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VOL. 1.

PETERBOROUGH, ONT., JUNE 15, 1881.

NO. 16.

**FORESTRY AND ABOICULTURE.**

BEING THE FOURTH CHAPTER OF THE REPORT OF THE ONTARIO AGRICULTURAL COMMISSION.

**Planting Waste Lands.**

For planting on waste lands, either inaccessible to cultivation or of a soil too poor to repay cultivation, the European larch has already been mentioned. Mr. Leslie, referring to this tree, says:—

"It is suited to our climate, being perfectly hardy, and very easy to transplant in the spring. It requires early transplanting, though later in the season it will thrive if transplanted, provided the roots are kept moist. As a rule, however, it should be planted as soon as the frost is out of the ground, or as late in the fall as possible before the permanent freezing of the ground. It can be imported at about the same price as the Norway spruce.

"I would not recommend planting them after they attain a height of more than eighteen inches or two feet; they are a little impatient of being moved after that time. There is not a large supply of them kept in this country; we keep a fair supply ourselves. If very large quantities were required, as for instance, if railway companies should go into their cultivation, they would have to be imported to meet the demand.

"The firm of Douglas & Co., Waukegon, in the States, grow them by the million. The prices in the old country, however, are less than those in the States, and in either case there is a duty on the trees when imported here."

For belts, Mr. Leslie would plant European larches three or four deep.

"Hitherto," he says, "the tree has been used more for shelter than anything else. I have no doubt of its success under good management. In our own place we have some trees thirty feet in height."

**Cost of Tree Planting.**

With regard to the cost of trees purchased from the nurserymen, Mr. Beadle says:—

"As to the cost per acre of such forest planting, young black walnut trees can be bought of the nurserymen who have been growing them, at about \$12.50 or \$12 per hundred for trees about four feet high. Chestnuts can be bought at about the same figure. I know of no plantations where the hard maple could be bought at any figure. Nurserymen have confined themselves mostly to the horse chestnut and mountain ash for tree planting."

Mr. Leslie says:—

"The American elm, the Scottish elm, and the English ash are also very desirable. Those that I have named I regard as the very choicest. In large numbers I imagine these trees could be got for about twenty-five cents apiece when about eight feet in height, which I regard as the proper size for planting. They would be trees

raised in this country, but they would have to be nursery grown, or transplanted from the woods."

Of the cost of Norway spruce Mr. Beadle says:—

"It is grown by nurserymen both in Europe and America by millions. They can be bought from one to two feet high for \$10 to \$15 a hundred, and if taken younger can be bought for still less."

Mr. Leslie, on the same point, says:—

"We sell these imported trees at from \$30 to \$40 a thousand—three or four cents apiece—that is to say the 15 inch ones. The 18-inch ones would be transplanted two years in this country and cannot be sold for less than \$60 a thousand. If large numbers were taken they could be sold at a much cheaper rate, say 25 per cent. off. If we could depend upon getting them every year in the same condition, they could be sold cheaper still, but we have to take an average."

The difference in age and size is, of course, an important factor in calculating the cost. Dr. James Brown in his evidence says, with regard to the cost of imported trees:—

"I have been just now at Leslie's nurseries, and find there that such plants as the Scotch pine and other sorts of pine would cost about five cents each. To plant an acre at that rate would cost \$50 for plants alone, independent of planting them. This rate is reckoned when planting the trees six feet apart. I think I would advise planting them as close as that. I don't think there is any reason why the price could not be greatly reduced by having extensive nurseries, in fact there is no doubt about it."

"Mr. Leslie said that if he had extensive orders for them he could afford to sell them cheaper, but at present he has no encouragement to do so. In the matter of re-planting the country with forest trees, the first thing essential is to establish large nurseries for the purpose of raising young trees. I think that trees suitable for replanting could be raised so as to sell on an average for \$3 a thousand.

"You can get the same plants in Scotland for a third of that. The difference between the price here and there would be owing to the difficulty of rearing them here on account of the severity of the winter. In Scotland they require no protection, but they would require to be protected here while they were young.

In reference to the question of cost, Mr. Leslie in his own evidence repeated the remark he had made to Dr. James Brown. There can be no doubt that trees can in large numbers be grown at a very small cost indeed, but, so far, in Canada, between the very limited amount of planting that has been going on and the accessibility of woodlands affording a cheap supply of trees of some sort or condition, the nursery demand has been comparatively insignificant, and no sufficient encouragement has been given

to induce nurserymen to raise forest trees in great numbers. As to the actual cost of planting a given area Mr. Leslie says:—

"The trees would cost about 5 cents each, say 6 cents with the planting. In other words, the north and west sides of the field could be protected at a cost of very little over \$8 an acre, or say \$7.50 with the planting."

In his evidence on general farming and other subjects, Professor Brown, of Guelph, gave the following as his estimate of the cost of planting out forest trees, and his opinion as to the mode of planting. He said:—

"Upon the subject of forestry, I will show you what it costs per acre to put down young trees taken from your own or a neighbor's bush, a method of replanting which can be adopted at the least possible expense, and I think with the greatest possible success.

"In selecting trees for replanting, it is best to keep on the small side. It is a great mistake to go into six or eight feet trees if you want rapid success. Two or three feet trees will ultimately do much better. I think it is an important point gained if we can show the Canadian farmer how he can be his own nurseryman and do his own replanting.

"There are thousands of young trees in every farmer's neighborhood which need cost him nothing but the expense of collecting them. If he has to pay ten cents to a nurseryman for every tree he plants, he will do very little in that way.

"I have been in the habit of planting one and a half million of trees a year and they did not cost more than ten shillings and sixpence a thousand and if our Government or private parties took the nursery management of such trees, I think they could be produced in Ontario at less than eight dollars a thousand.

"I have started an experiment upon this subject upon the Model Farm at Guelph, and I have found the cost to be as follows per acre:—

|  |         |
|--|---------|
| Clearing and preparing the ground..... | \$ 9 44 |
| Digging pits.....                      | 8 68    |
| Fencing.....                           | 4 75    |
| Planting.....                          | 11 50   |
| Pruning.....                           | 0 75    |
| Mulching.....                          | 2 25    |
| Taking trees from the forest.....      | 14 50   |
| Heeling.....                           | 0 50    |
| Total cost.....                        | \$30 57 |

"If the farmer does not estimate the value of his own labour, and of the labour of his horses, you may reduce that about one half.

"I do not believe in manuring forest trees. I have never seen any good effect from it, and I am expressing not only my own experience, but the experience of others dating fifty years back.

"We have had evidence of great weight that trees should not be planted less than six or eight feet apart, and that gives about 900 trees to the acre. We planted that number this season, and there are now 713 alive and doing

well, showing an actual death rate of one fifth. The deaths, however, occurred principally among the pine and spruce, apart from these, the deaths were comparatively few.

"In planting strips of wood for the protection of crops, I cannot recommend anything but standard trees."

**Effects of Forests on Moisture.**

The effects of forests on rain and snow fall is a subject that has attracted much attention in some European countries, and is admitted to be one that is being practically illustrated in our own experience, although, up to the present time, no such system of experiments or inquiries have been adopted as to identify, with scientific accuracy, the relations of the clearing of the land to be diminished moisture. Still, everybody mentally attributes the latter result to the former cause. Something more may be said in regard to this matter when the evidence on meteorology in relation to agriculture is under review. Meantime, the following extracts from the report of Dr. Hough, already referred to, will describe, in a few words, the part played by forest trees in relation to this branch of nature's economy:—

"It is a matter of common remark that our streams diminish as the woodlands are cleared away, so as to materially injure the manufacturing interests depending upon hydraulic power, and to require new sources of supply for our State canals, and for the use of cities and large towns. Many streams once navigable are now entirely worthless for this use. The mode in which this influence operates will be readily understood when we consider the effects of forests upon the humidity and temperature of the air.

"A deciduous tree, during the season when in foliage, is constantly drawing from the earth, and giving off from its leaves a considerable amount of moisture, and in some cases this amount is very great. This change of state from a fluid to a gaseous condition, is a cooling process, and the air near the surface, being secured from the sun and from the winds, becomes, by this means, so humid that a rank, succulent vegetation often springs up and thrives, which in an open field would wither and perish in an hour. The air being thus charged with moisture and cooled, does not take up by evaporation the rains which fall, and the soil, being more open, readily allows the water from melting snows and from showers to sink into the earth, from whence a portion appears in springs and in swamps, which give rise to rills and streams.

"The air at all times holds more water vapour in suspension, and its capacity for water is increased as the temperature rises, not by a steady gaining rate, but rapidly as the heat is increased. There is no evaporation when the air is saturated with

moisture, and no deposit of water, in any form until the temperature is reduced to the point of saturation. It is not yet determined as to how far the cooling and moistening influence of a grove may extend. It must depend upon many circumstances, and especially upon the slope of the surface and the direction of the winds. The effect is often apparent to the eye from the freshness of the herbage in adjacent fields for many rods in width."

"The effect of woodlands in retaining snows where they fall, and in delaying their melting in the spring, has been everywhere observed in snowy countries. In such localities the snow cannot be drifted by the winds and when it melts it disappears slowly, sinking into the soil rather than flowing off upon the surface. The effect of this delay in checking a too early appearance of fruit blossoms, cannot be mistaken. The result is in fact similar to that of considerable areas of water, such as our northern lakes, along the borders of which, and especially on the lee-side, fruits are found to flourish with the greatest success. In a country interspersed with clumps and belts of woodlands, the snows drift less and their melting more evenly over the surface cannot fail to be beneficial to the interests of agriculture, and more especially to meadows and pastures."

#### Concluding Remarks on Forestry.

The Commissioners during the progress of their investigations under this head, have been profoundly impressed, not less with the importance than with the magnitude of the subject. In fact, had the whole time devoted by them to the discharge of their varied duties been occupied in inquiring into the question of forestry in its many aspects, it might have been well spent. They feel that the evidence they have taken rather suggests further examination into, than exhausts the whole subject.

The arrangements and laws relating to forestry in Europe, as well as the progress of tree planting in the United States, in which direction an active movement has been going on for some years—would have been matters well worthy of close observation, and the Commissioners respectfully recommend that information thereupon should be obtained by such methods as may appear to the Government to be most convenient and effectual.

Possibly such information might assist in the solution of the question frequently raised in the course of this inquiry, By what means can tree planting by individuals or corporations be most successfully promoted?

Government assistance in the shape of money grants, exemptions of planted lands from municipal taxation, and the establishment by the Government of large forest tree nurseries have all in turn been suggested.

The Commissioners would be reluctant to advise the expenditure of any considerable sum of public money without having before them some scheme, the details of which had been carefully examined and worked out.

The subject is a new one to the minds of most of our people, and it is rather by the creation of public interest in the question, and a sense of personal responsibility with regard to it, that the ground work of any future plans must be laid.

Meantime the Commissioners are glad to be informed that the Fruit Growers' Association of Ontario, has included forestry and arboriculture in its programme of operations, and that the Government have given some encouragement to this step, while at the same time experimental tree planting has, under the auspices of the Association, been commenced at the Model Farm at Guelph. A few townships and urban municipalities have also offered inducements to the planting of streets and concession lines. All these are indications of a gradual awakening to a sense of the necessity of something effectual being done.

With the facilities that exist in all parts of Ontario, for obtaining a supply of materials close at hand, organizations in townships or school sections for planting a given number of trees, within a given period of time, and at the smallest possible cost, should not be difficult.

It has also been proposed that school house lots, now usually presenting a most bare and uninviting appearance, might be planted with

forest trees, and a small premium or reward be given to those schools, in a district, whose trees had been most successfully cultivated and best preserved for a given period.

It has further been suggested that interest might be excited, and information imparted, by lectures delivered by competent persons on forestry in connection, perhaps, with ornithology and ornithology, so far as those topics affect the farmer and fruit grower.

Such lectures might be delivered in school-houses, under arrangements made by the county inspectors, the senior classes in the school, and the public generally, being invited to attend.

In treating of these subjects, however, pictorial illustrations would be indispensable, and knowledge of the colours of leaves, insects, and birds would also have to be imparted. In order to accomplish this, and as the lectures would have to be delivered in the evening, the "magic lantern" might be brought into play, the novelty of such exhibitions assisting to ensure to the lecturer an audience.

The first cost of preparing transparencies would be considerable, but the other expenses of such a scheme need not be large, while the preparation for the work, of young men of ordinary ability and culture, would not be a difficult task, in view of the materials already at hand.

The objection raised to any proposal to add such studies to the already rather overcharged public school curriculum would be avoided, while parents, teachers, and children would, at one and the same time, be interested and instructed.

The Commissioners, in conclusion, may not travel beyond the bounds of their duty if they respectfully urge upon the Executive the propriety of steps being taken with regard to the preservation of the timber lands of the Province still in possession of the Crown, and not subject to the regulations affecting the pine timber forests.

Only by some action of this kind can waste and destruction be staid, and the stern necessity which in other countries at this moment has to be faced—be avoided, of replacing, by slow methods and at enormous cost, what has been recklessly and unreflectingly destroyed.

#### A LUMBER OPERATOR'S DEFALCATION.

Charles Smith was operating during the past season for the firm of Guy, Bevan & Co., of St. John, for whom he had engaged men to stream-drive on the South-west Miramichi. These lumberers are even now oblivious of all that has happened, with regard to their prospect of receiving the slightest pittance for their whole spring work, and they are, perhaps, now toiling in the hope of getting wages which may never be paid, so that the money which was hard earned by them, in steady work for the whole spring, will, in all probability, be lavished away at the whim of a defaulter and absconder.

Smith had a contract with Guy, Bevan & Co. to get out logs by the thousand, and he drew upwards of \$5,000 to pay driving wages. On Sunday last he left the city, his wife being very ill at the time, and drove to Woodstock, where he sold his horse and wagon to Mr. Glidden, and took the train for the West. Mrs. Smith died on Tuesday. Their son was at work on the drive, and on hearing of his mother's death, he went to Newcastle to get money to come home; but on finding his father had drawn it all, he was obliged to borrow enough from his fellow workmen to come home with. Mrs. Smith was buried yesterday. Nobody suspected anything was wrong until after Mrs. Smith's death, when inquiries were made as to her husband's whereabouts, and the foregoing facts came to light.

A number of persons in this vicinity are losers by Smith. Among them is J. McCoy, of St. Mary's, to whom he owes \$1,200 on a contract for logs. Mr. McCoy thinks he can hold the logs. Cameron & McCarthy lose about \$100; S. D. Macpherson upwards of \$100; J. McMurray \$75, and others. Messrs. Balloch Brothers, of Florenceville, will lose considerable by him, as they had sent him a quantity of oats for sale, which he disposed of. Smith's son and daughter, who remain here, moved away all their furniture during last night.—*Fredericton Capital.*

#### WIRE ROPE FOR TRANSMITTING POWER.

BY HENRY KWING.

I suppose there is scarcely a manufacturing establishment in the country, where, at times, the ability to transmit or convey power to some isolated or distant building, would not only be of great convenience, but as well a source of profit to the owner. Under ordinary circumstances this is impossible, except by purchasing a small engine or water wheel, the expense of setting and operating which becomes a grievous tax. In such cases, wire rope becomes an invaluable aid, and as its capabilities and requirements are, really, but half understood, perhaps some of the readers of the *Lumber World* may find something in this communication interesting and of utility to them.

The distance to which power may be transmitted by wire rope ranges from fifty or sixty feet up to something more than two miles. It commences at the point where a belt becomes too long to be used profitably, and can thence be extended almost indefinitely. In point of economy, it costs only one-fiftieth of an equivalent amount of bolting and the one-twentieth of shafting. This method was first introduced, both in Europe and America, about the year 1850. The development it has received in this country is but trifling; in Europe, however, it has been immense, numbering at the present time over 2,000 permanent applications, and as many more of a temporary nature.

In many factories, long counter-shafting, with heavy bevel-gearing, can be saved by using a rope; the farther off the shaft we wish to drive, the better the arrangement will work.

When neighboring property cannot be bought, perhaps that across the street can—yet the trouble and expense of digging up the street to lay down a line of shafting is sufficient to deter one from the purchase. For such a case, a remedy is here presented. A little endless rope passing through a couple of slits in the window casing of an upper story, across to the story opposite, will do all the work, and none of the passers by will be any the wiser for it. A belt would require protection from the weather, but the rope does not, and can hang free in the air. From an engine in the basement, power can be readily conveyed to the upper storeys; it is necessary, however, that for a certain distance the rope should hang horizontally, in order to gain the required tension. The utility of this mode of transmission is so manifest, and the convenience afforded by it has been so strikingly exemplified in localities where hardly any other system would have been practicable, that it is justly attracting the attention of the manufacturing public more and more as its merits become known.

The range in the size of wire ropes is small, varying only from three-eighths inches to three-fourths inches diameter in a range of three to two hundred and fifty horse-power. The ropes are always kept on hand, and can be spliced endless at the factory; or else directions are given to splice them, whenever an endless rope cannot be put on direct. In regard to cost, they are the cheapest part of a transmission. For instance, a No. 22 rope, conveying, say twenty-five horse power, costs nine cents per foot, whereas an equivalent belt costs about \$1.40 per foot. Where a rope transmission has to be constantly at work, it is good policy to keep a spare rope on hand, ready spliced, so as to avoid delay. Their duration is from two and one half to five years, according to speed. For the smaller powers it is advisable to take a size larger for the sake of getting wear out of the rope; although it must be borne in mind that a larger rope is always stiffer than a small one, and therefore additional power is lost in bending it round the sheave. Small ropes are made with hemp core to increase their pliability.—*Lumber World.*

**ZOPERA.**—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 *Zopera*, from Brazil, the new and remarkable compound for cleansing and toning the system, for assisting the digestive apparatus and the liver to properly perform their duties in assimilating food. Get a 10 cent sample of *Zopera*, the new remedy, of your druggist. A few doses will surprise you.

**Yellow Oil** is par excellence the remedy for Pain, Lame ness, Rheumatism, Croup, Deafness, Burns, Frost Bites, Stiff Joints, and all flesh wounds. Any medicine dealer can furnish it.

#### A WALL STREET A. B. C.

Never take the bull point in bear times, nor a bear point in bull times.

Buy on a heavy break and sell on a sharp advance.

Have margin enough to hold on to your "longs" or "shorts." Every dog has his day on the "street," and you will be sure to make money if your staying qualities are good.

During dull or bear times have nothing to do with ticked, unknown stocks, or those companies in which there is only a small number of shares, the merits of which are known only to a few; it is better to deal in securities for which there is always a market.

Confine your operations to two or three stocks of which you have made a study.

The most conservative way to speculate is to keep cash in hand and operate only three or four times a year, buying dividend-paying stocks outright when a break occurs, selling again when the market goes up. There are never less than two breaks in the course of a year, which occur usually in the spring and fall.

Remember that there is a rhythmic motion in prices; whenever they go up very high they are sure to rebound, and *vice versa*.

A dull stock market is a weather breeder and generally brings on lower prices.

Sell on the rallies in a bear market and buy on the setbacks in a bull market. It is safer to be a bear over Saturday nights than a bull.

The accidents of the market are generally in favor of the bears.

In the long run it pays better to be a bull than a bear. We live in a prosperous era, in which money is cheapened and prices are advancing.

When any disaster occurs to any one property in a certain section, or representing a certain interest, it is safe to sell properties similarly situated. If there is a sudden drop in St. Paul, sell Northwest; if in Lacawanna, sell Delaware & Hudson.

For permanent investments or slight fluctuations, deal in bonds and securities of communities in which there are diversified industries, in preference to sections of the country where everything depends upon one interest. For instance, Central and Lake Shore will be steadier in price than the northwest and southwest stocks, which are high priced only when the agricultural classes are prosperous.

Depend upon your judgment rather than upon your special points, and do not believe anything you hear.

If you stand over the tape every day, you are pretty sure to lose your money. The commissions will eat you up.

If you have been unsuccessful in other business, Wall street is no place for you.

Pay little attention to the opinions of the newspapers; they are generally in the interest of big operators, not of the outside public.

All excited bull markets end in a break. The close of a bear campaign is marked by a semi panic.

Look out for a reaction on the third day of a heavy break.

Finally, if you are wise and have any respect, able calling, never buy what you can't pay for or sell what you have not got. In other words don't speculate.

It is reported at St. John that Chas. Smith, a well-known lumber operator who resided and operated on the Miramichi during last season for Messrs. J. & J. Stewart, has left the city. He is said to have drawn on Messrs. Stewart for upwards of \$5,000 to pay drivers' wages, and the statement of many lumbermen is that they have not been paid. Mr. Smith is known to be largely indebted.

"**Their Name is Legion**"—the people who praise that matchless medicine, **Burdock Blood Purifier**. It acts at once upon the Secretions, the Bowels, the Liver, the Skin and the Kidneys. It purifies the Blood, dispels all foul humors, and strengthens the nervous and debilitated system. No known remedy can do more. Try it and be convinced.

**A Cough** is usually the effort of Nature to expel some morbid matter irritating the air passages of the lungs. It may, however, proceed from an inflamed or irritable condition of the throat, a slight rash or humor often being perceptible. Let the cause be what it may, the remedy should be Hagar's Pectoral Balsam. A purely vegetable Balsamic throat and lung healer. For sale by all dealers in medicine, at 25 cents per bottle.

**JOHN THOMPSON, OF LONGFORD.**

We are indebted to the *Orillia Times* for the following notice of the late John Thomson, Esq., of Longford Mills, which we are sure will be read with more than a passing interest by the readers of THE CANADA LUMBERMAN, and especially by those of them, and they are not few, to whom Mr. Thomson was personally known. Short as the career of THE CANADA LUMBERMAN has been, the present publishers feel that by his death they have lost a good friend—one who showed his sympathy with our undertaking not by words, but by putting his hand in his pocket and sending us a year's subscription for half a dozen copies to be distributed amongst his employes.

No event in the history of Orillia has created a feeling of such intense gloom, of such universal and spontaneous regret as the death of Mr. Thomson, of Longford. When word came on Friday, the 27th ult., that he was ill in Toronto we were sorry that he should have been taken down away from home, but no one anticipated the sad termination which has so moved the sympathies of the people of this neighborhood. He left home on Thursday, the 26th, and as if to emphasize the generous character of the man it is now known that his last journey on earth was taken in the interests of a friend. He complained of slight illness before leaving, but it was not allowed to interfere with his plans. To some friends on the train on the way down he expressed a fear that he was going to be ill, and before reaching Toronto the symptoms had increased, but not sufficiently to alarm either them or himself. On the following day he was so much worse that a return to Longford was not thought advisable, and a telegram was despatched announcing his condition. Mrs. Thomson went down the same afternoon, and on the following day the eldest son, William, joined them. He continued to grow worse, and during Sunday and Monday was attended by the best medical skill the city afforded. On Tuesday he was considered better, so much so that William returned to Longford expecting that in a few days he would be so much improved as to permit of his return home. It was not until Thursday night that the worst was apprehended, and a special train was despatched to Longford for the children. The train passed here early on Friday morning, Mr. Millar going down with the others. They found their father conscious but dying. All day Friday the telegraph office here was besieged with anxious enquirers, and late at night they dispersed with the melancholy satisfaction of knowing that their friend was still alive, but with little hopes of the morrow. On Saturday afternoon more hopeful messages arrived, and for several hours it was thought that the crisis was past. Mr. Millar was attentive to every enquiry, and as each turn in Mr. Thomson's condition took place it was promptly telegraphed to the anxious hundreds at Orillia and Longford. About nine o'clock on Saturday evening all hope was abandoned, and at half past eleven John Thomson passed from this world to the other. His last drive was down, the boom was cut, and the spirit of a noble lumberman floated out into the broad ocean of eternity.

It was not until Sunday morning that his death became generally known. A sense of personal loss was experienced by every one, both here and at Longford. It is impossible to express the full intensity of the feeling. Mr. Thomson was not only known and esteemed; he was loved. To all of us it was as if a brother was stricken down. About half-past two o'clock on Sunday afternoon a special arrived at Longford with his remains. All the mill employes and neighbors were at the station, and as the coffin was taken from the train strong men wept like children. It seemed so sudden and so terrible. Only a few days before he had gone away full of life and hope for the future, bright and cheery as he had been always, with his honest, manly countenance beaming with kindly good nature. And here he was back to us, a bit of lifeless clay. It was sudden, and it was terrible. Scores of people drove over from Orillia without any clear notion of why they went; it seemed as if they must go if only by their presence to testify to their great grief and dutifully to proclaim their sympathy. Early in the day flags were flying at half-mast at

town and at the mills at Longford.

On Monday morning the Mayor thoughtfully addressed a circular letter to the business men of the town, requesting that they would close their places of business during the afternoon of the funeral. The request was probably unnecessary, but it was none the less an indication of public feeling.

The funeral was the largest ever seen in this part of the country. Friends from a distance came in by the *Lady of the Lakes*, from north and south on the Northern, and from north and south on the Midland railways. Every place of business on Mississauga street was closed at twelve o'clock, and many of them heavily draped in mourning, including the leading hotels. Shortly after one o'clock the *Lady* put out from the wharf here with between two and three hundred on board. Mr. Sanson also ran the *Carriella*. Arriving at Longford it was found that a large number had already assembled. The employees, to the number of about one hundred and fifty, had provided themselves with badges of mourning and were massed together to take their place in the procession. Many of those who arrived by boat took advantage of the opportunity to view the remains, after which Rev. K. Creighton read a lesson from the Psalms and Epistles. The large congregation, who had assembled on the verandah and in the large space in front of the house, then joined in a hymn, which Mr. Gray announced to have been a favorite one of the deceased's. Rev. Mr. Beattie, of Port Hope, offered up a fervent and eloquent prayer. While a student Mr. Beattie had been placed over the Longford congregation for several months, and had thus an opportunity of becoming intimately acquainted with Mr. Thomson's family. A strong friendship was then formed, which has remained unbroken ever since. Both Mr. Beattie and Mr. Gray addressed a few words to those present, bearing particularly on the eminent virtues of their deceased friend and pointing out the lesson to be learned from an honorable, upright life. Rev. Mr. Currie closed the service by a short prayer. Soon after the pall-bearers appeared with the coffin, the line of procession was formed, and the large assembly of mourners and friends slowly wended their way to the wharf. Between five and six hundred returned on the boat. At the Orillia wharf an immense concourse had congregated, the larger proportion on foot, but many in carriages. The members of the corporation attended in a body. Here the procession was again formed, probably the most striking and suggestive feature of it being the horse and phaeton used by Mr. Thomson in driving to and from the mills, led by the faithful Hughey. About fifty carriages brought up the rear. Mr. Gray conducted the short service at the grave, and all that was mortal of the lamented deceased was committed to the earth.

The pall-bearers were Messrs. R. D. Ewing, J. B. Smith and Capt. Wm. Hull, of Toronto; Robert Thompson, of Hamilton; Wm. Hamilton, of Peterborough; Jas. Macpherson, of Rama; and Dr. Corbett and Melville Millar, of Orillia. The lumbering interest was largely represented, among others being Mr. J. E. Craig, Albany, N.Y.; Messrs. Silliman, McIntosh, E. A. Smith, Alex. Christie, Wm. Kero, McArthur Bros., Robert Smith, ex-Ald. Mutton, P. A. Scott, S. C. Kenedy, Joseph Oliver, McCool and Kent, of Toronto; Allan Gumm, Peter McIntosh and O. F. Wright, of Barrie; Geo. W. Taylor and Isaac Cockburn, of Gravenhurst; Jas. Scott, J. Elze and Henry Govering, of Waubesausheno; A. Marshall and E. Robinson, of Washington. There were also present, Messrs. A. P. Cockburn, M.P., Muskoka; Geo. Wheeler, M. P., North Ontario; Thos. Paxton, ex-M.P.P., Isaac Gould and Widdifield of Uxbridge; Chas. Robinson, of Beaverton; J. McL. Stevenson, J. S. Carnegie, Bank of Commerce, Chas. Ross, A. Arnall, Fulljames, Wm. Boys, King, McDermott, Radenhurst, Barrie. The Northern Railway was represented by Major Greig and Messrs. Webster, Kerr, Harvie and Marpole. Mr. John Bertram, of Dundas, and Mr. George Bertram, Toronto, were also among the prominent friends of the deceased. The Rama Indians turned out in large numbers.

Mr. Thompson was born in Haddingtonshire,

Scotland, in 1821. In 1854 he came to Canada, and settled at Peterborough, going into the mercantile business. He soon afterward engaged in the square timber trade, and in 1867, with Mr. Melville Millar as a partner, he came to Longford and established the timber business now so well and honorably known in every lumber market on the continent. With other lumbermen he went through the deep waters of the depression, and manfully and successfully struggled against the difficulties of that period. Having carefully and laboriously built up one of the finest and most profitable properties of the kind in the Province he had already contemplated retiring from business, and now it is an open secret that at the time of his death he was in negotiation with a company for the purchase of Longford at a price that would have enabled him to live the remainder of his days in affluence and free from every care. Mr. Thompson was a pronounced Liberal in politics, and at the recent convention in North Ontario was offered the unanimous nomination of the party as their candidate for the Local Legislature. We are in a position to state that had he accepted there would have been no opposition to his election.

Mr. Thompson leaves a wife and seven children to grieve over a loss that is yet imperfectly realized. It is impossible to conceive of a more united and affectionate family. Last January Mr. and Mrs. and Miss Thompson visited Scotland and England, the latter remaining with an uncle in Manchester, with whom it was intended to spend the summer. That was the first and only break in the family tie, and so strongly did Mr. Thompson feel it that it was with difficulty he was persuaded against returning to Manchester before sailing and bringing his daughter home with him. She is now on her way to Canada, alone, sad and grief-stricken.

It will afford a great deal of satisfaction to many friends at a distance to be assured that Mr. Thompson's business affairs were left in good shape, and that his death will not interfere with nor complicate the management of the immense concern he had built up and conducted so successfully—*Orillia Times*.

**ST. JOHN, N.B.**

From our Own Correspondent.

GENERAL REMARKS.—During the past fortnight there has been very little calling for special notice in our lumber business. As intimated in our last, the change in regard to water supply has resulted, so far as we can learn, in clearing the streams generally of their freight of logs, at least no complaints are being made from that quarter. Deals from the country mills are coming in freely and meeting ready sale at from \$8.00 to \$8.50 per M. sup. feet. In and about the city the operations of sawing and shipping are moving along in their usual steady course.

STEAMSHIPS.—One of the most noticeable features of the deal trade at this port the present season, is the large number of ocean steamships which have been engaged in loading deals here for various ports in Great Britain. It is true that deals have been shipped here by the regular "liners" for a number of years, but only in small quantities; whereas, the present season we have had the largest class of freight steamers carrying full cargoes of deals, varying between 600 and 700 Peterburg standards each, thus showing how steadily, but surely, steam and iron are supplanting our wooden sailing ships in the ocean carrying trade.

FREIGHTS.—The freight market continues very quiet, with no material change in rates.

SHIPMENTS.—The shipments of deals and other sawn lumber are as follows:—

|                 |                    |
|-----------------|--------------------|
| For Europe      | 20,031,000 Sup. ft |
| " United States | 2,295,000 "        |
| " West Indies   | 577,000 "          |

St. John, N.B., June 4th, 1881.

**A BARGAIN—GIST AND SAW MILL FOR SALE.** paying 12 per cent. clear; price \$9,000; and above percentage guaranteed. Apply to

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All kinds of Corks in stock and Cut to Order. Corks & Life Preservers a Specialty. Corkwood, Tinfoil, Capsules, Wire, &c.  
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*Wholesale Lumber Dealers*  
**TORONTO.**  
We have for sale a large quantity of PINE, OAK, WHITEWOOD, ASH, CHESTNUT, CHERRY, BUTTERNUT, BASSWOOD, &c.  
S.P.S.—Also on hand 120 M dry Oak 2 to 4 inches thick, will be sold cheap to close it out. 1y110



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Manufacturer of all kinds of Lacquered and Enamelled Woodwork, Turning and Carving in  
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Turned and coloured a specialty.  
MERCHAUM and AMBER GOODS repaired in first-class style. b17  
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**The Walkerville Foundry,**  
AND  
**MACHINE WORKS.**  
Walkerville, Ont., June 1881. 12y110

**A BIG JAM.**

30,000,000 FEET OF LOGS IN ONE JAM.

On the morning of May 22nd, there was considerable anxiety all along the Miramichi in reference to the probable effect of the freshet in the South West boom, which is the great receptacle of the lumber obtained on that branch of the river. There were about twenty million feet of logs in the boom in the morning, and the main river and Renous drives were coming along at such a rate as to make it plainly apparent that it would be necessary to jam the river. The lessee of the boom, Jas. Robinson, Esq., decided that the point of danger was reached, and he made the jam at Bryanton's shore. This was early in the forenoon. By half-past three ten millions feet of logs had run into the jam, when the accumulated mass bore so heavily on the boom and jam piers that the tops were swept off half a dozen of the latter, the boom was broken and the ten millions feet composing the jam left the twenty millions below it in the part of the boom which still held good - and went on the run down stream at the rate of about four miles an hour. Persons who have lived on the river for a long time and have seen other breaks in the South-west boom say they never saw such a run of logs at one time before, and it seemed to them that a great loss was inevitable.

It happened that Messrs. R. A. & S. Stewart had completed the telephonic communication only the day before between their office in Newcastle and that of Mr. Andrew Morrison, surveyor, at Parker's just opposite the boom, so the condition of things as they transpired was made known in Newcastle. Messages were also sent through Mr. Miller's telephone at Derby via Newcastle to Chatham, and little time was lost in making preparations to save the property now afloat.

The steamer *Andover*, with her owner, R. R. Call, Esq., on board, had started on Saturday forenoon on her regular trip up-river, but was prevented by the jam from proceeding to Indian Town. As it was known she was to be at the Hemlock Extract Factory wharf for some time, word was sent down, as soon as the danger of a break was seen, requesting that she be held ready for the emergency, and this was soon followed by the announcement of the break, carried by a man on horseback, and a call for both the *Andover* and *Derby*. Steam was got up on the latter, while the *Andover* proceeded up stream, meeting with and passing the logs, which her stern wheel enabled her to do, until the boom just below the rafting ground was reached. This had been unshackled by men of Mr. Robinson's rafting crew, who were working it down stream and the *Andover*, taking in tow, proceeded down the river. Much difficulty was experienced in running with the necessary speed down stream, for the logs were very thick and water was to be seen only here and there. The raftsmen who had got on board the steamer, as well as the hands belonging to the latter, were kept busy with their pike-poles shoving logs clear of the bow, and all who witnessed the race between the logs and the *Andover* for the South-West Railway bridge were gratified to see that the boat must win. They were properly anxious over the matter for unless the boom could be stretched across the river against the ice-breakers of the bridge the ten millions which had broken the boom as well as an additional twenty millions or more following would nearly all be lost. Fortunately the *Andover* got clear of the running logs and reached the railway bridge two miles in advance of them, so that before they came down the latter steamer, assisted by the *Derby*, stretched the boom across the spans, although it fell short of reaching each shore. It was made fast and the shore spans were also secured as well as the facilities at hand admitted of, when the mass of logs was borne down upon it by the current. This was a time of the greatest anxiety, for the shore ends of the boom at each side of the river let the logs slip through. The daring boom men, under Mr. George Parker, Mr. Robinson's foreman, were equal to the emergency, and a dozen of them ventured out on the moving mass of logs under the south span with the heavy lines, which they made fast to the logs in the second span of the bridge and around the base of the pier. The representative of the *Advance* who was present on

the steamer *St. George*, which had run up from Chatham, describes the work done at this juncture as most hazardous as well as difficult. Our readers can imagine for themselves a mass of logs moving through a two-hundred feet span of a bridge as through a sluice, with the current running as fast as a man might walk, and a few men carrying a heavy six or eight inch line across from shore to pier, stepping and springing from log to log and then running back and down stream to clear the line as its height was caught by the running lumber. Although some gallant fellow missed his footing or was obliged to let himself go down in his desire to clear the line, he would "up and at it again," while the on-looker wondered at the practised self-possession of these splendid men and the tenacity and pluck with which they hung to a task which few men are ever called on to perform—a task involving great physical endurance, special knowledge and experience and a single purpose which is a noble characteristic wherever found.

Success rewarded the efforts of the workers at the two shore spans, and just as the run was stopped, after letting, perhaps, about a million feet through, there was snapping and crashing at the third pier from the north shore of the river, caused by the boom breaking because of the mass of logs forcing it across the angular end of the granite ice-breaker there. As the broken boom ends and some logs drifted down from the direction of the pier where the break occurred, it was feared that the drift would escape, but the mass of logs above simply crushed in together, and not more than a hundred pieces escaped before the jam became self-sustaining. Similar breaks occurred afterwards, but the danger was practically over when the shore spans were made safe.

Of course much remained to be done after this in the way of prevention. Additional lines and hawsers had to be secured, and they were supplied by our merchants and others who had them, the *St. George* having taken up two and the *Andover* being run down to Newcastle and Chatham during the evening for more. The men worked all night and part of Sunday, when the jam was pronounced safe and the freshet had begun to fall off.

The logs which ran through under the bridge on Saturday—perhaps a million feet in all—were caught by temporary and other booms and by men in boats at points along the south side of the river, only about one hundred pieces going out to sea. The schooner *Claymore*, Captain Marquis, arrived on Sunday, and we base this estimate of total loss on report which he brought in. It will therefore be seen that the loss is trifling. Indeed the loss of logs on the Miramichi this spring has been unusually small, as compared with other seasons, and had it not been for the break of Saturday not a log would have been lost, a most unusual circumstance, due to the ice having melted instead of running out.

A meeting of the Directors of the Boom Company was held. All the parties interested in the logs were allowed to be present and take a part in the proceedings. After an exchange of opinions and suggestions, it was agreed that Mr. Robinson, lessee of the boom, proceed and raft out the jam at the bridge, with all possible dispatch. To facilitate his work the logs are to be rafted—in what is known as mixed rafts—for a fortnight, and deliveries are to be made to owners, in proportion to the logs they may have in the drift, a strict account of all to be kept, and any person receiving more logs of his neighbor than the latter receives belonging to him, is to return the same quantity to him or payment at the rate of \$7 per thousand therefor, and two-thirds of that rate for undersized logs within a fortnight after the drift account is closed.

On Sunday, Monday, and the Queen's Birthday, the South-west Boom was visited by hundreds of people who had never witnessed such a jam of logs before in their lives and may never again see a similar one—there being now 30,000,000 feet in the jam.—*Miramichi Advance*.

**Hazard's Pectoral Balsam** is a purely vegetable healing balsam. It cures by loosening the phlegm and corrupt matter from the Lungs and expelling it from the system. Croup, Asthma, Bronchitis, Hoarseness and all pectoral diseases yield to it promptly. It costs 25 cents a bottle.

**STRIKES.**

A recent number of the *Northwestern Lumberman* contained an article on the above subject from which we take the following sensible remarks:—

Notably in politics and religion there are men who ignore the fact that other men were born with brains, and seem to think that the Almighty has placed a special brand of superiority upon them, thereby giving them the supreme right to rule others, and to think for others. A marked specimen of this egotism has been on exhibition in the United States senate, and it does not take a long hunt to find it in the pulpit. This same disposition is manifest in nearly every business and profession. Men who imagine they were born to lead and not to work, are constantly engaged in the formation and direction of various unions, taking advantage of every ripple of dissatisfaction, sowing the seeds of discontent where before there was contentment, and all the while keeping their eyes straight on offices and high salaries. A while ago a gentleman in an eastern town made a wager with a friend that he could get a certain number of names to a petition praying that a covering be built over the sun dial on the public square. Such a petition, it would seem, would be the last one to be signed, for the dial, if not a necessity, was at least a curiosity, and one of the old landmarks of the park. No one in a sober moment, uninfluenced, would think of covering the dial, and under ordinary circumstances would call the covering of it an unheard-of and dastardly piece of business; but specious arguments changed these latent views, and the gentleman returned with the required number of signatures and claimed the wager. The leaders of the unions understand this trait in human nature, and make capital of it. They are aware of the susceptibility of the average mind, and set themselves at work to make the most of it. They care little whether their followers recline at night on comfortable beds or in the alley, so long as their dues are regularly paid. They call themselves the workingman's friends, but they are the syphons that draw from the workingman's pockets his money. This is not always so, maybe, but it often is. The necessity of unions is a question which has been often discussed pro and con, and one that cannot be settled with a few strokes of the pen. But common sense dictates that when a man of the character described above is at the head of a union, the members of it should look upon him as a barnacle that should be removed from the bottom of the ship in which they sail. And it is a pertinent question for every workingman to ask himself, Is it right than any man, or men, should dictate to me where I am to work, and what wages I am to receive? Answered in the affirmative, it follows that a man does not best know his own needs, and is not at liberty to follow out his desires. The folly of submitting to such dictation was forcibly illustrated by the action of the striking switchmen in this city a few days ago. They asked for more money to buy food and pay rent with, then formed into line and hired a band of several pieces to escort them through the streets. The request and the act were paradoxical in nature. But they said they did it in order that the citizens of Chicago might see that they were an orderly lot of men. Of course, at that time, they were orderly. They had advertised that they would be orderly, and no one expected them to be otherwise. But a while after that, when they were hurling brick-bats and coupling pins at the heads of men who were employed in their places, and who were innocently striving to earn an honest living, it might truthfully be said that they were not orderly. Had not these disgraceful proceedings been checked by the police, ere this their high-handed outrages would have been such that all the bands in the city would be unable to foot them into good repute.

Do strikes pay? It is a matter of history that generally they do not—that is, they do not pay the strikers, and could the loss to manufacturers and corporations be known it would be an argument against them that could not be appealed from. To ascertain how much the strikes this spring have cost this city in dollars and cents would involve intricate and profound calculations. But, of course, this is of no moment to the men who strike, for they go coolly and deli-

berately at work to occasion these losses. When they are losers themselves it does not serve to teach them better. Last summer the job members of the typographical union struck for an advance of \$3 per week. The result was that many of them were idle in the streets during the remainder of the summer. In such cases there is, in addition, a prospective loss, that is liable in the future to assume tangible forms. There is such a thing as competence and stability receiving a suitable reward. There is a feeling that is possessed by business men that they do not care to keep employed, longer than really necessary, men who are unreliable and who, at any moment, do not hesitate to peril the business that their labor should sustain and make more valuable. There is an indisposition on the part of business men to avoid giving employment to men of such character. Money is not all the capital a man can have. The man who is competent, industrious and reliable is wanted for all he is worth by somebody. If he stands ready to cripple the business that not only feeds his employer but himself, he should not wonder if he is not wanted.

It is singular that there are so many men who think that in the matter of employment there is but one party to the bargain. They forget, or seem to forget, that one man is not obliged to employ another any more than one man is obliged to work for another. Labor is a marketable article, and capital cannot buy it unless it is willing to be bought. Those workmen are ill-advised who rant about the desire of capital to crush and belittle them; if they were not so advised they would appreciate that capital and labor are dependent, one upon the other. If a man is thoroughly imbued with the idea that capital is his enemy, let him keep away from it. Let him paddle his own canoe. In this free country no man is obliged to work for a tyrant; and the country is large enough for the exercise of any skill or talent that a man may possess.

There is no law, legal or moral, that prevents a man from asking for higher wages, or quitting work, so long as there is no contract verbal or written that binds him to continue longer. Thus far it is the privilege of employees to go; farther than that it is the right of employers to say they shall not go. A striker has no more right to attempt to undermine the business of his former employer, because the latter refuses to pay a higher price for the labor he buys, than the employer has to undermine the house in which the laborer lives, because the latter will not work for a certain sum. A striker has no right to bulldoze or what is worse, as is often done, physically injure a man who is willing to take a vacated place at the wages formerly paid. There is a law written in the statute books of several states, making riotous conduct a penal offence, and there is a growing desire on the part of order-loving people at large that the construction of the law should include the unruly element considered in this article, and a growing disposition on the part of many magistrates of the law to so construe it.

**Two Thousand Dollars.**

The easiest, cheapest and best way to secure the above amount is to apply for membership in the Mutual Benefit Association of Rochester, N. Y. Pay Dr. S. B. Pollard, 56 Bay Street, one dollar for four medical examinations, he will send your application to the head office, if you are accepted as a member they will issue a certificate of membership, which, on payment of eight dollars, entitles you to full benefits as a member, should you die to-morrow, next day, next week, next month, or any time within three months, this Association will pay to your heirs, or assigns, the sum of two thousand dollars. At the expiration of the three months all you have to do is to pay your pro rata amount, which is from 20 to 75 cents on the death of some other member, who has done nothing worse than to die during the three months just past. By paying your assessments on deaths, you keep your certificate alive, and at the commencement of the second year you are assessed two dollars per thousand to keep up office expenses, etc., for the next year. No easier, surer or better schemes to carry two thousand dollars has ever been devised than the Mutual Benefit Association, of Rochester, N. Y.

## THE RIVERS AND STREAMS BILL.

REPORT OF THE MINISTER OF JUSTICE—REASONS FOR THE DISALLOWANCE.

The following is a copy of the report of the Minister of Justice on the River and Streams Bill:—

DEPARTMENT OF JUSTICE,  
OTTAWA, May 7th, 1881.

I have the honor to report with respect to an Act passed by the Legislature of the Province of Ontario at its last session, intitled:—"An Act for protecting the public interests in rivers, streams and creeks."

Application for the disallowance of this Act has been made by Mr. Peter McLaren, of the Town of Perth, lumber manufacturer, on the ground that the Act in question deprives him of vested private rights without compensation, and practically reverses the decision of the Court of Chancery in a case brought by him against one Caldwell, whereby Mr. McLaren's exclusive right to the use of improvements erected by him or those through whom he claims on certain streams in the Province of Ontario was established by a decree of the court.

The Act by its first section declared that all persons have, and always have had, during the spring, summer, and autumn freshets the right to float and transmit saw logs, etc., down all rivers, creeks and streams, in respect of which the Legislature of Ontario has authority to give this power, and in case it may be necessary to remove any obstruction from such river, creek, or stream, or construct any apron, dam, etc., necessary to facilitate the floating of saw logs, etc., down the same, it shall be lawful for the person requiring to float down the saw logs, etc., to remove such obstruction, and to construct such apron, dam, etc.

The second section declares that in case any person shall construct, or upon such river, creek or stream any such apron, dam, etc., or shall otherwise improve the floatability of such river, creek or stream, such persons shall not have the exclusive right to the use or control thereof; but all persons shall have a right to use them, subject to the payment to the person who has made such constructions and improvements of reasonable tolls.

The third section extends the operations of sections one and two to all rivers, creeks and streams mentioned in the first section, and to all constructions and improvements made thereon, whether the bed of the river, etc., or the land through which it runs, belongs to the Crown or not.

The fourth section empowers the Lieutenant-Governor-in-Council to fix the amounts which any person entitled to tolls under the Act shall be at liberty to charge on saw-logs, etc.

The fifth section extends the previous provisions of the Act to all such constructions and improvements as may hitherto have been made, as well as to those hereafter constructed.

The sixth section gives to all persons driving saw logs, &c., down the streams, the right to go along the banks.

The seventh, and last, section declares that if any suit is now pending, the result of which will be changed by the passage of this Act, the court may order the costs of the suit to be paid by the party who would have been required to pay the costs if the Act had not been passed.

It is tolerably clear that this section refers specially to the suit of McLaren against Caldwell above referred to. It appears that Mr. McLaren is the owner of certain streams and improvements on streams which he makes use of for the purpose of floating down saw logs from the timber limits from which he takes the same for the purposes of his business as a lumber manufacturer.

Mr. Caldwell is also a lumber manufacturer owning timber limits in the neighbourhood of those owned by Mr. McLaren.

He attempted to float his logs down Mr. McLaren's streams and through his improvements. To prevent his doing so, the suit in chancery above referred to was instituted, and a decree was made declaring Mr. McLaren exclusively entitled to the use of the streams and improvements and restraining Mr. Caldwell from floating his logs down the same.

That case has been appealed to the Court of Appeal. The effect of the Act now under con-

sideration must necessarily be to reverse the decision of this suit.

Had this Act, instead of giving to any person desiring to make use of the streams the right to use the same upon payment of certain tolls absolutely expropriated the whole ownership of the streams for the public use, and provided a means of compensating the owners for the property so taken from them, it would be less objectionable in its features.

The effect of the Act as it now stands seems to be to take away the use of his property from one person and give it to another, forcing the owner practically to become a toll-keeper against his will, if he wishes to get any compensation for being thus deprived of his rights.

I think the power of the Local Legislature to take away the rights of one man and vest them in another, as is done by this Act, is exceedingly doubtful, but assuming that such right does in strictness exist, I think it devolves upon this Government to see that such powers are not exercised in flagrant violation of private rights and national justice, especially when, as in this case, in addition to interfering with the private rights in the way alluded to, the Act overrides a decision of a court of competent jurisdiction by declaring retrospectively that the law always was and is different from that laid down by the court.

In reporting upon a reserved bill of the Prince Edward Island Legislature in 1876, the then acting Minister of Justice reported to Council, and His Excellency was advised to withhold his assent from the bill, one of the grounds being that the bill was retrospective in its effect; that it dealt with the rights of the parties then in litigation, and that there was no provision saving the rights of private parties.

On the whole I think the Act should be disallowed. I recommend, therefore, that the Act passed by the Legislature of Ontario at its last session, intitled:—"An Act for Protecting the Public Interests in Rivers, Streams, and Creeks," be disallowed.

(Signed)

JAMES McDONALD,  
Minister of Justice,  
per J. A. M.

## WHAT BURNS THE MILLS.

With the opening of the season, the saw-mill proprietor enters not only upon a period of active labor in the production of lumber, but upon a season fraught with the gravest apprehensions. He may not fear that through a low stage of water his supply of logs will be stranded upon the upper waters, or rather bars, of the river or creek upon which he has launched them; he may not fear that river pirates will snatch them from the drive, and put them upon the market before they can float within reach of his own ability to manufacture them; he may, in fact, be blessed with a boom full at the mill, and enough in a handy store boom at no great distance away to bid adieu to all apprehensions of a season's shortage; but the time of his peril as well as his profit is upon him, and from now to the close of the season he may well assert that "uneasy lies the head" of the man who owns a saw mill. If he could be about the mill through the night as well as through the day, and were he endowed with powers that did not need to seek recuperation in sleep, he could rest somewhat easy in his mind as he contemplated the risk attaching to his property, in the contemplation of the fact that his own eternal vigilance would prove the price of his safety from the danger of fire.

With the beginning of the present sawing season, come thicker and faster the reports of mills destroyed, and hopes of prosperity blasted. In fact, the number of saw mills thus far this season reported as gone up in smoke is remarkably large, and the fact calls for a more careful attention on the part of every saw mill owner, lest he too be called upon to part in an hour with the fruits of a lifetime, or at least of many years of labor.

It is not possible to point out all the causes of fire that lurk unseen around the saw mills of the country, only awaiting a favorable combination of circumstances to make known their dangerous nature, but in calling attention to a few of them it may not be impossible that others will suggest themselves to the minds of our readers,

leading to such examination of their premises as secure the adoption of safeguards which shall prove the ounce of prevention better than a pound or more of regret. Mill arches, which have stood all winter, are quite likely to settle somewhat, soon after a season's work begins, and the jar and rattle of the machinery develops the shell of weakness which has held them. Cracks in the wall to which no particular attention is paid, have proved a most serious source of danger in permitting sparks to escape upon the light dry dust which is almost certain to have accumulated upon the beams and timbers in the neighborhood of the engine room. These should not be permitted to "run a day or two longer" before having them fixed. Procrastination is not only the thief of time, but has destroyed many a good saw mill, and the only safe motto about a mill is found in the trite saying, "Never put off until to-morrow what it is needful and wise to do to-day."

Careless engineers and faithless watchmen are about the most dangerous things to be found about a mill. The former allows the sawdust to accumulate about the furnace doors or hearth, and if the truth were to be known about many a saw mill fire, it would be found to have its inception in this scattered sawdust, which ignited while the engineer had "just stepped out of the fire room for a minute." His call outside proves a most disastrous minute for the proprietor; though the resultant destruction could have been averted if the hearth had been well swept before he stepped out. Probably two-thirds of the fires which destroy saw mills in the day-time arise from this cause. It is no uncommon thing to see the engineer of a saw mill bank up his hearth doors with sawdust, when he shuts down at noon and goes to his dinner. Such an engineer is a most excellent subject for discharge from a man's employ, and if the mill does not take fire the first time he does it, the old adage about taking the pitcher to the well once too often is pretty sure to be verified before the season is over.

Night fires are more usually the result of a too implicit confidence in the watchman, than many suppose. We would not assert that all watchmen are unfaithful, but experience has proved the value of a proprietor's call at the mill at unseasonable hours of the night. If you find a wide plank or two laying across the top of your boilers, or suspiciously near to the arch, you may be pretty sure that a quiet visit to that locality in the small hours of the night, will find them occupied by a lodger whom you have paid to walk around and see that no marauders are threatening your property, and no incipient blaze is endangering its safety. It is a good thing to have an energetic man in your employ, but when you find your watchman always ready to fill an extra place during the day, and apparently able to do without sleep for an indefinite length of time, you can be almost positively sure that what sleep he dispenses with in the day-time is taken at your risk during the night. It is well to be suspicious of the faithfulness of the man who can watch all night and every night, and grow fat on it, while working half or three-quarters of the time during the day. It is at least a good plan to visit him occasionally when he least expects you, for by such visits you can often reduce the amount of your apprehension, if not the actual premium on your insurance.

The spark-catcher on your smoke stack may be all safe enough, for practical purposes; but when you find a little patch of fire here and there through the mill yard, on a hot day, it will pay handsomely to call in the boiler maker, or set your engineer at work to make the meshes smaller, or to put up a new wire screen in place of the damaged one, which will warm you some day with a hotter blaze than is healthy or profitable. Your fire pump may be a first-class one; but when you go into a mill and see a row of empty water buckets in the rack on the saw floor, you can rest assured that if a fire ever starts on these premises, the fire pump will be of very little service. Empty buckets are a pretty sure sign of lazy engineers and mill foremen, and a disabled pump. Unfortunately, when a fire starts on saw mill premises, it is usually in too much of a hurry to get through the contract it has taken in hand to allow a machinist to be sent for to put the pumps in

order, or to repair the hose which has been hanging on a peg in the wall until it is ready to drop to pieces from decay. The truism that "a stitch in time saves nine," has often been correctly rendered, "a full bucket of water saves the mill." With the record of saw mill fires daily increasing, it well becomes all who are interested in this class of property, to give the subject of its safety from fire a little of the care that is taken to obtain a full stock of logs, or an extraordinary cut by the saws. —*Northwestern Lumberman.*

## COMBINATION LUMBERING.

Regarding the recent combination of lumbering interests on the Chippewa river, Wis., of which some details were given some time since, the *Minneapolis Lumberman* says: The purchase of the immense property of the Chippewa Lumber & Boom Co., by the lumbermen of Eau Claire and the Mississippi Logging Company is one of the largest transactions of the kind which ever occurred in this country. The total value of the property is \$1,496,000. The realty costing \$1,275,000 and the rest being for logs cut during the winter. A sort of syndicate has been formed between the Mississippi Logging Co. of Eau Claire by which it is intended to bring about entire harmony in all future lumbering operations on the Chippewa. The amount of property taken by the new combination including most of the property of the Chippewa Falls Co., and also certain improvement dams, etc., heretofore made by the Mississippi Logging Co., on the river above Chippewa Falls. The total property which goes into the hands of the pool is \$1,232,000, which is divided up so that 492 shares go to Eau Claire and 738 goes to the Mississippi Logging Co. The shares at Eau Claire are divided up among the companies there. The significance of the great transactions to the trade lays in the fact that it means more economical production of logs on the Chippewa river by united and harmonious action. Experience has demonstrated lumbering operations on our rivers, (especially driving,) can be much more successfully carried on under a single management, than by scores of individual operators, each bent on getting the start or advantage of his neighbors. The trouble in the latter case being that every man knows that his plan of operation is the best and the rest cannot see it.

The lumbermen of the Chippewa river have been acquiring an education in these matters, and probably have spent as much as the present investment in finding out that they could do better in a friendly pool of common interests than by struggling for the ascendancy. Hereafter there will be no more wars, or rumors of wars, on the raging Chippewa, and everybody should rejoice who lives this side of Chicago.

The Eau Claire *News* recently published the following on the same subject: It is rumored that a number of Eau Claire lumbermen have purchased two-fifths of the stock of the Chippewa Lumber & Boom Company, thus putting the control of lumbering operations on the Chippewa in the hands of one big corporation. The Chippewa Lumber & Boom Company, it will be remembered, is the owner of all the pine lands, town property, saw mills, dams, booms, etc., formerly owned by Peck & Barnard, successors to the Union Lumber Co., valued at \$1,275,000. The capital stock of this company consists of 1,230 shares of \$1,000 each. Of this amount twelve firms on the Mississippi river own \$738,000, and six Eau Claire concerns \$492,000.

Although the Boom Company is not yet fully organized, it is understood that the stock taken here is as follows:—

Empire Lumber Co., \$125,000; Eau Claire Lumber Co., \$105,000; Valley Lumber Co., \$73,000; North Western Lumber Co., \$73,000; Daniel Shaw Lumber Co., \$62,000; Badger State Lumber Co., \$50,000.

If these rumors are true, and they seem to be well founded, it looks as though it was the intention of the lumbermen to act in harmony in the future and conduct their operations in a manner to subserve their combined interests. It is easy to see that such a powerful combination will be able to control in a great measure, all the lumbering operations on the river.

The circulation of the CANADA LUMBERMAN is over 2,000 copies. Advertisers should note this.

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CANADA LUMBERMAN OFFICE, PETERBOROUGH,  
Peterborough, Ont., June 13th, 1881.

**Travelling Agent.**

MR. A. L. W. BEGG has been appointed agent for the CANADA LUMBERMAN, and is authorized to collect subscriptions and grant receipts therefor and to make contracts for advertisements appearing in its columns.

**The Canada Lumberman**

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PUBLISHED SEMI-MONTHLY BY

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

PETERBOROUGH, Ont. JUNE 16, 1881.

**THE HARDWOOD TRADE.**

While pine is undoubtedly the most valuable as well as chief product of our forests, it cannot be too frequently impressed upon our people that a vast field for the employment of labour and capital lies before them in the other varieties of timber which our forests produce.

With advanced prices for pine the tendency will be more and more to substitute the former for the latter. Already in the neighbouring States hardwoods, such as maple and beech, are taking the place of pine for the purpose of flooring, and various finishings in houses, while every ship, every wagon, every agricultural implement, every piano, every piece of furniture, every railway car, every nicely finished room calls for more or less hardwood, and inasmuch as this same call comes from a rapidly growing continent as well as from Europe, it is evident that in our hardwoods we have a source of national wealth and individual employment and prosperity that should not be despised. We observe that the hardwood trade of Chicago alone for 1880 is estimated at 250,000,000 feet, or about one-sixth of its pine trade, and that nearly 7,000,000 feet of hardwoods were cut in the Saginaw Valley alone in 1880, where its first manufacture dates only a few years back. In Michigan only a few years ago maple was valueless, and now every tree is husbanded as representing so much money. Birch too, which was a drug, is now anxiously sought after by furniture men, and so on through the round until you reach the despised poplar, which has found a commercial value for the manufacture of printing and wrapping papers.

While the field is a good one and prices of hardwoods like pine is booming, it will, however, be wise in those who think of embarking

in the hardwood trade to proceed cautiously. Very much depends upon how it is manufactured and handled, while it requires time to season, and is of comparatively little value until properly seasoned.

**HEMLOCK TREES AND BARK EXTRACT.**

Our neighbors in New Brunswick are considerably exercised over the hemlock bark question. It appears that recently three representative men visited Fredericton, in the milling and lumbering interests of Northern Kent, to protest against the Local Government's policy of selling outright, to parties interested in manufacturing hemlock bark extract, portions of the timber lands licensed to them for general lumbering purposes. The Crown Lands Department has advertised for sale 1,000 acres of land on the Richibucto river under license to Mr. E. Walker, and from which he draws supplies from his mill on Bass river, and surveys have been made of other blocks on the Goul Branch, the Kouchibouguine and the Kouchibouguine, affecting the other mill owners. There is a considerable number of hemlock trees on the streams named, and the Government claim that under the terms of the licenses granted to the mill-owners and lumberers these lands can be sold at any time. The St. John Sun says: "It may be justifiable to withdraw such lands from the lumbermen when they are actually required for actual settlement purposes, but it seems scarcely just or reasonable to refuse to sell these lands, so necessary to the supply of the saw mills of the country, to one class of lumbermen, and to sell them absolutely (not simply license them) to another class of lumbermen. In the one case the trees are cut down, hauled out, sawn into lumber and form a staple export of the country. In the other case, the trees are cut down and stripped of their bark, which alone is removed; the trees themselves are left to rot in the woods; the prosecution of other lumbering is greatly obstructed; and the risk of forest fires is greatly increased." The Sun goes on to say: "We hope the Provincial Government will consider the whole question very fully before deciding to sacrifice an old and important industry for the sake of one which, with some good features, has a number of very bad ones. We regret to learn that the mill-owners' protests have not been favorably regarded by the Local Government, but there is still time for the Government to reconsider their original decision in the matter. We incline to the opinion that the country will say there is a practical grievance here which the Government cannot pass over without serious injury to the public interests."

Mr. Chas. A. D. Miller gives his views in the St. John Telegraph on the other side of the question. He says:—

"It is argued that the selling of a certain quantity of land in Kent County to a firm interested in the Bark Extract business on the sole condition that they erect one of their factories in the district will have the effect of seriously injuring saw mill owners in that part of the country, and that it is a great injustice to these gentlemen. Now this is not all borne out by the facts of the case, as all unprejudiced persons will readily admit, for the extract manufacturers do not want the spruce or pine (whatever small quantities of these may remain on these lands, they having been cut and culled over and over again for the last 30 years and more) but on the contrary are perfectly willing that the lumbermen should make use of what remains on the lands they may take up as heretofore, and in fact offer to the mill owners this lumber on condition that they give them in return the hemlock bark on what lands they (the lumbermen) may hold, which surely is fair enough. In fact the establishment of a bark extract factory in that part of the country will increase the value of mill property and provide them with work for many years to come, for the effect of such a factory will be to furnish them with an abundant supply of hemlock logs, which otherwise would be too expensive to lay down at the mill, unless the bark were also utilized, and at the same time they will have their supply of spruce logs, etc., as intact as before.

"It must also be borne in mind that the spruce and pine in this district have now become so scarce, and what is left of them, so

small, that it is very unprofitable work, and does not give their mills anything like full employment. Hemlock logs, on the contrary, at the prices at which they will, by the erection of the bark factories, be enabled to obtain them, delivered at their mills, will offer much more remunerative and constant employment.

"Now as regards the argument that this bark should be reserved for the use of tanneries in the future. What guarantee have we got that large tanneries will ever be established in this section? In this age of progress and discoveries can we be certain that hemlock as a tanning agent will not at any moment be superseded by some cheaper and more perfect tanning agent? Do not India and the Levant and other tropical countries produce tanning materials which grow up and are gathered every year in the form of nuts and a species of plum, etc., which are now being shipped to England and Europe generally in immense quantities, and which have almost entirely taken the place of oak bark for tanning purposes? The production of these articles can be forced at will and is enormously increasing, and whereas as hemlock bark only contains from 4 to 7 per cent. of tanning, these articles contain from 20 to 40 per cent. The effect already of the introduction of these materials, though hemlock and oak bark may be becoming scarcer, has been that tanning agents in the great markets of the world are cheaper to-day than they were 10 or 20 years ago, and this, too, notwithstanding that the tanning trade in the same time has enormously increased. There is an old saying that 'Hay should be made while the sun shines,' and surely the present generation should not be allowed to starve that a future one may have a merely prospective advantage.

"England does not prohibit the use of coal, though scientists unanimously declare that it must, ere long, be exhausted. The fact of the matter is that there will always be enough bark in New Brunswick, and to spare, to tan all domestic hides; and as much money is expended per cord of bark used in the manufacture of merchantable bark extract, as in the case of a large tannery, which invariably has to look to a foreign country for its supply of hides, which is by far the largest item of expenditure in such an industry. In this respect it contrasts unfavorably with the hemlock extract business, in which the entire expenditure is made in the country."

**HOW TO SPLICE BELTS.**

Mr. W. McGrath, one of the employes of the Dickson Estate Mills, has sent us the following ancient item which appeared in a late issue of this journal with regard to the running of the splices of a belt:—

A belt should be put on so that the splices will run with the pulleys, not against them. Both pulleys, the driving and driven run the same way, consequently the splices act the same on both. In instances where a pulley is on both sides of a belt, as is the case when a tightener is used, put the belt on so that the splices will run with the smaller pulley. The grain side of the leather should be put next the pulley, as it is more close and will not stretch as much as the flesh side. It is also smoother and will not be so apt to slip under the strain of starting up.

**McCLAREN vs. CALDWELL.**

Since our last issue this case has occupied the attention of the Court of Appeal for several days. The lengthy arguments of the counsel having been concluded, judgment was reserved. Several minor moves have also been made on the legal chess-board with regard to the same, without, so far as we can see, any material benefit to either party.

**PETERBOROUGH.**

PETERBOROUGH, June 13.—The river here is full of logs. Some forty river drivers are camped at the Little Lake, and there are now between this point and Stoney Lake fully 500,000 logs bound for the mills.

We are informed on excellent authority that the Dominion Bank recently sold their mill cut of last season (with mill culls out) for \$12 per 1,000 f.o.b. at Longford mills. This lot could not be considered above an average one.

**A SMALL MILLER'S COMPLAINT.**

To the Editor of The Canada Lumberman:

FALKENBURG, June 6th, 1881.

DEAR SIR,—I see in the current month you ask for correspondence under the head of "Class Journalism," from persons interested in the lumber trade. This brings to mind the case of small saw mill men, of whom, being one myself, I can speak "feelingly." Now, such men find it quite a feat, and a hard one too, to furnish and stock up a small mill with a few thousand logs, cut them into lumber, and get it to market without the loan, in most cases, of a cent from a bank, they are consequently forced to hurry their lumber to market and sell for anything they can get in order to meet running expenses, and, of course, they nearly always sell at great disadvantages. For instance take this case, such a man "ships" 2 or 3 carloads to Toronto, say, when he gets there he has little cash, and can't wait, he must sell, the planing mill men know this, and they've got him; they offer what they like, and a bargain is made, and the lumber is sold for sometimes a third less than its real value; then in measuring, the buyer has the seller again, if a board is damaged in transit, it is culled, and a wide margin is taken for "checks," sun-dried boards, spoil lying on cars, docks, and waiting shipment, this margin in a few carloads is often thousands of feet; these culls are rated as of no value, although firewood is \$5 or \$6 a cord in Toronto. All this reduces the price of the lumber to a low figure, that just allows the millman to live by a hard struggle, and he often breaks down after a short fight, and is bankrupt. Now, if a combination of small mill men was formed, a depot at some point formed under proper management at any good point for selling, where the lumber could be received and taken proper care of, and sold at a fair profit, how much better that would be for such men as I describe, and it would injure nobody, but would be a fair way of doing business, and the standing, etc., of the persons availing themselves of these arrangements could be learnt, and loans could be got from banks to enable a better winter's work to be done in stocking up and cutting, etc., better and more lumber could be made at a benefit to all round. This idea, no doubt, has occurred to many, but I have not seen it in print. If it interests any of your readers, well and good; if not, no harm is done; and as your paper is especially devoted to the trade, to which it is doubtless doing good service, I suppose one may consider the above named as a fair subject for thinking over by anyone concerned.

Yours truly,

W. MOORE.

[We shall be glad to hear from others on this or any other subject connected with the trade. One of the advantages to be derived from the publication of such a paper as THE CANADA LUMBERMAN, is that it will afford a medium for the expression of opinions, and thus secure the removal of grievances.—ED. LUMBERMAN.]

**BRACEBRIDGE.**

THE late rains have been the means of bringing out nearly all the logs that were expected to be "hung up" for the present season. The Little East drive is still moving, but it is slow work as the water is very low. The tail of the Muskoka Boom Company's drive is past Bayville, on the South Branch, and they are running into Mary Lake. On the North Branch the head of the drive is within three miles of the Georgian Bay, and the Company expects to begin delivering these the last of this month, which will be about a month earlier than usual. The water generally is very low and falling.

**BOBCAYGEON.**

A scow load of poplar has passed through the Locks here on its way to the Napanee Paper Mills. At Lindsay it will be transferred to the cars and taken to Napanee. As poplar makes first-rate paper, the probabilities are that this will prove the pioneer shipment of many to follow from the same district.

THE steamboats are busy with the drives.

ULLYOT & SADDLER'S drive of 40,000 pieces, from the township of Anson, are now passing the slides en route for Harwood. They are a fine lot.

**NOTES BY THE WAY.**  
LINDSAY.

Building operations, so far, have not been brisk in Lindsay this season. A few buildings are under contract, and the block of wooden buildings recently burned, covering an acre of ground, will have to be rebuilt, which will create some extra work.

One saw mill, known as "The Yankee Mill," (Bond, Downer & Co.) has been shut down for the past two seasons. The other two saw mills in Lindsay are running full time. Messrs. Needler & Sadler's mill, driven by water power, is running from six o'clock a.m. to eight p.m. The cut this season will amount to 100,000 feet custom work, and 700,000 feet from logs got out on their own account last winter. They had a new "burner" built last spring to consume sawdust and refuse. It is constructed after the pattern of a steam boiler furnace with ordinary smoke stack, and answers the purpose well.

Mr. Thurston's mill is working full time in the various branches of sawing, shingle-making, etc., carried on by this enterprising gentleman. The stock of logs got out by him last winter has been, proportionately, considerably more extensive than that of former years, which must reduce the ultimate profits. The same rule applies more or less to stocks, generally, cut last winter.

Shingle manufacture is an extensive industry in Lindsay. Mr. Fee is engaged in completing his stock of cedar shingles before commencing the pine stock, as when the weather becomes dry the manufacture of cedar shingles is disagreeable on account of the impalpable dust which comes from the seasoned blocks; whilst, on the other hand, before the wood gets too dry the work is pleasant, and the aroma of the cedar which pervades the mill is healthful and agreeable. His cut of cedar shingles this season will amount to four million—pine shingles, one million. Mr. Fee exports to Oswego, Albany, Troy and other United States markets, and does a large trade in fence posts and telegraph poles. He intends next season to retire from the milling business to his farm, near Lindsay, where he has this spring erected a large brick dwelling, and where he will carry on butter and cheese making on an extensive scale. As the mill is fitted up with powerful steam engine, circular saw for cutting lumber, planing machine, as well as the most improved shingle making machinery, Mr. Fee's retirement will make a good opening for some enterprising party acquainted with the lumber business.

Mr. Burko has a good shingle mill, on the upper side of the locks, which is turning out a fair quantity of first-class shingles daily.

The other principal industries of Lindsay are, two tanneries, a woollen factory, brewery, stove factory, chair factory sash and door factory, a carriage factory, and a large flouring mill, working day and night, grinding 8,000 bushels of wheat, yet on hand of last winter's purchase. Over a dozen steamers of various sizes ply on the Seugog and Bobcaygeon waters, engaged in freight, lumber and passenger traffic between Fenelon Falls, Bobcaygeon, Lindsay, and Port Perry.

GALT.

The new saw mill recently erected by George Hespeler, Esq., (P. McGregor, manager,) has a stock of logs on hand to cut for the season of 800,000 feet of pine and 200,000 feet of hardwood. The machinery, 7 ft. circular saw, edger and butting saw,—all of the most improved pattern—are driven by a 35 horse power steam engine from Goldie & McCulloch's establishment. The mill works well and will have the sawing finished early this summer.

HAMILTON.

The "Ambitious City" is full of business energy at the present time. Workmen of all kinds are in good demand and wages high. Railway freight trains daily bring in car after car loaded with square timber and lumber of all sorts and sizes. The demand is greater than the supply. Near the Great Western the harbor looks like one of the Quebec coves. Men are busy rafting. Withs and traverses are piled in heaps along the wharves. The old immigrant sheds are taken possession of by the jolly shanty men, who find them roomy and commodious dwelling places.

Messrs. Platt & Bradley have made up and despatched two rafts of 100,000 feet each, which have arrived safe at Quebec. Another raft of 125,000 will be ready to leave on Monday (13th June.) The rafts are composed of oak, elm, ash, pine, whitewood, maple, cherry, walnut, and hickory, square and round. Messrs. Platt & Bradley have yet to arrive by train about 300,000 from all parts of the surrounding country. They have about 40 men employed in rafting.

Messrs. McArthur Bros., of Toronto, have despatched two rafts from Hamilton, averaging about 100,000 feet each—mixed lumber. Another raft, nearly ready, will take the balance they expect to have at this port.

Messrs. McCrae & Murphy sent one raft out early in May, and are making up another which will clean up their stocks. Timber mixed, oak, &c.

Mr. John Durkin, of Quebec, has sent away one raft—has another ready, and a small raft yet to make up.

Mr. J. Lattimer, Toronto, has one raft nearly ready, which completes his stock on hand.

Messrs. D. & J. McCrae are loading a vessel with staves and plank for Collins Bay.

Messrs. Platt & Bradley have shipped four cargoes this season of oak and hickory to Garden Island to be forwarded to Quebec.

Building operations are brisk. Mr. Robert Chisholm is making good progress with the large cotton factory now in course of erection. The main building is 302 ft. long by 50 wide, with a number of wings and additions. The engine-room is 45 ft. by 33. Picker house 52 by 40 ft. There are three floors in the main building, supported by 250 oak columns. The beams are 50 feet long, and 12 by 14 inches, formed of three pieces, beaded, 4 inches thick, and bolted with 7/8 inch bolts 18 inches apart. Floors double laid on the joist, or beams, forming a ceiling. Messrs. Brennan & Son, lumber merchants and manufacturers, supply the lumber, doors, sash, etc. There are three hundred windows in the main building. Mr. Chisholm has just finished the Hamilton Provident and Loan Society's buildings—a magnificent block with two fronts of Ohio freestone. Another large building is being erected on King street, with two fronts of brown freestone from the Caledon or Georgetown quarries, said to be superior to the Ohio freestone in durability and facility of working.

The Emery Wheel Manufacture or Hamilton Hart Wheel Company, have very complete premises, and seem to be doing a large business. Corundum is used freely by this company, and is said to be superior to emery.

MR. LEACH'S shingle mill was burnt to the ground on May 31st. The fire caught from a smudge they had to chase mosquitoes.

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**THE MIXTER SAW GUMMER IS KING.**

MORE GUMMERS and SWAGES sold the past year than ever before. The great and constantly increasing demand for the "MIXTER GUMMER" settles the question of its efficiency and superiority over all other Gummings in Market.

The following is a fair sample of the many flattering testimonials which are constantly pouring in upon us:—

DEAR SIRS—Your Patent, Automatic, Self-Feeding Saw Gummer is a perfect success. Yours, &c., E. MOIR & CO., Lumber & Timber Dealers.

WEST TROY, N. Y.

GENTS—I am using one of your Patent Automatic Self-Feeding Saw Gummings at each of my three mills, and I would not take one hundred dollars for it if I could not get another like it. Yours truly, WM. ANDERSON.

WATSON, EFFINGHAM CO., Illinois.

GENTLEMEN—The Patent Automatic Self-Feeding Saw Gummer we bought of you just fills the bill exactly. We gummied a sixty-inch saw with sixty teeth, cutting on an average of three-fourths inch deep to each tooth, with one cutter without sharpening it.

CORINTH, Miss.

THE CUTTER OR BURR referred to in the above, (1 in.) cost 90 CENTS, it takes one-half minute to each tooth, and the saw is gummied without removing it from the machine. ALL SAWYERS know this is a great advantage, besides saving in time.

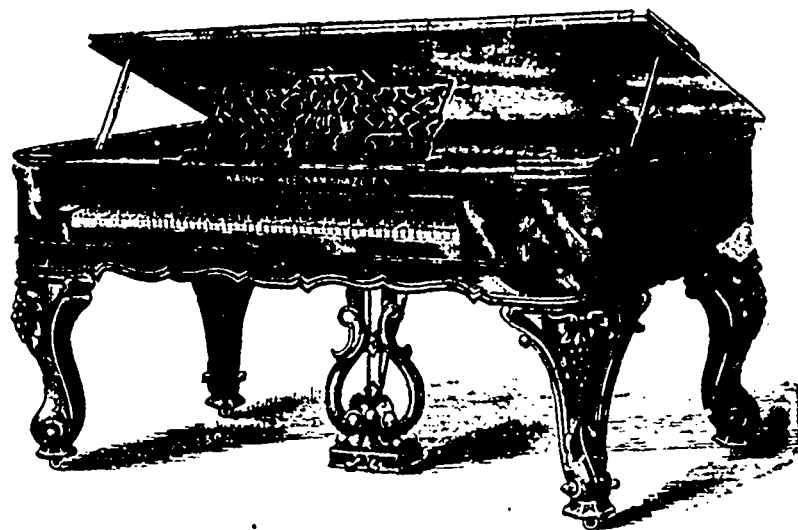
We challenge ANY saw tool manufacturer in the United States to produce such an array of unsolicited testimonials as we have received for our GUMMER AND SWAGE. Of course we have not room here for an extended list.

Our goods are now so well established throughout the country, that information can be easily obtained as to their practical working from any of the several THOUSAND Sawyers who have them in use.

In short the MIXTER GUMMER is pronounced by all to be the "BOSS GUMMER." Send for circular and price list with cash discounts.

EWAN CHAIN for Sawdust Carriers, Live Rolls, &c. SAWS and Saw Furnishings.

**Waterous Engine Works Co., Brantford, Canada**



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CARRIES OFF THE HONORS OF 1880 AS FOLLOWS:

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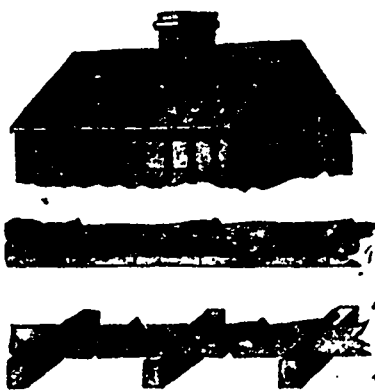
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101, 103 and 105 West Front Street,  
CINCINNATI.

All kinds of CORRUGATED IRON Furnished.

Send for Illustrated Circulars, naming THE CANADA LUMBERMAN.





## NOTES BY THE WAY.

## UXBRIDGE.

Mr. J. Gould cut last spring about 400,000 ft. of custom logs at his water saw mill, Uxbridge, 41 miles from Toronto. Of this about one-half was pine, and the balance hemlock and hardwood. He has, of his own stock, also cut 50,000 ft. of hardwood, 40,000 ft. basswood, and 250,000 ft. of pine—having yet on hand 350,000 feet pine to cut, which will be finished by the end of July.

Mr. Wholer, of Uxbridge, is getting through with cutting his stock of about 400,000 feet of pine. The demand is good, both locally and for export by the Toronto & Nipissing Railway, all along the line from Cobocoink.

## LONGFORD.

Two "burners" have been erected by Mr. W. Hamilton, of Peterborough, for the Longford Lumber Co., for the convenience and safety of consuming the refuse from the Longford mills. They are built of boiler plate. The larger of the two is 80 ft. high and 60 ft. in circumference at the base. They are bottle-shaped, and lined inside to the thickness of 18-in. and height of 32 ft. with fire brick, brought from Scotland. The largest burner is capable of consuming the refuse of the sawing of 80,000 ft. in a day of 11½ hours. The smaller burner is about one-fifth less than the other. Mr. Thompson, the manager, has 6,000,000 ft. of logs in the lake (St. John) at the mills, and 10,000,000 on the river. The mills are running at their greatest capacity and on full time. Twenty-seven loaded cars of lumber left the yard one day, week ending 31st May.

## WASHAGO.

Mr. John Stewart's shingle mill, on lot 15 in 9th con. of North Orillia, was destroyed by fire on the 15th May. The machinery is being repaired at Brammer's, Orillia. Mr. Stewart is to have a circular-saw put in along with the shingle machinery, and expects to be running again the first week of June.

## DARTMOUTH.

Mr. John Fleming, of Dartmouth, Atherley station, Midland railway, had his shingle mill burned on the 24th May. The mill was driven by water, but the fire communicated from burning refuse. About \$100 worth of shingles were consumed. No insurance. Mr. F. will re-build at once, and put in a circular-saw at the same time with the shingle machine.

## GOODWOOD.

This is a lively lumber station, 34 miles from Toronto, on the Toronto & Nipissing Railway, having two good saw mills run by steam. Clark's mill will cut two million logs this summer. Mr. Davidson, manager, is filling two orders from the Dominion Government for lock-gates' material for the Welland and Lachine canals, viz.: Sawed timber, 30 ft. long and 7½ to 10 x 21½ in. wide. The timber is of excellent quality.

The other mill at Goodwood is run by J. & G. Bessé & Co. They will cut 1½ million feet this season, and are shipping daily to Toronto, with good demand for all they can get ready, and with orders ahead for next winter. There is also a planing machine connected with this mill.

## ORILLIA.

Messrs. Miller & Vansickle have lately finished their new steam saw mill, near the Midland railway station, Orillia. It is fitted up with all the latest labor-saving machinery, and to those improvements are added some new contrivances invented by the proprietors of the mill. The present stock of logs at hand is being cut for the Flos Lumber Co.—Mr. Orr, manager, Barrie. The mill is running full time, and a shingle machine will soon be added to the lumber cutting machinery.

Mr. Andrew Tat is carrying on a lively trade in supplying lumber and shingles from his mill at Orillia, as well as from some smaller mills along the Midland, westward, which are furnished by him.

## PARRY SOUND.

The logs of the Parry Sound Lumber Co. (J. C. Miller) are all afloat, and the mills are working to their utmost capacity. This spring a very large "burner" has been erected at those mills to consume the sawdust and refuse. It is shaped like a champagne bottle, and constructed of boiler plate and lined 30 ft. up with fire

brick. The height of the "burner" is 100 feet, with a screen 17 feet high on the top, in all 117 feet. It is 22 feet in diameter at the bottom and 12 feet at the top, and gives the mills a business like appearance from the approach to the Sound.

Sales on the Georgian Bay are brisk.

The drives in Parry Sound and Muskoka districts are getting along slowly, and unless more rain falls soon on the North Seguin, a considerable quantity of logs will be left over.

On the North Seguin, the Ontario Bank will have about 20,000 pieces hung up, but on the South Seguin it is expected all will be got down. The Ontario Bank sold recently at their mills at Parry Harbor, about four and one-half million feet of lumber to J. C. Miller, at an average of \$10 per M. cash.

## SALE OF TIMBER LIMITS.

Berths Nos. 128, 136 and 137, on Serpent River, near Bruce mines, were recently sold by Mr. J. C. Miller to Mr. H. H. Cook for \$20,000 net cash. It is stated that the same limits are now under offer to parties from Grand Rapids, Mich., at \$40,000. The same parties have the refusal from Mr. Miller of berths 85, 92, 107, 119 and 124 on the Spanish River, at \$50,000.

On the 23rd of May, Mr. A. M. Spratt, of Alpena, Mich., purchased the north 37 square miles of the Township of Armour, in the Parry Sound district, from Mr. J. C. Miller for \$15,000, and next day re-sold the berth to Messrs. Burton Bros., of Barrie, for \$17,750. This was a handsome profit for Brother Jonathan to make on the bargain. The timber limits on the north shore of Georgian Bay are becoming very valuable, as the Muskoka region is getting thinned out.

## THE CHAUDIERE PLANING MILLS AND MACHINE WORKS.

These industries were established many years since by Mr. A. H. Baldwin, Chaudiere Island, Ottawa, then one of the leading sawn lumber merchants and mill owners, who has since retired from business in favor of his son, Mr. W. H. Baldwin, and his son-in-law, Mr. James Parr, present proprietors.

The planing mill was started in 1870, the machinery of which, however, was removed in 1876 into a new building erected for the purpose, which is 80 ft. by 30, two storeys high, and contains three planers, moulding machine, re-sawing machine, turning lathes and the usual sawing butting, edging and gig saws. Every description of house furnishing lumber is manufactured, such as clapboards, flooring, scroll work and mouldings of all kinds, etc., full assortments of which are kept in stock and stored in large sheds adjoining the mill. When we visited the works a quantity of water elm was being cut for the inside finishing of a public building at Winnipeg, Man.

The machine shop and foundry, also run by Messrs. W. H. Baldwin & Co., which are built of stone, were erected and fitted up by Mr. A. H. Baldwin in 1868, and afterwards sold to the owners of the Victoria Foundry, but subsequently lapsed back to the original founder, remaining idle, owing to the depression, for three years.

The machine shop which is now in full operation, 30 x 60, three storeys high. The first and second flats are equipped with five lathes, two planers, two vertical drills, a large bolt cutter, shaping machines, etc. The upper flat is occupied as a store room for the various patterns kept.

The blacksmith shop has two forges and the usual other appliances.

The foundry, built also of stone, is 35 x 60, and contains a cupola, blast and cranes for lifting heavy castings.

The appurtenances are complete in every department of the works for the manufacture of every article required in general and mill and steamboat machinery, which is a specialty of the firm, who aim at promptness and durability both in new work and repairs.—Our Cheerful Friend.

The great Marvel of Healing—the grand climax of medicinal discoveries is Burdock Blood Bitters. It cures all diseases of the Blood, Liver, Stomach, Bowels, Skin and Kidneys, Female Complaints, Scrofula, General and Nervous Debility, and is a reliable Tonic in all broken down conditions of the system. Sample bottles 10 cents, supplied by all dealers in medicine.

## CONSUMPTION OF LUMBER IN TORONTO.

## From Our Own Correspondent.

I have been endeavoring to collect a few statistics relating to the retail lumber trade in this city, but find it exceedingly difficult to procure figures that can be fully relied upon. The reasons for this may be explained as follows: Upon interviewing A. he gave me a long column of figures purporting to be a correct statement of his sales from the yard during the year 1880. Upon enquiry, however, I found that included in this statement are sales by car load, made by him to B. and C. who are also yard men, but had bought several cars from A. to retail from their yards, A. happening to have the particular kinds of lumber they needed. Upon making application to B. and C., they in turn informed me they had also sold considerable by car loads to other retailers, all of which was comprised in the figures handed me as being yard sales. Other retailers informed me they could not give me the quantities they had sold, but could give me the figures in dollars and cents, so that to obtain figures that may be taken as reliable is simply impossible. Another serious disadvantage under which the retailers labour here, is the want of organization or cohesion amongst themselves, they seem to view each other with a kind of suspicion and distrust, so that each man, so to speak, runs on his own track, heedless as to what his brother chip may be doing. As witness the following experience when visiting a few of the yards: Questioning the first I called upon as to what price he obtained for joisting and scantling up to 16 ft. lengths, his answer was \$11.00 per M.; on repeating the question to No. 2, his reply was \$11.50 per M., and No. 3 stated he would not sell under \$12.00 per M., so that it virtually seems to be a matter of go-as-you-please amongst them. Now this is certainly not as it should be, and nothing tends more to demoralize the trade than such want of unity, but if a Lumbermen's Exchange was once in proper running order, so that grades could be properly established, prices regulated, and dead-beats shown up, and in short, a thorough interchange of ideas take place between one another, it would certainly be greatly to the advantage of all concerned.

Another evil under which retail men are laboring here, and one which could easily be abated by acting in concert, is the custom in vogue amongst mill men of supplying consumers by the car load, at rates as low, or nearly so, as that charged to the retail trade, even going the length of bringing down half a car for a consumer and disposing of the remaining half car to the retailer. Now, this is certainly unsatisfactory both in principal and common justice to the retail men, and the yard men could soon apply the remedy if thoroughly in earnest. Doubtless some of your readers will remember the tactics used by the retailers in Chicago to remove the same trouble and in which I believe they were thoroughly successful; it operated in something like the following manner: After notifying the wholesale men that hereafter, they, the retailers, would demand a royalty of \$— per car according to grade on all lumber sold to consumers, they calmly waited and watched. Some of the wholesalers laughed and derided at the demand as something preposterous, but those who disregarded the demand soon found to their cost that they had not all the laugh to themselves. The retailers simply black-balled all such which meant nothing more or less than this: We purchase no more lumber from you until you accede to our demands; and in this way the remedy was prompt and efficient, and there is no reason why the same means could not be adopted and carried out here, and to the ultimate benefit of all concerned. The lumberman is generally termed the prince of good fellows, but sometimes there crops out amongst the best of them a slight disposition to grasp at all the trade within their reach, and this is more often the case amongst wholesale men, so that in dull times especially, the course taken by them in the matter of selling to consumers, has driven many of the retailers to the wall and has ultimately been a cause of considerable loss to themselves.

During the year 1880 there has been sold from the yards here in round numbers:—

30,000,000 ft. lumber, 13,000,000 shingles, 15,000,000 sawn lath, and in addition to this there has been sold by car loads to consumers, direct, as much more, besides a considerable quantity sold by the factory men, who all do more or less of a retail lumber business, and the sales of the present year bids fair to far outstrip that of its predecessor, as buildings are springing up in every direction; and it is much to be regretted for the future of Toronto that many buildings now being erected by speculators, are of such material and workmanship as not to add to the future glory of this the Western Metropolis. Still there are a number of quite pretentious and substantial buildings now going up; and one thing to be noticed is, that the architects are now demanding that all lumber used in the construction of good buildings shall be fairly dry, so that this will necessitate a much larger stock of lumber to be kept on hand by retailers, to meet the demand in this respect. To sum the whole matter up, the building trade is now fairly booming and all concerned feel correspondingly jubilant.

## HOW CHICAGO YARD PRICES ARE FIXED

At a recent meeting of the Lumbermen's Exchange in Chicago, the following were unanimously passed:—

*Resolved*, That on the 27th day of each month a meeting of the yard dealers shall be called to go through the price list, making such alterations as to them may seem wise; that said list, so amended on the 27th of each month, shall be in force on the first day of the succeeding month, and shall be the standard of prices at which orders shall be filled, until its successor comes out on each succeeding month; *Provided*, that should any change in prices be considered advisable prior to the 27th of any month, a meeting of yard dealers shall be called, and their action shall be binding on all orders received after a lapse of twenty-four hours.

*Resolved*, That when a price list is agreed upon and adopted at any yard dealer's meeting, it shall become obligatory on all yard dealers to issue no list, either printed or hektographed, nor to advertise in any newspaper at any less prices than established at said meeting; and should any firm think that prices as fixed at any time are higher than the market will justify, then, on notice to the president and secretary, a meeting of yard dealers shall be called, before any reduced list or advertisement is sent out.

## YOUNG'S POINT.

## From Our Own Correspondent.

SAW LOG DRIVE.—On the 27th ultimo a large drive of saw logs, consisting of 45,000 pieces, passed through here en route to Messrs. Ulyott & Saddler's mills, Harwood, under the charge of Mr. P. Bergin, foreman. The men on this drive were the best conducted that has passed through here for some years. The foreman is a shrewd business fellow, and the men under him seemingly work with a will.

## Worth Preserving.

The following figures are worth remembering, as they will save a great deal of calculation and give approximately accurate results with a minimum of labor:—

A cord of stone, three bushels of lime and a cubic yard of sand will lay 100 cubic feet of wall.

Five courses of brick will lay 1 foot in height on a chimney. Nine bricks in a course will make a flue 8 inches wide and 20 inches long; and 8 bricks in a course will make a flue 8 inches wide and 16 inches long.

Eight bushels of good lime, 16 bushels of sand and one bushel of hair will make enough mortar to plaster 100 square yards.

One fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching of the floor.

One thousand laths will cover 70 yards of surface, and 11 pounds of lath nails will nail them on.

One thousand shingles laid four inches to the weather will cover 100 square feet of surface, and five pounds of shingle nails will fasten them on.

BUFFALO has in all sixty-six lumber dealers. Tonawanda has twenty-seven.

# Chips.

It YOUNG & Co. have completed the new chimney to their mill. They have in Half Way River Lake no less than 5,000,000 feet of logs.

Mr. HUGH MACKAY, Crown Lands Agent and Collector of Customs at Parry Sound, died suddenly on the 28th ult., from the bursting of a blood vessel.

Price & Co., West Brook, are erecting a store at West Brook crossing. They have stopped sawing at their steam mill—their logs being for the present "hung up" for want of water.

SEVERAL rafts of cordwood were being unloaded near the foot of Broadway street, Winnipeg, on the 27th ult., where a number of men are working constantly in the water up to their waists for the purpose of fishing it out.

An enterprising Vancouver, B.C., man, Mr. B. L. Morrison, has this season shipped to San Francisco 800,000 hoop-poles, and has 600,000 nearly ready for shipment and more coming. He has shipped as high as 2,000,000 in one water.

A CORRESPONDENT of the Country Gentleman says that he saw 100 black locust posts which had been 22 years planted, and that they were sounder below the ground than above, and would be good posts for at least another 20 years.

A FLEET of nine flatboats of lumber, shingles, etc., arrived at Winnipeg on the 28th ult., from Moorhead, having been brought down by J. Morris. About two weeks were spent on the way. The freight was brought to Moorhead Minneapolis by rail.

LEWIS RIVERS, Esq., of St. John, has become manager for Thos. L. DeWolf & Co., at their new mill, at Diligent River. This mill will be completed this fall. It will cost some \$20,000. The firm have some 5,000 acres of land to log town and they have 3,500,000 logs out.

A FEW years ago the idea of exporting boblins would have been considered extremely impracticable, but now the diminishing timber supply of the old world has forced her to call upon us for these articles. A Lawrence, Mass., firm is in receipt of large orders for them from England.

A STEAM saw mill near Oakland, Md., was blown to atoms by the explosion of a boiler. The fireman, Marshall Butler, was blown six hundred feet, and driven head foremost under some old logs. One boiler was carried one thousand feet up the hill side.

DURING 1879-80, Ontario has shipped to the United States \$109,970 worth of household furniture, and a little to the West Indies; Quebec sent \$3,319 worth. Doors, sashes, and blinds were sent from both Provinces to Great Britain. Other manufactures of wood, unspecified, went from Ontario, Quebec, Nova Scotia, and New Brunswick to Britain, and the States and the Indies to the value of \$262,000.

We have had a visit from Mr. Little, an experienced lumberman, who some seven or eight years ago prophesied the extinction of the American lumber supply in ten or twelve years, and thereafter the accelerated extinction of our own. He still thinks, notwithstanding the extreme slackness of the lumber trade for the large part of the time since his pamphlet was published, that his calculation is not far from correct, and that in ten years from now America will have to look for her lumber in European forests. People in Canada are, as a rule, too busy to take up questions of this sort seriously. A rumor once started in England about the possible exhaustion of the coal supply created national alarm, and provoked parliamentary investigation. Mr. Little's warning of danger to our leading industry is more or less borne out by the opinion of all experts whom we have consulted on the subject, and it seems that the matter should be looked into.—*Montreal Witness*.

### A Good Location.

THE CANADA LUMBERMAN could not easily have got into a better "location" than the Peterborough REVIEW offices. Messrs. Toker & Co. will not spare either talents or money in rendering the paper all that its name implies. The LUMBERMAN has been restored to its original size, 16 pages.—*Orillia Packet*.

## STEAMSHIPS AND THE TIMBER TRADE.

The constantly increasing number of steamships in the timber-carrying trade will not be wondered at by those who take note of the immense quantity of steam tonnage annually turned out in this country from the great building yards in the north. The mystery will be, by and by, how sailing vessels are to get a living at all, in any trade, against the opposition of steam, which can accomplish so much more in less time and at a lower rate of freight than the sailer can live at. Mr. C. Moller's recently issued steamship circular furnishes some remarkable information on this important subject. From it we learn that since the 1st of January no fewer than 78 ships, measuring about 118,000 tons gross, have been added to the large fleet already afloat. Nevertheless, there were still at the beginning of April about 800,000 tons of shipping on the stocks, much of which is especially adapted for Atlantic service. The American trade is daily gaining more and more in importance, owing to the large increase in emigrants from Europe and live stock and provisions back. Of new ships there are not many offering for sale, and there can only be had at full prices; but by degrees, as the new ships become available, more second-hand boats are coming into the market, and many of them, having been supplied with new boilers, have become very useful ships, and can be bought at reasonable prices. Most of the principal builders are full of work for some time to come, but still orders can be effected on previous terms.

There will, of course, come a time when many of these ships will not be wanted for the trades on which they were intended to run. Some will fall out of it by age and disability, and others on account of being superseded by new ones of larger size or of greater suitability, and the timber trade will most likely pick up the stragglers, which will not require much alteration to adapt them permanently to the trade, and by and by others will be built, in all likelihood, of light draught of water to go anywhere, and to anything that a small coaster can now accomplish.

Though they are rather backward this spring, steam and iron together are creating a revolution in the timber-carrying trade, which is more and more obvious to us as every fresh season comes round. Two results may be expected from this change, which will be claimed as publicly beneficial—it will keep timber down in price, and prevent there ever being any scarcity of it.—*Timber Trades Journal*.

### Carbonized Timber.

Herr Goppert has recently exhibited a piece of pine which has been submitted for two years to a pressure of 12½ tons in a Silesian mine. It had been compressed to one-fourth, and had been converted into a half-carbonized state through the action of pressure alone, as little moisture had access, and the temperature was never above that of the surrounding atmosphere. It had quite the appearance of a dark brown colored bituminous wood of the tertiary brown coal formation, but it was without the smell observed in burning bituminous wood. The change of volume was at the cost of the water-content of the wood. A considerable amount of oxygen and hydrogen had come off as water; and the composition approximated to that of peat of the older peat formations.

### Chicago's Imports of Canada Lumber.

We learn from the *Northwestern Lumberman* that the imports of lumber into Chicago from Canadian ports during the last three years has been as follows:—

|           |                |
|-----------|----------------|
| 1878..... | 7,751,000 feet |
| 1879..... | 837,000 "      |
| 1880..... | 765,000 "      |

### A Healthy Change.

THE CANADA LUMBERMAN has changed hands, and will hereafter be published at Peterborough by Messrs. Toker & Co., proprietors of the Peterborough REVIEW. Judging by the initial number under the new management, we must say that the change appears to be a healthy one. We wish our contemporary much success from their new acquisition.—*North Shore Miner*.

TRY ALL DO IT.—Everybody uses "TRABERRY" for the tooth and breath, the newest, brightest, coolest little toilet gem extant. Try a 5 cent sample.

## Wanted.

A SECOND HAND DOUBLE EDGER; also a LATH MACHINE, both in good repair. Reply stating lowest cash terms or particulars to Box 1002, Peterborough. L10

## For Sale.

A 40 INCH LEFFELL WHEEL and COMPLETE CIRCULAR RIG, all in good order, suitable for a fifteen foot boat. Apply to Box 1002, Peterborough. L10

## Allandale Junction Hotel

Travellers by Northern Railway have 15 to 20 minutes by all trains, for refreshments. Solid meals. Tea and coffee at counter. Fine brands of Liquors and choice Cigars. b17 E. S. MEKING, Proprietor.

## Orillia House,

### ORILLIA.

New and Commodious Brick Building; best north of Toronto, splendid sample rooms, centrally located, free bus. b20 JOHN KELLY, Proprietor.

## The Queen's Hotel,

### TORONTO, CANADA.

McGAW & WINNETT, Proprietors. Patronized by Royalty and the best families. Prices graduated according to room. b20

## St. Lawrence Hall,

### PORT HOPE.

Is noted for its superior home-like comforts—a well kept table, equalling the best hotels in Toronto, and large, well-furnished rooms. Good sample rooms on ground floor. Walton Street, Port Hope. b20 W.M. MACKIE, Proprietor.

## Caledonian Hotel,

### GRAVENHURST.

JOHN SHARP, Proprietor. This Hotel has been newly opened out, pleasantly situated on Main Street, within five minutes walk of Northern Railway station. Bar kept with best assorted Wines, Liquors and Cigars. Every attention paid to guests. Good Stabling. b115

## St. Louis Hotel.

### THE RUSSELL HOTEL CO., Proprietors.

#### WILLIS RUSSELL, Pres., Quebec.

This hotel, which is unrivalled for size, style and locality in Quebec, is open throughout the year for pleasure and business travel. b13

## Queen's Hotel,

### BRACEBRIDGE.

JOHN HIGGINS, Proprietor. The proprietor (late of Georgetown,) having lately purchased the above hotel, will endeavor to make it one of the best houses in the District of Muskoka. Tourists and hunting parties will receive every possible attention. Free bus to and from steamboat wharf. Terms, \$1 per day. b20

## The American Hotel,

### BARRIE, ONT.

#### Collier Street, Adjoining the Market.

RATES REASONABLE, CENTRAL LOCATION, FREE BUS TO AND FROM ALL TRAINS. b27 Every accommodation for Commercial and LUMBERMEN. L14 W. D. McDONALD, Proprietor.

## Fraser's Hotel,

### GRAVENHURST, ONT.

HENRY FRASER, proprietor, (successor to Dougland Brown.) Mr. Fraser having purchased and thoroughly renovated and refitted that old established hotel, so long and popularly kept and owned by Dougland Brown, in the Village of Gravenhurst, is now in a position to attend to the wants of the travelling and general public. Parties en route to the Muskoka District, will find "Fraser's" a comfortable stopping place. The Bar and Lanter are well furnished. Convenient Sample Rooms for Commercial Men. Good stabling and attentive hostler. Free bus to and from trains and steamboats. b20

## SAWYER, ENGINEER & MILLER

A PRACTICAL MAN to take charge of a Saw Mill, Shingle Mill, one run Flour Mill, with power sufficient to run alternately, situated on Duck Lake, N. W. T., 500 miles west Winnipeg. Engagement for a year and expenses paid. Apply immediately, stating experience, reference, salary expected, when could leave. A man accustomed to our machinery preferred. L14 WATEROUS, BRANTFORD.

## D. S. PRIGGS,

### 9 TORONTO STREET, TORONTO.

#### WHOLESALE DEALER IN

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BILL STUFF CUT TO ORDER. L12-1y

E. S. VINDIN,  
Commission, Shipping, Forwarding and General Agent.  
**LUMBER MERCHANT**  
Office, Tompost's Block, Port Hope. L11

J. K. POST & CO.  
**LUMBER MERCHANTS**  
And Shipping Agents.  
OSWEGO, N. Y. L12-1y

JAMES HADDEN,  
MANUFACTURER OF  
Shingles and Dressed Stuff.  
Foxmead, P. O., County of Simcoe, Ont.  
Two Planers for sale or exchange for a Boiler. b20

# CANOES!

The under-signed keeps Canoes suitable for LUMBERMEN, SPORTSMEN and others constantly on hand. Price List on application.

**WILLIAM ENGLISH**  
L14 PETERBOROUGH, ONT.

**New Files** | **Old Files**  
Manufactured from the BEST English Cast Steel and Warranted equal to the Best Imported File. | RECUT BY HAND, and EQUAL TO NEW FOR USE. PRICE LIST on application.

**THOS. GRAHAM, Manufacturer,**  
35 Sherbourne St., Toronto. L11

## To Lumbermen.

The Subscriber makes to order all kinds of **TENTS,** Hammocks, Tarpaulins, Waggon and Horse Covers, Also dealer in all kinds of OIL SKIN Clothing, Nets and Seine Twines. An is also Agent for the best makes of AMERICAN COTTON BUCKS in all widths.

J. LECKIE,  
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Commission Lumber Dealers,

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## PORT HOPE.

**TRUSSES.**  
CLUTCHES PATENT SPIRAL TRUSS all attachments improved. No more buckles, all on solid brass casting. Break on rupture, and human frame free. Send address in full post card. Best true information about rupture and deformities. CHAS. CLUTCH, Surgical Machinist, 118½ King Street west, Toronto. L12-13

Market Reports.

TORONTO.

From Our Own Correspondent.

TORONTO, June 9th, 1881.—Since my last report, common lumber has advanced in price on this market, although I think it is more than questionable, if the advance can be sustained to the end of the season. The production of common lumber in proportion to clear and picks increase every year, and the stock of common lumber to be marketed this season will be far in advance of any preceeding year, and unless prices advance in the American markets a large quantity of common lumber must either be held over at the mills or placed on the Canadian market, so that should my impressions in the latter respect be verified, present prices will not hold out to the end of the present year.

Shipments from this port still languish, so that dock hands and vessel captains are not in the best of spirits, and considerable ill-temper is naturally displayed in consequence, but it is the general impression that the 1st of July will witness a more rapid movement of lumber, as by that time it is expected the change of gauge on the lines of road (mentioned in my last letter) will have been made, and rolling stock supplied to meet all demands, a matter most devoutly to be wished for.

Since my last letter building matters have been making rapid strides, and over one hundred more buildings have been started in this city and the adjoining village of Parkdale. This would seem to indicate a rapid increase of population, although this cannot be taken as a proper guide in that respect, as many people prefer new houses and fresh localities, and as a consequence, there are a large number of the older houses tenanted.

Prices at the yards rule as follows:—

Table listing prices for various lumber products such as Mill cull boards, Shipping cull boards, Scantling and joist, etc.

Sixteen ft. lengths dressing stocks are scarce and in demand. Shingles will likely advance before long; at present prices for lumber shingles should command at least \$2.75 per M from the yards, and as the demand from the American market comes in later on, doubtless shingles will advance above present prices.

CHICAGO.

CHICAGO, June 1st, 1881.—The receipts of lumber at this port during the past week have aggregated 51,751,000 feet, and of shingles 24,062,000. Of these, a fair proportion has been sold on the market at the Franklin street dock, though by far the greater bulk has at once proceeded to the yards, for which it had been purchased before arrival. Taking the season as a whole, the receipts have not yet reached the aggregate to the same date last year by 11,269,000 feet of lumber and 20,325,000 shingles. For the week the receipts of lumber have been larger than for the corresponding week of 1880 by 2,738,000 feet, the shingle receipts have fallen short 1,991,000.

Prices during the month of May at the cargo market were, as our readers know, somewhat unsettled, owing to the difference of opinion between buyers and sellers as to the value of lumber. For some time the market showed signs of weakness under the persistent endeavors of the bears to pull it down, dropping from \$10 on piece stuff at the opening, to \$9.50 on the 13th, and as low as \$9.25 on the 23rd. The past week, however, prices have advanced to nearly, if not fully, the opening quotations. During the closing day--of the month a decided firmness

the ideas of values do not materially differ, for of feeling developed, and for the past two or three days, green piece stuff of ordinary length has sold up to \$9.50 and \$9.75, while a fair admixture of lengths above 16 feet, has readily commanded \$10, and at this writing we may truthfully speak of the markets as firm and quiet at these quotations. This, in face of the fact that the receipts since Sunday have been larger than for some days, leads to the opinion that the tendency of the market is to still higher figures. Sales of one-inch lumber may be quoted at from \$12.50 for ordinary green, to \$14.50 on a better grade, while \$16 and \$17 have been paid for fair to good mill run. Dry lumber has brought \$1 above these figures, and is quick at from \$16 to as high as \$22, according to richness in picking qualities and condition of seasoning. Shingles have participated in the firmness, and standards which have sold as low as \$2.40, are now steady at \$2.45 to 2.55. Extra A's, which have sold at \$2.45 to 2.50 now command \$2.55 to 2.65. Lath have not fluctuated so much, and we quote from \$1.60 to 1.65 for green and Norway, to \$1.80 to 1.90 for dry. Selected pickets have brought \$11.75; common, \$7 and \$8.

The general tone of the cargo market is much firmer than at any time since the opening of navigation, and the opinion is expressed by both bulls and bears that the firmness will continue.

CARGO QUOTATIONS:

Table listing cargo quotations for items like Joist and scantling, Mill run, Shingles, Lath, etc.

LAKE FREIGHTS.

Table listing lake freight rates for destinations like Manistee, Muskegon, Ludington, etc.

Receipts and shipments of lumber and shingles for the week ending May 31.

Receipts. Shipments.

Summary table of receipts and shipments for lumber and shingles.

Receipts and shipments of lumber and shingles from January 1 to and including May 31:

Receipts. Shipments.

Summary table of receipts and shipments for lumber and shingles from Jan to May.

Trade at the yards is of a feverish nature. Nearly every dealer admits that doing business on the margin between cargo and price list figures is not profitable, just now, yet nine out of ten of them are doing business on even a smaller margin. It is safe to say that that proportion of the yard men are selling under the list, and if a dealer is not willing to say so, his neighbor is not backward in saying it for him. Some declare that that is an undesirable stock only, others, in plain words, that a reduction is made in order to hold customers. We saw a bill of Number 2 fencing sold at \$10.25, that is put down on the "re-affirmed" list at \$11.50, and the buyer assured us he could purchase any quantity at these figures. Dimension that is billed at \$13 we heard offered, and refused, at \$11.50.

It is almost impossible, just at this time, to make a quotation of yard prices that will accurately represent the market. It is admitted by nearly everybody that lumber does not bring the prices named in the "official" list, but the dealers, as a rule, dislike to say what they really do get for it. It is claimed by some that the better qualities of stock, such as finishing lumber, wagon-box and stock boards, sell pretty nearly up to the quotations, while others maintain that the list is shadowed from fifty cents to \$1 on sales of any magnitude. We quote a range on dressed and matched flooring that we believe covers the market fairly. Occasionally the inside prices given may be cut a trifle more, but when this is done the trade is generally an exceptional one.

The cut in prices is, of course, brought about by everybody except the man with whom you are talking. Those who are bullishly inclined say the bears are bound to break the market, and the bears say the bulls stand ready to undo them every time. Whoever is to blame,

the bids on a bill of considerable size that went the rounds did not vary much. We think, however, there is no question but that in certain directions there is a firmer feeling than existed two or three days ago. The firmness of lumber by cargo affords the best reason for the belief that it cannot be bought from the yards much longer at present prices. There is certainly no money in handling lumber for those who have to buy it on the market, and unless there is a speedy decline there, which is something hardly anyone looks for, we do not see how they can afford to do it at the figures now ruling. The Lumberman is therefore inclined to think that this market has about touched bottom.—Northwestern Lumberman.

COMMON BOARDS—ROUGH.

Table listing common board prices for various lengths and widths.

TIMBER AND DIMENSION—DRY.

Table listing timber and dimension prices for items like Small timber, 2x4, 2x6, etc.

ALBANY.

ALBANY, June 7. - Pine Lumber has been in free receipt, with a good trade during the past week, mainly to New York and Brooklyn; from Brooklyn a number of buyers have, within the last few days, been in the District. A large sale, but of which we have not any particulars, is reported to have been made yesterday for Greenpoint. Prices are held with much firmness on a freely moving market. From the Saginaw and from Canada, active markets are reported at very firm prices; indeed at all manufacturing points the markets are stiff and buyers are meeting manufacturers at their prices.

In Hardwoods there is a steady trade at quotations.

Coarse Lumber is moving as brisk as ever; the receipts are coming in free and going out, on sales ahead, as fast as received; prices are very firm.

The receipts by canal at Albany from the opening of navigation to June 1st were:—

Table showing receipts by canal for lumber and shingles.

River freights are:—

Table listing river freight rates for various destinations.

Quotations at the yards are as follows:—

Large table listing yard quotations for various types of lumber and shingles.

NEW YORK.

Our wholesale market has fallen into a sort of rut from which it is difficult to draw many new features of interest from week to week. Business continues good all around, supplies are generally selling close to the offering, especially for near-by delivery, and prices are well maintained for all attractive goods and assortments. In fact, it is a good, healthy and cheerful market, with no reason to expect the favorable elements will vanish for some time. Consumption is unabated, indeed, and the stock tends toward an increase. Dealers are the look out for additions to assortment and the interest of exporters is retained to a very fair extent, though on some grades the foreign demand has been diverted to parcels at primary points. Choice well-seasoned stuff of all kinds is becoming somewhat scarce, and holders who have anything of the kind in stock talk rather firmly.

Spruce still appears to be under very good control and sellers' views comparatively extreme, especially on full sizes, of which there is a very small amount within reach. Large quantities are more plenty at the mills, but a goodly number of orders have been awaiting them and the additional product will not disturb the condition of the market. Agents have been unwilling to quote randoms positively in the absence of business of a fairly testing character, but on a general range to cover all grades about \$14.00 to \$15.00 may be named, while on specials the line may be extended up to \$17.00, to cover all sizes and deliveries, but no higher than the latter figure is now mentioned.

Piling is plenty and dull with values fluctuating slightly, though about 4c. per foot seem to be the average rate. Exactly what has possessed producers to send forward the stock they have this spring it is difficult to determine, as some of the winter accumulation still remains unsold and is difficult to work out.

White Pine does not appear to have changed in any important particular since our last. The demand from home sources continues good and general, all regular descriptions and sizes being wanted, and the orders coming from pretty much every source ordinarily represented. Larger quantities and better assortments are becoming available, but the limit of valuation is full and deficiencies here cannot be replaced at any reduction on cost. Exporters move with some showing of caution, but are pretty good customers still with dealers who cater to the foreign outlet, confident that their business will hold good. We quote \$17@19 per M for West India shipping boards; \$21.50@26 for South American do.; \$16@16.50 for box board; \$17@17.50 for do. wide and sound do.

Yellow Pine continues to be reported in the same strong and cheerful manner by pretty much the entire trade, but shows no positively new features. Supplies immediately available are small and poorly assorted, the principal mills have orders to keep them busy for many weeks to come, even on an uninterrupted run of saws, and new orders and specifications are daily coming to hand. Agents are also figuring on a pretty good run of orders for shipment direct from the South. Prices strong and inclined to an advance if anything. We quote random cargoes at about \$21@26 per M.; ordered cargoes, \$26@28 do.; green flooring boards, \$24.50@26.50 do.; and dry do. do., \$27.00@29. Cargoes at the South, \$15.00@19.00 per M. for rough, and \$20.00@24.00 for dressed.

Hardwoods continue quite generally in seller favor, the good control of the desirable stock at primary points and the apparent wants of jobbers and consumers inspires much confidence among holders. No further positive additions to value, however, have of late been noted and indeed at the prices asked some buyers are refusing to operate as "there is no money in it." We quote at wholesale rates by carload at as follows: Ash, \$30@38 per M.; oak, \$16@17 do.; maple, \$30@35 do.; chestnut, 1st and 2nd, \$30@35 do.; do. cull, \$18@20 do.; cherry, \$30@35 do.; white wood, 3/4 and 2 inch, \$25@27.50, and do. inch, \$30@35 do.

Shingles have been selling to about the ordinary extent and without change in tone or prices. We quote: Pine shipping stocks, \$1 for 18-inch, and Eastern saw grades at \$2.50 to 4.00 for 16-inch, as to quality and to quantity.

Machine dressed cedar shingles quoted as follows: For 30-inch, \$16@22.25 for A and \$23.75 @33.25 for No. 1; for 24-inch, \$6.50@16 for A and \$16.75@23 for No. 1; for 20-inch, \$5@10.50 for A and \$11.25@11.75 for No. 1.

At the yards business is good and general and dealers appear to be having a first rate season as a rule. Some complain of competition compelling them to sell on a very narrow margin.—*Real Estate Record.*

**TONAWANDA.**

TONAWANDA, N.Y., May 30. Receipts by lake continue to come in very generously and acceptably, giving the yards here an opportunity to stock up with stuff that is much needed to enable them to fill orders, some of which have been on the books three and four weeks. The amount of lumber received at this point during the past week will foot up about 16,500,000 feet; one consignment of shingles, 1,600,000. The ruling figure from Michigan points has been \$3 per thousand on lumber. Dealers here are chafing somewhat under this steady high rate, and some of the prominent ones are yet holding off, as that price is too much of a discrimination against their interests as compared with through rates by rail. Canal freights to Albany have dropped a trifle since last report, and are quoted to day at \$2.50 to Albany, and \$3.25 to New York. Boats are coming in freely, and there is an active demand for the season. Sales are reported as being good, with no change in prices. We hear of an order for 250,000 feet dressed for New England parties; 350,000 feet of box for an eastern firm at \$12.50, 1,500,000 shingles at \$3.65 here; 600,000 shingles, clear butts, \$2.75; and other equally favorable transactions. With the present condition of the trade there can be little or no change in prices. We quote as follows:—

**CARGO LOTS—MICHIGAN INSPECTION.**

|                   |    |          |
|-------------------|----|----------|
| Three uppers..... | 8  | 5443 00  |
| Common.....       | 17 | 6020 00  |
| Culls.....        | 11 | 50212 50 |

We quote railroad freights as follows:—  
Tonawanda to Boston or New England points, per ton..... \$3 50  
New York and Hudson river points..... 3 00  
Jersey City, Newark, etc..... 3 00  
Philadelphia, Baltimore, Wilmington, etc..... 3 00

**BOSTON.**

The *Journal of Commerce* of June the 4th says:—

The general appearance of the market is about the same as last week, and dealers report the demand as very good. Prices are firm, and will probably remain for some time as now quoted, unless hardwoods advance in sympathy with the western markets. Reports from the west show seasoned hardwoods to be very scarce, and in some cases the supply is so low as to be hardly equal to the demand. As a consequence, white-woods have advanced \$2@5, and ash \$2.50@5. Oak has also advanced, 1-4th in timber and flooring. The eastern markets, as yet, remain unchanged, and this upward turn at the west will probably subside as soon as shipments from primary points begin to come in and stocks are replenished. Below are carload quotations.

**CANADA FINE.**

|                             |      |          |
|-----------------------------|------|----------|
| Shets, Dressed.....         | \$48 | 00@50 00 |
| Shelving, Dressed, 1st..... | 40   | 00@42 00 |
| do do 2nds.....             | 33   | 00@35 00 |
| Dressed Shippers.....       | 27   | 00@29 00 |
| Dressed Box.....            | 18   | 00@20 00 |
| Shedding, 1st quality.....  | 42   | 00@45 00 |
| 2nd.....                    | 31   | 00@35 00 |

**OSWEGO, N.Y.**

Quotations are as follows:—

|  |      |          |
|--|------|----------|
| Three uppers.....                      | \$12 | 00@45 00 |
| Peckings.....                          | 32   | 00@35 00 |
| Five, common.....                      | 20   | 00@25 00 |
| Common.....                            | 14   | 00@16 00 |
| Culls.....                             | 12   | 00@14 00 |
| Mill run 1st.....                      | 17   | 00@22 00 |
| Shelving, selected, 1 inch.....        | 32   | 00@34 00 |
| 1 inch.....                            | 30   | 00@32 00 |
| Mill run, 11, 13 to 16 ft.....         | 17   | 00@21 00 |
| selected shippers.....                 | 20   | 00@25 00 |
| 1st.....                               | 15   | 00@18 00 |
| Mill run, 1 and 1 1/2 inch strips..... | 16   | 00@20 00 |
| Culls, selected.....                   | 22   | 00@26 00 |
| Culls.....                             | 12   | 00@14 00 |
| 1st selected for clappanets.....       | 24   | 00@25 00 |
| Shelving, 3X3, 1 1/2 inch, pine.....   | 3    | 75@4 00  |
| 3X3, 1 1/2 inch, cedar.....            | 4    | 00@4 15  |
| Lath.....                              | 1    | 40@1 25  |

If you suffer from any chronic disease arising from Impure Blood, Singsish Liver, disordered Kidneys or Irritation of the Bowels; if your Nervous System is debilitated from whatever cause arising, do not despair, but procure a trial bottle of Burdock Blood Purifier; it will only cost 10 cents. Large bottles \$1.00. For sale by all medicine dealers.

**FREIGHTS.**

OSWEGO. Canal freights on lumber are \$1.00 to Albany and \$2.25 per M up to New York.  
BUFFALO, N.Y.—Canal freights dull and rates unchanged. Quoted as follows:— Pine lumber at \$2.25 per M feet to New York. Staves to New York \$1.30 per ton over tolls.  
EAST SAGINAW, Mich.—Lumber—Freights to Ohio ports steady, at \$2.50 to \$2.75, outside figure being Toledo rates. Buffalo and Tonawanda \$3 to \$3.25, outside figure being the rate to Tonawanda.  
BAY CITY, Mich.—Lumber to Toledo \$2.50, Tonawanda \$3, Cleveland \$3.  
TORONTO.—Lumber is still taken at \$1.25.

**THE SLIDES.**

The following is a statement of the timber which has passed the Chaudiere Slides during the week ending 3rd June:—

|          |                       | Cribs. | Pieces. |
|----------|-----------------------|--------|---------|
| May 23rd | J. R. Klock.....      | 74     | 1,910   |
| "        | A & P. White.....     | 206    | 5,327   |
| " 25th   | John Fraser.....      | 112    | 3,095   |
| " 26th   | Wm. Mackay.....       | 59     | 2,339   |
| " 27th   | Robt. Grant.....      | 56     | 1,574   |
| " 28th   | James Findlay.....    | 12     | 653     |
| June 1st | Wm. Croft.....        | 35     | 886     |
| "        | J. O. T. Havely.....  | 31     | 990     |
| May 28th | James B. Dickson..... | 102    | 2,570   |

**Heat in the Boiler Room.**

H. G. Baker in the *Lumber World* says.— Excessive heat in your boiler room, while indicating a waste of fuel, or, in other words, a loss of power, is by no means beneficial to your engineer or fireman, and its presence causes them, perhaps unwittingly, to become careless in the performance of their duties, this carelessness resulting more to your detriment than theirs. A man overheated is not capable of exerting his best energies in the performance of any labor, physical or mental, and when your fireman or engineer begin to get careless, they, as everyone else, get more and more so, particularly if the conditions under which they labor are not changed. Ventilation in the boiler room is permissible if due precautions are taken to prevent radiation from your boiler and steam pipes. If these are properly protected, comparatively little heat will pass from them into the room, and ventilation, so long as strong currents or draft of air are not created, will not be hurtful. If your boiler or connections are not properly protected, don't ventilate, but shut your room up as closely and tight as possible, and keep it so. Put a man inside and keep him there to attend to the engine and fire, and when he is sufficiently baked, take him out and substitute another. It won't be quite as cheap as it would to protect your steam surfaces, but you can do it.

**Growth of Timber.**

As the result of observation, and from the testimony of reliable men, the following is about the average growth in twelve years of the leading desirable varieties of timber, when planted in belts or groves and cultivated: White maple, one foot in diameter and 30 feet high; ash, leaf maple or box elder, one foot in diameter and 20 feet high; white willow, one and a half feet in diameter and 50 feet high; yellow willow, one and a half feet in diameter and 35 feet high; Lombardy poplar, 10 inches in diameter and 10 feet high; blue and white ash, 10 inches in diameter and 25 feet high; black walnut and hatternut, 10 inches in diameter and 20 feet high.

**Manitoba.**

Prittie's sixth party with sleeping cars attached, will leave on 29th June, per G.T.R. at 11.45 a.m., and continue every other week during the season, preceded two days before by their fast freight train. 50,000 acres of choice land for sale. Letters enclose 3c. stamp for reply. R. W. PRITIE & Co., 61 King Street East, Toronto. 116

With the Approach of Spring, Bilinary Complaints prevail that often lead to serious results. Guard against their attack in time by using *Burdock Blood Purifier*: the best Liver Invigorator, Kidney Corrector, Regulator of the Bowels and Secretions, and the purest, most permanent Tonic in the world. For sale by all dealers.

**Flexible Board Rules,**

With Stool Head, either Cleveland or London make, at \$1.75 Each.

**GEORGE STETHEM,**  
PETERBOROUGH.

**Wrought Iron Shanty Cook Stoves**

*The Best Article ever offered to the Trade.*

I have much pleasure in drawing attention to my WROUGHT IRON COOKING STOVE, for Shanty, Hotel and Boarding House use. These Stoves are made of Heavy Sheet Iron, the top and lining of the fire-box being of Heavy Cast Metal and all the connecting parts of substantial Wrought Iron Work. The dimensions of these Stoves are as follows:—

**SINGLE OVEN STOVE**

Top surface contains six 10-inch holes, with ample room between, and one oven 16 x 21 x 26.

**DOUBLE OVEN STOVE**

The Double Oven has a top surface containing twelve 10-inch pot holes, with two ovens, each 16 x 21 x 26. One fire-box of suitable size for area to be heated. Below will be found Testimonials from some of the leading Lumbermen, who have used my Wrought Iron Cook Stoves since I commenced manufacturing them. They are the names of gentlemen who are well known and reliable, and will carry more weight than any recommendation of my own could do.

**The Best Stove I have ever Used.**

PETERBOROUGH, May 31, 1880.

ADAM HALL, Esq., Peterborough. Dear Sir, - I have used your Wrought Iron Cooking Stove in our lumbering operations since its introduction here, and have no hesitation in saying that I prefer it to any other. For durability, economy and efficiency, where a large number of men are employed, it is the best stove I have ever used. You can, with confidence, offer it to hotels, boarding houses and lumbermen.

Yours truly, THOS. GEO. HAZLITT.

**The Stove for Lumbermen.**

PETERBOROUGH, June 1st, 1880.

ADAM HALL, Esq., Peterborough. My Dear Sir, - We have used your Wrought Iron Cooking Stove and find it is very satisfactory for lumber operations, especially so on drives. We can recommend it highly.

Yours truly, IRWIN & BOYD.

**Given the Greatest Satisfaction.**

PETERBOROUGH, June 3rd, 1880.

A. HALL, Peterborough. Dear Sir, - I have had the Wrought Iron Cook Stove, purchased from you, in constant use ever since last fall, and it gives the greatest satisfaction in every respect. I can recommend them highly to any one who is in the lumber business.

Very truly yours, GEO. HILLIARD, M.P.

**EVERY STOVE GUARANTEED**

All the necessary TINWARE and CUTLERY for Shanties supplied at the Lowest Prices.

**ADAM HALL, Peterborough.**

**HOW SPOOLS ARE MADE.**

The town of Drummondville, Canada, on the St. Francis river, had the good fortune some years ago to be selected as the site of several factories for the manufacture of spools, the principal reason for the selection being the abundance of white birch in the immediate vicinity. This wood, though inferior for many purposes, is just the thing for spools, and the following account of the process of manufacturing these useful articles may be of interest.

The wood, after being delivered to the factories is first sawn into pieces about 4 feet long and from 1 to 1 1/2 inches square, according to the spool it is desired to make. These pieces are put into a dry-house and thoroughly dried, from whence they are taken into the factory and given to the rougher, who, in an incredibly short space of time, bores a hole in the centre a couple of inches deep, turns about the same space round, and then cuts off the length required for a spool. The machines used for this purpose are revolving planers, in the centre of which is a revolving gullet or bit, and immediately to the right a small circular saw with a gauge set to the proper size for the spools. The roughers receive 1 1/2 cents per gross for their work, and experienced men turn out from 100 to 130 gross per day. The round blocks pass from them to the finishers, who place them in machines which give them the shape of spools, and make them quite smooth. The spools are thrown loosely into a large cylinder, which revolves slowly, so that the spools are polished by the constant rubbing upon each other for some time. On being taken out of the cylinder, they are placed in a hopper with an opening at the bottom, through which they pass down a slide for inspection. Here the inspector sits and watches closely to see that no imperfect spools are allowed to pass, and a very small knot or scratch is sufficient to condemn them. They are packed in large boxes, made the proper size, and no additional packing is needed. The packers receive one-fourth of a cent per gross for packing, and a smart boy who is accustomed to the work can pack about 200 gross per day. One proprietor ships over two million spools per

month to England, and another firm ships over one million spools to Glasgow, Scotland.

**Mean Velocity in Open Water Courses.**

The discharge of open water courses may be found experimentally by observing the velocity of the current, and measuring the cross-sectional area of the stream. But to do this correctly, we require the mean velocity throughout the section, which cannot be obtained by observation. The velocity varies, being a maximum at the surface, and where the channel is deepest, which is usually near the centre of the width, diminishing from thence to the banks on either side and to the bottom, where it is a minimum. The best experiments we have, give the mean velocity throughout the section at 84 per cent. of the maximum central surface velocity, which is usually the velocity observed, being easily obtained by a float on the surface of the stream. Thus, if a channel has, by observation, a central surface velocity of 35 feet per minute the mean velocity will be 29.4 feet.

**A Creditable Organ.**

The Lumber and Timber industries of Canada, probably the most important in the country, have at last, we are pleased to notice, secured an influential and highly creditable organ in THE CANADA LUMBERMAN, published by Messrs. Toker & Co., at Peterborough. The LUMBERMAN was founded in Toronto last year by Mr. Alex. Boye, and came into the hands of the present publishers only a month ago. It appears in an entirely new dress, and will in future be published semi-monthly, at \$2.00 per annum. It has a vast field and important work before it, and under its present able management we hope to see it live and flourish. It certainly deserves the support of every one interested in the lumber trade, to which it cannot fail to be of immense benefit. *North Hastings Review.*

Hazard's Yellow Oil is a perfect panacea curing by external and internal use all inflammation, pain and soreness. Rheumatism, Stiff Joints, Headache, Colds, Kidney complaints, Burns, Frost Bites, and Flesh Wounds of every variety. For sale by all dealers.

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JAMES D. McARTHUR - - - Manager.

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## Pure Oak Tanned Leather Belting!

FIRE ENGINE HOSE, LACE, LEATHER,

## OAK TANNED SOLE LEATHER, ETC., ETC.

STITCHED AND RIBBED BELTING MADE TO ORDER.

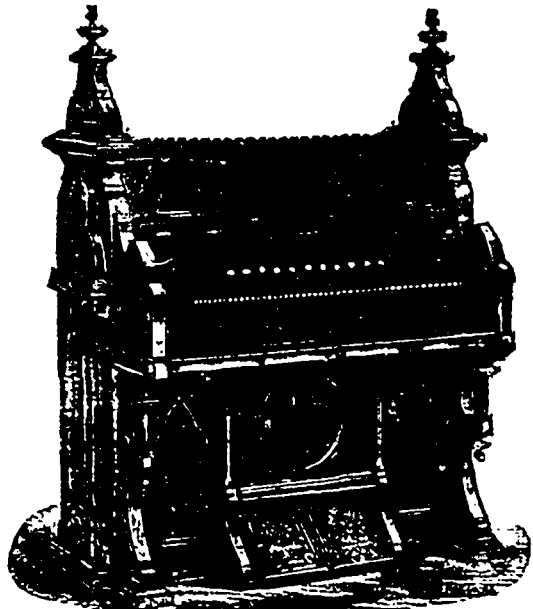
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42 FRONT STREET EAST, TORONTO.

# The Crowning Triumph of the Bell Organ

The Bell Organs have just received the HIGHEST AWARD and SPECIAL PRIZE (Gold Medal) at the International Exhibition, Sydney, Australia, this year for their Organs over all the English and American makers. This along with the unlimited awards, prove that

## THE BELL ORGANS LEAD THE WORLD!



WE RECEIVED  
Medal and Diploma.....Provincial Exhibition, 1871  
Medal and Diploma.... Centennial Exhibition, 1876  
International Medal & Diploma, Sydney, Aus. 1877

WE RECEIVED  
Only Medal for Parlor Organ, Provincial Ex., 1878  
Only Medal for Parlor Organ, Industrial Ex., 1879  
And Gold Medal.....at Sydney Australia, 1880

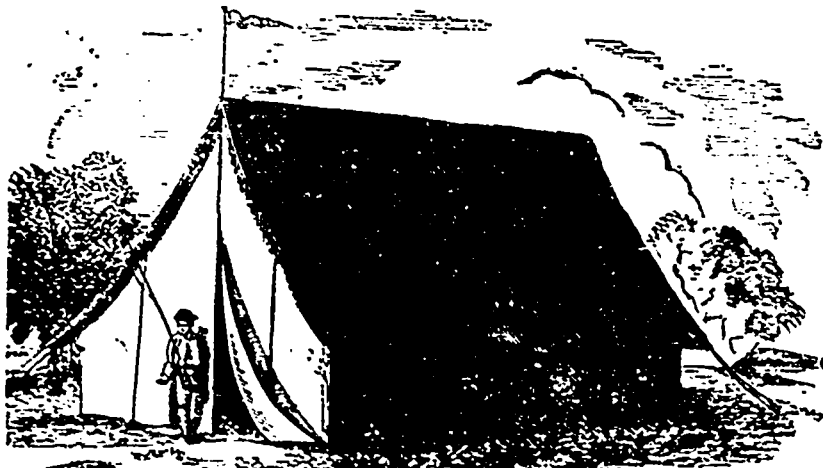
The Bell Organ Manufactory is the Largest and Oldest in the British Empire, and the fact that we have sold nearly 15,000 proves that they are the best in the market. We guarantee all our Organs for five years. Correspondence Invited. Illustrated Catalogue mailed free.

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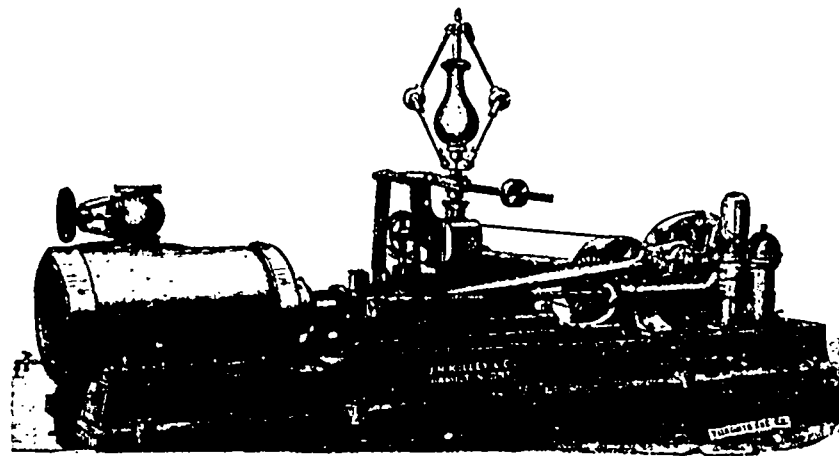
# National Manufacturing Company

202 SPARKS STREET, OTTAWA.



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## LUMBERMEN!

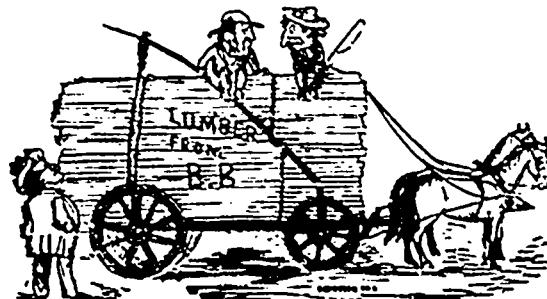
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Is the Most Perfect Machine that has ever been Introduced into Mills for that purpose.

**CIRCULAR SAW  
STEAM FEED!**

I would also call special attention to my

**Heavy Circular Saw Mills**

and for STEAM MILLS, would recommend the Steam Feed, having put in several which are giving the best of satisfaction, as will be seen by the following testimonials: -

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WM. HAMILTON, Esq., Peterborough.

DEAR SIR—I have used your Steam Feed for near four months, and it has given me perfect satisfaction in every way; it is admitted by every person who has seen it work to be the best feed ever invented. Since I put it into my mill, I have not lost ten minutes time fixing anything belonging to it. I can cut 18 boards 13 ft. long in one minute. It can do much smoother and better work than the plow feed. It is easily governed and reverses the carriages instantly. I am thoroughly satisfied with it and can recommend it to any person who has a Circular Saw Mill for cutting long or short logs. I consider I have cut more lumber than will pay for the Steam Feed since I got it than I would have cut had I not put it in.

Yours respectfully,

WILLIAM TAIT,  
Lumberman, Gravenhurst.

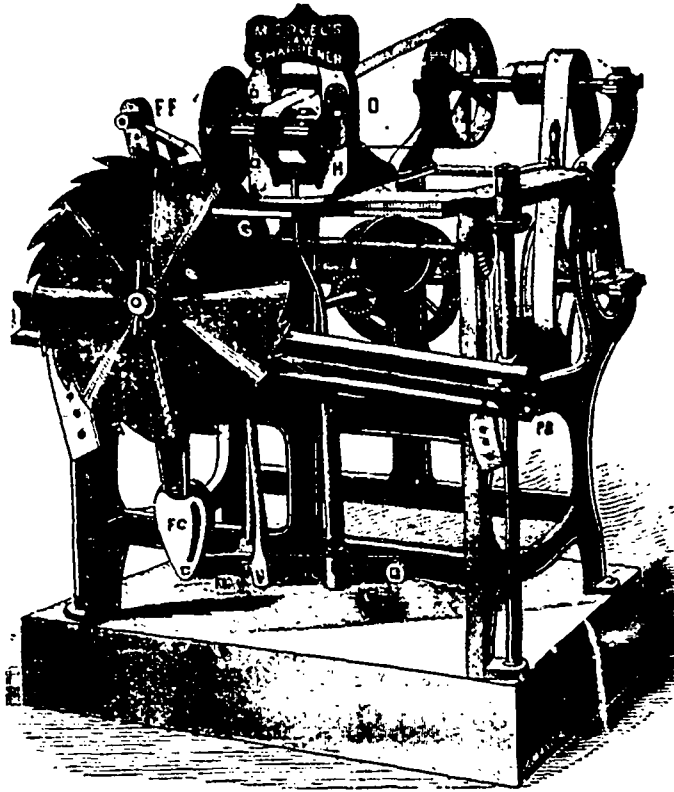
Toronto, August 11th, 1880.

WM. HAMILTON, Peterborough, Ont.

DEAR SIR—The Steam Feed you put in is working splendidly.

Yours, &c.,

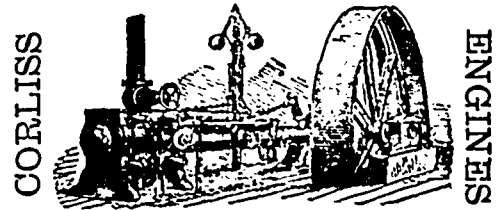
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I am also manufacturing Saw Mill Machinery, for all sizes of Gang or Circular Mills, Span or Double Circulars for Slabbing Small Logs. My Patent Jack Chain for drawing logs into Saw Mills, acknowledged by all to be the Cheapest and best ever got up; also, my Patent Lumber Markers, different sizes of Eggers, Gang Lath Mills, Trimmers, Power Gummers, and all Machinery used in a first class Gang or Circular Saw Mill; also, small Hand Gummers for use in the woods, for Cross-cut Saws, Rotary Pumps of different sizes, for Fire Protection in Mills, &c.

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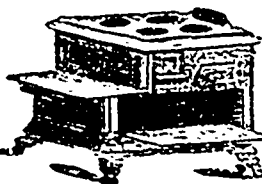


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Where economy of fuel is the great consideration, along with uniformity of speed, such as is required in Grist and Flouring Mills, Woolen and Cotton Factories, or large Factories of any kind, I supply the Corliss Engine. I feel justified in saying that our ability, Workmanship and Finish on this Engine will be no discredit to its renown, and certainly is not equaled in this country for economy of fuel. I have them working at 2 1/2 pounds of coal per horse-power per hour.

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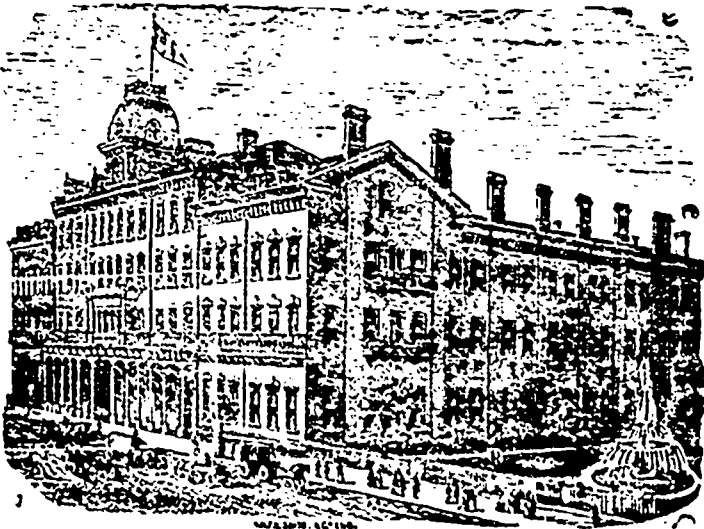
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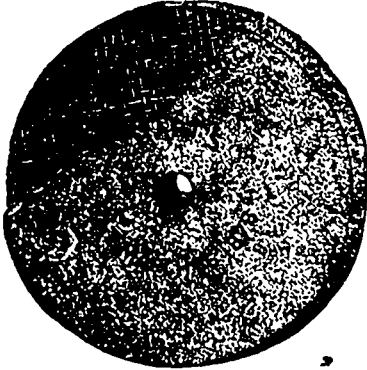
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THESE WHEELS ARE

## WIRE STRENGTHENED!



AND SPECIALLY

## Adapted for SAW GUMMING.

Neither Animal nor Vegetable Glue or Gum being used in the composition of these Wheels, 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:—Shirely & Dietrich, Galt; R. W. Smith & Co., St. Catharines; James Robertson, Montreal; James Robertson & Co., Toronto. We refer also to William Hamilton, Peterborough, Manufacturer of Covell Saw Sharpeners—and to H. B. Rathbun & Son, Deseronto, Lumber Merchants.

1y116

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Irish Canadian Office,  
Toronto, Feb. 21st, 1881.

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Dear Sir, - The watch I purchased from you some time ago, has given perfect satisfaction, and I am much pleased with it, and can cordially recommend an person in need of a watch or anything in the jewelry line, to deal at your store. Yours very truly,  
PATRICK BOYLE,  
Proprietor Irish Canadian

Send for our new price list of Watches, Diamonds, Silverware, Jewellery, &c., sent post prepaid on application. Goods sent C. O. D. to any part of Canada. We have dozens of testimonials similar to the above, plainly showing that St. King St. East is the place to buy your goods.

**F. CRUMPTON,**  
53 King Street East,  
TORONTO, 1880

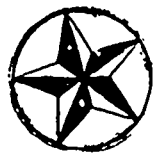
## F. E. DIXON & CO.

MANUFACTURERS OF PURE BARK TANNED

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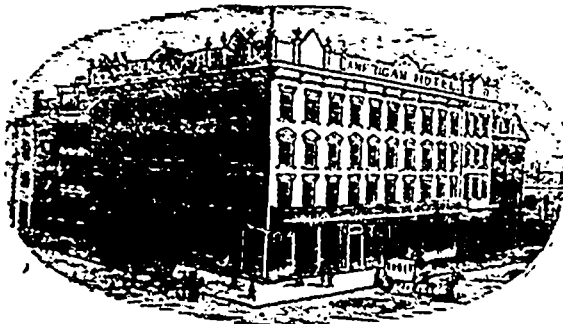
- First Prize, Provincial Exhibition .....Ottawa, 1875
- First Prize, Provincial Exhibition .....Hamilton, 1876
- First Prize, Provincial Exhibition .....London, 1877
- First Prize, Industrial Exhibition .....Toronto, 1879
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None genuine unless with a STAR on the head of rivets. Send for Price Lists and Discounts.

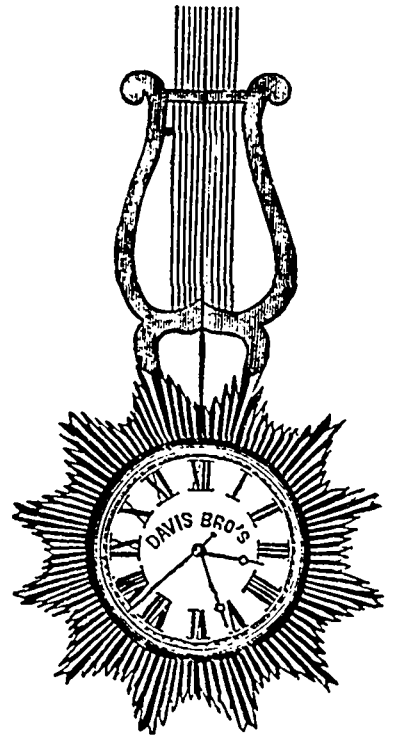
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"THE CANADA LUMBERMAN,"

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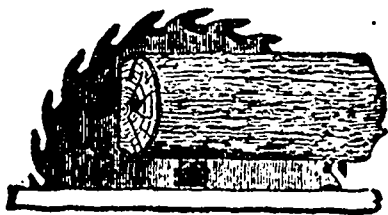


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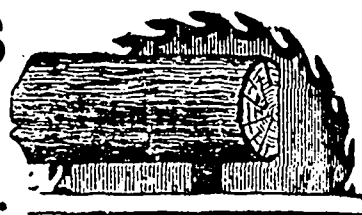
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A SPECIALTY.



Emerson Pattern and Lumberman's Clipper.

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EVERY SAW WARRANTED.

SEND FOR PRICES.

6113

## EMERY WHEELS FOR SAW GUMMING!



Solid Emery Wheels are now almost in universal use for the purpose of gulletting 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 small mills 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 fleet, 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 \$750 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:

|     |               |      |               |      |                               |
|-----|---------------|------|---------------|------|-------------------------------|
| 8x1 | } 3 in. hole. | 10x1 | } 3 in. hole. | 12x1 | } Holes, 3/4, 5/8 and 1 inch. |
| 8x2 |               | 10x2 |               | 12x2 |                               |
| 8x3 |               | 10x3 |               | 12x3 |                               |
|     | 10x4          | 12x4 |               |      |                               |
|     | 10x5          | 12x5 |               |      |                               |
|     | 10x6          | 12x6 |               |      |                               |

Probably more wheels 12x1, 12x2 and 12x3 are used than all the other sizes together. Saw Gumming Wheels are used, however, of all sizes up to 24x1. 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 going 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 a "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 qualities 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.

# The Tanite Co. Stroudsburg, Monroe Co. Pennsylvania

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