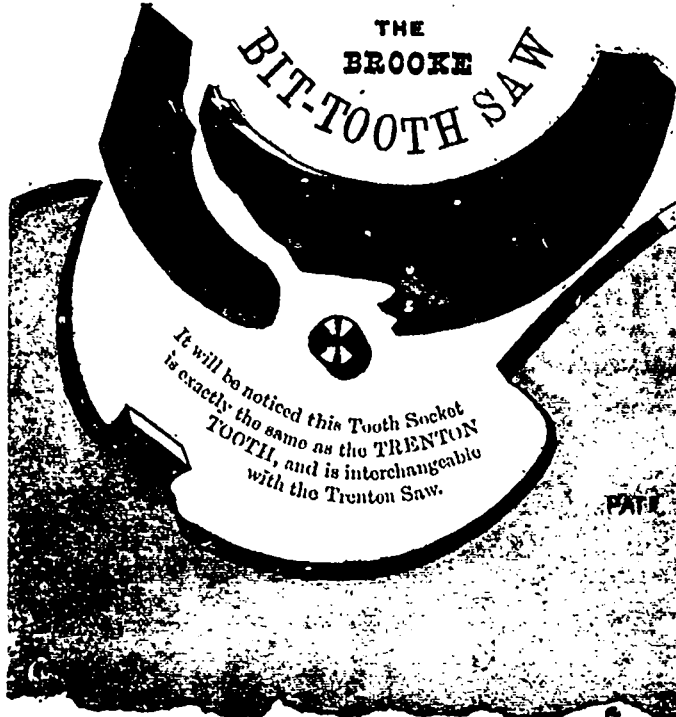
VIZ.

McLAUGHLIN Bros., Amprior, run two 60-in. Double Bit Saws, 800 revolutions per minute on 6 to 10-inch feed.

They use Steam Feed

No. 1 TOOTH.

AMERICAN SAW Co.
Emerson, Smith & Co.
R. HOE & Co.
Hubbard, Bakewell & Co.
Inserted Tooth,
BIT TOOTH,
AND
SPECIALLY THIN SOLID SAWS



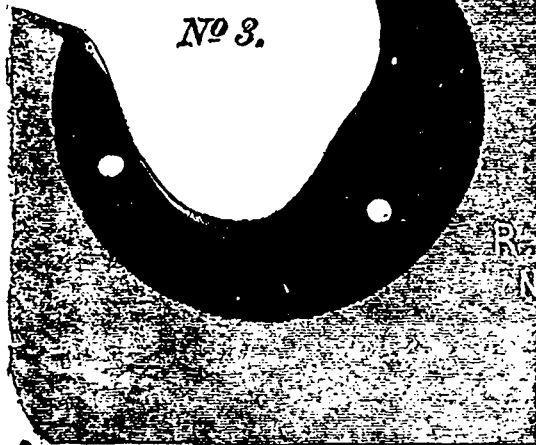
With this Saw you have either a Bit Tooth Saw or ordinary Inserted Tooth Saw, with teeth two-and-a-half inches long, both fit same socket and are interchangeable in a few minutes. These Bits require no gumming, and very little filing; are so firmly held that they will stand all necessary swaging, and can be worn down to dotted line shown in cut; they rest on lugs, saving the strain on the rim of the saw. For these reasons they will cut more and better timber at less cost than any other tooth.

EXTRA BITS (per 100) No. 1, \$9; No. 2, \$8.— (per 1000), No. 1, \$80, No. 2, \$70.

Two sets No. 1 Bits have cut 600 m. feet pine, in 60-inch saw, running 800 revolutions per minute, on 6-inch feed. E. E. PARSONS, Amprior.

We run 60-inch to 72-inch Solid Saws, as thin at center as 10 gauge at rim—saving, over a 7 gauge saw—1000 feet of lumber in every 25,000 cut.

McLAUGHLIN Bros., Amprior, run two 60-in. Hoe Saws, on 6 to 10-in. feed, 800 revolutions per minute. Write them.



HOE'S PATENT BIT SAWS.

One of the best Bit Saws made, above cut represents usual size tooth; one size larger and smaller made. Send for particulars and prices.

SAVE TIMBER



GROW RICH

EMERSON'S EXTRA THIN SOLID SAWS

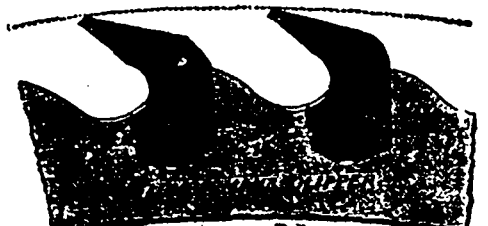
Having special facilities for the manufacture of extra thin saws for board mills, we are prepared to receive orders for Circular Saws as follows—64 inches in diameter, as thin as 12 gauge at rim and 11 at center, 54 to 60; 11 gauge at rim, 10 at center, 66 to 72; 10 at rim, 9 at center. Our unparalleled success with thin saws during past few years has induced us to recommend them to our customers. Our superior facilities are: 1st, Evenness of Temper, 2nd, Perfect Accuracy in Thickness, Saw balances perfectly; 3rd, Properly flammered, to have equal strain in all its parts and at same time run true. This department is under the special supervision of J. E. Emerson, who has had 30 years experience and is without doubt the most successful circular saw maker in the world.

NO EXTRA PRICE FOR THIN SAWS.

EMERSON'S LUMBERMAN'S CLIPPER SAW

Can insert one tooth for every inch in diameter of Saw.

Extra Teeth 25c. each.



Extra Teeth 25c. each.

Designed especially for Thin Saws not thicker than 6 gauge at rim, or thinner than 15 gauge at rim.

The CLIPPER FLANGE SAW

EXPRESSLY FOR HEAVY FEED.

Extra Teeth 50c. each.



Two and a half inch long

Alligator Jaw Wrenches

5 sizes, grip from 1 to 3 inches, Iron. Solid Steel Jaw. Price 50c. to \$5.50.



Cut represents No. 1. Larger sizes have Solid Handles.

WE KEEP IN STOCK ALL KINDS OF

Saw Mill Furnishings

SAW GUMMERS—Stone's Original, large and small size Mixer's Self-feeding Champion; Emery Wheels and Stands.

SAW SWAGES—Hoe's, Emerson's, Mixer's, and American Saw Co.; from \$1.50 to \$3.00.

SIDE FILES, BELT STUDS, Detachable Belt Fastners.

JARECKI'S PATENT SOREW, PLATE, and PIPE CUTTER, 1/4 inch to 2 inches, \$23.00; smaller ranges in proportion. **Band Saws, Scroll Saws, Rainbow Saws** for felling trees. **American Shingle Saws, Lace Cutters, Cant Hooks, Fine Scrapers, Leather, Cotton and Rubber Belting.**

SPECIAL AGENTS FOR GANDY'S PATENT MILL BELT, runs wet or dry; the best and cheapest main driver. **WORTHINGTON and BLAKE'S PATENT STEAM PUMPS, ECONOMIST PLANER and MATCHER COMBINED,** large range of work, light, handy, durable, cheap.

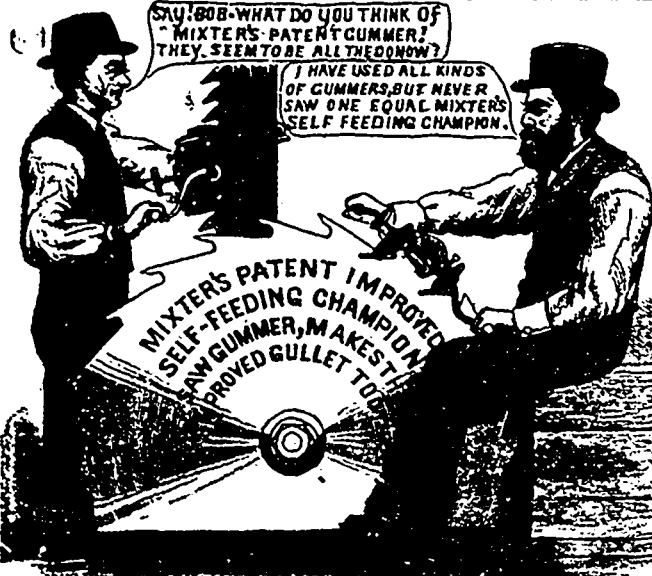
Ewart's Detachable Chain For Log Jacks, Refuzers, Sa-dust Carriers, all sizes, Live Rolls, Transfers, Slow Speed Driving Belts, Tie Loaders, Slash Tables, Trimmers, Lumber Sorters, Shingle Block Elevators, and many uses about a saw mill.

HIGH CLASS HEAVY and PORTABLE SAW MILL MACHINERY our Specialty.

Waterous Engine Works Co., Brantford

Send for New Price List and Chain Circular.

Mention this Paper.



SAV: 808—WHAT DO YOU THINK OF MIXER'S PATENT GUMMER? THEY SEEM TO BE ALL THE GONOW?

I HAVE USED ALL KINDS OF GUMMERS, BUT NEVER SAW ONE EQUAL MIXER'S SELF FEEDING CHAMPION.

MIXER'S PATENT IMPROVED SELF-FEEDING CHAMPION SAW GUMMER, MAKES IMPROVED GULLET TO