

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

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

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

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

Cover title missing/
Le titre de couverture manque

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

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

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

Showthrough/
Transparence

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

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

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

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

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

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.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

Additional comments:/
Commentaires supplémentaires:

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

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



PUBLISHED
SEMI-MONTHLY.

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

SUBSCRIPTION
\$2.00 PER ANNUM.

VOL. 2.

PETERBOROUGH, ONT., AUGUST 15, 1882.

NO. 16.

THE BLACK WALNUT.

Black walnuts are best grown from the seed, planted at once in the station to be occupied by the trees. The Hon. H. G. Joly, an enthusiastic tree-planter of Montreal, is quite sanguine of success there, and may be able to give his experience in that northern latitude. I should hesitate recommending the tree for the Dominion. The walnut prefers a very rich, deep soil, and its natural habitat is chiefly south of the Great Lakes, but it is hardy enough; it thrives in Bohemia.

The seeds may be gathered in the autumn, when they fall, and can be planted at once with their hulls on, or they may be spread out thinly on the ground not more than two or three layers deep, and left exposed until the spring. The hulled or cleaned seed may be purchased in any of our towns for a price ranging from 26 cents upward to \$1 per bushel, varying with the demand and crop of nuts.

In planting, the ground should be prepared as for Indian corn, and one or two nuts dropped at the intersection of the marker used for that cereal, or they may be dropped in a furrow and covered with the plow. They can stand 4 feet apart, or if in wider rows, still closer. A row of corn or potatoes can be planted between these drills, if 5 to 7 feet wide. Spring planting may be done in the same hills with the corn, as is done with locust seed and some other hardy species that will make a good growth the first year, such as the white maple, or the ash. This plan saves the labor and risk of transplanting from the nursery row.

The land needs to be well cultivated and kept clear of weeds for two or three years. The walnuts may be planted in blocks alone or in alternate rows with other trees that are to be removed in a few years, as the walnuts need room, but close planting forces them up.

J. A. WARDER,
Vice-Pres. A. F. A.

PENNSYLVANIA FORESTS.

The state board of agriculture, which recently met at Harrisburg, took steps to ascertain what proportion the timber land of the state bears to the entire acreage. Since then statistics which have been obtained indicate that about one-fourth of the acreage is woodland, and that its tendency is toward a marked decrease in quantity. The chairman of the committee on forests and forestry, Wm. S. Roland, of York, foresees impaired health and discomfort of the people, and deleterious effects upon the business relations of the state, if the destruction of Pennsylvania forests is allowed to go on without something being done in the way of repair. "Trees are the dominating members of the vegetable kingdom. They are the necessary factors in the sum total of those influences which constitute the environment of animal life. Trees, by absorbing carbonic gas and

emitting oxygen, act as agents in rendering the atmosphere life-sustaining. By interposing their foliage between the sun and the earth, they serve a useful purpose in sheltering the soil from the heat, and, as conductors of heat, in equalizing the temperature of the earth and air. The forest, too, guards the soil against abrasion and the displacement from torrents and overflows, and thus again exerts its conservative influence for man's good. We need trees for the delight they afford, as at once the most majestic, imposing and beautiful of nature's vegetable forms. The state cannot afford and should not much longer withhold, or refuse to give the subject of our forests its most serious attention." Mr. Roland notes the encouragement which tree planting is receiving in other states, and thinks these examples should be imitated in Pennsylvania. He suggests intelligent legislation, the organization of local agricultural societies, and the support of the state board of agriculture. In this way much good could be accomplished, in his judgment, toward creating public sentiment with regard to the question, and starting a general movement for the repair of the wastes which have been made in the forests of Pennsylvania.—*Williamsport Gazette*.

THE OUTLOOK FOR TRADE.

The *Northwestern Lumberman* says:—The amount of new projects in the way of building operations, which is now developing not only in Chicago but throughout the entire west, has never been excelled at any period in the history of the country. Newspaper exchanges from every quarter contain notices of improvements contemplated, and contracts entered into for business houses and residences, to an extent which bids fair to give employment to all the skilled artisans in the land. From New York and Boston, as well as other cities of the East, to the Rocky Mountains, every town and hamlet gives word of a demand for an unprecedented quantity of building material of all classes and descriptions.

During the past two weeks buyers from the country have made their appearance in the Chicago market in number and with demands for lumber which presage a lively fall trade. It is no doubt true that the yards of the dealers in almost every section of the West have been kept on short stock, dealers preferring, from the unsettled condition of the wholesale markets, to order from hand to mouth until such times as prices should have, beyond cavil, reached their lowest level. This is thought by many buyers not yet to have been realized, and while many declare that they are not yet prepared to lay in full assortments, the boom in building in many localities has forced the dealers to an increased activity in obtaining supplies.

Every indication at present points to a condition of prosperity among the farming communi-

ties of the West which presages a contentment of mind and satisfaction of feeling highly conducive, on their part, to make all needful or hitherto contemplated improvements. That this is the view taken by the merchants and dealers in all kinds of commodities, lumber included, is fully evidenced by the increased activity daily becoming more and more manifest by the influx of buyers, as well as by the increase of orders, at all wholesale points, seeking the goods which a prosperous people are already showing an increased willingness to purchase, as well as by the building projects which are necessitated by the increased wealth of a people who feel assured of their ability to purchase and pay for the comforts and luxuries in which prosperity enables them to indulge. The present outlook gives indications of a business boom exceeding anything which the past two years of prosperous activity has witnessed.

NEW FORESTS IN THE WEST.

The *Bay City Lumberman's Gazette* says:—Many thousands of acres in the treeless regions of the far west are annually planted with shoots and saplings under the provisions of the law, passed by Congress a few years ago, to encourage the growth of timber. The wisdom of these laws, says the *Boston Advertiser*, becomes more and more apparent as time goes on. They promise to counterbalance the wholesale destruction of forests in the older sections of the country by creating new tracts of woodland upon the vast bare plains of the trans-Mississippi region. They appeal directly to the individual self-interest of settlers and to the desire for land-ownership which appears to be a stronger passion in new communities, where the soil is almost the only visible property, than in places where an old society has created many other forms of wealth. The western farmer who has homesteaded a quarter section of 160 acres can secure an additional quarter section by planting and caring for the growth of ten acres of trees. If he selects his homestead tract upon an unoccupied section he can get 320 acres in a body, and if this is not feasible he can usually find a chance for a "timber entry" within a short distance of his home and thus obtain a second farm to give to his sons or sell when the denser settlement of the region has made it worth a good price. Nor are the benefits of the tree-culture laws limited to actual settlers. Many claims are taken up purely for speculative purposes by non-residents. Considerable areas of land are thus kept out of the hands of men who would homestead and cultivate them, but the object of securing the rearing of numerous patches of forests in regions naturally bare of trees is greatly advanced.

It is still too soon to tell whether or not any noticeable climatic changes will result from the creation of timber tracts now going on in south-

western Minnesota, Dakota, Nebraska and Kansas, but it is not probable that great benefits may accrue to those regions. When the trees attain a fair size the new forests may prevent excessive droughts and destructive freshets, and break the force of high winds and tornadoes, as well as promote a supply of fuel and lumber for future generations. The timber-culture laws afford a striking example of how much can be done to improve natural conditions by wise legislation, and are a lesson to the advocates of the let-alone theory of government. Their successful working suggests the inquiry,—If the United States can, by two simple statutes, cause forests to spring up on hundreds of thousands of bare acres in the new west, cannot the states do something by legislation to regulate and limit the destruction of timber in the older sections of the country?

OLD WOODEN BOLTS IN HOUSEBUILDING.

Why do you make so lavish a use of nails in the carpenter work of our houses, to the exclusion of the honest old oaken pin? Pull down any building—it be merely a barn, of more than 200 years old, and you will not find a single nail in the original work; rafters and joists were all bolted together so stoutly as almost to defy the tools of the destroyer. Many an old manor barn, when pulled down of late years—as unfortunately only too many of them have been—has shown itself to have been better built than most palaces are now. There are arguments in the way of economy of time and so on in favor of the use of nails in housebuilding, but they are as nothing compared with the solid advantages of using wooden bolts. The iron nails in time canker and rot rafters and floors, but bolts hold them together "like grim death, and render a house practically indestructible.—*Exeter Flying Post*.

The *Timber Trades Journal* of July 15th says of the 44 vessels to London recorded in this number no less than 32 are steamers, 3 of them forming part of the Quebec fleet. The spring arrivals from the St. Lawrence to the present time consist of the *Ocean King, Howding, Earl King, Viking, Nightingale, Thames, Orcin, and Red Jacket*, the last mentioned famous clipper once again bringing to our port a full cargo pine deals, &c., from Quebec.

A DETROIT despatch says:—The American Lumber Company has purchased from the Detroit & Marquette Railway Company the standing pine on its entire land grant, except Mackinaw county and the east part of Chippewa county—in all 500,000 acres; they have also purchased 225,000,000 feet of timber in the northern peninsula, giving it control of the largest body of pine in Michigan. It intends to cut 14,000,000 feet next winter. The head offices are in Toronto, Canada.

THE UNITED STATES TARIFF.

The recently authorized and officially appointed commission for the purpose of investigating the tariff policy of the United States, and making such recommendations to congress as a conference with the representatives of the various industries of the country may impress the committee with the necessity of, possesses an interest to the lumberman as much as to any other class of our citizens. Already steps have been taken in the Saginaw Valley to bring the subject of a tariff on products of the forest to the attention of the commission. Such representatives as may appear before the committee, from the manufacturing localities of the country, can reasonably be expected to present only the views of the pine land owners of the United States, and it is an indisputable fact that a large majority of these are advocates of a full protective tariff, as opposed to the admission free of duty of products from other countries which may be expected to enter into competition with the timber and lumber produced in this country.

It is a favorite argument with this class of people that the admission of Canadian lumber would reduce the selling value of the lumber produced in the United States, and consequently diminish the profits of a large and influential class which, having large investments in the manufacturing of lumber, gives employment to vast armies of men in the woods, on the rivers, in the saw mills, in the maritime interest, and in the various manipulations of manufacture, transportation and final distribution, down to the final consumption on the farm, or in the dwelling, or warehouse.

There is much force in the arguments of the advocates of a policy which shall exclude from the markets of the United States the timber products of the neighbouring Dominion, and this side of the case will without any question be forcibly and ably presented to the attention of the commission. But there is also a large, well informed and influential body of citizens equally interested in the general prosperity of the tariff and of the lumberman particularly, who believe that lumber and other forest products should be admitted to this country free of duty. These, too, have strong arguments to present in favor of their view of the case. They acknowledge all that is claimed by the advocates of protection, as regards the extent of the business, and the vastness of the army of men who find employ in its production, transportation and sale. But they argue beyond those who favor the protective policy in the interest of the holders of timber land, and say that the greatest good to the greatest number, the protection of the interests of the great mass of the people in a rapidly growing country demands that no restrictions shall be placed upon the importation of a commodity necessary to the growth of the country, and the development of its industries, especially in view of the fact that the article in question is rapidly becoming extinct as a home product, and that even with the addition, without let, hindrance or import duty, of that which a neighbouring province can supply, the period is all too near at which the exhaustion of the home supply will be most severely felt.

Those who take this side of the question urge that the interests of the many millions who consume the lumber are of paramount importance to that of the few thousands of timber owners, in whose interest protection is demanded. They go yet further and assert that the interests of the timber owners of the United States would not be in the least jeopardized by the admission free of duty of the entire timber resources, or surplus, of our Canadian neighbours, for the reason that the Canadian supply is too small in the aggregate materially to affect the markets of the United States. They assert that the yearly production of lumber in Canada does not exceed, upon a liberal estimate, one quarter the amount yearly taken from the forests of Michigan and Wisconsin, and that at this rate of production many of the Canadian lumbermen assert the present existence in the provinces not to exceed a five years' supply. Even if it be sufficient to maintain a present ratio of production for twenty five years, the prospects of denuding the American forests in less than ten years is ample justification for inviting the Canadians to assist us in building up and peopling our vast

country, by lengthening out the period in which our own pine lands will be exhausted.

The advocates of free trade point to the estimates of the present resources of the northwest, as presented by the census commission in 1880, and confidently assert that if, at that time, there were resources of but 81,000,000,000 feet of timber in the white pine regions of the only portion of the United States in which that article is produced, while the yearly cut of the same region is from 8,000,000,000 to 10,000,000,000 feet, it has become a matter of not exceeding one decade when the point of exhaustion shall have been reached, and that with an increasing demand of from 1,000,000,000 to 2,000,000,000 feet yearly, consequent upon the natural growth of population, the addition of the increased demand through importation from the Dominion of Canada will work no harm to the present owners of timber in the northwestern states, while lengthening the period of their labours and consequent profits. That the supply of the United States is growing perceptibly less is, they claim, proven by the rapidly advancing values of standing timber.

The advocates of the free trade policy assert that the general good being paramount to that of the individual, cheaper lumber to the masses is of greater importance than of increased profits to the few, and that if by the introduction of Canadian lumber free of duty the price was reduced, such a result would be for the benefit of the people of the country as a whole.

This latter argument is probably the weakest which has been suggested, inasmuch as the abrogation of all import duties on lumber and timber would but have the effect of leading American capitalists to possess themselves at once of all the Canadian timber, which is not already owned by them, and a realization of its true value, in view of the not far distant period of the extinction of the *pinus strobus* in the northwest, would forbid their placing it on the market at unremunerative prices. Free trade or protection will have but little influence over the prices which the people as a mass will be called upon to pay for their lumber in the future, and the all important consideration is in the question of lengthening out the supply. *Northwestern Lumberman.*

THE FOREST BABY.

There are "babes in the woods" which are both beautiful and of value to those who are seeking the best investment of time and money in transplanting trees.

Autumn is better than spring time for the usual methods of transplanting, but we have found a more excellent way than either of these times affords. All through the woods, and under the trees on the edge of the forests and along the road-sides, little forest babies, or seedlings, are springing up. They are cozied away under parent elms and maples, linden and ash trees. Any rainy day from the first of June till on in September is a good time to select these sylvan seedlings, and set them where you wish them permanently to stand. Take an ash pan and a transplanting trowel, with an old newspaper or two in your pocket, out under some hard maple of exceptionally fine form and size; one it may be which has been admired for its beauty. You pick out as many as you want of that kind. Take up plenty of earth with each, and wrap enough paper around the earth to keep it in place. The heads of the maple forest babies are from two to four inches high, and peep cunningly out from their nest in the ash-pan. They are snugly in among their cousins of other desired varieties, and in an hour or less you return with a score or more precious prizes. It may be well to set each one in the ground, with the paper still around the roots and earth. The paper—unless there is more of it than is necessary—will do no harm if left on, and taking it off might displace the soil around the tiny rootlets. We want of course to remove the forest baby from its old home to its new one without its knowing it has been moved. Thus with the expenditure of less time and money than is needed to transplant a tree, ten feet high, twenty or more are set. In ten years, the two-inch forest baby will be larger than its neighbor which was ten or twelve feet tall, and set, it may be, some weeks or months earlier. The baby during the life of both, will outgrow

the other. It will also continue to grow long after the other has reached maturity, as it never had one-hundredth part the root disturbance which has been suffered by the other.—*G. M. Powell.*

WOOD-CARVING.

It is remarked that the growing admiration for antique patterns in dress, furniture and house decorations has brought about the revival of a form of art that almost starved to death during the recent period of utilitarianism. Wood-carving is perhaps not a very exalted manifestation of the sculptor's art, but experts in it fifty years ago ranked among the foremost of artisans if, indeed, they fell short of consideration as artists. In older countries, where vested wealth, continuing for generations in families, made patronage of the arts one of the chief amusements of the possessors, stately mansions are filled with rare examples of the wood-carver's cunning, and in the older portions of this country similar objects are not wholly wanting, if not plentiful. Gentlemen of estates in revolutionary times thought their mansions unshaded unless the showy rooms were plentifully adorned with fanciful mouldings, panels and wainscoting done in hardwoods. Such fine workmanship was generally imported from the mother country, and little encouragement was given to aspiring youth of home growth to try their pretence hand in that field of endeavor. Some few found foothold in the eastern states, but their craft lost vogue, and about the only field for its exercise came to be the fanciful wooden figures indicating emporiums for the sale of tobacco, or adorning the prows of ships, and regarded as a sort of fetish by superstitious tars. There is said to be only three master wood-carvers in New York, and one of the prominent practical exponents of this art has directed his operations to the West, having some time ago dropped down in Chicago. He is 52 years old, grizzled, and so deaf that a slate is the medium of questioning him. His shop contains many specimens of the carver's art, in various stages of progress, from the rough hewed pine log to the finished and painted aboriginee, whose tempting tender of a wooden something supposed to resemble the Indian weed, is valued as the tobaccoist's trade mark. He has been all through the mill from the age of 19, serving his apprenticeship when the ambitious beginner had to pay \$100 to \$200 the first year for his preliminary knowledge. There was a time when ship figure-heads were in demand, and were carved to order at such prices as \$12,000 to \$15,000. A large business grew up in the manufacture of wooden figures of Indian men and maidens, and this is now an important industry. In the early stages of the hue and cry of circus humbuggery, when sensational display was more of a big thing than now—it having become an old story—the menagerie nabobs vied with each other in the securing of extravagant and fiery chariot and caravan-carvings. Barnum would sell his fancy elements of pageantry when they had been used a year, and order new ones. A band wagon built for Forepaugh, with a wealth of carving, cost \$2,225, and though made in this country, he advertised it as imported at a cost of \$90,000. The carving of effigies is a novel branch of the art. Some time ago Allan Pinkerton, the noted detective, had made the image of an old negro for whom he had a regard which prompted the desire to preserve his memory in that form, and the carving was executed from an old photograph.—*Northwestern Lumberman.*

NEW ZEALAND TIMBER.

Even in far off Australasia the people are waking up to the serious effects produced by cutting the forests from the hillsides. It is not a country of forests, it would seem, and the *Otago Witness* editorially says: "We who live in Dunedin, and who can recollect how much drier our climate has become of late years, owing, no doubt, to the hills surrounding us having become in great part denuded of the forest growth which for so long covered them, will not need to call in the aid of science to convince us. Our experience will be sufficient for that." It appears that one county (Lake) has officially made a move towards replenishing the forests,

and the legislature of that country has had the matter under advisement for some years. One of the enactments provides that any person planting one acre (presumably of his own land) with forest trees shall be entitled to receive a free grant of two acres of any land open for sale in the province. But it was first to be shown that the land had been devoted to the purpose of tree planting only for at least two years, that the trees were in a vigorous and healthy state; and that they had been enclosed by a fence which was sheep and cattle-proof. An amendment provides that certain crops may be raised among the trees, and that not less than 20 nor more than 250 acres could be taken under the grant.

This is in a similar direction to the United States law in relation to timber culture.

The move there is undoubtedly in the right direction, and will bring good results. The work in tree planting, and the nursing of wild timber in the west, is making itself felt perceptibly already, in various modifications in the climate. It will be more and more surely felt as the years go on. In some of our once treeless regions it is also found that tree planting pays in the value of the timber grown. In five years poles may be taken out of the young growth, and soon thereafter posts and large timber, and at the same time space is furnished to the timber left. The shade also becomes valuable, and the growing timber holds moisture in the soil to be gradually given out. Its benefit is also decided, not in increasing the annual rainfall but in a more equable and timely distribution of the same. There certainly is profit in the planting of timber in treeless regions.—*Lumberman's Gazette.*

Southern Pine in Northern Markets.

A perceptible increase is noticeable in the northern consumption of southern pine. In this city, where the more readily accessible and cheaper white pine has hitherto monopolized the demand, to the almost utter exclusion of the southern product, the increased use of the latter in the laying of floors in all kinds of buildings, and to other uses in which it is well suited, is strong evidence that the day is not far distant, when the use of the long-leaf pine of the south will rank favorably in the extent of its consumption with its northern rival.—*Northwestern Lumberman.*

So much complaint has been made by lumbermen about the Chippewa Valley & Superior railroad bridge, over the mouth of the Red Cedar river, Wis., that the company has decided to make a change in it so as to remove all possibility of delay or damage to rafts.

The *Northwestern Lumberman* says:—A. M. Elliott, from Canada, is considering the project of starting a tannery at Cheboygan, Mich. This may be the initial leather manufactory of a large number that are bound to go into operation in northern Michigan, whereby the vast quantity of hemlock bark in that region is to be utilized.

MR. H. DE L. ALLEN, of Duluth, is making preparations for starting an extensive lumber mill in the immediate vicinity of Prince Arthur's Landing. He has very large timber limits in the neighbourhood of Pigeon River, and he proposes to tow the logs from that point for the purpose of manufacturing his lumber at the Landing.

The exportation of fine household furniture from the United States is assuming large proportions. Last year the value of such exports reached \$5,000,000, an amount largely in excess of the exportations of the preceding year, thus showing that the business is increasing. On the other hand the importation of this class of goods is diminishing rapidly.

The *Emerson International*, of August 1st, says.—The river is again filled with floating logs. The drives belong to the Winnipeg Lumber Company. The logs come all the way from Clear Water on the Red Lake River. The quantity is about 10,000,000 feet. The logs are pine, and are as fine a lot as ever went down the Red River or any other stream.

F. E. DIXON & CO.
 MANUFACTURERS OF PURE BARK TANNED
LEATHER BELTING



First Prize, Provincial Exhibition..... Ottawa, 1878
 First Prize, Provincial Exhibition..... Hamilton, 1876
 First Prize, Provincial Exhibition..... London, 1877
 First Prize, Industrial Exhibition..... Toronto, 1879
 First Prize, Industrial Exhibition..... Toronto, 1880
 International Medal, Centennial Ex..... Philadelphia, 1876



None genuine unless with a STAR on the head of rivets. Send for Price Lists and Discounts.

81 Colborne Street, Toronto

Wooden Water Pipe.

There is an important industry at Tumwater, W. T., in the shape of a wooden water pipe manufactory. The pipe is constructed of Puget Sound fir, the large logs being used, in order to get the most solid timber and render the pipe strong and durable. The wood cylinders when turned out are shipped to Ogden, where they are bound with heavy strap iron, well coated with tar, and wound spirally on the pipe which is about an inch thick. The pipe is easily put down; and it is claimed that wood pipe when kept well saturated with water will last as long as iron under the same conditions, if not longer, and the outside coating amounts almost to an iron piping in addition, while the cost is about half that of iron piping. At Ogden this pipe has been adopted, and some nine miles of service established, a portion of which has a pressure of 10 pounds per square inch, or over 200 feet perpendicular head.

Black Birch.

At the outlet of Chazy Lake, Clinton county, N. Y., there is a large saw and planing-mill, recently erected by an iron company that has large works there. The mill building is 40x100 feet on the ground, and two stories high, the roof being covered with slats. On the second floor is a circular mill capable of sawing timber 55 feet long, with a capacity of 30,000 feet a day. The mill is supplied with edger, clipper, planer, clapboard, shingle and lath machinery. It is hoped to utilize the mill in sawing black birch for the market. Large quantities of this timber grow in the vicinity, and it is considered in that section as very fine for house or car finishing. Hitherto it has been consumed in making charcoal, but it is now proposed by the mill owners to put it to a more noble and valuable use.

MALTOPEPSYN
 Artificial Gastric Juice.
 A WONDERFUL FACT, proving the remarkable digestive power of Maltopepsyn.
 Two doses (30 grains), of Maltopepsyn will digest the entire white of a hard boiled egg in a bottle of water, in from 3 to 4 hours. How much more will it digest in the stomach assisted by that organ? About twenty times the quantity.
 Test this for yourselves,—it is an interesting and useful experiment.



Get from your druggist ten drops of Hydrochloric Acid in a four ounce bottle, (3) bottle half full of tepid water (distilled water is best, though soft water will do), then add the finely cut white of a hard boiled egg, then add two doses (30 grains) of Maltopepsyn and shake bottle thoroughly every 15 or 20 minutes, keep the bottle warm, as near the temperature of the body (100° Fahrenheit) as possible, and in 3 to 4 hours the egg will be entirely dissolved or digested.
 Maltopepsyn is endorsed by the leading Physicians and Chemists throughout the Dominion of Canada.
 Send for Pamphlet, 24 pages, giving full treatment of Dyspepsia with the rules of Diet, etc., mailed free upon application by HAZEN MORSE, TORONTO.
 Price per bottle, with dose measures attached, 50 cents, contains 48 doses or about one cent per dose.

A. L. UNDERWOOD
 WHOLESALE DEALER IN
 White Pine, Basswood & Hardwood,
 82 King Street East,
TORONTO, ONT.

S. S. MUTTON & Co.,
 Wholesale Lumber Dealers
TORONTO.

We have for Sale a large quantity of PINE, OAK, WHITEWOOD, ASH, CHESTNUT, CHERRY, BUTTERNUT, BASSWOOD, &c.
 Also a SET OF THE MACHINERY FOR SALE, CHEAP—OR EXCHANGE FOR LUMBER.

LUMBER
 Shingles, Doors, Sash, Flooring, &c.,
 WANTED,
 STATE QUANTITIES AND PRICE TO
SHORE & DAVIS,
 Head Office, 514 Maine Street, Winnipeg, Man.

CENTRAL IRON WORKS.
Law, McLean & Brayshaw
 Simcoe Street,
PETERBOROUGH.

CASTINGS of every description in Brass and Iron.
 All sorts of MACHINERY for Saw and Grist Mills.
 STEAM FEED for Circular Saws.
 Also Saw Gummings, Cutters, Double Upset Swages, and all Saw Tools.
 Send for Price List.

IRWIN & PHILP
 Commission
 Lumber Dealers,
 FORWARDERS,
 Shipping & General Agents
PORT HOPE.

THE MONTREAL SAW WORKS

MONTREAL,

456,

St. Paul

Street.

General Mill Supplies always on hand.



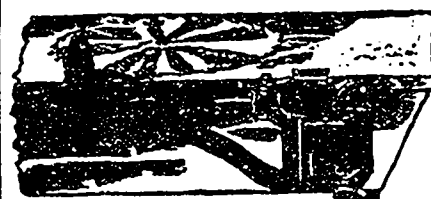
General Mill Supplies always on hand.

Address all correspondence to Chas. M. WHITLAW, MANAGER.



J. F. LAWTON
 Alexandria Saw Works
 SAINT JOHN, N.B.

Saws of all kinds manufactured from the BEST CAST STEEL that can be procured in any Market.
EVERY SAW WARRANTED.
 SAWS REPAIRED in the best manner and on Short Notice.
 Send address for Price List, Terms, &c.
 J. F. LAWTON.



TO MILLMEN!
HODGSON'S
Patent Saw Grinder

is a new, efficient, and exceedingly cheap machine and is equally well adapted to grinding long and round saws of every description. Wheel is moved along the length, and in the depth of the tooth, and can be placed just where wanted as easily as a file. It is just THE THING for mills, cutting from one to five million feet of lumber, and costs no more than one-fourth to one-tenth the price of little better machines. It is patented in United States and Canada, and is made in Welsport, Pennsylvania, and in Amherst, Nova Scotia.

Hodgson's Patent Monitor Shingle Machine

combines, at a moderate price, more points of excellence than any other. Joiner is built in machine, a few inches from the saw. The cast steel feed rolls are opened by a foot lever, and grip the block like a vice. Traverse of carriage to suit large or small stock, is under control of operator when running. Will run for days without cutting a shim. Warranted to cut, with one attendant, three thousand in an hour, and not forfeit of \$100. Send for circulars to

T. HODGSON, AMHERST, NOVA SCOTIA.

ESTABLISHED 1830.

EAGLE FOUNDRY!

GEORGE BRUSH

14 to 34 King and Queen Streets, MONTREAL,
 MAKER OF
 Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps,
 CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS,
 Ore Crushers, Mill Gearing, Shafting, Hangers and Pullies, Hand and Power Hoists for Warehouses, &c., &c.,

AND AGENT FOR "Water's" Perfect Steam Engine Governor, and "Herald & Sisco's" Centrifugal Pumps

THE FORTHCOMING SUPPLIES.

The *Timber Trades Journal* says—The great question of the hour, so far as the timber trade is concerned, just now is, what proportions are the autumn supplies likely to assume? To the provinces this is even more important than to the large towns; the ability of the latter to relieve their markets when unduly oppressed by public sales, at which a numerous attendance can mostly be relied on, makes prices less affected by the state of the supplies than at smaller places where the bounds of consumption are not capable of the same expansion, and there are some ports where a dozen shiploads on the market would be almost calamitous.

The general opinion is that the stocks will be considerable for fall shipment, both as respects flooring and deals, from the north of Europe. The first impression was that, through want of snow to fill the rivers, the floatage of logs from the interior of Sweden, &c., would have been difficult, and the stuff available for conversion consequently been extremely limited. This has not been borne out in the result, as logs are plentiful at the mills, while all are said to be in full work manufacturing for export to the various markets, both continental and colonial, but two-thirds at least of which will most likely find its way to the United Kingdom.

The German market is almost entirely closed to the Swedes, owing to the prohibitive duties on sawn and planed wood which the governing powers of the former have thought proper to institute, with the view of stimulating their own manufacture. It is not improbable that hereafter, when the Germans have established planing mills and produced more than is needed for their own wants, we shall find them looking abroad for a market, and entering into competition with the Swedes and Norwegians. At present, however, in respect of sawn wood, deals, and battens, to which their manufacture is just now confined, we shall not receive from Prussia any heavy supply this autumn. Neither to the east country ports generally need we look for heavy fall shipments, though in whitewood from Riga and Petersburg an average supply may be counted upon. The redwood logs at hand at the east Baltic ports fit for conversion are stated to be very limited, and shippers, though more anxious now than they were earlier in the year to make sales, are not inclined to make reductions in the l.o.b. quotations to any serious extent, notwithstanding the admitted dullness of the present state of trade on this side, which is generally acknowledged to be telling very seriously on the cargo values of nearly all descriptions.

We however, are not so immediately concerned now with the tendency of prices as with the subject of the coming supplies, and, as will be gathered from our remarks, the views generally expressed imply that they are likely to be somewhat heavy from both Norway and Sweden. With deals, &c., from the Gulf of Bothnia, we are not overburdened as yet. The stocks of the latter country, however, run more in battens and flooring. Already battens are plentiful at the various markets here, and where flooring is imported in large quantities, viz., the south and west coast ports, the stocks are full ones for the time of year.

Across the Atlantic it is early yet, with the spring fleet from Quebec only just coming forward, to attempt to discount the fall supply; but, while we are on the subject, it might be as well to bear in mind that the manufacture up to the present time has been short of that of last year on both pine and spruce—in fact, from the lower ports to the United Kingdom the spruce shipments have shown a marked decrease as compared with last summer. The lack of supply as forthcoming from New York, of this last mentioned description (2,000 standards), attested to some time since, we have heard nothing further about, and whether the quantity has been shipped, or only a portion, we are not able to say. There can be no doubt that with the facilities offering in the way of cheap freights from the Empire City, it became possible to send goods through in that way, and very likely, when we are writing, deals from New York may be now discharging, in some European port. If it would pay to send spruce through to New York, why not pine? The United States demand for the latter, however,

is too active to admit of shipping the stuff to a less favorable market, and the question of low freight would, in respect to yellow pine, probably not influence a single cargo in the direction of New York for transhipment.

On the question of prices, the present tendency of values of nearly every description is downward; most of the importers have their hands already full, and till trade recovers from its present apathy, they are unlikely to lodge themselves now to later engagements, but will probably wait the tide of events; in fact, the waiting policy at this juncture would be the wisest for many and various considerations, the probabilities of a rise in values being too remote to lead speculators to invest in large stocks, though, if values reach a lower point, it is more than likely, at the present cheap price of money and the quantity available, that large purchases of timber will be made on the chance of improvement. It would at this juncture have been highly interesting to have had the opinions of the Society of Swedish Saw Mill Owners, but that body probably do not think it judicious at this critical and somewhat uncertain moment to make any public expression of the state of the stocks at the various mills.

With reference to London there seems to be no indication as yet that the forthcoming supply will be heavier than last year; in fact, up to very recently the advices received were just the other way, and the Dock Company last week had on their list to arrive only 74 vessels, as against 94 last July, but with the great shipping facilities afforded by steamers the market may be overburdened on a very short notice as long as the stuff at the mills is plentiful and shippers choose to send it here.

CHIPPewa CHIEFS.

The *Northwestern Lumberman*, of July 29th, says:—Last Wednesday a delegation of Chippewa chiefs and their attendants arrived in the city, on their way to Washington to complete negotiations which are now pending for the disposal of their lands, in whole or part, to the government. The Red Lake, Minn., reservation and their outside territory includes 3,200,000 acres of pine land, the timber on which is admitted to be of excellent quality, and stands thickly in most places. It is pretty well understood that the untutored redskin is a poor lumberman, and more interested in the hunt than in logging. While he is proverbially noted for a distaste for manual effort, he is generally found without facilities for performing practical labor, and without the sagacity and skill in a mechanical way, which he would display on the trail or in the chase. True, the Red Lake Indian is supposed to be nothing more than a semi-savage, without grit enough to get up a raid, or sufficient gumption to dig in, and plow a 10 acre field, but he has the inherent qualities of the American aborigine, and hard work is not on his bill of fare, though he will stand more grief than anybody for the sake of avoiding that worthy essential to decent existence. As a result the pine on the lands of the Chippewas is very little cut by its owners, while a large amount of it is surreptitiously snaked off and utilized by invaders. So the pine lands have become very much of an elephant on the hands of the Chippewas—they can't hunt anything of consequence in the forests but muskrats, they won't lumber to any extent, and the lands are worth most to their friends who call and go away again with a few million feet of pine in their pockets, as a souvenir. Ready cash is the only thing the Indian can handle to advantage, and hence the Chippewa nation has been looking around for some time for a purchaser, and they are beginning to get anxious about the matter for fear they will not fix things before somebody has stolen all the timber. St. Paul, Minneapolis and Duluth parties have talked about buying some of the land, but nothing but talk has been evolved, hence the present treaty between the Indians and the government.

The delegation mentioned has been working its way from the reservation up north toward Washington, picking up stray nickels on the route by giving exhibitions in native costume, doing war dances, singing chants, and giving other characteristic performances. Reaching this city they associated themselves with Mr. Englehardt, who has an exhibition of natural

wonders in the armory of Battery D, on the lake front. There are nine in the party, four of whom are chiefs. Their names are as follows, the chiefs coming first: Show-an-ok-om-ick-kish-hong, or The Man Who Walks Where the Land Meets; As-in-way, or Little Rock; An-mik-oonce, or Little Thunder; Nip-wag-glow, or the Man That Stands Where the Land Meets; Ash-awa-kin-owc, or Crossing Eagle; Nakon-way-witong, or Leading Thunder. Pas in ase, or Wind-driven Cloud; Neak-ono-kot, or Leading Cloud; Tap-pas-ikon, or Low Feather; Mish-akke-kohok, or Low Cloud; Lady Betsy Dolomo and Frank Russel, interpreter.

A representative of the *Lumberman* interviewed the delegation, and found that the whole tribe was pretty much disgusted with the way their pine had been purloined, and bent on adjusting their affairs of real estate so as to get legal tender for it or secure immunity from wholesale thievery. Skirmishers from the British Dominion, Canada, Chippewas, Scandianavians, etc., are not the only operatives who plunder the lands, for there are those on the American Shore who have respectable connections who instigate or execute such timber thefts, and who ought to know better. If we should make any personal allusions it would result in stirring up the journalistic animals over at Minneapolis, and an imaginary lumber paper would do an immense amount of indignant and energetic kicking. But the Redskins know who are doing the looting over there, and are not afraid to say so. The delegation will fill an engagement at the lake front, and intends going to Washington presently to conclude the treaty and get satisfaction somehow. They desire to sell half of the land, at any rate. In the meantime they are doing the grotesque war-dance every day at the armory, and Little Thunder, who was somehow mixed up with the Custer affair, tells what he knows about running soldiers into a trap and butchering the whole lot.

SHELTER BELTS.

We have something to offer as a substitute for the forest, to those of our fellow citizens who do not feel prepared to plant timber trees extensively and as a crop, more or less extensively, as it is done in thousands of instances by the landowners of Europe. We offer this plan to those who feel they cannot spare a single field from the plans and schedules they have laid down for a regular rotation of corn, oats, wheat and clover, or meadow lands—and also to those who may have on their farms no rocky ledges, no ravines, no steep hillsides, no odd waste corners, nor overflowed lands, upon which they might advantageously plant trees. They are not asked to give up a single field and turn it into woodland; but even they who are so happily situated as to the cultivable character of their lands may yet find it greatly to their advantage to plant trees in the manner which is now to be explained. It will be all the more desirable that they should do so, if their farms be surrounded on all sides by other lands equally well adapted to arable crops, and equally free from the waste places so often found on many farms, and which are almost utterly profitless, though always counted in as so many acres by the assessors in making up the tax duplicate.

In such a territory of fertile champaign country, where every farmer in a wide neighborhood is similarly inclined to crop his whole farm, and where all desire to reap the golden harvest from every acre of which he may be possessed—just there is the great danger of our finding out some of these days that we have too much cleared land in contiguous tracts; just there we are liable practically to turn our woodland into a prairie—as in many parts of the country we are rapidly reaching such a condition.

Just there, too, is the place to institute means that shall obviate the danger which threatens. This is not to be done by relegating a single one of those farms back to forest growths. No one shall lose anything by cruel edict, but each for himself, and all collectively, are promised the full fruition of the benefits that will accrue to those who accept the advice and adopt the plan, which consists in a system of tree belts across the whole township, and across or between the several farms.

These shelter belts and wind-breaks, though

occupying a portion of the land, will add materially to the productiveness of the soil that is retained in cultivation, and they will in no small degree modify the local climate, which an extreme amount of clearing has already affected by the exposure of such broad contiguous surfaces to the influence of the scorching sunshine, and to the drying and blasting winds.

On the broad and open expanse of surface of the treeless plains of Iowa, where in the north western half of the state there is but one acre of woodland to a mile square of 640 acres, these shelter belts have been fairly tried by those who were bold enough to settle in such exposure. Among them, Mr. C. E. Whiting has been one of the first and the most extensive planter of trees upon this plan, and for the purpose of modifying the local climate, and in this he has been successful. Mr. Whiting declares that he can well afford to plant the trees and to give up the land they occupy, independently of the fuel they already yield him, and the wood for many economical purposes upon his farm, the remaining four fifths of the land still occupied by his crops will yield him better returns than the whole area would have done if it were all cultivated to the extreme outer boundaries, but exposed to the elements, and not thus protected by these artificial shelter-belts.

This kind of tree-planting serves the double purpose of replacing the forests which have been destroyed and of modifying the climate. First—It produces wood for fuel and lumber. Second—It also modifies the climate.

These shelter belts are particularly adapted to level tracts of fertile lands devoted to agriculture, and the broader the area of such lands the greater becomes the necessity for their protection in this way, just as they are needed in the prairie regions.

The planting of these shelters does not supersede the necessity of tree-planting also on the waste places, ravines and corners, where they exist; by all means, let that good work also be done, to supplement the belts in our efforts to replace a proportion of the forests we have destroyed.

Here, as elsewhere, in all our artificial forestation, planting directed by human brains is better, and the results will be more satisfactory, than trusting to natural reproduction, for it enables us to do the work more thoroughly, more evenly and more judiciously, since we can make a selection of the species best adapted to our soils, and best fitted to our necessities, whether for their sheltering effects or for their ultimate wood products.

If, as of necessity on the prairies, you desire to produce an immediate effect in the shelter, you can be gratified by planting the trees of most rapid growth, even though they be of inferior quality. The outer rows of the wind-break may be set with these kinds, and next to them may be placed those of slower growth, whether deciduous or evergreen. Or you may have the effect you desire at first, and better trees afterward, by planting intermediately such as will be coming on more slowly to take the place of the fast growers when they are removed. This will be true of oaks and hickories or walnuts, planted among poplars and other rapidly growing kinds.

The evergreens should not be mixed with deciduous trees either in the belts or in the groves, but they should always be massed by themselves and planted in separate rows, if we desire them to succeed. In some cases it may be desired to use the evergreens exclusively; and for mere shelter, particularly in winter, they are exceedingly effective, and a double or quadruple belt will yield more shelter if set with Norway spruce, or some of the pines, than ten rows of almost any of the deciduous class.

The preparation of the land for the shelter belt should be as thorough as for a crop of grain, and done, of course, with a plow and harrow. Furrows or marks are made at intervals of four feet to receive the plants, which may be set closely as in other plantations, especially as we desire to break the force of the winds as soon as possible.

A single row of trees, especially if they be of evergreen species, will yield a comfortable shelter, but to be effective, and in exposed situations, several rows should be planted occupying a strip of some four to eight rods in width.

The cultivation should be thorough to encourage the rapid and healthy growth of the young trees, and it should be continued until the plants entirely shade the ground—a varying period, depending upon the character of the trees, and in part upon the breadth of the foliage.

Until the trees have attained sufficient size to protect themselves, it will be necessary to exclude all domestic animals—or, indeed, these should never be admitted to the plantations.

Dr. J. A. Warder.

ARRIVALS IN THE CLYDE.

The *Timber Trades Journal*, of July 22, says: The Norwegian barque *Dronnigan*, 838 tons, Captain Anderson, arrived in the Clyde with a cargo of timber from Quebec. She was the first arrival of a timber-laden vessel from the St. Lawrence this season. She sailed from Quebec on the 14th of June, and made the passage in thirty days. The *East*, 1,153 tons, Captain Lochard, arrived on the 16th inst. She sailed on the 15th June, making the same length of passage as the *Dronnigan*. The ship *Abbotsford*, 1,177 tons, Captain Williams, also arrived on Saturday, but as she sailed on the 9th June she was six days longer on the passage than the *Abi ord*. All the masters report the winds strong and variable. The first arrival in the Clyde from Quebec last year was the ship *Boyne*, 1,350 tons, Captain Rae. She arrived on the 17th of June, and the *Almeer*, Captain Oswald, on the 28th June. In 1880 the *Orleans*, Captain Cloutier, arrived on the 30th of June. The fleet this year will be much later in arriving than usual, owing to the protracted passages they had out by being icebound.

Blowing Up Trees With Dynamite.

C. P. Markle & Sons, of Markleton, Somerset county, Pa., have a pulp manufactory, consuming spruce and hemlock timber. Their operations are large, and instead of practicing the slow method of chopping down trees and sawing them up, in order to get the wood into the pulp-mill, they blow them to splinters with dynamite. An eye-witness thus describes the process:—A fine large spruce was selected, and a hole was driven in about 10 inches, the chips removed, and a dynamite cartridge inserted. The dynamite comes in sticks like a candle and resembles moist brown sugar. A fuse was attached, and the men sought a place of safety. In a few seconds there was a mighty roar, and the great tree was lifted up in the air about 10 feet, and then with a swoop and crash it came to the earth, splintered half way up the trunk. Dynamite is not cheap, but, taking into consideration the time, labor, wear and tear of tools saved, is not as expensive as might be supposed.—*North-western Lumberman*.

The *Timber Trades Journal* says we understand that a firm of large timber exporters have decided to bring forward their goods in future as far as possible by steamers, and that special arrangements have been made so as to permit of several steamers being discharged simultaneously. The new system inaugurated, of bringing forward as much as possible by steamer, carries with it two decided effects. The most important is that the bulk of the timber imported will in the near future be brought over in English bottoms; the second is, that the doing of trade-by-the-smaller-importing houses will in many respects be rendered more difficult.

The *Ottawa Citizen*, of August 2nd, says:—There was a jolly party assembled at the foot of the locks yesterday to enjoy raftsmen's fare on a splendid raft of timber which had been brought from Victoria Creek. The raft is in charge of Mr. J. McIver. This is the first raft that ever came through the Victoria Creek—300 miles above Ottawa—the firm of R. & J. White having spent upwards of \$30,000 to enable them to get their timber through. The above improvements were under the supervision of Mr. J. S. Poupore, who is the agent for the firm. There are about 130 cribs of first-class pine lumber in the raft. As the steamer *Rover* swung the raft—about two and a half acres in dimension—out of the bay it was a grand sight. The cabin comprised a village in themselves.

QUEBEC DOCKERS' OFFICE.

The following is a comparative statement of Timber, Masts, Bowsprits, Spars, Staves, &c. measured and culled to July 29th

	1880.	1881.	1882.
Wancy White Pine	875,765	892,910	789,677
White Pine	1,812,708	2,350,871	2,589,084
Red Pine	888,872	603,593	592,890
Oak	824,800	1,635,533	645,069
Elm	602,608	778,979	441,590
Ash	174,250	250,436	160,081
Basewood	90	3,009	250
Butternut	448	897	1,900
Tamarac	15,204	5,949	1,427
Birch and Maple	664,483	123,232	202,273
Masts			33 pcs
Spars	12,800	160,213	237,321
6 ft. Staves	224,919	193,817	604,100
8 ft. Staves			10,634

ALEXANDER FRASER, Deputy Supervisor.

Quebec, 28th July, 1882

RAFTS ARRIVED.

The Quebec *Chronicle* gives the following list of rafts &c. arrived:—
July 24—Thomas Totu, deals, Black River. Sundry lots, deals, South Quebec.
July 27—R. & W. Conroy (2), red and white pine, Dubell & Co's cove.
Boll & Hickoy, red and white pine, St. Lawrence docks.
A. & P. White, red and white pine, Cap Rouge.
Ross Bros., deals, Buckingham.
J. B. Dickson, white and red pine, Cap Rouge.
R. Campbell & Son, white and red pine, Cap Rouge.

TEABERRY whitens the teeth like chastened pearls. A five cent sample settles it. "AND FOOLS who came to scoff remained to pray."—We receive many letters from those having tried while doubting, yet were entirely cured of dyspepsia and liver troubles with Zoposa. Clergymen write us earnestly as to its wonderful effects.

WE CONTRACTED to insert Mack's Magnetic Medicine because we were assured that the firm was composed of reliable and honorable gentlemen, and also because the medicine was recommended as being all and more than the advertisement claimed. We are informed by druggists that it is the best selling article they have, and that it gives satisfaction to their customers. See advertisement in another column.

A healthy man never thinks of his stomach. The dyspeptic thinks of nothing else. Indigestion is a constant reminder. The wise man who finds himself suffering will spend a few cents for a bottle of Zoposa, from Brazil, the now and remarkable compound for cleansing and toning the system, for assisting the digestive apparatus and the liver to properly perform their duties in assimilating the food. Get a ten cent sample of Zoposa, the new remedy, of your druggist. A few doses will surprise you.

C. BRITTON, Lindsay, Ont., writes:—"I have much pleasure in recommending Baxter's Mandrake Bitters in all cases of Jaundice, Biliousness, Sick Headache and Liver Complaint, for they have given universal satisfaction, and I have sold more of them the past season than any other one patent medicine."

AMERICAN FORESTRY CONGRESS, MONTREAL MEETINGS, AUGUST 21st and 22nd, 1882.

PATRON: HIS HONOR LT. GOV. ROBITAILLE.

All interested in the subject of Forestry are invited to attend the Meetings and participate in the proceedings.

THE RAILWAYS THROUGHOUT CANADA GRANT ROUND TRIP TICKETS TO THOSE HAVING INVITATIONS FOR SINGLE FARE.

For Cards of Invitation, Address,

WILLIAM LITTLE,

Forestry Chambers,

MONTREAL, CANADA.

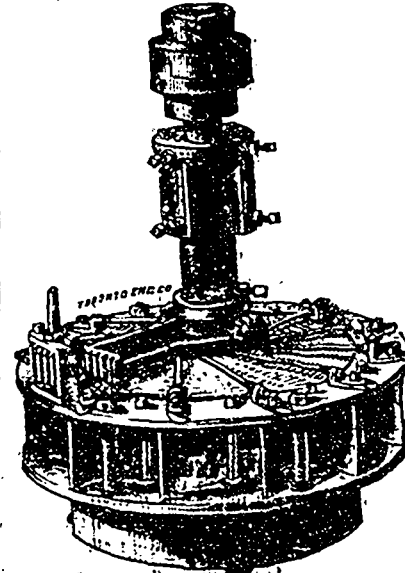
Simcoe House, CORNER FRONT and SIMCOE STS TORONTO, ONT.
Best accommodation in the City. TERMS \$1.00 and \$1.00 per day, according to Location of Rooms
The Most Convenient House to all Trains
GREEN & SON, Proprietor.

The American Hotel, BARRIE, ONT.
Collier 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.

BARRIE SAW WORKS
JAMES HAGUE.
Circular, Cross-Cut & Machine Saws
Gummed and Hammered on Short Notice.
Shop in Sewrey's Foundry, BARRIE, Ont.

CASTORINE MACHINE OIL
CASTORINE AXLE GREASE

15,000 IN USE!



JOSEPH HALL Mfg. Co., (ESTABLISHED 1851.)

OSHAWA, ONTARIO.

MANUFACTURE THE CELEBRATED **JAMES LEFFEL'S Double Turbine Water Wheel,**

All Sizes of Stationary and Portable Engines and Boilers, Shafting, Pulleys, Hangers, Gearing, the best Improved English and American Gears.

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

For further particulars address, **JOSEPH HALL Manufacturing Co., OSHAWA, ONTARIO.**

E. S. VINDIN, Commission, Shipping, Forwarding and General Agent.
LUMBER MERCHANT
Office, Tempest's Block, Port Hope.

D. S. BRIGGS, 9 TORONTO STREET, TORONTO.
WHOLESALE DEALER IN Clear, Pickings, Common and Hardwood Lumber, Lath, Shingles, &c.
BILL STUFF CUT TO ORDER.

J. & F. N. TENNANT Dealers in all kinds of **Lumber, Lath & Shingles,** Office, Union Loan Building, Toronto Street, Toronto.

17 YEARS' EXPERIENCE.
HOWIE'S DETECTIVE AGENCY
OFFICES, 32 KING STREET EAST, TORONTO ONT.
All legitimate Detective business attended to for Banks, Fire and Life Insurance Co's, also for private parties. This agency does not operate for reward.

CHOPPING AXES (Made to Order and on hand.)
MILL PICKS DRESSED in a first-class style Those shipped by rail will be returned promptly.
Lance Tooth Saws Gummed. AXES WARRANTED.
W. HERLIHEY, Lindsay.

J. L. Goodhue & Son MANUFACTURERS OF **Leather Belting!** —AND— **Patent Lace Leather.** DANVILLE, P. Q.

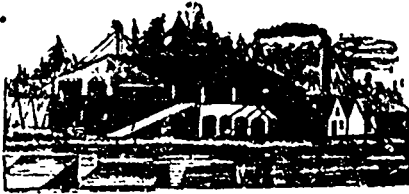
There is no excuse for suffering from **CONSTIPATION** and a thousand other diseases that owe their origin to a disordered state of the Stomach and Bowels, and inaction of the Digestive Organs, when the use of

DR. HENRY BAXTER'S MANDRAKE BITTERS

will give immediate relief, and in a short time effect a permanent cure. After constipation follows Biliousness, Dyspepsia, Indigestion, Diseases of the Kidneys, Torpid Liver, Rheumatism, Dizziness, Sick Headache, Loss of Appetite, Jaundice, Apoplexy, Palpitations, Eruptions and Skin Diseases, etc., all of which these Bitters will speedily cure by removing the cause. Keep the Stomach, Bowels, and Digestive Organs in good working order and perfect health will be the result. Ladies and others subject to **SICK HEADACHE** will find relief and permanent cure by the use of these Bitters. Being tonic and mildly purgative they

PURIFY THE BLOOD by expelling all Morbid Secretions.

PRICE 25 CTS. PER BOTTLE. For sale by all dealers in medicine. Send address for pamphlet, free, giving full directions.
HENRY, JOHNSONS & LORD, PROPS., MONTREAL.



THE CANADA LUMBERMAN

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 "accepted" in the following number, should be in the hands of the publishers a week before the date of the next issue.

PETERBOROUGH, Ont. AUGUST 15, 1882.

The forest acreage of Pennsylvania is one-fourth of the total in the state.

A STICK of pine 82 feet long was hauled into Manistique, Mich., the other day, to make a mast for the "Fulton."

THE latest parts of *Picturesque Canada*, namely the ninth and tenth, deal chiefly with the lumbering industry. A chapter is especially devoted to this subject, and the various scenes in the forest and on the river are illustrated by beautiful engravings.

THE *Northwestern Lumberman* says:—Across the water devices are often adopted which would do credit to an ingenious Yankee. Timber floats are constructed to take the place of docks, in order to avoid the dues imposed, and one at Queensborough, Eng., has been recently brought into service for the receipt of lumber, mainly pitch pine.

The order-in-Council for the collection of tolls on saw logs and timber passing the Carillon dam is rescinded, and the sums collected are ordered to be refunded, as it appears that the dam, instead of facilitating, retards the descent of timber, and was built for the purpose of increasing the supply of water to the Carillon and Grenville canal.

THE *Northwestern Lumberman* says:—A white worm about three-fourths of an inch long is destroying the foliage of hackmatack and fir trees in certain sections of Maine. The trees appear all bare and brown, as though scorched by fire. It is thought that this worm is identical with the one that has destroyed so many acres of valuable spruce trees on the coast.

Gen. R. A. Alger, M. S. Smith and J. S. McCaul have formed a corporation known as the Manistique River Improvement Company, with a capital stock of \$20,000, held entirely by themselves. They propose to expend considerable sums in improving the navigation of the Manistique river for the lumber trade in the counties of Schoolcraft, Mackinaw and Chippewa.

The Parsboro' correspondent of the *Chignecto, N. B. Post* says:—Immense quantities of logs are yet at the mills unsawn—at Halfway Lake steam mill, notably. Over 20,000,000 feet of lumber has been shipped from our shores this season. The lumber business is panning out, so is the timber from our forests. We are going down in the maelstrom of American speculation.

THE *Timber Trades Journal* says a large sailing ship load of spruce of 500 to 600 standards has been placed in Liverpool at £7 5s. c. l. f. Since the completion of this contract it is said that spruce has been stiffening in the market. The great amount of spruce that will this year be brought into Liverpool by steamers will prove to be one of the most prominent incidents of the year's trade.

Messrs. J. & G. K. WENTWORTH, of Vassar, who are conducting heavy lumbering operations on the Chippewa, the *Times* says are still hauling large quantities of logs to the stream over their private railroad. They have put in over 11,000,000 feet thus far this season, and will soon increase their business by the addition of more men to their working force. The Wentworths are an enterprising firm, and conduct operations on a huge scale.

It is estimated by Professor Brewer, of Yale College, that there may be 800 species of wood plants growing native in the United States, of which about 300 attain a height of 30 feet and 250 are tolerably abundant somewhere. Excluding semi-tropical species on the extreme southern border, and some others that are rare, there would still remain about 120 species, of which about 20 grow to 100 feet, 12 to 200 feet, and 5 or 6 to 300 feet or over. Of these 120 about 50 are conifers.

THE *Timber Trades Journal* says the cheapness of pitch pine, coupled with its uniformly excellent quality, and the further fact that the logs can be procured with sawn sides, has had a most depressing effect upon Baltic hewn timber, almost driving the latter out of the market by the pressure of the competition which the employment of pitch pine has brought to bear upon it in recent years. Nor is it difficult to see that the competition is likely to decrease rather than to diminish in the future.

THE *Lumberman's Gazette* says:—The Roscommon lumber company are building twelve miles of logging railroad and will put 40,000,000 feet of logs into Houghton lake to be run to Muskegon. They are already at work in the woods. R. E. Cade & Son have just started in for an operation in the vicinity of Otsego Lake, proposing to skid 6,000,000 feet of logs before snow flies. T. J. Miller proposes to put in 40,000,000 feet of timber in the upper peninsula for Alger, Smith & Co., and has already started in to make his camps, etc.

THE FORESTRY CONGRESS.

Our readers should not forget the meeting of the American Forestry Congress at Montreal on August 21st and 22nd, under the patronage of His Honour Lieut. Governor Robitaille. The proceedings are likely to be of great interest, and, we hope, of practical benefit. The invitations are very appropriately printed on wood, but by no means upon a shingle.

BIRD'S-EYE MAPLE.

To the Editor of the *Canada Lumberman*:
SIR,—Can you tell me what city would be the best market to sell some bird's-eye maple in, and what kind of lumber it would be best to cut it into? A friend in the north part of Michigan wants to get some out, but has no idea of its worth per M. feet board measure. Any information you can give will much oblige. I am an old lumberman and still feel an interest in the lumbering business of Canada. I think your valuable paper should be in the hands of everyone engaged in the lumber business. I see you hit things about right, and any information you give I believe can be relied on.

I am yours truly,
THOS. LINGHAM.
Belleville, Aug. 6th, 1882.

NON-COMBUSTIBLE WOODWORK.

Many processes have been discovered for protecting woodwork from burning, mostly by foreign scientists. Usually it has been attempted to gain this end by means of paint. Nickle's process, which has been used a good deal in Strassburg, consists in adding to the lime used for whitewashing an equal weight of chloride of calcium of 14 deg. B., and applying the whitewash in the usual manner. Another wash used in Westphalia consists of 2½ parts of salammoniac, 1 part of sulphate of zinc, 2 parts carpenter's glue, 20 parts of zinc white, and 30 parts of water. Patona in Vienna has used with success a mixture of 2 parts of gypsum and one part of sulphate of ammonia in three parts of water. J. P. Martin recommends 15 parts of salammoniac, 5 parts of boracic acid, 50 parts of glue, and 1½ parts of gelatine in 100 parts of water, to which is added enough pulverized lime to bring it to the proper consistency. Schussel and Thouret have rendered wood incombustible by impregnating it with this mixture: To 16 parts of a phosphoric acid solution of 16 deg. B., and 2½ parts carbonate of ammonia, are added 6 parts of a solution of salammoniac of 10 deg. B., and 1 part of gum arabic. The dried wood is put into this liquid for at least twenty-four hours, then allowed to dry, and painted with oil paint.

There is no doubt that impregnation protects the wood from fire better than any kind of paint, and will no doubt become very important in the future. Probably the rather costly mixture of Schussel and Thouret may be replaced by other substances that are of scarcely any value for other uses, such as the still unused portions of the Stassfurt salts, and the enormous quantity of waste chloride of calcium made in some manufactures. Instead of saturating the wood by simply dipping it into the liquid, it would be better to force it in by atmospheric pressure. In a similar manner wood is already impregnated on a large scale to protect it from decay, and the works where railroad ties are prepared should not permit the preparation of fire-proof lumber for building purposes to slip through its hands. The same substances that prevent its burning also protect it from dry rot. It is to be hoped that the use of impregnated fire-proof lumber shall not be limited to theaters and similar buildings, but come into general use.—*Wood Worker.*

A LITTLE GAME.

THE *Lumberman's Gazette* of Bay City, Michigan, says:—The "large-sized African in the fence" in connection with the "bear" movement of the Chicago lumber exchange is being divulged, and it is said to have been nothing more nor less than a preconcerted plan among that element to shove off a million or so of lumber at the pretended reduction, and hoping thereby to scare the Michigan manufacturers into a panic in order to stock up at the reduction, when they would stiffen up the Chicago market again and secure the advantage of the situation. But the gauzy transaction didn't materialize worth a cent, and the expected panic among the Michigan mill owners didn't pan out as expected; therefore the few big "bears" interested have complacently pocketed their losses and are wondering how it is that those Michigan fellows are so mulish that they refuse to "tumble to a racket" when it proceeds from Chicago.

TIMBER SUPPLY OF NEW HAMPSHIRE, VERMONT AND MAINE.

Forestry Bulletin No. 16 says that the estimated amount of merchantable timber standing in the state of New Hampshire May 31st 1870, is as follows:

Counties	Feet.
Carroll.....	60,000,000
Cococ.....	1,000,000,000
Crafton.....	450,000,000
Total.....	1,510,000,000
Cut in year ending May 31, 1882.....	153,175,000

WHITE PINE.

The original white pine forests of New Hampshire are practically exhausted. Considerable areas formerly occupied by white pine, especially in the southern part of the state, have grown up again with this species.

No estimates of the amount of this second growth pine have been made, although it furnished a cut during the census year of 89,400,000 feet, board measure.

It is roughly estimated that the spruce forests of the state contain over 33,750,000 cords of hardwood and 105,000,000 feet of hemlock.

TIMBER SUPPLY OF VERMONT.

	No. of Feet.
Valley of Connecticut river.....	375,000,000
Green Mountain range.....	380,000,000
Total.....	755,000,000
Cut in year ending May 31, 1881.....	100,000,000

WHITE PINE.

The original white pine forests of Vermont are practically exhausted, and are only represented by a small amount of second growth, which furnished during the census year a cut of 6,500,000 feet board measure.

THE PINE AND SPRUCE SUPPLY OF MAINE.

	Pines.	Spruce.
St. John river and tributaries.....	75,000,000	1,400,000,000
Penobscot river and tributaries.....	100,000,000	1,600,000,000
Kennebec river and tributaries.....	50,000,000	1,000,000,000
Androscoggin river and tributaries.....	50,000,000	500,000,000
St. Croix, Machias, Narragaus and others.....	200,000,000	500,000,000
Total.....	475,000,000	5,000,000,000
Cut for 1880, ending May 31st.....	138,825,000	301,000,000

Considerable areas in southern Maine are covered with second growth pine, not included in the above estimate, although furnishing a large proportion of the pine sawed in the state. Pine has been cut in every township, and the largest spruce has been removed from that state except from the inaccessible region about the head-waters of the Allagadash river.

The system of cutting only the large trees and carefully protecting the remainder prevails in Maine, and allows the forests to be profitably worked at stated periods, varying from 15 to 25 years. Their permanence is thus insured.

A CUSTOMS ORDER.

The Ottawa correspondent of the *Toronto Globe* says:—The lumbermen in this district are greatly exercised over an order which has recently been passed by the United States Customs authorities respecting Canadian lumber imported into that country. It appears that for years past Canadian boards have been admitted into the United States on their nominal measurement of one inch in thickness, but the greater number of Canadian boards it seems measures one inch and a quarter instead of one inch, as those manufactured across the border, and they were measured for their length and breadth, taking the thickness to be the same as Yankee boards. A short time ago some genius discovered the difference, and brought the matter before the American Customs authorities, who issued the order respecting the measurement which has proved so obnoxious to the United States importers of Canadian lumber. A number of barges from Whitehall, New York, Albany, and other American ports, which arrived here a short time since for loads, have not yet commenced to take in cargo, those in charge of them having received telegraphic instructions not to do so until they receive further orders. The new regulations will seriously affect freight rates between here and the United States. This matter is creating quite an excitement among the lumbermen of this vicinity.

DESPISED WOODS.

For a county of which it was said years ago that all the desirable timber was cut, (that is, oak and heavy sticks), Essex is shipping a remarkable quantity and variety of woods. Mr. T. A. Ouillette continues to send out ash, butternut, basswood and elm, to fill various contracts from Buffalo to Virginia. Railway ties are being shipped from Kingsville to Buffalo; lumber from Leamington to Detroit. The fact is, we are only beginning to learn the uses to which the despised firewoods of twenty years ago may be put; and to dispose of hickory to steamboats for \$2 per cord, or ash at \$1 per cord now-a-days, as was done in 1850 to 1860, a man would be considered as "green" as the wood he sells. We learn from the *Amherstburg Echo* that 25 tons of "bent stuff," made by Heard & Co., for shafts, felloes and other

Drake Brothers' Box Mill,

Provost Street Extension, New Glasgow, Pictou County, N. S.

SPRUCE, PINE & HEMLOCK SHINGLES

F. H. DRAKE.

1117

N. H. DRAKE.

WILLIAM CAMPBELL

(Late CAMPBELL & FOWLER.)

MANUFACTURER OF

Edge Tools, Axles, Springs,

&C. OF EVERY DESCRIPTION.

1119

Robertson Place, Smythe Street - ST. JOHN, N.B.

wooden parts of vehicles, were last week shipped by propeller eastward, destined for Montreal, Quebec and Halifax; while buggy spokes are going by the car-load to Sandusky, from Higgins Bros., of McGregor in the same county.

Timber Limit Sale.

The Ottawa correspondent of the *Globe* under date of August 10 says:—A large sale of timber limits took place this evening at the Grand Union Hotel. Considerable interest was manifested in the sale, and buyers were present from both Ontario and Quebec. The limits put up were understood by the knowing ones to be very valuable, but the bidding was rather dull. The Jean de Terre limits, consisting of Licenses Nos. 145 and 146, and comprising 50 square miles each, were started at \$100 per square mile, and slowly bid up to \$340, at which figure they were knocked down.

The *Lindsay Post* says:—From Boyd's piling yard at Bobcaygeon a large amount of lumber has been taken. Six scow-loads came in on Wednesday. R. C. Smith, of Fenelon Falls, is shipping some fine square timber. The rafts of logs are being transferred to the Midland cars at the loading point. A large quantity of shingles from the mill of Mr. W. Bick, Bobcaygeon, are lying on scows at the wharf. They will be hauled to Port Hope and shipped across the lake to American customers.

The California forests are being sacrificed for leather. One of the handsomest trees in the state is known by the name of chestnut oak. It furnishes the only native bark suitable for tanning leather. The leather business has been unusually good for the last two or three years, and the consequence is, says the *San Francisco Bulletin*, that over large districts this beautiful tree is slashed down for the bark. The trunks are peeled and then left to decay. Great openings are made in the forests and the sun is let in, evaporating the moisture so rapidly that these trees do not propagate. The result will be that this immense waste will only terminate with the destruction of this tree and the decay of the fallen timber.

The *Chicago Northwestern Lumberman* says: On the occurrence of a forest fire of much magnitude, the *Lumberman* receives letters from operators deploring the fact and suggesting that some means be employed to prevent such fires. That is just what this paper has been advocating for a good while. Whether any means shall be employed, though, rests entirely with the operators themselves. One thing is certain, no amount of whining or regret will prevent a single forest fire. It will require work well planned and systematically carried out. So far as the observations of the *Lumberman* have been made not a dozen operators in the Northwest are willing to spend the time and money necessary to insure their pine land against fire.

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. 1111



TRENT NAVIGATION

NOTICE TO CONTRACTORS.

THE letting of the works for the FENELON FALLS, BUCKHORN and BURLEIGH CANALS, advertised to take place on the second day of August next, is unavoidably further postponed to the following dates:—
Tenders will be received until Thursday, the Twenty-fourth day of August next.
Plans, Specifications, &c., will be ready for examination, (at the places previously mentioned) on Thursday the Tenth day of August next.

By order,
A. P. BRADLEY,
Secretary.
Dept. of Railways and Canals,
Ottawa, 16th July, 1882. 6d17 2x15



Welland Canal Enlargement.

NOTICE TO CONTRACTORS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the Welland Canal," will be received at this Office until the arrival of the Eastern and Western Mails on FRIDAY, the 1st day of SEPTEMBER next, for the deepening and completion of that part of the Welland Canal, between Ramey's Bend and Port Colborne, known as Section 34, embracing the greater part of what is called "Rock Cut."

Plans showing the position of the work, and specifications for what remains to be done, can be seen at this Office, and at the Resident Engineer's Office, Welland, on and after FRIDAY, the 18th day of AUGUST next, where printed forms of tender can be obtained.

Contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms, and, in the case of firms, except there are attached the actual signatures, the nature of the occupation and place of residence of each member of the same; and further, an accepted bank cheque for the sum of four thousand dollars must accompany the respective tenders, which sum shall be forfeited if the party tendering declines entering into contract for the works, at the rates stated in the offer submitted.

The cheque or money thus sent in will be returned to the respective contractors whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.
By order,
A. P. BRADLEY,
Secretary.
Department of Railways and Canals,
Ottawa, 16th July, 1882. 6d15-law 2x15



Has Facilities

—FOR—

DOING as GOOD WORK

—AND AS—

PROMPTLY

As any Engraver in Canada

ESTIMATES FURNISHED.

CURRIE BOILER WORKS

ESTABLISHED 1852

MANUFACTURERS OF

STEAM BOILERS.

NEW and SECOND HAND ENGINES and other Machinery on Hand and for Sale.

CURRIE, MARTIN & Co.

Esplanade, Foot of Frederick Street, TORONTO.

1114

FOR THE BEST

TURBINE WATER WHEELS

AND

Mill Machinery,

ADDRESS:

PAXTON, TATE & CO.

PORT PERRY, ONT.

Send for Illustrated Catalogue.

6L16

ROBIN & SADLER

594, 596, 598, St. Joseph St.

MONTREAL

Manufacturers

of

LEATHER BELTING

Fire-Engine

HOSE,

Lace Leather,

Mill Supplies, &c.

1118

AMERICAN FORESTRY

It is both interesting and gratifying to see that there are representative men, occupying positions of influence and power, who are alive to the importance of preserving, and in some places restoring, the wood-lands of America. It is so natural and easy for men to become absorbed in the study of what seem to them, and are, great questions of state policy, questions affecting the interests of commerce, manufactures and national prosperity which have engaged the attention of statesmen in all civilized countries, and will necessarily engage it to the end of time, that when an effort is made to interest them in a subject such as this of forestry they are slow to be convinced that it is a matter that should engage their attention, and are disposed to look upon those who have studied the subject as enthusiasts. But men who can take broad views of national interests soon find that this is a subject which touches the national prosperity at many points. That it has most vital connection with commerce, with manufactures with the supplies of food, with the health and the life of a people. Among such men stand prominently then Hon. Mark H. Dunnell, of Minnesota, whose speech in the House of Representatives of the United States is replete with earnest words, most valuable information, and an evident, appreciation of the importance of the subject. From his speech we learn that in February, 1874, a committee of the American Association for the advancement of science brought a memorial from that body to the President of the United States, urging the duty of Government concerning the cultivation and preservation of forests, and recommending that a commission should be ordered to mature plans calculated to meet the requirements of the subject. The President laid this memorial before Congress, which resulted, in 1875, in the appointment of Dr. Franklin B. Hough, of Lowville, New York, to the duty of ascertaining the annual amount of consumption, importation and exportation of forest products, the probable supply for future wants, and the best means for the preservation and renewal of forests; the influence of forests upon climate, and the measures applicable in this country for the planting of forests.

In pursuance of this appointment, Dr. Hough made two reports to Congress, one in 1877, the other in 1878-9. Of the first of these an officer of the Wurttemberg forest service says:—"It awakens our surprise that a man, not a specialist, should have so mastered the whole body of American and European forestry literature and legislation."

From this speech we also learn that the quantity of pine lumber produced in the State of Maine has steadily declined from an average average of 100,000,000 feet per annum in 1851 to 1855 to an average of 11,800,000 per annum in 1876 to 1881; that the timber supply of the upper peninsula of Michigan, at the rate of production in 1879, will last eighteen years; that of the lower peninsula will last seven years; that of the State of Wisconsin scarce twenty years; and that of Minnesota about eleven years; and that at the rates of present consumption in the North-West, the whole supply of the timber of the United States would last about seventeen years. Hence he concludes that it is the duty of Government to inquire how far it can withdraw remaining timber lands from market and place them under regulations that shall secure the greatest present benefit from the use of timber now fully mature, having regard to the requirements of the future, and to ascertain how to impress upon private owners the importance of planting, and how far and in what manner it may encourage this object. To this end he advises the establishment of experimental stations for the careful study of the requirements and capabilities of soils, and of the several kinds of trees, and publish the results in a form particularly calculated to impress their importance, and to teach the simplest rules for securing success. He concludes his very interesting and instructive speech by saying:—

We are using up the capital which nature had for centuries been providing for us in the growth of forests, and we are doing nothing to restore them. Under skillful management the supply might be so arranged that in twenty-

or sixty years for others, a new crop would be furnished by growth; and if only a twenty-fifth or thirtieth part of the former, or a fiftieth or sixtieth part of the latter, were taken yearly, the supply would be perpetual. But instead of this, we are taking a tenth or twentieth part every year, while the growth from our neglect is not a fourth part of what it should be where any growth is allowed.

"We shall only too soon be reminded of the consequence of this improvidence in the growing prices of lumber, which in some kinds have already doubled within a very few years, and which are advancing every day. These advances may be ascribed by some to speculation, and doubtless to some extent they are, for the speculator never loses a chance to turn a penny in his favor, it matters not who suffers; but when these advances are steadily going on from month to month, and year to year, at an accelerating rate, it means that the intrinsic value of the commodity they represent is becoming greater under the combined effects of diminishing supply and increasing demand. It will inevitably lead to the realizing conviction that there is profit in growing timber, and the sooner this is understood and acted upon the better will it be for the country and for the future."

The large gatherings of influential and representative men which recently took place in Cincinnati, embracing not only scientists, whose special duties have led them to understand the importance of this subject, but also members of state and national legislatures, leading agriculturists, and the chief of the national Agricultural Bureau, this gathering is a cheering evidence that our neighbors across the border are becoming aroused to the importance of this subject, and that steps will be taken to prevent the needless destruction of their forests, and to secure the planting of woodlands as a branch of economic industry.

It is very gratifying to us as Canadians to know that the Honorable the Commissioner of Agriculture for Ontario is fully alive to the great importance of this matter to us, and that he is using every means at his command to procure and diffuse information on this subject, and to encourage the planting of forest trees for timber, shelter and fuel, wherever it can be done with advantage.

Doubtless our own forests are disappearing as rapidly as those of our neighbors under the united ravages of the woodman's axe and the devastating forest fires. Already some parts of Ontario are beginning to suffer from want of a due proportion of the woodland in the diminishing volume of her springs and streams in protracted summer drouths, and in the unbroken sweep of frost-laden winter winds. It is time, full time, that public attention be turned to this matter; that something be done to limit the annual cutting of lumber, so that it shall bear a proper relation to our present supply and present needs; that measures be taken to prevent wholesale destruction by forest fires, and that planting be commenced without delay on lands suitable for the purpose, with a view to keeping up the supply perpetually, and of preserving the proper proportion of woodland, so as to save us from those climatic changes which are sure to follow the denudation of this country, bringing in their train drouths, excessive floods, sterility, famine and pestilence.—*Canadian Horticulturist.*

INTERNATIONAL TRADE.

The *Northwestern Lumberman* says:—A good deal of the lumber which the mills of the northern states are turning out goes to meet an already active and developing demand in the Dominion, with which the comparatively few Canadian mills cannot keep abreast. So much emigration has tended to Manitoba, and other provincial sections, that the results of the emigration boom which has been so marked this year, have not been so much felt in the north-western states. That there is a building boom in Canada there can be no doubt, for there are facts in open view which demonstrate it. As things are conditioned now, however, what affects the Canadian lumber trade has a healthful influence upon the markets of the United States, and this benefit may be more widely operative than may be thought. For instance, the upper Mississippi supplies are drawn on

quite extensively, and we have already noted a large sale of dry lumber going from Chicago to Winnipeg, which was a secondly made. The enterprise of constructing portable houses is still actively prosecuted in Canada, the industry being particularly prominent in Quebec, Ottawa, Belleville, Hamilton, and other main points, and among them competition is lively. So great, however, is the need for shelters that there is almost an enormous demand for tents, which are used in lieu of better habitations. It is told that in and about Winnipeg alone there are more than 3,000 people living in tents, and the plan has been adopted to more or less extent over a wide section. This is all very well during the summer weather, when Old Sol makes things genial, and sometimes red-hot, but persons can not successfully abide here in tents during the winter months, and Canada is still farther towards the north pole. This fact is, all these tent-abiding people must be provided with structures before the cold weather sets in, and we opine that a very respectable share of those provincial prospectors will sleep under American pine in the future. On account of the growing scarcity of dry-stocks, what building is now prosecuted consumes largely green lumber, and it is often a case of Hobson's choice.

A LARGE PURCHASE.

The *Lumberman's Gazette* says:—The American Lumber Company has purchased from the Detroit, Mackinac and Marquette Railway Company the standing pine on its entire land grant, except Mackinac county and the east part of Chippewa county. This comprises some 500,000 acres, and it is expected the yield will amount to several hundred million feet of pine. This company has also purchased of the same company about 75,000,000 feet of pine on the Tiquaquanon river, in Chippewa county. It has also purchased about 150,000,000 feet on the waters tributary to Ontonagon river. This gives the company the entire control of the largest body of pine in the northern peninsula.

A mill with a capacity of 100,000 feet per day is now being erected at Newberry, Chippewa county, on the line of the railroad, and it is the intention to cut about 14,000,000 feet during the coming winter. Another large mill near Escanaba is contemplated. The American Lumber Company is composed of Scotch and Canadian capitalists. The head offices are in Toronto. H. H. Cook, M. P., A. MacKenzie, Robert and John M. Dollar, and J. S. Lockie, all of Toronto, are resident directors. The headquarters in the northern peninsula will be Marquette. Robert Dollar will be general manager at that point.

OBSTRUCTING MILL STREAMS.

The *Bay City Lumberman's Gazette* says:—This bit of law comes to us through Bradstreet's: A, the owner of a mill, filed a bill to enjoin B, who had a mill to manufacture lumber and clothes pins above that of A on the same stream, to prevent him from discharging his saw dust, shavings and refuse into the stream, so that they were carried by the current into A's pond in such quantities as to cause him considerable expense to remove this waste, and interfered seriously with the profitable use of A's mill. In this case the supreme court of Vermont granted the injunction, the Chief Justice (Royce), in the opinion, saying: "While it is true a manufacturer has the right to appropriate and use the water of a stream in a proper manner, it is equally true that he must respect and regard the rights of riparian proprietors below him; and while such owners must submit to such inconvenience and injury as may result from such use, they are not compelled to submit to injuries which are not necessarily occasioned thereby. Such injuries as are incident to, and necessarily result from a proper use of the water, must be borne, but the manufacturer has no right to do any act that in its consequences is injurious to others, because it is a matter of convenience or economy for him to do so. It is as much the duty of a manufacturer to so dispose of his waste as not to injure others, as it is to refrain from injuring others by any other act. No one is allowed to deposit any substance in a running stream that will pollute its waters, to the injury of riparian proprietors below. Neither has anyone the right to deposit any

other substance in such a stream, beyond what is absolutely necessary to a beneficial use of it, to the injury of mill owners or the lands through which the stream may run. It would be manifestly unjust to hold that a manufacturer could so conduct his business as to seriously impair the value of the rights and property of manufacturers on the same stream below, and injure or perhaps ruin the lands of riparian owners, without accountability, upon the showing that it was more convenient and economical to him thus to conduct it. The acts of the defendant in depositing the waste made at his mill in the manner we have found it has been done, were illegal, and a perpetual injunction will be issued enjoining him and his heirs, executors, administrators and assigns from so disposing of it in the future.

AUSTRALIAN TIMBER TRADE.

Messrs. O. S. Ross & Co.'s latest report from Melbourne states that the arrivals of timber and building materials continued heavier than the demand for consumption, and prices had in consequence declined, especially in American lumber and British shipments of red deals. The arrivals for the past month have been per *Alderprose*, *Macbeth*, *British Enterprise*, and *Gulf of St. Vincent*. The parcels ex ships from Great Britain (which were landed in the usual bad order of such shipments) have been sold at prices which leave a heavy loss to the importers, and this result will always follow, as our buyers require timber in bright condition. The *Pacific's* cargo from Gesslo was ordered on 12th May, resulting in the sale of 4,000 pieces at from 6d. to 5 1-16th d. per foot 9 x 5, the balance being withdrawn at the latter figure. The stocks in hand are much larger than usual at this season, and as they are weekly being added to from Great Britain, the prospect for shipments on route are not favorable to profitable results. The *British Queen*, from London, arrived at Adelaide last week with a cargo of 38,000 pieces red deals and battens, and was ordered on to Sydney. Our advices from Sydney reports sales of small parcels of London shipments at 3 3/4 to 4 3/4 per foot 9 x 3, for 3rds. The *Ravenwood* from Glasgow, *Mistley Hall* and *Ann Millicent*, from London, and *Hospoda*, are reported at the Heads.

A Good System.

The census office at Washington has just issued a bulletin, giving some interesting figures showing the estimated amount of merchantable pine and spruce standing in Maine, New Hampshire and Vermont, May 31, 1880. The statistics for Maine show that 475,000,000 feet of pine and 5,000,000,000 feet of spruce, board measure, were standing in the census year, and that 138,825,000 feet of pine and 301,020,000 feet of spruce were cut that year, including 6,000,000 feet of pine and 49,000,000 feet of spruce cut on St. John River, but sawed in New Brunswick. Considerable areas in Southern Maine are covered with second growth pine not included in the above estimate, furnishing a large proportion of the pine sawed in the state. Pine has been cut in every township, and the largest spruce has been removed from the state, except from the inaccessible region about the head waters of the Allagash River. The system of cutting only the large trees and carefully protecting the remainder prevails in Maine and allows the forest to be profitably worked at stated periods, varying from fifteen to twenty-five years. Their permanence is thus insured.

The Superintendent in Love.

Supt. E. J. O'Neill, of the Dominion Police Force, Ottawa, Canada, thus spoke to a representative of one of Ottawa's leading Journals: "I am actually in love with that wonderful medicine St. Jacobs Oil. I keep it at home and likewise here in my office; and though my duty should call me hence in an hour to journey a thousand miles, St. Jacobs Oil would surely be my companion. It is the most wonderful medicine in the world, without any exception, I believe. My entire family have been cured by it. We have used it for twenty different ailments, and found it worth half a score of doctors. My men here on the Dominion Police Force, use it right along and very justly think that there is nothing like it. I believe it is the long sought *Elizir Vitae* and possesses the power of making the old, young again. I know it often enlivens me, and although I am past fifty years of age, I am, thanks to that wonderful agent, a lively man yet."

Chips.

A STEAMER is being built at Oconto, Wis., for picking up logs along the shores of Green Bay. A LARGE number of Americans are visiting the Thunder Bay region north of Lake Superior prospecting for timber and minerals.

The Two Rivers, Wis., Lumber Company have a log scow with steam machinery for taking logs out of the water and loading them on the scow.

The Chignecto, N. B., Post says. It is said that Mr. Alex. Gibson will pile some 15,000,000 feet of lumber at the Straight Shore, St. John, this season, to be held for higher prices.

The Timber Trades Journal says a parcel of over 1,000 standards, per steamer, said to be the largest cargo of spruce yet shipped to Liverpool, has been sold by a firm of brokers to an import house there.

In the return of exports from the port of Trebizond, given in the report of Consul Bilotti for 1881, we find there were 8,893 cwts. of boxwood, valued at £2,660, sent to Great Britain; and 272 cwts. walnutwood valued at £541.

The uses of pine are many, and it is told that the needles of the Silesian forests are capable of conversion into what is termed forest wool, which, besides being efficacious in cases of rheumatism, can be curled, felted and woven.

The Northwestern Lumberman says the saw mill at Butternut, Wis., has been enlarged, 60 feet being built on the north end, making it 120 feet long, and a shingle and lath mill has been added. The capacity for next season is placed at 10,000,000 feet.

The Brighton Ensign says that Mr. Chester Loomis of Newcombe Mills has completed a shipment of 47,000 feet of basswood, ash, and elm lumber to the Upper Canada Furniture Company, Bowmanville. He got \$13 per M. delivered at the factory.

The Stirling News-Argus, of July 28th, says: Immense numbers of logs have passed down the Trent within the past few weeks. The mouth of the river is now fairly choked with logs, about a hundred acres of space being covered with a perfect jam. It is a sight not often seen.

Mr. BOLDUC, M.P. for Beauce, has purchased from the Quebec Seminary extensive timber limits in Montmorency County, and will, it is said, erect large saw mills at which 10,000,000 feet are expected to be cut annually for export to England. The timber on these limits is chiefly spruce.

The Northwestern Lumberman says a representative of Noble & Little, Ashland Avenue and 22nd street, has been in Manitoba working up a little new Northwestern boom for his house. He went for pleasure only, but managed to make a sale for anywhere from 50 to 75 carloads of lumber.

The Lumberman's Gazette says:—We have heretofore referred to the fact of the enormous immigration pouring into the eastern states; and on it we have based our faith for a permanent demand for lumber, which would inevitably be continued, as it is an imperative demand which cannot possibly be ignored.

The Northwestern Lumberman says a huge raft, comprising 1,000 telegraph poles, arrived at Monroe, Mich., lately, from which point they are to be distributed along the line of the Lake Shore & Michigan Southern road. Two more of these large rafts are expected, the poles coming from the shores of the Georgian Bay.

Messrs. C. T. BRANDON & Co. have received from Winnipeg, Manitoba, a large order for common lounge frames, step ladders, camp stools and small express wagons, which are to be shipped knocked down in box cars from Toronto. Quite a large trade it is expected will be done with the Prairie Province in these goods.

The Quebec Chronicle says our timber market remains as inactive as it has been during the past few weeks, and we do not hear of any transactions worth noticing. Rafts continue to arrive and are placed in the different commission booms, for sale. But it is generally expected that they will remain unsold for the next few weeks, and that little timber will change hands before September.

A NORTH CAROLINA darkey was agreeably astonished, recently, at beholding a lot of gold coins roll out of an old log he was splitting. There were 26 eagles in all, and it is thought the money had been in the tree about a quarter of a century. If the trunks were always that way, there must be some valuable stumpage around that section.

The Timber Trades Journal says there has been shipped from Quebec during the last few years a considerable quantity of 1st, 2nd, and 3rd quality yellow pine boards, from 9 to 12 and 13 inches broad, of various thicknesses. These boards have been found by users of pine wood to be exceedingly economical, and the quality of them invariably good. They are fuller in the various thicknesses than are boards of similar widths which are cut from 3 in. deals. There is a further advantage associated with them, viz., the saving of the cost of sawing; hence, the importation of these boards is almost certain to increase considerably.

The Timber Trades Journal says the old and new state of affairs in respect to the wood-carrying trade have had a somewhat whimsical illustration afforded them at one of the north country timber docks. There, sheltered under the prow of a huge wood-laden steamer, was to be seen a modest little craft of 60 tons burden, discharging Norwegian pit-props. The little vessel was crudely built, in a home-made fashion, her masts, scarcely straighter than the rough cut props that she was discharging from her hull, and her general style and build illustrative of those daring little crafts of our ancestors that in the seventeenth century patiently made their hazardous voyages amidst the perils of the Baltic.

The Lumberman's Gazette says the forestry bulletins which show, by maps, the contracting areas of timber lands, are calculated to encourage the protection of growing timber now so recklessly sacrificed in the west. Notwithstanding the efforts of the government to encourage the growth of forests by the tree-claim plan, the necessity of more and larger trees is felt, especially in those sections where lands have been entered on tree claims. A party of Colorado citizens were forced to ride six miles to find a tree suitable for the hanging of a horse thief. Such a lack of timber for a necessary and imperative demand in Colorado, is entirely inexcusable, and in order to remedy such a glaring want, concerted action is demanded, on the part of Colorado freemen.

The Hull correspondent of the Timber Trades Journal says:—Speaking of large timber, which is, in other words, speaking of American wood, we may notice a few "sticks" floating in the ponds of Messrs. R. Wade, Sons, & Co. There are three logs of Quebec pine—63 ft. 6 in. x 26 1/2 in. x 24 1/2 in., 236 ft. contents; 43 ft. x 27 in., 205 ft. contents; 42 ft. x 25 1/2 in. x 24 in., 178 feet contents. These are closely matched with the following logs of Quebec white oak: 46 ft. 6 in. x 20 1/2 in. x 20 1/2 in., 227 ft. contents; 54 ft. x 25 in. x 24 in., 225 ft. contents; 44 ft. 6 in. x 27 in. x 27 in., 226 ft. contents, which latter are free from wane. It is highly probable that these dimensions can be exceeded in Liverpool and London stocks, but we give them as examples of what are held here, feeling certain that our many Baltic friends, who are strangers to such logs, will be interested with the figures.

The Liverpool correspondent of the Timber Trades Journal says the high prices demanded for Quebec timber meet with but little response from buyers, who, excepting for the very best of work, are taking to pitch pine for many purposes for which but a few years ago yellow pine only would have been used. The fact is that consumers will not pay the fancy prices that have recently been asked for this wood, and are substituting other and cheaper material for it, and until our Canadian friends can reduce their prices to something approaching former rates, they will have to be content with a very small demand from this neighbourhood, and that will be confined to the better classes of wood only. Already the common yellow pine timber, such as was formerly imported under the designation of building timber, has been entirely superseded by pitch pine, and oak timber is now being rapidly worked out of the market by the large quantities of cut waggon scantling supplied from the United States.

ST. JACOBS OIL



THE GREAT GERMAN REMEDY FOR RHEUMATISM,

Neuralgia, Sciatica, Lumbago, Backache, Soroness of the Chest, Gout, Quinsy, Sore Throat, Swellings and Sprains, Burns and Scalds, General Bodily Pains,

Tooth, Ear and Headache, Frosted Feet and Ears, and all other Pains and Aches.

No Preparation on earth equals St. Jacobs Oil as a safe, sure, simple and cheap External Remedy. A trial entails but the comparatively trifling outlay of 50 Cents, and every one suffering with pain can have cheap and positive proof of its claims.

Directions in Eleven Languages. SOLD BY ALL DRUGGISTS AND DEALERS IN MEDICINE. **A. VOGELER & CO.,** Baltimore, Md., U. S. A.

UNION FOUNDRY

Union Street, --- Carleton, Warerooms, Water Street, **ST. JOHN, N. B.**

Allan Brothers

(Late of Harris & Allen) MANUFACTURERS OF ALL KINDS OF

Steam Engines

MILL MACHINERY.

Ships Windlasses, Iron Capstans and Ships CASTINGS of all kinds.

Ships Cambooses & Cabin Stoves.

COOKING AND HEATING STOVES,

Shop, Office and Parlor Stoves, and Franklins

Agricultural Implements.

BRASS CASTINGS.

Tin, Sheet Iron and Copper Ware for SHIP and HOUSE use.

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

ROBERT SMALLWOOD

MANUFACTURER OF
The Patent Lever Feed Shingle, Box Board & Heading Machine
(Always takes First Prize.)

Rotary Saw Mills

IN FOUR SIZES, and other
MACHINERY for SAW and GRIST MILLS.

SEND FOR CIRCULAR.

CHARLOTTETOWN,
PRINCE EDWARD ISLAND

ZUGGATO'S PAPHYROGRAPH



is a new invention for the rapid production of facsimile copies of any Writing, Drawing, or other work which can be done with pen and ink. **Autograph Letters** Circulars, Music, etc., are first written upon a sheet of paper, in the usual way, and from this written sheet

500 COPIES PER HOUR may be printed upon any kind of dry paper, or other material, in a common Copying Press.

This is the Most Simple, Rapid and Economical Process yet Discovered. THOUSANDS are already in successful use in Government Offices, Colleges, Academies, Public and Private Schools, Railway and Insurance Offices. Also by Business Men, Lawyers, Clergymen, Sunday school Superintendents, Missionaries and others. The Simmons Hardware Co., of St. Louis, says of it: "Our Papyrograph, purchased some time since, gives entire satisfaction. Would not be without it for \$1,000 a year. For specimens of work, price list, etc., address with stamp.

THE PAPHYROGRAPH CO.,
43 and 45 Shetucket Street, Norwich, Conn.
LOCAL AGENTS WANTED.

EARS FOR THE MILLION

Foo Choo's Balsam of Shark's Oil
Positively Restores the Hearing, and is the only Absolute Cure for Deafness known.

This Oil is abstracted from peculiar species of small White Shark, caught in the Yellow Sea, known as GARCHARODON HONOLETII. Every Chinese fisherman knows it. Its virtues as a restorative of hearing were discovered by a Buddhist Priest about the year 1410. Its cures were so numerous and many so acutely miraculous, that the remedy was officially proclaimed over the entire Empire. Its use became so universal that for over 300 years no Deafness has existed among the Chinese People. Sent, charges prepaid, to any address at \$1.00 a bottle.

Hear What the Deaf say!

It has performed a miracle in my case. I have no uncertainly noises in my head and hear much better. I have been greatly benefited. My deafness helped a great deal think another bottle will cure me.

"Its virtues are UNQUESTIONABLE and its CURATIVE CHARACTER ABSOLUTE, AS THE WRITER CAN PERSONALLY TESTIFY, BOTH FROM EXPERIENCE AND OBSERVATION. Write at once to HAYLOCK & JENNEY, 7 Dey Street, New York, enclosing \$1.00, and you will receive by return a remedy that will enable you to hear like anybody else; and whose curative effects will be permanent. You will never regret doing so." -Editor of Mercantile Review.

To avoid loss in the mails, please send money by REGISTERED LETTER. Only imported by **HAYLOCK & JENNEY,** (Late HAYLOCK & Co.)
SOLE AGENTS FOR AMERICA. 7 Dey St., New York. L11-w22-ly

Market Reports.

MONTREAL.

From our own Correspondent.

Aug. 10th.—There is very little to report this week. Prices continue steady as last reported, business has been very fair, the demand for building lumber has been good, and prospects are that it will continue so for some time to come. The market for walnut and almost all hardwoods has been active. Yard prices are as follows:—

Table listing lumber prices for Montreal, including Pine, Spruce, Hemlock, and other types with their respective prices per 1000 ft.

SHIPMENTS.

Exports are going on briskly, and there are at present 18 vessels in port chartered to load for South America. The rise in grain freights has had no effect on rates of lumber tonnage, which, however, are firm, but the demand is weak. We quote rates of freight to River Plate at \$14.50 to \$15, as to size of vessel. Deals are taken in considerable lots to the United Kingdom at from 6s. to 7s. 6d. The barque Cupid, which was damaged, is still at Quebec under repairs. Shipments from this port since the 24th ult. were:—To London, 30,000 ft. deals and 33,541 pcs. deal ends; to Bristol, 10,000 ft. deals; to Liverpool, 577,712 ft. lumber; to Cork, 10,000 ft. deals. The shipments to the River Plate since date of last report were 6 vessels, carrying 2,957,430 ft. The total shipments to South America since opening of navigation to date were 5,310,250 ft., against 4,736,541 ft. for same period of 1881, being an increase of 573,709 feet.

CORDWOOD.

There is not much to be said about this market. Prices keep high, but trade is rather slack. There is not a very heavy stock on the wharves, and if anything the tendency is upwards, which checks business. We quote ex cartage:—

Table listing cordwood prices for Montreal, including Long Maple, Short, Long Birch, Short, Long Beech, Short, and Tamarack.

TORONTO.

From our own Correspondent.

Aug. 9th.—There is not much that is worthy of record in regard to the movement of lumber at this point since I last wrote you. Shipments over our docks has been somewhat brisker during the last week, but not nearly up to anticipations, and from present indications the local consumption of lumber for this season will be fully one-half less than during the building season of 1881. Various causes are assigned for this falling off in our building trade; some say that the carpenters' strike in the early part of the season was the main cause, others affirm that the high price of material has the most to do with it; if the latter is the correct theory, real estate owners may rest assured that the day is past, never to return, when they will be able to purchase lumber at rates existing four or five years ago, and it is not difficult to determine why this advance in value of lumber must to a certain extent hold good. All the pine in our frontier townships has been cut off, and our nearest points for any considerable quantities of lumber, by rail, is now 100 miles, or over, on which the rates of freight is \$4c. per hundred weight, and in many cases the logs are brought from 20 to 50 miles by river driving, to the point of manufacture, so that it is quite useless and certainly not desirable to expect that lumber will again sell at any such figures as in the past. For my own part I don't think that either of the above reasons given for the slackness of the building trade are correct. The fact is building in this city has been overdone, and monied corporations have grown shy, and decline to invest, preferring to take their chances on farm property in Manitoba and elsewhere, al-

though there is no doubt that land in many parts of this city has doubled and trebled in value during the last two or three years, and a healthier state for the building trade of our fair city will not tarry long.

Now although the retail trade keeps dull, there is no glut on our market, all the yards having light stocks, and nothing is forced on the local trade, neither will there be, so long as the American market is open to dealers, and fair prices ruling, so that I do not anticipate that manufacturers will be left with anything on their hands at the close of the season that cannot be disposed of at fair prices.

QUOTATIONS, FROM YARDS.

Table listing lumber quotations from yards, including Mill cull boards, Shipping cull boards, Scantling and joist, and other types with their respective prices.

OTTAWA.

From our own Correspondent.

Aug. 8th.—As a result of the representations set forth in a petition from a large number of prominent lumbermen to the Minister of Public Works, that the tolls on the Carillon dam be rescinded, the latter has complied with the prayers of the petitioners, and issued an Order-in-Council to that effect. The following is the text of the order, which appeared in the last issue of the Canada Gazette:—

CERTIFIED Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 15th July, 1882.

On a memorandum dated 5th July, 1882, from the Minister of Public Works, submitting that certain rates of toll on saw logs, timber, &c., passing the Carillon Dam, on the Ottawa River, were established by Orders in Council of the 29th May, 1860, and 3rd May, 1882, and published in the Canada Gazette.

The representation is now made to his Department that the construction of the dam across the river, instead of facilitating, retards the descent of timber, from two to three days being now occupied in passing, whereas previously not more than two hours were required for the passage of rafts, and application has been made for the removal of the rafts in question.

That the dam was not built for the purpose of facilitating the descent of timber but to increase the supply of water to the Carillon and Grenville Canal.

The Minister, in view of the circumstances, recommends that the Order in Council in so far as provides for the collection of tolls at the Carillon Dam, be rescinded; the Acting Minister of Inland Revenue concurs in the foregoing recommendation and further advises a refund to the parties who have paid tolls during the present season of navigation.

The Committee submit the above recommendation for Your Excellency's approval.

JOHN J. MCGEE, Clerk, Privy Council.

I certify that the tolls heretofore collected on saw logs, timber, &c., passing the Carillon Dam, on the Ottawa River, under Orders in Council of 29th May, 1860, and 3rd May, 1882, have been this day removed by His Excellency the Governor General in Council.

JOHN J. MCGEE, Clerk, Privy Council.

Privy Council, 15th July, 1882. The construction of the dam complained of causes a lengthy and inconvenient outlay in the

navigation of logs and square timber to the Quebec market. Before the dam was built only about two hours were required for the passage of rafts; whereas at present from two to three days are required. The object of the dam is to increase the water supply on the Carillon and Grenville Canal. The Government's relieving lumbermen of the obnoxious toll will be considered somewhat of a recompense for the inconvenience existing.

THE SHIPPING TRADE.

An unusual dull spell exists at this port in the shipping trade. There is a large number of American boats lying at the docks awaiting loads, as many as forty being counted to-day. Rates have not materially changed. The cause of the dulness in the exportation of the sawn lumber is due in some degree to the enforcement of new regulations by the American Custom House authorities, which will no doubt affect the market to no small extent. Heretofore, it seems, the duty on Canadian board lumber was levied by the Americans, on the prescribed condition that the average measurement in thickness of the board was one inch. Canadian manufacturers, allowing for dressing, etc., have turned out their boards averaging one inch and a quarter. Taking the large amount that is exported annually, the amount of duty evaded by this quarter of an inch must have been considerable. Stringent orders have, however, recently been issued by the authorities to the Custom House officials on the other side to levy duty on Canadian lumber at its actual measurement.

The saw mills herabouts are running in good order, the water being at a favorable height; in fact better than any other period this year.

ST. JOHN, N. B.

From our own Correspondent.

Aug. 8th.—Our lumber market is still very dull, owing no doubt to the very high rates of freight that vessels are asking now for Atlantic business, and spruce deals have still farther declined in price, and are selling at about \$9 per M., being 50c. less than at the date of my last report.

Freights generally on this side of the Atlantic have advanced considerably during the past fortnight, and even the greatly increased rates paid at St. John have failed to draw a single vessel from any of the ports of call. Under these circumstances, and in view of the fact that vessels of a good class are in great demand for grain in the United States ports, and that ordinary vessels are much wanted at Quebec, where freights are considerably higher. It is most likely that there will be a still farther advance here.

Freights to-day may be quoted as firm at the following rates:—

Table listing shipping rates for Liverpool, Bristol Channel, and Ireland.

SHIPPING.

The following is a list of the vessels in port, with their tonnage, destinations and rates of freight:—

Table listing shipping vessels including Calliope, Suredloe, Missouri, Arabia, Little Stewart, Lepreaux, Gloire, Westmoreland, Harriet Campbell, Fidelity, and Belle Star.

Table comparing shipments in 1881 and 1882, listing deals, pine, birch, and other types.

Table listing vessels loading this date for 1881 and 1882, including ships and tonnage.

BOSTON.

Aug. 5.—The Journal of Commerce says:—There is a moderate and steady inquiry for pine and other soft woods, and prices keep along pretty even. There is considerable building going on and in contemplation for fall, and the outlook of trade is very good. Stocks are pretty well reduced at the yards, and more activity is to be looked for soon. The western primary points generally show quite firm prices. At

Chicago there continues the irregularity in prices that has prevailed for quite a time. Advice from Albany report an agreement among dealers to advance prices on August 1st at the rate of \$2 per M feet on shelving and above and \$1 per M feet on grades below. The southern pine market remains rather dull. Hard woods ke long pretty evenly."

ALBANY.

Table listing Albany market prices for Selects, Dressed, Shelving, Dressed, 1st, 2nd, Dressed Shippers, Dressed Box, and Sheathing, 1st quality, 2nd.

Quotations at the yards are as follows:—

Table listing lumber quotations at the yards for Albany, including Pine, Spruce, Hemlock, and other types with their respective prices.

BUFFALO.

Table listing Buffalo market prices for Uppers, Common, and Culls.

OSWEGO, N.Y.

Table listing Oswego market prices for Three uppers, Pickings, Pine, common, Common, Culls, Mill run lots, Sidelings, selected, 1 inch, 1 1/2 inch, Mill run, 1x10, 13 to 16 feet, selected, 25 00@35 00, Strips, 1 and 1 1/2 inch mill run, culls, 1x8 selected for clapboards, Shingles, XXX, 18 inch, pine, XXX, 18 inch, cedar, and Lath.

CHICAGO.

The Northwestern Lumberman says:—Values at Saginaw, Muskegon, Minneapolis and other points of production are fully maintained, with a little stronger feeling rather than otherwise prevailing. Purchasers who visit such places of supply find that the offerings are extremely limited, the general statement being that the stock to be cut has been pre-engaged. The limited number of cargoes daily offering on the market of this city is an evidence that the statement of scarcity of procurable lumber made by searchers after it is true at least of Lake Michigan ports. Dealers who, through what they considered wise motives, did not stock up earlier in the season, are now a little anxious to know where their supplies are coming from, provided a heavy fall trade should ensue. The pertinacity with which manufacturers have held on to prices throughout the season thus far must be taken as a new feature of the lumber business, which has an adequate cause, and after the season's fight is over it will be well for the trade at large to study out a means for meeting it in the future. Generally the demand regulates the supply; but this year we have witnessed the supply dictating to the demand, and laughing at opposition. Lately we see in this cargo market the pushing disposition of the supply, for no sooner did the trade

make a few slight advances in the list than the price of cargo lumber was crowded up a little, advancing on prices stuff from \$10.60 and \$11 to \$11.50 a thousand. The manufacturers seem to have a grip on the situation, and are determined to hold it.

CARGO QUOTATIONS.

Short dimension, green.....	\$11 00@11 25
Long dimension.....	11 75@15 00
Boards and strips, No. 2 stock.....	12 50@13 50
No. 1 stock.....	18 00@21 00
No. 1 log run, culls out.....	18 00@22 00
Standard shingles.....	2 00@ 2 05
"A".....	2 70@ 2 95
"Clear".....	3 20@ 3 25
Lath.....	2 00@ 2 25

Receipts and stock on hand of lumber and shingles, etc., for the week ending Aug. 3, as reported by the Lumberman's Exchange:—

RECEIPTS.

1892.....	Lumber. 60,337,000	Shingles. 19,278,000
1891.....	54,958,000	25,225,000

FROM JANUARY 1 TO AUG. 3 INCLUSIVE.

RECEIPTS.

1892.....	Lumber. 1,015,052,000	Shingles. 435,309,000
1891.....	893,633,000	393,259,000

Inc.....	131,369,000	42,050,000
----------	-------------	------------

LAKE RECEIPTS TO AUG. 3.

1892.....	867,047,000	402,734,000
-----------	-------------	-------------

STOCK ON HAND JULY 1.

1892.....	443,039,546	352,391,329	347,346,410
Shingles.....	223,809,500	142,726,000	144,005,000
Lath.....	29,691,162	30,764,312	29,733,645
Pickets.....	1,902,187	3,170,238	795,360
Cedar posts.....	154,143	120,559	111,656

TONAWANDA.

CARGO LOTS—SAGINAW INSPECTION.

Three uppers.....	\$43 00@40 00
Common.....	18 00@24 00
Culls.....	12 00@11 00

LONDON.

The *Timber Trades Journal* of July 22nd says: A year ago the deliveries from the docks were excessive, and all were surprised that they kept at such a high rate for so long; the export to the colonies, assisted by the country demand, added to fair average demand on the spot, brought them up to figures we are not likely to see surpassed this year, unless something unexpected crops up to give them a stimulus. The present deliveries are high enough, we expect, for the dock company, who are not so anxious about their keeping up, though doubtless glad to record a great trade doing, but it is only natural they should like to see the arrivals plentiful as well.

Just now the Surrey Commercial Dock Company are pretty busy, and in Canada Dock seven large sailing ships and one steamer discharging together gave an appearance of greater activity in that quarter than has been observable for some time. The Quebec liners form a prominent feature in the docks generally at this period, and though hardly so many now as there were at this time last year, the rest of them cannot be far off, and probably the next fortnight will help to swell the tonnage considerably. Of the Colonial goods a considerable proportion, we understand, has gone overside into craft, but nearly all of the cargoes arriving from the Baltic ports have been landed.

TYNE.

The *Timber Trades Journal* of July 22nd says: The arrival of wood goods during the last fourteen days has been upon a fairly large scale, and covers almost every kind of timber. A large fleet of Baltic ships have come to hand, and are now delivering their cargoes at various parts of the river, and as there are also several cargoes of timber from Pensacola, &c., the river presents at the moment a very animated appearance. Several steamers have arrived in the interval with the usual assortment of wood goods for cargo from Gothenburg and Norway, while one steamer entirely loaded with battens is now delivering at Newcastle Quay from Norway. Several yellow pine ships are almost daily expected from Quebec, and, as these goods are very scarce in the river at present, their arrival will be hailed with welcome by the importers.

LIVERPOOL.

The *Timber Trades Journal*, of July 22nd, says:—So far as spruce deals are concerned, there is a firmer tone in the market, although this has not yet developed itself sufficiently to make quotations higher, but there is evidently

a disposition to store rather than sell at prices recently obtained, and several cargoes are being stored, amongst them being one large cargo per steamer of about 1,200 standards. The details of what has recently been done in these goods by auction will be seen below, but higher prices are anticipated for the next auction.

At the auction sale on the 14th inst., of which a short summary was telegraphed, prices were maintained at the previous rates obtained for spruce deals, as will be seen from the following details:—

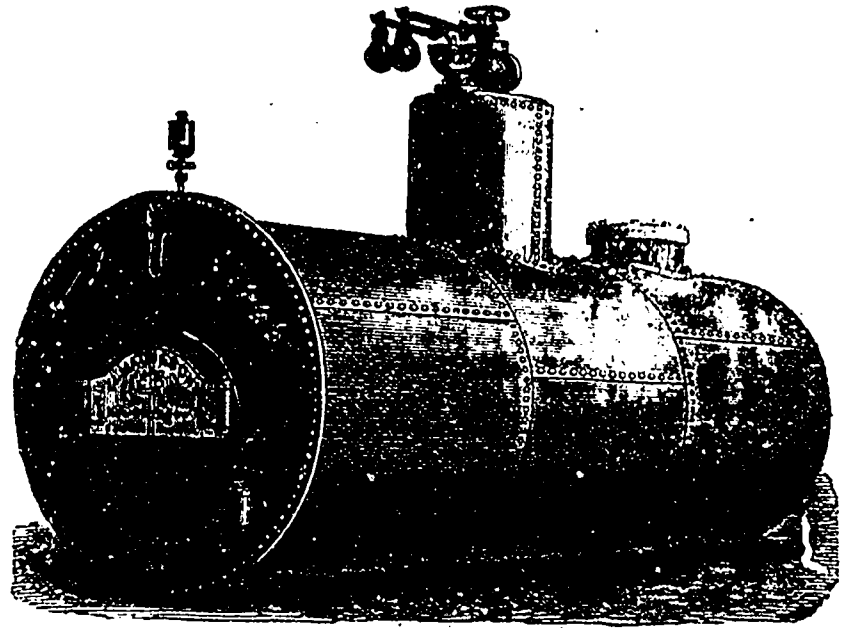
Spruce deals, St. John, N.B.,					
16 to 24 ft. 3x11	7 10	0 to 7 12	6		
12 " 15 " 3x11	7 10	0			
9 " 11 " 3x11	7 2	0			
16 " 24 " 3x9	7 5	0			
12 " 15 " 3x9	7 5	0			
9 " 11 " 3x9	7 2	0			
16 " 27 " 3x7	7 0	0			
12 " 15 " 3x7	7 0	0			
9 " 11 " 3x7	7 0	0			
9 " 23 " 2 1/2 x 7	7 10	0			
9 ft. & up. 3x12 & up.	7 7	0			
16 to 24 ft. 3x8	7 0	0			
9 " 15 " 3x8	6 17	6 to 7 0	0		
9 ft. & up. 3x6	7 2	6			
Scantling	6 5	0			
Deal ends	6 0	0 to 6 7	6		
Do. St. Margaret's Bay, N.S.—					
16 to 26 ft. 3x11	7 10	0			
12 " 15 " 3x11	7 7	6 to 7 10	0		
9 " 11 " 3x11	7 7	6 " 7 10	0		
12 " 23 " 3x9	7 5	0			
9 " 11 " 3x9	7 0	0 to 7 2	6		
16 " 29 " 3x7	6 17	6			
12 " 15 " 3x7	6 17	6 to 7 0	0		
9 " 11 " 3x7	6 15	0			
9 " 29 " 2 1/2 x 7	7 7	6			
9 " 25 " 3x10	7 7	6			
9 " 29 " 3x8	0 17	6			
9 " 29 " 3x6	7 2	6 " 7 5	0		
9 " 28 " 3x6	7 2	6			
Scantling	6 15	0			
Deal ends	6 0	0			
11 to 20 ft. 4x12 to 16	9 0	0			
10 " 23 " 4x11	8 10	0			
9 " 25 " 4x10	8 7	6			
9 " 27 " 4x9	8 5	0			
9 " 27 " 4x8	8 12	6 to 8 15	0		
9 " 27 " 4x7	7 17	6 " 8 0	0		
Planed spruce boards—					
10 " 24 " 1x7 & 8	8 0	0			
10 " 25 " 1x6	7 17	0			
10 " 25 " 1x5	7 12	0			
10 " 24 " 1x4	7 2	6			
Unplaned spruce boards—					
All sizes	6 7	0			
Birch timber, St. John, N.B.—					
22 to 24 in. deep	30d	per ft.			
20 1/2 " 21 1/2 "	25d				
20 " "	24d				
19 1/2 " "	21d to 21 1/2d				
19 " "	20d " 20 1/2d				
18 " 18 1/2 "	19d " 19 1/2d				
17 " 17 1/2 "	17 1/2d " 18d				
16 " 16 1/2 "	16d " 17 1/2d				
15 " 15 1/2 "	15d " 16 1/2d				
14 " 14 1/2 "	14d " 15d				
13 " 13 1/2 "	14d				
10 1/2 " 13 "	13 1/2d				
Maple 13 " 17 "	16d				
Elm 20 " "	15d				
Ash 16 " "	25d				

GLASGOW.

The *Timber Trades Journal* of July 22 says:—Imports of wood goods to Clyde ports during the week have amounted to about 10,000 loads, and comprise three cargoes of pitch pine, and the remainder chiefly Quebec timber and deals. At Grangemouth the arrivals have been to the extent of about 3,500 loads.

SWEDEN.

The Stockholm correspondent of the *Timber Trades Journal* says:—Shipping operations from the timber ports of Norrland are now being vigorously prosecuted on a large scale, and with favourable weather on the whole. From the extent of recent sales, and other contingent circumstances, I am inclined to believe that the present season's export will be the largest of sawn and planed wood that Sweden has yet despatched. I should not be surprised were the present season's export of these goods to reach nearly 700,000 Petersburg standards, a quantity that would have been considered fabulous twenty years ago. It is not to be wondered at that, under the pressure of this immense consumption, the very oldest firms in the trade in the north of Sweden, who ten or fifteen years ago were convinced that the forests they were then working would serve them longer than they required to look forward to, should now begin to reckon up more carefully the resources at their disposal, and to find, to their surprise, that they will soon have to enter the open market for logs, the same as many of their competitors have to do. This, I am informed, has been the case this season with a particularly prominent firm in the Lower-Gulf, whose saw-mill manager could not persuade the partners that they were likely to require logs from other than their own woods until the present year. Negotiations are still being continued by



ACADIA FOUNDRY
 J. MATHESON & CO. ENGINEERS & BOILER MAKERS.
 NEW GLASGOW, N.S.

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.

prominent firms in the Gedge district, as well as by Sundswall people, for the acquisition or lease of large tracts of growing forest in their respective districts. Prices in the latter district are on the rise, and may be expected to still further increase from the competition of the many mills in the Sundswall district poorly provided with reserves of forest property. Forest fires, mentioned in my last as causing considerable loss in Medelpad and Jemtland, have now been subdued, thanks to energetic action on the part of their owners, assisted by a copious rainfall.

The Red Lake Pine Lands.

The *Northwestern Lumberman* says:—There is likely to be a political fight in Minnesota, of no small proportions, over the Washburn bill to provide for the sale of the Red lake lands. The Grand Forks *Plaindealer* is growing hot on the question, and wants congressmen elected who will defeat the bill. It says that \$40,000,000 is involved in the bill, and every effort should be put forth to prevent that bonanza falling into the hands of the Minneapolis ring. The *Plaindealer* further says that there are thousands of Minnesota men in the Red river valley who are willing to pay from \$10 to \$16 an acre for the Red lake pine lands, while the ring back of the Washburn bill is trying to get it on the "old swindling" auction plan for \$2.50 an acre. While the Grand Forks interest is trying to defeat the Washburn bill through political measures, it had better keep right on with the

proposed scheme of forming a syndicate for the purpose of acquiring a large share of the pine lands in dispute. Grand Forks has a golden opportunity that should not be neglected.

LEATHER BELTING.

Chipman, Renand & Co.
 MANUFACTURERS OF
 LEATHER BELTING,
 FIRE ENGINE HOSE
 LACE LEATHER, &c.

124 & 126 Queen St.

MONTREAL.

THE GREAT MICHIGAN FIRE.

A correspondent of the *Fireman's Journal*, who has lately gone over the territory devastated by the great fire in the forests of Michigan last fall, says his observations are conclusive that phenomena aside from the ordinary conditions of combustion were developed. In the first place the fire created at least two veritable storm centers which had the essential features of storms, and especially the spiral winds. The evidence is confirmatory of the belief that this storm center, after it became fully developed, consisted of a heated body of air or gas in a state of combustion, which was constantly fed by the smoke and vapor driven to the center by the whirling winds and gases generated in the combustion of the pines and other resinous woods. This body of air, or burning gas, if it may be so called, by its heat acquired an accumulative force, but by the rapid forward motion of the fire was sucked forward and devoured, actually preceding the fire proper. It is evident that this body was of intense heat, possibly as great as 400° Fahr., at which point oxygen and carbon unite. That such a body of luminous vapor existed, detached from the fire, is asserted by many who saw it from a distance, and by those who were under it, but who escaped from the fact that it passed above their places.

The idea is further sustained by the fact that the fire jumped whole patches of inflammable slashings, and alighted beyond, lifting and falling in its forward motion like a balloon touching the earth. Fences in the center of broad fields burst into a blaze as if by explosion, and others nearer the fire escaped. A man in fighting the fire took off his trousers, fearing they would catch fire and burn him up, and left them in a furrow in the middle of a field remote from any combustible material. When he went to get them he found them burned, and six quarters dollars that were in the pocket melted together. A set of spoons were served the same way at another place.

Mrs. Lock and her children were burned to ashes, noting but their bones remaining in the middle of the road, one hundred feet from any heavy timber. Green timber was dried and burned, and perhaps the most conclusive evidence was the apparently spontaneous appearance of fire in stumps and fences where no sparks were falling. These blazes appeared of white light and indicated a chemical union of carbon and oxygen. Another general feature is the fact that the fire appeared to move forward in parallel lines of varying width, and that in these lines everything was burned and frequently to ashes. At the edge of the track a fence would be burned square off, just as though it had been cut or sawed perpendicularly; a house would be taken and the barn left; a wagon and a fanning mill were within five feet of each other, and the wagon was burned to ashes and the fanning mill not charred. It would be impossible under ordinary circumstances, to burn a wagon without piling combustible material over it, but of this nothing but the iron was left.

Finally, the storm and fire disappeared simultaneously; that is to say the fire was dependent upon the storm, or secondary to it—that it was prevented from lingering in the track or from burning sideways. In from two to three hours the fire was practically out where it had passed, indicating that the prime cause of the rapid combustion was in the storm which had passed, and which passing, perhaps, carried in its wake a condition of atmosphere opposed to combustion. This hypothesis explains pretty much all the phenomena except the balls of fire, which exactly correspond with what is known as "ball lightning," but which is a form of electricity wholly disputed by some, but recognized by Professor Loewna.

The statements of Ballentine and Kabecko are confirmatory of this ball lightning idea, and contradictory of the idea that these lights arose from the intense heat, or they themselves could not have survived it. Other statements are to the effect that this ball of fire fell on the ground and exploded, running in all directions. This is explained by some who were not present, who say that it was but the resinous cones of the pines ignited, carried by the wind, falling, scattering the burning pitch, about them; but it should be remembered that those people who

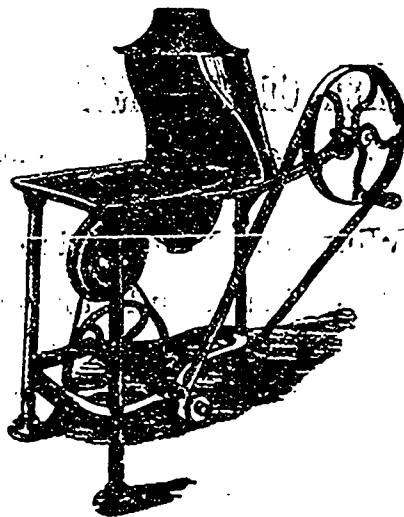
saw this phenomenon are men who have lived amid forest fires all their lives and have seen all the ordinary phenomena, and are not of a class exactly visionary or imaginative. It is fair to assume the possibility of electrical phenomena incidental to this fire storm, both from the fact that it was a great commotion in the elements and because it differed from a storm only in the facts of the absence of rain and presence of fire. —*Scientific American.*

Botanic Gardens.

In an article on the approaching Forestry Congress in Montreal the *Gazette* says:—There is one branch of the subject which, we think, has never had the attention in the Dominion which is due it—we mean that of botanic gardens. Some of the colonies have institutions for the study of forestry, with a museum and botanic garden attached, which have been productive of much good. With us but little has yet been attempted in this direction, though Halifax has set a good example. Why should we not have at Montreal as a part of our beautiful park, a garden, representative of the various forest wealth of Canada? We would respectfully suggest that some of the members of the Congress take up this proposition and set it, in all its details, before the authorities and the public. A garden of that kind would not only do much for the furtherance of the study of forest botany, but would be a feature of our city, most attractive both to residents and strangers.

The Hon. M. C. George said in Congress last April that the coast range forests of Oregon and Washington territory embrace an area of 17,000,000 acres. This, he alleged, is ten to twenty times as many acres as are in the best timbered lands of Wisconsin, Michigan or Pennsylvania. The logs of the sea that creep up the valleys are mainly the cause of the astonishing growth of the coast range forests.

PORTABLE FORGES



Send for Circulars and Prices to
H. R. IVES & Co., Montreal

MACK'S MAGNETIC MEDICINE.



Is a Sure, Prompt and Effectual Remedy for Nervousness in ALL its stages, Weak Memory, Loss of Brain Power, Sexual Prostration, Night Sweats, Supermenstruation, Seminal Weakness, and General Loss of Power. It repairs Nervous Waste, Rejuvenates the Jaded Intellect, Strengthens the Enfeebled Brain and Restores Surprising Tone and Vigor to the Exhausted Generative Organs. The experience of thousands proves it an INCALCULABLE REMEDY. The medicine is pleasant to the taste, and each box contains sufficient for two weeks' medication, and is the cheapest and best. Full particulars in our pamphlet, which we desire to mail free to any address.

Mack's Magnetic Medicine is sold by Druggists at 50 cts. per box, or \$2 for \$5, or will be mailed free of postage, on receipt of the money, by addressing **MACK'S MAGNETIC MEDICINE CO., Windsor, Ont.** Sold by all Druggists in Canada. 123

ROBERT W. LOWE,
AUCTIONEER AND COMMISSION MERCHANT

81 SANDS BUILDING, PRINCE WILLIAM STREET.

Cash advanced on Goods put in for sale. No Storage charged. All kinds of Merchandise Bought and Sold. New and Second-hand Furniture always on hand. Agent for HAZELHURST & CO'S WINTHROP COOKING RANGES, WATERLOO WOOD STOVES, FRANKLIN, &c., &c., &c.

1117

SAINT JOHN, NEW BRUNSWICK,

PARKER & EVANS

SOLE PROPRIETORS OF THE

FAMOUS INTERNATIONAL BOILER FLUID COMPOUND.

Patented 5th March, 1877.

This Compound will save its Cost many times in one year by saving fuel. It eradicates scale, and when the Boiler is once Clean a very small quantity keeps it Clean and Free from all Incrustation. It is perfectly harmless to Iron, and emits a clear pure Steam. In ordering, mention the CANADA LUMBERMAN.

1119

504 St. Paul Street, MONTREAL.

MILL SUPPLIES.

Extra Stretched and Patent Smooth Surface

RUBBER BELTING—in Stock, 2, 3, 4, 5, and 6 Plies.

HOYT'S CELEBRATED LEATHER BELTING.

COTTON BELTING, for Flour Mills. &c., Superior Quality.

DISSTON'S CELEBRATED MILL SAWS.

Steam Packing of all kinds, Rubber and Linen Hose, Silk Bolting Cloth, Emery Wheels, Lacing Leather (Paco's Genuine), Lard, Seal, Cyander, Spindle, West Virginia and Wool Oils. Our Stock includes Mill Supplies and Rubber Goods of all kinds. Quotations furnished for any part of Canada.

1121

ESTEY, ALLWOOD & CO., SAINT JOHN, NEW BRUNSWICK.

MACHINE OILS, ETC.

MCCOLL BROS. & Co.

TORONTO,

MANUFACTURERS and WHOLESALE DEALERS IN

Machine and Illuminating Oils

Four (4) Medals and Three (3) Diplomas awarded to them in 1881, by the Leading Exhibitions of the Dominion.

SEND FOR PRICES, ETC.

512

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 & IERWIN, 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

1717

ROBERTSON'S LIGHTNING CANT-DOG

STEEL RING,
The Lightest, Cheapest and Most Durable Cant-Dog in the World.

PETER ROBERTSON,
Chaudiere - - - Ottawa.

AMERICAN HEAVY Oak Tanned Leather Belting

Rubber Belting, Rubber Packing,
Rubber Hose, Linen Hose,
And Cotton Hose.

A Full and Complete Stock always on hand.
Write for Prices and Discounts.

T. McILROY, JR.

WAREHOUSE—10 & 12 King Street East,

P.O. BOX 556.

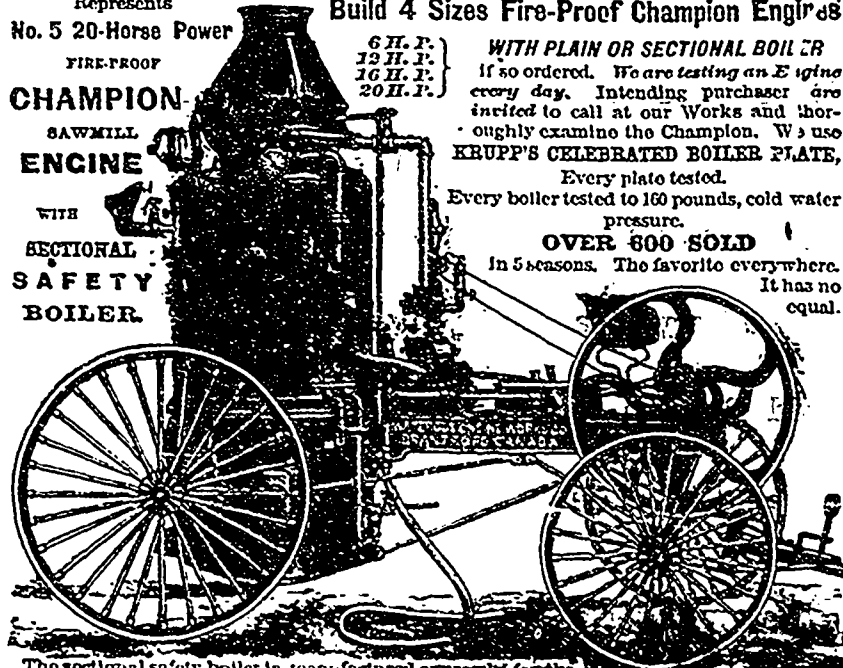
TORONTO.

Represents
No. 5 20-Horse Power
FIRE-PROOF
CHAMPION
SAWMILL
ENGINE
WITH
SECTIONAL
SAFETY
BOILER.

Build 4 Sizes Fire-Proof Champion Engines
6 H. P.
12 H. P.
16 H. P.
20 H. P.

WITH PLAIN OR SECTIONAL BOILER
If so ordered. We are testing an Engine every day. Intending purchaser are invited to call at our Works and thoroughly examine the Champion. We use KRUPP'S CELEBRATED BOILER PLATE, Every plate tested. Every boiler tested to 160 pounds, cold water pressure.

OVER 800 SOLD
In 5 seasons. The favorite everywhere. It has no equal.



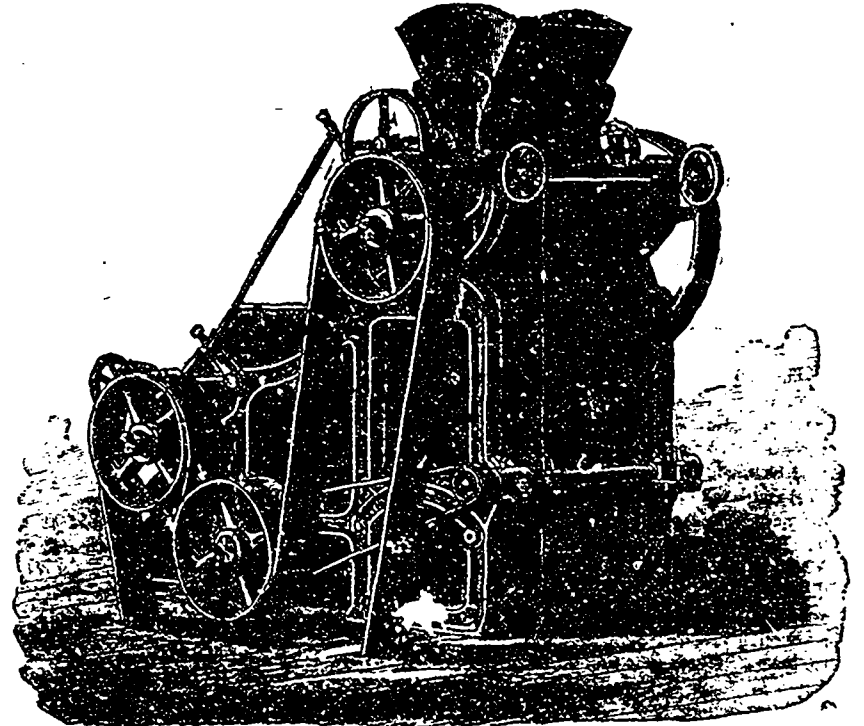
The sectional safety boiler is manufactured expressly for the "North West" trade. This boiler is so arranged that it is readily taken apart in sections enabling purchasers to clean thoroughly every part of it and prevent burning out. We know from experience this is absolutely necessary with the alkaline waters of the great Western prairies. Largely used by the Pacific Railway Company and all the large Colonization and Rancho Companies.

ADDRESS WATEROUS ENGINE WORKS CO., BRANTFORD, CANADA.
Send for New Circular.

THE LATEST

For Flour Mills of 50 to 125 Barrels Capacity.

GRAY'S PATENT Gradual Reduction Machine



The above engraving shows the driving side of Machine.

This Machine is by far the Best and Simplest Combined ROLLER and SEPARATING Machine made. It has two pairs of Corrugated Rolls and two Reciprocating Sieves.

The Grain passing down from the hopper and over the feed roll, passes through the first or upper pair of rolls and on to the first or upper sieve, where a complete separation of the product is made, the flour and middlings passing through the sieve and out from the Machine, and the large unreduced portion passing over the tail of the sieve and through the second or lower pair of rolls, when a second separation is made. Each Machine makes two reductions and two separations.

The Machine is perfectly adjustable, the same devices being used as on the simple roller machines. The same feed gate and roll is used, and the same adjustable and self-oiling boxes. The Machine is driven by a single belt. Both pairs of rolls can be spread simultaneously when feed is stopped. The Machine is NOISELESS and DUSTLESS.

These Machines are designed for use where economy in space is desirable, as they save the room required by two scalping rolls and an elevator, thus affording to smaller mills the great advantages of the roller system at a comparatively slight cost. Send for particulars.

MANUFACTURED EXCLUSIVELY BY

MILLER BROS. & MITCHELL,

Nos. 110, 112, 114 and 116 KING STREET

MONTREAL.

Sole Licensees for Dominion for Gray's Patent Noiseless Roller Mills and Gradual Reduction Machines.

RAFTS ARRIVED.

The Quebec Chronicle gives the following list of rafts, &c., arrived:—

July 29—R. & G. Strickland, white pine, R. R. Dobell & Co.'s cove.

D. D. Calvin & Co., oak, pine, &c., sundry coves.

July 31—Sundry lots staves, Union Cove. D. C. Thomson & Co., staves, Bridgewater Cove.

O. Latour, white and red pine, Cap Rouge. Price Bros. & Co., deals, Town Wharf.

Wm. Mackay (2), white and red pine, Hadlow Cove.

Aug. 2—D. D. Calvin & Co., (Charleson Lot), staves, Union Cove.

C. & W. Mohr, white pine, &c., St. Lawrence Docks.

C. & W. Mohr, spruce deals, St. Lawrence Docks.

Ed. Dorency, white pine, &c., Cap Rouge. Costello Bros., white pine, &c., Cap Rouge.

B. Caldwell & Son, white and red pine, St. Lawrence Docks.

Aug. 3—Sereney & Wilson, white and red pine, St. Lawrence Docks.

David Moore, white and red pine, Cap Rouge.

Costello Bros., spars, Cap Rouge.

Red Lake Pine.

The Northwestern Lumberman says:—The pine forest region around Red Lake, north-western Minnesota, begins to attract much attention. Aside from the political capital that will be made out of it in connection with the Washburn bill for bringing it into market, there are natural reasons why it will be difficult for T. B. Walker and his ring, or any other Minneapolis interest, to wholly monopolize it. The Red Lake river, which connects Red Lake with the Red river of the north, is pronounced an excellent log driving stream, and nature seems to have designed that the larger share of the forest products of the region should go westward to supply the vast prairie country of northern Dakota.

Young's Point, Ont.

SHINGLE MILL.—The shingle mill which is run by W. J. Kearns is doing an immense business, and owing to the great demand for shingles Mr. Chalmers intends to sell the present machine, which only cuts 11,000 shingles per day, and purchase a new one to cut from 16,000 to 20,000 per day, which will pay all concerned, and the supply will be kept up to the demand.

Saw Log Drives.—Mr. Alex. Wynn, in the employ of Mr. Geo. Chalmers, passed through here Monday, July 31, with a drive of 25,000 saw logs, bound for the Lakosfield saw mills, to get cut into merchant lumber for shipping to the other side. Mr. Hilliard has also a large drive consisting of about 40,000 pieces, bound for Blythe mills, which were run over here on August 2nd, Mr. Foster, foreman. Mr. Irwin, of Naasau Mills, has also a large drive of saw logs in the rear, and more drives to follow.

Turtle Mountains Timber.

The Northwestern Lumberman says:—Turtle mountains lie across the line between Dakota and the Dominion of Canada. On the south there is a belt of excellent agricultural land, mostly prairie. On the lower slopes of the mountains is a fringe of timber, ranging in a zig-zag course from the prairie land to the mountain tops. The timber observed by a tourist was oak, ash, elm, birch and poplar, the trees being sturdy, and the forest free of underbrush. Some pine is said to abound.

The Glasgow correspondent of the *Timber Trades Journal*, of July 22nd, says the imports at Glasgow have been chiefly Quebec deals per steam liners, large quantities being at present on the wharf at Yorkhill in course of removal to the yards for being stacked.

The Rev. Charles E. Piper, formerly of Pittsfield, N. H., but now of Wakefield, R. I., writes:—"I have used Baxter's Mandrake Bitters in my family for over two years, and as a result have not called a physician in the whole time. My wife had been an invalid for two years, but these bitters have cured her."

ADAM MCKAY,

MANUFACTURER OF

Steam Engines and Boilers,

AND ALL KINDS OF MACHINERY.

Locomotives, Stationary and Marine Engines and Boilers, Girders, Heaters, Radiators, and all kinds of Steam and Brass Fittings and Sheet Iron Work; and dealer in all classes of Railway, Steamboat and MILL SUPPLIES.

144 Upper Water Street, HALIFAX, N.S.



Farmers and Mechanics.

Provide yourselves with a bottle of *PAIN-KILLER* at this season of the year, when summer complaints are so prevalent; it is a prompt, safe, and sure cure. It may save you days of sickness, and you will find it is more valuable than gold. Be sure you buy the genuine *PERRY DAVIS' PAIN-KILLER*, and take no other mixture.

Cobourg, Ont., March 3, 1880.

I have been selling Perry Davis' Pain-Killer for the past six years, and have much pleasure in stating that its sale in that time has been larger than any other patent medicine that I have on my shelves, and in those years I have never heard a customer say aught but words of the highest praise in its favor. It is an article that seems to have combined in it all that goes to make a first-class family medicine, and as long as I have a house and store, Perry Davis Pain-Killer will be found in both.

Yours, &c.,

J. E. KENNEDY

Beware of Counterfeits and Imitations.

Price 20c., 25c., and 50c. per bottle.

LUMBERMEN'S STATIONERY.

We will supply anything in the line of **BLANKS** or **STATIONERY**, for Lumber Shanties and Offices at City Prices.

All **PRINTING** done in the Highest Style of the Art, and at Lowest Living Prices.

BOOK-BINDING of every Description got up in a very Neat and Superior manner.

Account Books Ruled and Bound to any desired Pattern.

For Schedule of Prices address, describing the kind and quality of work desired,

TOKER & Co.,

"THE CANADA LUMBERMAN,"

PETERBOROUGH, ONTARIO.

HART EMERY WHEEL COMPANY, Limited

HAMILTON, CANADA.

GILBERT HART, Detroit,
President.

JAMES T. BARNARD, Hamilton,
Secretary-Treasurer.

SAMUEL BRIGGS, Hamilton,
Superintendent.

MANUFACTURERS OF THE CELEBRATED

DETROIT

EMERY and CORUNDUM WHEELS

These Wheels are

Wire Strengthened



And Specially Adapted

For Saw Gumming

Neither Animal nor Vegetable Glue or Gum being used in their composition, they are NOT LIABLE TO HEAT, and give out no Odors, while

They Surpass All Other Wheels for Free Cutting and Durability.

We refer to the following well known Saw Manufacturers for Opinions as to the Quality of our Wheels :

Messrs. SHURLEY & DIETRICH,
GALT.

Messrs. R. H. SMITH & CO.,
ST. CATHERINES.

JAMES ROBERTSON, ESQ.,
MONTREAL.

Messrs. JAMES ROBERTSON & CO.,
TORONTO.

WE ALSO REFER TO

WILLIAM HAMILTON, ESQ.,
PETERBOROUGH,
Manufacturer of the Covell Saw Sharpeners.

Messrs. H. B. RATHBUN & SON,
DESERONTO,
Lumber Merchants.

EMERY WHEELS FOR SAW GUMMING!



Solid Emery Wheels are now almost in universal use for the purpose of gulleting and gumming saws. Statistics show from 25,000 to 30,000 saw-mills in the United States. Many of these run only a single saw each. A one-saw mill would use one or two wheels a year, costing \$3 to \$4 each, and when such a mill order single Emery Wheels from the factory, the express charges often equal the cost of the wheel. There was a time when the quality of Emery Wheels was so uncertain, and the demand so hectic, that storekeepers could not afford to carry them in stock. Now, however, Saw Gumming Wheels have become as staple an article as Files, and every dealer in saws, Hardware and Mill Supplies can afford to carry a few dozen standard sizes in stock. Large dealers order stocks of \$500 to \$700 worth at a time. Saw Gumming Wheels are used with the edge (or face) square, round or beveled. Probably seven-eighths of all in use are beveled.

The principal sizes are:

8x4	} 2 in. hole.	10x4	} 2 in. hole.	12x4	} Holes 2, 3 and 1 inch.
18x4		10x6		12x6	
8x6		10x8		12x8	
		10x8	12x8		

Probably more wheels 12x4, 12x6, and 12x8 are used than all the other sizes together. Saw Gumming Wheels are used, however, of all sizes up to 24x12. The most frequent complaint is that Emery Wheels harden the saw so that a file won't touch it. The answer is that you don't want a file to touch it. An expert workman will shape and sharpen the teeth with an Emery Wheel, leaving the teeth case-hardened, in which condition the saw will cut about 33 per cent. more lumber than a soft saw will. Those who want to use the file, however, have only to touch the saw lightly a second time (after being all over it once), and this second touch will cut through the case-hardened scale.

A QUESTION OF QUALITY.

Thirteen years of experience as makers of, dealers in, and actual users of Emery Wheels, have led us to a decided opinion as to what quality is the best. We prefer for almost every use an "Extra Soft" wheel like the "Pocono." We believe that money lost through the rapid wear of the wheel is more than made up by the money saved on wages. As we cannot get every one to adopt our views, we make several qualities, so as to meet their views. We say to those who think they can only be satisfied with some other make of wheels (not Tanite), that we can furnish quantities to match any and every other make. If you have got used to some special quality of wheel, let us know what it is, and we can send you a Tanite Wheel of similar quality. Our regular classification of Saw Gumming Wheels is as follows:

CLASS 2. MEDIUM-HARD. This wheel is the standard Saw Gumming Wheel all over the world. Probably seven-eighths of all the Saw Gumming Wheels used are Class 2. It cuts fast and keeps its shape well. Some think it too hard, some too soft. We prefer the "Pocono."

CLASS 3. MEDIUM-SOFT.—The same as to coarseness and fineness as "Class 2," but a softer, and therefore freer cutting wheel.

CLASS "POCONO." EXTRA-SOFT.—This wheel we prefer to all others. It is both finer in grain and softer than either of the above. As a Saw Gumming Wheel, Class "Pocono" is specially suited to those practical and experienced sawyers who know how to grind with a light touch, and who want a free cutting wheel that will not create much heat.

Illustrated Circulars and Catalogue, showing Cuts of Saw Gumming Machines, and Shapes, Sizes and Prices of Wheels, sent free on application.

Tanite Co. Stroudsburg, Monroe Co. Pennsylvania.
CANADIAN TRADE SPECIALLY SOLICITED.

MILL REFUSE TURNED INTO MONEY

BY THE USE OF

Brown's Patent Shaft and Shingle Mill,

for making Shingles, Barrel Heading, Box Stuff, &c., from spalls, board trimmings, slabs, and mill waste generally, turning material otherwise worthless into valuable products. I have made arrangements with the patentee to manufacture and sell for the Dominion, have made and sold a good number of these machines which are giving excellent satisfaction and can give the best of references.

Our Steam Feed for Circular Mills,

is now the Best Feed where steam is the motive power. It is easily operated, is simple, rapid, and seems never likely to wear out. Sixteen 16 ft. bonns, or eighteen 10 ft. boards, have been cut by it in one minute. It is the established feed for steam mills, I make a specialty of its manufacture; will guarantee satisfaction.

Our Patent Twin or Span Circular,

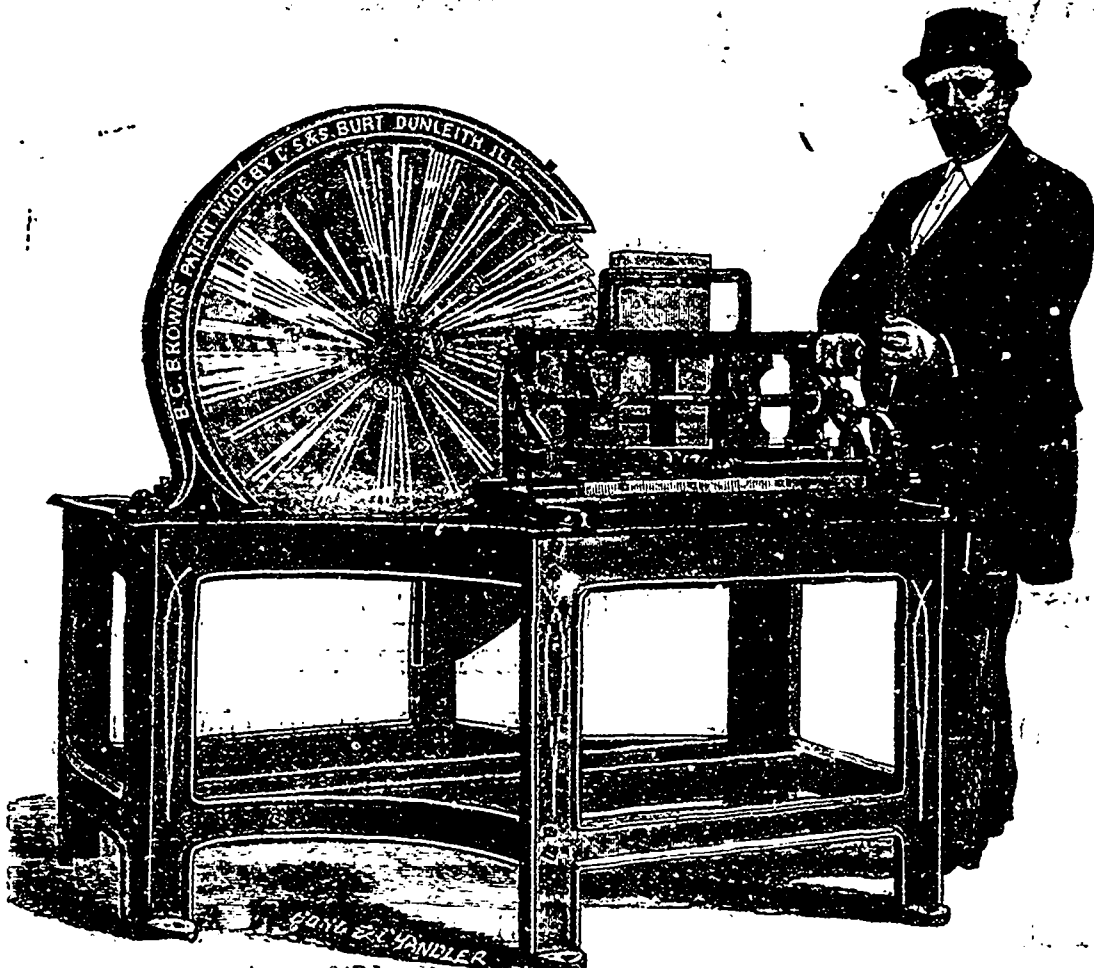
with Steam Feed for Steam Mills, and Rope or Rack Feed for Water Mills is fast coming into general use. It is used in place of Gang Slabber in our best Canadian Mills. One of our Span Circulars which will slab logs 25 inches in diameter down to 7 and 8 inch stocks, will do the work of three slabbers, with an immense reduction in first cost, running expenses and labour. Two of these machines can be seen at work in Messrs. Gilmour & Co.'s Mill, Trenton, and Georgian Bay Lumber Co's Mill, Waukegan and Port Severn. I am also introducing a new style of Mill Engine, neat, substantial and simple, with Corliss Frame and Balanced Valve, all carefully designed and honestly made.

Covel's Automatic Saw Sharpener,

is now well known and highly appreciated; when placed at work in the mill, slabs out its own edge, I keep it constantly on hand, ready for immediate shipment.

Our Standard Circular & Gang Mills & Machinery,

are too well known to need any reference, any further than to say that I spare no pains or expense to have my work all first-class and give satisfaction, and I make Heavy Saw Mill Machinery a specialty, any party wanting a First-class Mill will find it to their advantage to give me a call.



WILLIAM HAMILTON, Peterborough Foundry and Machine Works, PETERBOROUGH, Ont.