

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- | | |
|--|--|
| <input type="checkbox"/> Coloured covers/
Couverture de couleur | <input type="checkbox"/> Coloured pages/
Pages de couleur |
| <input type="checkbox"/> Covers damaged/
Couverture endommagée | <input type="checkbox"/> Pages damaged/
Pages endommagées |
| <input type="checkbox"/> Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> Pages restored and/or laminated/
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> Cover title missing/
Le titre de couverture manque | <input checked="" type="checkbox"/> Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> Coloured maps/
Cartes géographiques en couleur | <input type="checkbox"/> Pages detached/
Pages détachées |
| <input type="checkbox"/> Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> Showthrough/
Transparence |
| <input type="checkbox"/> Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> Quality of print varies/
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> Bound with other material/
Relié avec d'autres documents | <input checked="" type="checkbox"/> Continuous pagination/
Pagination continue |
| <input checked="" type="checkbox"/> Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure | <input type="checkbox"/> Includes index(es)/
Comprend un (des) index |
| <input type="checkbox"/> Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées. | Title on header taken from: /
Le titre de l'en-tête provient: |
| <input type="checkbox"/> Additional comments: /
Commentaires supplémentaires: | <input type="checkbox"/> Title page of issue /
Page de titre de la livraison |
| | <input type="checkbox"/> Caption of issue /
Titre de départ de la livraison |
| | <input type="checkbox"/> Masthead /
Générique (périodiques) de la livraison |

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

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



PUBLISHED
SEMI-MONTHLY.

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

SUBSCRIPTION
\$2.00 PER ANNUM

VOL. 4.

PETEBOROUGH, ONT., MARCH 1, 1884.

NO. 5.

THE ENGLISH MAHOGANY TRADE.

The *Builders' Weekly Reporter*, of London, dated January 18, has the following concerning the English fine wood market:—Edward Chaloner & Co., of Liverpool, in their mahogany, etc., circular, state that there have not been any auction sales in the past fortnight, and the market is without change. The imports of St. Domingo veneer wood and logs of large to medium diameters have been on a limited scale for several months past. The stock is now very light, and suitable supplies would come to a good market. There is a good demand for well grown curls three feet and five feet long, but all other descriptions have been dull of sale of late at low figures. Of Cuba the stock is light, and early supplies of good wood, of desirable dimensions, will meet with ready sale. The stock of Honduras now on hand, say 500 logs and curls, will be offered by auction and will be, no doubt, promptly disposed of, as there have not been any public sales of Honduras wood since December 7, when there was a very good demand at full prices for straight sound, well-made logs. As the stock of Mexican is only about 400 tons, chiefly of small sizes, there is a good opening for supplies of larger dimensions, which are wanted, and will command very good prices. Cedar imports from Honduras and Mexico have been light in the past few weeks, therefore some improvement in value may be shortly expected. Pencil cedar has been in moderate request. The demand for rosewood has been very dull for both Bahia and Qio. Of Honduras the stock is exhausted. Belize wood has been inquired for. Zebra-wood is dull of sale.

SOUTHERN PINE FORESTS.

The census reports of the amount of standing pine in the United States, and of the immense amounts annually cut in the Northwest, that were perceptibly thinning out the forests in that section, succeeded, at least, in arousing the attention of the country to the necessity of forest preservation, and, also, in developing to an unnecessary degree the fear of forest denudation, so far as the pine forests of the South are concerned. We say to an unnecessary degree, because these forests possess favorable characteristics, which are not applicable to those of the Northwest. There, the undergrowth is so heavy it is of itself dangerous to the preservation of the timber fit for manufacturing, and there are strenuous advocates of the claim that while it would be preferable to thin the forests out gradually, and leave the smaller trees standing for a few years; yet, it is recognized to a great extent a necessity to cut every merchantable tree, in order to preserve them from the devastating effects of forest fires that often sweep over immense districts before they are either controlled or die out from lack of fuel

to feed on. This is their natural condition. To attempt to carry out the idea of forest preservation by cutting only the larger timber, is by many, considered sheer folly, as every tree felled, but increases that much the amount of combustible material, and to that extent increases the danger of destruction by fire.

With the pine forests of the Southern States this danger to standing trees does not exist, except to a limited extent. With the greater portion, it is known that among the pines little or no undergrowth exists; not enough at any rate to endanger the life of the trees from forest fires. This is well shown in the almost harmless custom prevalent throughout the Southern States, of, each spring, burning off the dead leaves and grass, among the pines, to allow the young grass to spring up so that it will furnish an early pasture for the sheep and cattle.

It may be said then, that these forests possess features which will permit, to the highest degree, the application of the European idea of forest preservation, that permits the felling of a certain number of trees only, to a given acre, and those only that have attained certain dimensions. Excepting in certain localities; in the more thickly settled sections of the country, and immediately along the older worked streams, no evidence of the scarcity of pine for manufacturing needs is perceptible to anything like a dangerous degree. Yet, it would be well enough if some plan of forest preservation could be inaugurated and successfully applied; as the wealth and prosperity of large sections are immediately dependent on the conversion of timber into lumber; and they will be so dependent for a series of years; at least until their population has increased to the extent making the land valuable for cultivation.

It has been demonstrated, by experience, that in twenty-five years the yellow pine will attain a growth sufficiently large to permit its being cut for lumber. It has also been demonstrated that the culling of the best trees from the forest does not endanger those left standing. On the contrary, it has been shown that the standing trees are benefited; that the thinning out of forests, forces the growth of smaller trees, and causes them to attain dimensions superior to the largest trees first felled. Sections in this state and in Mississippi, Alabama and Georgia, thinned out eight and ten years ago in this manner, have been again brought into requisition, and first-class logs obtained from trees that had previously been left standing as unfit for manufacturing.

With these facts in view, it can be seen at a glance, that in their pine forests, the Southern States possess sources of wealth which will remain with them time out of mind if properly preserved from possible exhaustion; a fear which is of little present consequence; and one which it will not be necessary to entertain for

many years to come; as at present the combined annual cut of the nine Southern States, with their immense forests of pine, does not much exceed one half the yearly cut of the State of Michigan alone.—*American Lumberman*.

LUMBER WASTES.

Taking into consideration the rapidity with which our lumber lands are seemingly being denuded of heavy timber growths, it is plainly a matter of no insignificant importance that some means be adopted to make a tree go as far as possible. That a large proportion is left to cumber the premises, is proven by the perpetual fires going on in some localities to get rid of the sawdust, slabs, etc., that accumulate so rapidly around all mills. Chemists tell us that all this offal can be utilized and made into a paying commodity if treated properly and attended to in time. Let us examine and see.

With valuable timber, such as rosewood, walnut, mahogany, etc., this offal could be gathered and submitted to a process by which it could be softened without destroying the fibre, and afterward submitted to hydraulic pressure and material of any required size produced; this, in turn, again sawed and dressed, is found to take a high polish, and, excepting its tensile strength, is equal in every respect to the lumber from the body of the tree, and in some respects would be preferable; as, for instance, it would stand the most intense heat without warping, shrinking or affecting its finish. Furniture, and all articles not subjected to overstrain, would present a most homogeneous structure, while for coffins, burial caskets, inside finish for dwellings, and the like, it would last nearly forever, inasmuch as the elements of decomposition would all be removed and nothing but the mineral elements of the wood remain. But in this article we wish to discuss the wastes of the cheaper woods, leaving the subject of artificial wood for subsequent discussion, as by request of Mr. Morgan. Wood of any kind indigenous to the United States can, we are sure, be rendered plastic as in making paper, then restored to its original hardness and shape, if used, without detracting any of its properties save that of elasticity, which, of course, would be destroyed.

We will assume that out of an ordinary tree the lumberman gets 75 per cent. of lumber which he sells; now the remaining 25 per cent. a very low estimate, virtually amounts to a nuisance, and the question how to remove it is paramount; in many instances fire is resorted to, but this is both dangerous and unnecessary, as we will show.

All wood contains 65 percent. of volatile matters, the remainder being carbon. We have taken pains to make a chemical test of a sample of oak, and found this sixty-five per cent. of light or volatile matter to be divided into creosote,

tar, rosin, pitch, paraffine, alcohol and acetic acid; whereupon we made no little inquiry as to the prices obtainable for those products, and found ready buyers in Chicago for the acetate, in Buffalo, N. Y., for the alcohol, in New York city for the pitch, tar, etc., in St. Louis for the creosote, leaving the carbon, a matter of 35 per cent., worth, I am told, 63 cents per bushel, or 2 cents per pound in Peoria, for filtering purposes. With these prices, two tons of wood, is worth nearly as much as the rest of the tree before being sawed; in other words, the per cent. of alcohol, one, we obtained at 65 cents per gallon, the acetate of lime 650 pounds per cord at two and one-half cents per pound as offered, the creosote and other by-products, all put together, give a grand total of \$11 per cord for wood; then the charcoal, amounting to as much more, makes a cord of wood worth say \$22 per cord. At this price we will give figures approximating the cost of manufacture. Calling the wood nothing, as it is no more trouble to throw this refuse in one place than another, and the appliances of manufacture are of a character that they could be arranged to take all wastes and sawdust as coming from the mill, then labor at \$2 per day, two men, machinery, steam, etc., \$10 per day; packages, etc., for storing and shipping, \$10 per day; an ordinary mill will have say ten cords of waste per day, and no great mathematician is required to give the profits, and even allowing one-half loss for the visions of a chemist, we still have a profit that seems marvelous.

It looks to us like a wanton destruction of lumber material to see so much refuse rotting and burning away, when if utilized in the manner suggested much good could come of it. In the matter of preserving timber alone, this subject is well worth the attention of owners of timber tracts and saw mills. The crude product could be used for preserving bridge timbers, railroad crossties, fences, buildings, and the like, and would require no extra manipulation save to burn these wastes and condense the smoke, a simple process, and one which anyone can understand.

We have investigated the cost of entire works of this kind but little, and of course would depend altogether on the amount of waste desired to consume in the process, but for a capacity of reducing ten cords offal in 24 hours the cost would not exceed as many thousand dollars, and if a wood or meat preservative was all that was to be made the cost would be much less.—*Chicago Lumber Trade Journal*.

F. S. STERLING & Co., of Monroe, Michigan, handled 18,000 telegraph poles last year and expect to deliver 100,000 this season, having now on hand contracts for 80,000 poles. They are trying to make Monroe the largest distributing depot for telegraph poles in the United States.

WASTE OF THE WORLD'S FORESTS.

When the forests of such a country as Cyprus were destroyed, said Thistleton Dyer, in a discussion in the British Society of Arts, it was like a burned cinder. Many of the West Indian Islands are in much the same condition, and the rate with which the destruction takes place when once commenced is almost incredible. In the Island of Mauritius, in 1835, about three-fourths of the soil was in a condition of primeval forest, viz., 300,000 acres; in 1870 the acreage of woods was reduced to 70,000; and in the next year, when an exact survey was made by Indian forest officer, he stated that the only forest worth speaking about was 88,000 acres. Sir William Gregory says that in Ceylon, the eye, looking from the top of a mountain in the centre of the island ranged in every direction over an unbroken extent of forest. Six years later the whole forest had disappeared. The denudation of the forests is accompanied by a deterioration in the soil; and the Rev. R. Abney, who went to Ceylon on the Eclipse expedition, calculated, from the percentage of solid matter in a stream, that one-third of an inch per annum was being washed away from the cultivated surface of the island. In some colonies the timber was being destroyed at such a rate as would lead to economic difficulties. In Jamaica, nearly all the timber required for building purpose already has to be imported. In New Brunswick, the hemlock-spruce, is rapidly disappearing, one manufacturer in Boiestown using the bark of 100,000 trees every year for tanning. In Demerara, one of the most important and valuable trees, the greenheart, is in a fair way of being exterminated. They actually cut down saplings to make rollers on which to roll the large trunks. In New Zealand, Captain Walker says he fears that the present generation will see the extermination of the Kauri pine, one of the most important trees. All these facts show that this a most urgent question, which at no distant date will have to be vigorously dealt with.

HOW TO TREAT SUDDEN WOUNDS.

The subject of one of the lectures by the Society for instruction in First Aid to the Injured, delivered by Dr. D. L. Woodbridge, of New York, was "What to do in case of a sudden wound when a surgeon is not a hand."

As parts of it may be useful to our readers we take the following from the *Scientific American*:

An inexperienced person would naturally close the lips of the wound as quickly as possible, and apply a bandage. If the wound is bleeding freely, but no artery is spouting blood, the first thing to be done is to wash it with water at an ordinary temperature. To every pint of water add either five grains of corrosive sublimate or two and a half teaspoonfuls of carbolic acid. If the acid is used add two tablespoonfuls of glycerine, to prevent its irritating the wound. If there is neither of these articles in the house, add four teaspoonfuls of borax to the water. Wash the wound, close it, and apply a compress of a folded square of cotton or linen. Wet it in the solution used for washing the wound, and bandage down quickly and firmly. If the bleeding is profuse, a sponge dipped in very hot water and wrung out in cloth should be applied as quickly as possible. If this is not available, use ice, or cloths wrung out in ice water. If a large vein or artery is spouting it must be stopped at once by compression. This may be done by a rubber tube wound around the arm tightly above the elbow or above the knee, where the pulse is felt to beat; or an improvised tourniquet may be used. A hard apple or a stone is placed in a folded handkerchief, and rolled firmly in place.

This bandage is then placed so that the hard object rests on the point where the artery beats, and is tied loosely around the arm. A stick is then thrust through the loose bandage and turned till the flow of blood ceases.

WARPING.

It is said that the wood on the north side of a tree will not warp as much as that from the south side; and that if trees are sawn in planes that run east and west, as the tree stood, will warp less than if cut in the opposite direction. However this may be, says a writer in the

Journal of Progress, it is certain that the tendency to warp when sawn into boards is much greater in green than in dry wood, and that the convex side of the curve is always toward the heart. This warping, due to unequal shrinkage, and to the more open texture of external portion of the tree is not found to occur in the middle plank or board of the log, excepting as it may in slight degree reduce the breadth. The quality of not warping, which is in many cases absolutely indispensable for certain uses, as for example in the sounding-boards of pianos, is secured in the case of spruce timber by first quartering the logs and then sawing them with the angle downward. It is then sawn into boards very nearly at right angles with the lines of annual growth, and small triangular strips must be taken off to make the boards square-edged, but qualities of stability and strength are secured that could not otherwise be gained.

LARGEST LOAD OF LOGS.

The Oaroda Salt and Lumber Company can now undoubtedly brag of hauling the largest load of logs which has ever been piled on a pair of bobs. The *Northern Mail*, published at Mio, in publishing the facts says:—

Seven pieces of round timber, scaling together over 28,000 feet, had been skidded three miles from the river, and from the immense size of the pieces (two of them scaling over 6,000 feet) and from the fact that it was contemplated to take the whole skidway to the river at a single load, the logs in question have excited quite an amount of interest. Quite an amount of light snow had fallen during the night, but the road was true as a die, the weather just warm enough to favor the undertaking, and after a snow plough had gone down nothing more could have been desired. A pair of bob sleighs, which had been in use on the road all winter, were brought out, provided with new bunks made especially for the trip, and the load rolled on. Three pieces were loaded upon the bunks, the fourth and fifth logs on top of these, and the sixth above the last two, when it was found that there had been 28,123 feet of logs loaded, and no room left for the seventh log.

The following is a memorandum of the scale:

Length in feet.	Diam. at centre in inches.	No. of feet.
57	85	3,423
58	27	2,842
57	30	2,830
84	38	6,066
73	26	4,603
88	38	6,354
Total.....		28,123

The load then started on its three-mile trip, and was drawn by a single span of horses. Not a stop was made on the whole route, the team keeping a stiff trot over a greater part of the distance after getting under headway. The amount of round timber in the load estimated by the usual methods, weighs over 70 tons.—*Lumberman's Gazette.*

OLD PINE.

A Milford, Pa., correspondent writes to the *Cincinnati Commercial Gazette*: M. V. O. Shoemaker, of Dingman's, has one of the newest houses in Pike County, but the flooring is probably the oldest manufactured lumber in the United States in actual use for a similar purpose. It is made of yellow pine boards an inch and a half thick and nearly two feet wide. The trees from which they were cut were felled along the Delaware at Dingman's 150 years ago. The boards were sawed out by hand by ancestors of Mr. Shoemaker, and used to floor a stone house they erected in 1724. This building also served as a fort, those early settlers being continually exposed to Indian raids. The house was torn down to make room for the new dwelling. The timbers used in it were nearly all sound. The floor boards were so well preserved that no sounder ones could be found in a lumber yard. About 100 pounds of wrought iron nails four inches in length were taken from the timbers. These must have been forged on the spot, as there was no place nearer than the Minisink settlements in New York state, where they could be obtained. Yellow pine, now entirely extinct in this region, was evidently cheap and common in this country as late as 50

years ago, for in tearing away the porch of the Criseman house in this village a few days ago, which was built about a century ago, the ceiling of the upper part was found to be of yellow pine boards an inch thick and over a foot wide. They wore as sound as when put in. To inquire at a lumber yard to-day for a load of such lumber would frighten the dealer into fits.

PRICES OF TIMBER IN ENGLAND.

The following prices may be considered the present obtainable ones for the various kinds of standing timber, and based on its growing within four or five miles of a central railway station within a 10c. railway rate of the manufacturing districts. If the timber is growing in an unfavorable position for removal, the price must be reduced in proportion, or if in small lots in a country district, where haulers have to be brought from a distance, the expense of cartage is necessarily heavier. Specially selected lots in favorable situations by themselves may command higher prices.

Oak, selected timber	1s. 9d. to 2s.
Do., second class	1s. " 1s. 6d.
Ash, selected timber	1s. 6d. " 1s. 9d.
Do., small second class	1s. " 1s. 3d.
Elm	6d. " 7d.
Beech	5d. " 7d.
Poplar, large	5d. " 6d.
Do., small	3d. " 4d.
Larch, large	9d. " 11d.
Do., small	6d. " 8d.
Sycamore, good and large	1s. 6d. " 2s.
Do. small	6d. " 9d.
Scotch fir	4d. " 6d.
Spruce	3d. " 5d.
Alder	5d. " 7d.
Horse chestnut	5d. " 7d.
Willow	6d. " 7d.
Spanish chestnut	6d. " 10d.
Walnut	6d. " 1s.
Lime	6d. " 10d.

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, Feb. 19, 1884, is specially reported to the *CANADA LUMBERMAN* by Franklyn H. Hough, solicitor of American and foreign patents, No. 617 Seventh St., N. W., Washington, D. C. —

- Band fastening—W. W. Stewart, Brooklyn, New York.
- Gearing (changeable speed)—S. W. Martin, Springfield, Ohio.
- Lathe for turning eccentric or polygonal forms—W. H. Lenhart, Defiance Ohio.
- Lathe (cutter-head for handle turning)—J. Westcott, Union City, Pa.
- Lubricator—A Bradford, deceased (2 patents) W. W. Blackman administrator and assignor of 5-16 to T. O. Wiggins, Brooklyn, A. R. Smith, New Brighton, and A. S. Comstock, New York.
- Lumber-drier—D. Goodwill, Oak Park, Illinois.
- Match splints (machine for making)—G. Sebald, Karlsruhe, Germany.
- Pane (bench)—2 patents—A. T. Goldsborough, Washington, D. C.
- Plane-gage—J. A. Trant, New Britain, Conn.
- Pulp (manufacture of articles from wood)—W. H. & W. S. Ravencroft, Parkersburg, W. Va.
- Spokes (machine for milling off ends of wheel) J. Barnet, Lafayette, Ind.
- Spoke stove—A. D. Goodell, assignor to Millers Falls Co., Millers Falls, Mass.
- Wood-pressing compound—H. O. Dorr, San Francisco, Cal.

Built Up Wood.

Several thin sheets of wood—they are called veneers, though they are sometimes an eighth of an inch thick—are glued one upon another, with the grain of each sheet crossing the grain of the sheet next above or below it at right angles; and, when the whole complex fabric has lost all power of resistance though being almost saturated with steaming glue, it is pressed into an almost homogeneous board without any cleavage whatever, and so without possibility of splitting. Every sort of wood, of course, can be built up. The inside layers can be cheap and the outside choice. No matter

whether the different sheets naturally swell and shrink evenly together. They are too thin to exert much force. Their separate identities are lost in the common and overmastering union. The advantages of economy, strength in every direction, and immunity from cracking are enough to give the fabric the readiest possible acceptance for whatever uses it may be adapted. It is already in use for broad, flat surfaces in cabinet work, especially where strength or permanence is wanted. It already competes with canvas for the use of artists, and with binders' board for book covers. Its availability for any purpose appears to be a matter of expense and skill—never of quality. That it will be adapted to many uses not now thought of is as sure as the inventive fertility of our mechanics.

CALIFORNIA REDWOOD.

Mr. E. L. Allen, secretary of the Redwood Association, San Francisco, furnishes the *Northwestern Lumberman* the following figures, representing the output of sawed lumber of the redwood mills of California for 1883:—

DEL NORTE COUNTY.	
Redwood, 8 mills.....	4,282,740
Pine.....	7,848,134
Total.....	12,140,874
HUMBOLDT COUNTY.	
Redwood, 14 mills.....	70,815,616
Pine.....	3,000,000
Total.....	82,815,616
MENDOCINO COUNTY.	
Redwood, 21 mills.....	77,905,717
Pine.....	15,225,000
Total.....	93,130,717
SONOMA COUNTY.	
Redwood, 7 mills.....	18,948,459
Pine.....	8,500,000
Total.....	29,448,459
SAN CRUZ COUNTY.	
Redwood, 19 mills.....	87,500,000
Pine.....	2,500,000
Total.....	40,000,000
Grand Total.....	250,535,696

QUEBEC.

A despatch dated Feb. 16, says:—A heavy suit has been instituted by the Merchants Bank against a western timber firm in which about a quarter of a million is said to be involved. A number of our leading timber merchants have been examined in the matter. The real cause of the action is not generally known, but is believed to relate to advances by the bank, the rate at which the timber was sold in England by the western firm's Quebec agent being an important issue.

What a Woman Says.

Mine Run Furnace, Va., Jan. 31, 1884. E. ST. JOHN, G. T. & P. A.,

CHICAGO, ILL.

Your valuable Cook Book came to hand, for which accept my thanks. It's a treasure, for its recipes are plain, and the book is well got up; its typographical and general make up speaks well for your department in doing so much for the "Women of America." May your Road be as successful as every woman will be who follows your Cook Book, and every man who eats thereafter. Yours Truly, Mrs. M. R. KAESTERS.

This beautiful book contains 128 pages with illuminated covers. Sent on receipt of 10 cents in stamps or cash. Address, E. ST. JOHN, G. T. & P. A., G. R. L. & P. Ry, Chicago, Ill.

THE London trade in wood does not appear to be on the increase, as the dock deliveries have been rather declining than increasing for the last two years. In 1880 they amounted at the year's end to 222,446 standards sawn and planed and in

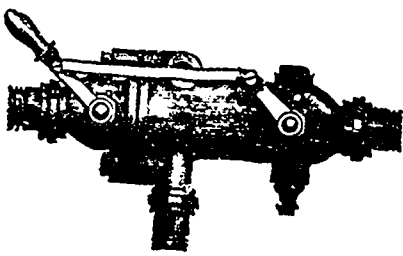
1881 to 218,714 stds.
1882 " 235,621 "
1883 " 224,903 "

by which we see that a less amount of business was done at the timber docks each of the two last years, than in that preceding. It either must be therefore that the timber trade of the port is less, or that the docks do less of it than they used to do.

This Space Belongs to the
Machinery Supply Association,
MONTREAL.

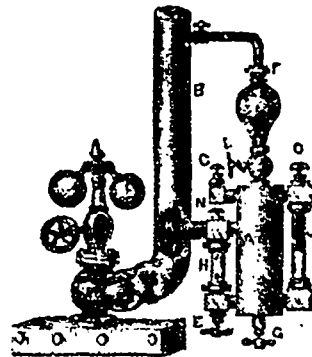
ROBERT MITCHELL & CO.
 Montreal Brass Works,
 St. Peter and Craig Streets, Montreal.

THE KORTING INJECTOR
 Acknowledged to be the Best Boiler Feeder in the World.



Will lift 20 feet, and take water at 150 degrees. Only one handle to start and stop. No valve to regulate. CHEAPER than any other injector in the market. Also, PATENT EJECTORS for conveying Water or Liquids. CIRCULARS ON APPLICATION.

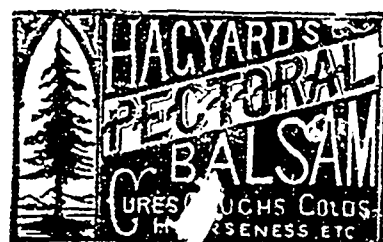
The Continuous Feed Lubricator
 Saves 50 per Cent in Oil.



MECHANICS WHO RISE
 There is a large sized nugget of truth in this from Dr. J. M. Buckley's series of "Letters to Young Men," in the New York Christian Advocate:—
 "Benjamin Franklin told the truth when he said that the best knowledge a man could give his son was the mastery of a good trade. Such a man is cosmopolitan. He can make himself useful anywhere, and he can live anywhere. If it should not be necessary always to work at his trade, he feels the ability wherein to support himself. . . . Between the average mechanic and the great manufacturer or merchant prince, great numbers can be found who began as mechanics and who have taken positions by their mechanical skill fully equal to that of the average merchant and far superior that of most clerks and professional men.
 Always have in view rising above the position of a mere journeyman. Look at things from a broad, business point of view. Consider that some day you may not be a journeyman, and try to study the relations of capital to labor, and to master the principles of business, so that if you should ever form a partnership with a business man, you will not be at his mercy, and so that, if you choose, you may at any time enter upon business for yourself, and not fritter away your life in a vain effort to overcome by mechanical skill financial obstacles."

PROOF POSITIVE.—If you suffer from pain in the region of the shoulders, headache, irregular bowels, indigestion, sick stomach, variable appetite, bad taste in the mouth and complexion, your liver and biliary organs are seriously affected, and Burdock Blood Bitters is the prompt and certain remedy.

GOLD for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money in a few days than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer; to all who are not well satisfied we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address BRINSON & Co., Augusta, Maine.



THOS. GRAHAM & Co.,
File Manufacturers
 ETC.,
 150 FRONT STREET EAST
 TORONTO.
 FILES FOR SALE. FILES RE-OUT

F. E. DIXON & CO.
 MANUFACTURERS OF
STAR RIVET
LEATHER BELTING
 70 King Street East, Toronto.

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



Lumber Drivers' Calks
 TEMPERED IN OIL.
 25 BALL and 5 HEEL to Set

The Calks are now used by all the principal Drivers in Maine and New Brunswick. Kept by Dealers in Lumbermen's Supplies

FOR SALE BY
T. McAVITY & SONS
 Dealers in Lumber and Mill Supplies.
 ST. JOHN, N. B.

Samples sent by mail on application.

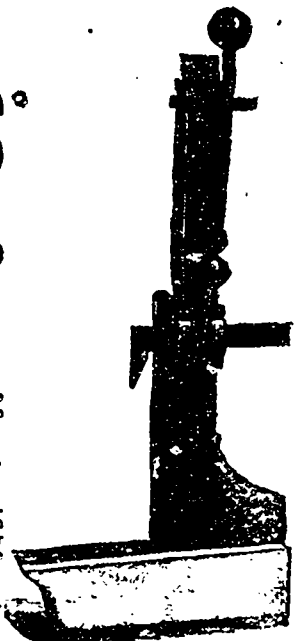
HUGH GIBSON,
 MANUFACTURER OF
 KNIGHT'S PATENT "EXCELSIOR"

SAW MILL DOGS

The Sawyer's Favorite
 For Holding Logs upon a Saw Mill Carriage while being Sawed into Lumber.

MISSISSIPPI, June 7th, 1883.
 HUGH GIBSON, ESQ.—Your Patent Excelsior Mill Dogs give entire satisfaction, and is certainly up to your recommendation. They are the best Mill Dog in the market. I am very much pleased with them.
 Yours Respectfully,
 PETER McLARREN.

BERKLEY, April 20th, 1883.
 HUGH GIBSON, ESQ.—The Dogs I bought of you give satisfaction. They beat any Dog that I ever saw for tipping or edging lumber on carriages. They are just the thing for scantling. I would not take \$50 for them to-day and have to wait for another pair to come from you, because I believe they make two dollars a day for me.
 Yours truly,
 GEO. S. BROWN, JR.



Manufactured by HUGH GIBSON, CHATHAM. EXCELSIOR DOG.

THE COCONUT TREE.

Alfred Trumble entertainingly describes in the *American Agriculturist*, a tree he has been making among the cocoanut groves in the tropics:

Straight up, for 50 feet, an ash-grey stem, banded with many indented rings, springs from the yellow sand. Far up, the sea breeze rustles a feathered crown of swaying fan-like fronds, which wave against the sky like so many gigantic plumes. As we looked up in delight at this, the first cocoanut tree that we had ever seen, a sharp snap sounded overhead, and we dodged just in time to save our head from a large nut, which, breaking from its stem, had fallen and now rolled at our feet.

On a schooner bound to Aspinwall, we had run ashore during the night on one of the many coral reefs which wall the Central American coast from the deep Caribbean. By day, the islet would have been visible enough, with its great tree standing a warning beacon, tall and solitary. But the night had been dark, and we had made the closer acquaintance of the signal tree. We were carried, a couple of days later to St. Andrews, by a native fishing boat, which had been on a cruise after turtles, and which we signalled. There we saw the cocoanut in all its glory. St. Andrews is the chief supply port of the cocoanut in the American tropics. The nuts are brought north from all along the coast and from many of the West India islands, but St. Andrews is the great producing centre. The island is given over entirely to cocoanut growing. The nuts are its only currency, and from them many of the islanders have grown rich, as riches go in that primitive society. The crop, which was originally planted by nature, has since been improved by man, and now St. Andrews is said to produce the best cocoanuts in the world.

The foliage of the cocoanut palm is inexpressibly beautiful. Imagine from 15 to 20 gigantic ferns, dark green in color and with tough-fibered, sharp-pointed and highly-polished leaves or fronds. Bunch these at the end of a towering pole, and set them swaying and clashing in the breeze and flashing the sun from their polished surfaces, and you can form an idea of the tree.

The cocoanut makes its first appearance above ground with a delicate fern like shoot. Another and another follows until the growing plant looks like a gigantic fern. Then a couple of leaves turn yellow, brown, and bright russet, and drop off, and you see a foot of stem between the remaining leaves and the ground. It takes from seven to ten years to send the tree up to a height of 20 feet. Then it begins to bear. The first crop of nuts is from 15 to 25 a year. When it is in full bearing a tree will make an annual yield of from 80 to 100 nuts, or even more.

The cocoanut propagates with amazing readiness. A nut washed ashore on some tropical beach is rolled up by the tide. Then the rain rots the husk, and the winds bury it in the sand, and next year a cocoanut palm is springing from the arid ground. The trees protect the tropical beaches from the action of the tides. Their roots spread out and interlace into a tough and matlike network, which opposes a wall of vigorous resistance to the gnawing and encroachments of the sea.

Everyone knows what the ordinary cocoanut of commerce looks like. In nature, however, it is enclosed by a thick, tough husk, fibrous on the inside, and from two to three inches thick, but covered without with a smooth, light-green rind. This husk is either split with a blow of a heavy wood-knife, and torn from the nut, or else the nut is husked by spitting the rind on an iron blade set in a log. It is from the fibre of the husk that the mats and cordage of commerce are made. The fibre is rot-proof in water, and in tropical ships is popular in the form of coir rope. The uses of the cocoanut in all forms are manifold. The value of the fruit for food is its best recommendation. The meat of the nut is macerated and soaked in water, and pressed, when it yields a rich oil, very pleasant in flavor at first, but soon growing rancid on exposure. This oil is also obtained by boiling the meat, and furnishes a stearine for candles. It is used pure for burning and in soap making. Soap made from cocoanut oil forms a lather in salt

water. Mixed with resin, the oil makes a valuable pitch for caulking. It is largely used in tropical cookery, and on holidays many of the aborigines and blacks besmeare themselves with it as if it were a perfume. The meat from which the oil is obtained is savory, but, being rich in fat, is very indigestible.

A green cocoanut contains only a milky fluid, which gradually consolidates on the inside of the shell. When the nut becomes over-ripe on the tree, only a watery milk is left in the shell. This rapidly sours, when the nut becomes worthless. If it is picked, however, before it grows too old, the milk preserves its sweetness.

The leaves of the cocoanut palm furnish the most durable thatch known in the tropics. They are also extensively worked into mats, screens, baskets, boxes and so on. When dampened and exposed to the sun until the green portion rots, the fibre is carded and woven into coarse cloth. The wood is fine-grained and hard, and is used in ornamental work under the name of porcupine wood. The fibrous heart of the old stems is made into cordage. The husk is used for burning and makes an excellent scrubbing brush.

A NEW USE FOR SAWDUST.

The *Deseronto, Ont. Herald* states that patents have been issued to E. W. Rathbun and George Walker for blocks of consolidated sawdust and tar, mixed in certain proportions, for the manufacture of gas for light and fuel. The gentlemen referred to are one of the proprietors and the chemist of the Rathbun Company, of Deseronto, near the foot of Lake Ontario, that cuts about 50,000,000 feet of lumber a year. This company has been for sometime profitably extracting acids from sawdust, and the present invention is one of the results of the practical information they have acquired in this way. It has long been known that gas of good quality, in moderate quantities, could be obtained by the distillation of wood, but it has only been demonstrated within a few years, that by heating wood to very high temperatures enormous quantities of gas could be produced as compared with coal. Taking this hint it is proposed to manufacture gas from sawdust and tar. While on the manufacturing scale only about 9,000 to 10,000 cubic feet of gas are obtained from a ton of coal, it is not unusual to obtain 30,000 cubic feet from the same weight of wood. By this recent invention a gas producing material is obtained from sawdust from which 40,000 feet of gas of any desired illuminating power may be obtained per ton. The invention referred to consists in mixing tar, while in a fluid state from heat, with sawdust, and after thoroughly mixing these ingredients immediately consolidating them in a powerful machine capable of effecting so close a union between them as to render their separation during roasting impossible. The difference in cost according to Mr. Walker's calculation, between coal and wood gas is enormous, and he adds that with very few changes coal gas works can be used for sawdust blocks. The cost of coal gas he estimates at from 50 to 75 cents per 1,000 cubic feet in the holder, whereas the cost of gas from the blocks would be \$6.12 for 33,000 cubic feet, or 1,611c. per 1,000 cubic feet, the product in gas of 2,000 of gas blocks. If these calculations are anywhere near correct a revolution in gas manufacturing may be anticipated.

It will be remembered that the gas works of Messrs. Rathbun were burned down not long since.

THE SWEDISH SUPPLY

The *Timber Trades Journal* of Feb. 2, says: Swedish saw mill owners will do well to cartain their stocks if they can, but the question is, will they be able to accomplish this, to them, much desired end? The difficulty of the task will lie in one common bond the various conflicting interests predominating throughout the numerous shipping ports that lie along the Gulf of Bothnia—from Tornea, in the extreme north, to Gefle, and the more southern loading places. Of course, the greater portion of the Swedish supplies lie between Gefle and the Pitea River, and this region, embracing the Sundwall, Soderham, Hudikswall, and Hernosand districts, represents an export of something like 500,000

standards of sawn wood, and if any general agreement could be arranged binding the shippers to some limitation, the effect on the markets here would undoubtedly be very considerable. Now that the season has fairly commenced it is very doubtful whether the generality of shippers will care to embarrass themselves with pledges, and the likelihood is that no limitation will be noticeable on the average quantity of stocks for shipment first open water.

It was suggested at the meeting of the Swedish Society of Saw mill Owners at Stockholm, that the stock notes should not be issued before the middle of the month, and that they should then only be forwarded to the agent in each country. But this has not been acted upon generally, and we note several price lists have been issued to the trade here. Two of the largest Swedish shipping houses already have their prices in print, and any further delay, if contemplated, has evidently not been carried out. The task of limiting the export of a country like Sweden in the 19th century is a Herculean one, and if it is accomplished it will make the present season stand out as one of the most remarkable in the annals of the trade. We have often reports of similar arrangements to record, but the result has always been a direct contradiction to them, illustrating the immense difficulty surrounding such a scheme.

To carry it out successfully, the compact should, we consider, have been entered into much sooner than has been the case this time; for though a limitation of the product was mooted in November last it does not appear to have taken any shape until after the year had finally closed. Under any circumstances we scarcely think it can succeed, the obstacles in the way being so immense.

That several of the large export houses will stick to their promises, if things continue as they are, we have very little doubt; but circumstances alter cases, and with a rising market, with plenty of the raw material available, the self-denial on the shipper's part in keeping his mills working below their full strength would, we fear, be more than human nature is capable of.

FIRE EXTINGUISHING APPARATUS FOR SMALL MILLS.

Some time ago we called the attention of our manufacturers and others to the importance of a more general adoption on all the floors of manufacturing establishments of water buckets, axes, and other hand appliances which might be useful in combating fire.

The *Manufacturer*, published at Toledo, Ohio, takes the subject up, and gives some figures as to the cost of supplying factories with simple means of self protection against fire.

Among mills and factories where the capital invested is too small to admit of the outlay for pumps, hose and sprinklers, usually provided in larger establishments, says the writer, a large proportion remain without any means of suppressing any fire that may break out in the premises, though the ravages of the element in this class would indicate some preventive measure as an absolute necessity.

Forty-five dollars is a liberal estimate for the cost of casks, buckets, and auxiliary apparatus, in an ordinary four-story mill. The apparatus will last for many years, and may be the means of saving property at any moment. A suitable arrangement for such a mill would be as follows:—

For each floor two good water casks, with covers to exclude dust, four pails, two axes, two crowbars, and one saw. For water casks, empty oil barrels are as good as any, if not the best. These should be fitted with covers like cheese box covers, setting loosely over the casks and having handles on them to lift them off by. All the salt that the water will dissolve should be put into the casks, both for its effect on fire and as a preventative of freezing. One cask on each floor should be placed near the stairs and the other as remote from the first as practicable; over and about each should be hung two pails, an axe, and bar, for reaching quickly such fire as may lodge in any concealed space, and by the cask on each floor nearest the stairs, a medium sized hand saw. Wooden

pails are unfit for this use owing to their liability to warp, shrink, and fall to pieces when handled at a critical moment. Fire pails should either be of leather, paper, or metal, well galvanized or otherwise protected, preferably the latter two, which neither shrink, crack, nor deteriorate with age.

The cost of such an equipment for such a mill would be about as follows:—

8 casks at \$1.00 each.....	\$ 8 00
Covers for same at 25c each.....	2 00
10 paper pails at \$4.80 per dozen.....	6 40
8 axes at \$1.25 each.....	10 00
8 bars at \$1.00 each.....	8 00
4 saws at \$1.50 each.....	6 00
Salt.....	60
Painting and placing in position.....	2 00
Total.....	\$43 00

These figures are sufficiently liberal to cover all freights and other charges, and are for goods of the best quality. Every article should be marked in large letters, "Not to be removed except in case of fire," and instant discharge should be the penalty for disobedience of this rule. Somebody should be charged with the duty of examining the casks at stated intervals, keeping them full and seeing that the other articles are in their places. With these precautions and light expenditure, provision is made for extinguishing any fire discovered in season, with apparatus easily understood and requiring no previous drill for its application, and which has proved adequate in a vast multitude of cases.—*Scientific American.*

How a Union Soldier Made a Fiddle.

It was at the "Brandy Station," Va., in the winter of 1863-4, says the *Westfield, Mass. Times*, that George M. Colt, Company C, Second Vermont Volunteers, proposed to make the cheer-giving instrument; and with a hatchet, jack knife, file, and a piece of junk bottle as his only tools, he cut a piece of maple from a stump that grew on the bank of the Rappahannock River, and set to work. The back and sides of the fiddle are made of one piece—a "regular dug out." The top is of hemlock taken from a box which brought some "goodies" from their friends in "Vermont." The bow is of maple. The keys were made from the horns of some Confederate cattle that fell into our hands and were devoured by our carnivorous soldiery, so that the poor brutes contributed to our mental as well as physical welfare. The hairs were pulled from the tail of the Colonel's horse, who was fond of music and never raised a foot in resistance. It is said that he even signified his willingness to furnish enough of his hoofs for glue, but that was found elsewhere, and the instrument was completed and in the hands of a modern "Paganini," who rose for the occasion, gave forth his soul stirring strains. It conjured up the "stag dances," serenaded headquarters, and was admired and cherished by the officers and men of the "Green Mountain Boys." The rest must be left to imagination, as far as its army record is concerned. Suffice it to say, it was "honorably discharged," and has been the hero of several occasions since the war, receiving the first premium at the Vermont State Fair. Rude as is its origin, its tone is remarkable sweet and expressive, especially in the rendering of "Old John Brown" and other airs that were offerings of the war, which seem to revive in it the memory of the exciting scenes of its early existence. Its maker and owner still lives, though he received wounds after the production of his instrument that have nearly disabled him for active duty.

Amount of Lumber in Michigan.

The following table shows the amount of lumber now on hand at the principal manufacturing points in Michigan:—

	Feet.
Muskegon.....	120,000,000
White Lake.....	18,000,000
Grand Haven.....	54,000,000
Manistee.....	20,000,000
Ludington.....	6,000,000
Big Rapids.....	10,000,000
Flint.....	15,000,000
Saginaw River.....	370,000,000
Lake Huron shore.....	112,000,000

There is but little difference between the amount on hand now, as shown above, and at the same period last year.

The Limit of Tall Buildings.

The *New York Mail and Express* says:—Some concern is expressed by a Boston contemporary that air and light should be kept from other buildings by the immense structures which now rise 150 feet or more skyward in our city. It is not probable that any limit of the height of buildings to be erected in New York will ever be established. It ought to occur to every intelligent person that the lower stories of a tall building will suffer quite as much as surrounding structures from the effect of its towering height upon the air and light in the street below, and therefore builders will not rear their walls far enough heavenward to make them a nuisance. Manhattan island is so small that its surface is too valuable to be covered with low structures, and it would be folly to prescribe a limit for their height. The authorities need to adopt more rigid regulations as to the safety of immense buildings, but if any man thinks it would be profitable to build a structure 200 feet tall, he should be at liberty to undertake the enterprise, if he conforms to the law in making it safe. There is ample room within the city limits above the Harlem for those who dislike tall buildings, but people who remain on Manhattan island must accept them as inevitable.

Four Million Pails.

The pail and tub industry of Keene, N. H., consumes more timber than all others carried on in Cheshire county, says a contemporary. There are 40 pail and 30 tub lathes in operation in the county; each lathe turns out on an average 100,000 pails a year, consuming 450 cords of sapling, which gives a product of 4,000,000 pails from 18,000 cords of pine. The 20 tub and bucket lathes use a proportionately large quantity, and as great quantities of staves are sawed and sold for use outside the county, it is probable that 40,000 cords of sapling pines are cut every year. Besides much hardwood that is cut for manufacturing purposes, a vast quantity is used for fuel. Yet many competent judges think the yearly growth equals the amount cut and that there is as much growing wood and timber in the county as there was thirty years ago.

A Maniac Woodsman.

Not a little excitement was occasioned in Crystal Falls, Mich., recently, by the arrest of a Canadian named John Breen, an employee of the Kirby-Carpenter Lumber Company. He was uneasy and dissatisfied, and kept wandering from camp to camp, showing signs of insanity, and finally becoming so violent and dangerous that it was deemed best to arrest him. With a maniac's strength he wrenched the iron bars from the lock-up windows and escaped. He was recaptured, and placed in an inner cell, but he tore the door from its hinges, and it was only with the utmost difficulty that he was finally restrained.

A NEW narrow gauge railroad is to be built between North Anson and North New Portland, Me., a distance of eight miles. The lumber operations on the Carabasset and Dead rivers will be greatly facilitated by this road.

A PLANING mill man at Muskegon, Michigan, states that there have been more buyers of dressed lumber at that point within the past month than in any previous year during the same time. He predicts that the rail trade out of Muskegon this year will be very large.

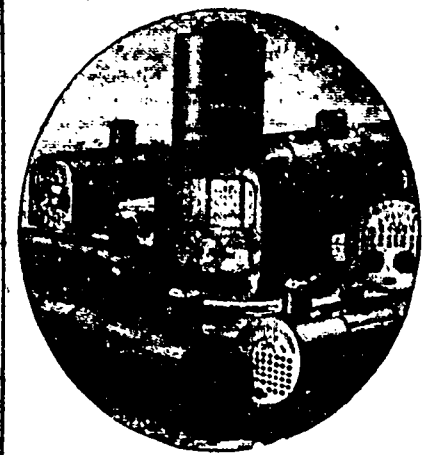
SINGERS and public speakers are always benefited by using Down's Elixir, as it removes the hoarseness and increases the power of the voice. Take small doses often. Price, 35c, 50c, and \$1.00.

IT SAVED HER LIFE.—Mrs. F. Taylor, of Toronto, was a great sufferer from inflammatory rheumatism, which for a long time baffled all treatment. At last she tried Haggard's Yellow Oil, and declares it saved her life.

PROOF POSITIVE.—If you suffer from pain in the region of the shoulders, headache, irregular bowels, faintness, sick stomach, variable appetite, bad taste in the mouth and complexion, your liver and biliary organs are seriously affected, and Burdock Blood Bitters is the prompt and certain remedy.

JOHN MCGREGOR & SONS

Manufacturers of all kinds of STATIONARY, MARINE and LOCOMOTIVE



BOILERS

And SHEET IRON WORK.

SECOND HAND MACHINERY Bought, Sold or taken in repairs for new work. REPAIRS PROMPTLY TENDED TO. All Boilers Tested by cold water pressure to 150 pounds to the square inch.

DOCK and WORKS:—

Sandwich Street, Windsor, Ont.

PATENTS

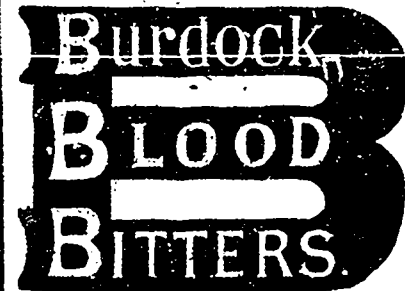
MUNN & CO., of the SCIENTIFIC AMERICAN, continue to act as Solicitors for Patents, Caveats, Trade Marks, Copyrights, for the United States, Canada, England, France, Germany, etc. Hand Book about Patents sent free. Thirty-seven years' experience. Patents obtained through MUNN & CO. are noticed in the SCIENTIFIC AMERICAN, the Largest, best, and most widely circulated scientific paper, \$3.00 a year, Weekly. Splendid engravings and interesting information. Specimen copy of the Scientific American sent free. Address MUNN & CO., SCIENTIFIC AMERICAN Office, 231 Broadway, New York.

HILL'S BUCHU, KIDNEY INVESTIGATORS IN USE.

It is a specific in the cure of all diseases of the Kidneys, Bladder, Prostate Gland of the Urinary Organs, Irritation of the Neck of the Bladder, Burning Urine, Gleet, Gonorrhoea in all its stages, Mucous Discharges, Congestion of the Kidneys, Brick-dust Deposit, Diabetes, Inflammation of the Kidneys and Bladder, Dropsy of the Kidneys, Acid Urine, Bloody Urine, Pain in the Region of the Bladder, PAIN IN THE BACK, Urinary Calculus, Renal Calculus, Renal Colic, Retention of Urine, Frequent Urination, Gravel in all its forms, Inability to retain the Water, particularly in persons advanced in life. IT IS A KIDNEY INVESTIGATOR that restores the Urine to its natural color, removes the acid and burning and the effect of the excessive use of intoxicating drink.

PRICE, \$1; or, Six Bottles for \$5. Sent by all Druggists. W. JOHNSTON & CO., 161 Jefferson Ave., DETROIT, MICH.

\$66 a week at home. \$5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at once, make great pay all the time they work, with absolute certainty, write for particulars to H. HALLIBURTON & Co., Portland, Maine. Gmd145-1ywf1



WILL CURE OR RELIEVE. BILIOUSNESS, DIZZINESS, DYSPEPSIA, DROPSY, INDIGESTION, FLUTTERING OF THE HEART, JAUNDICE, ACIDITY OF THE STOMACH, ERYSIPELAS, SALT RHEUM, HEADACHE, HEARTBURN, HEADACHE, DRYNESS OF THE SKIN, And every species of disease arising from disordered LIVER, KIDNEYS, STOMACH, BOWELS OR BLOOD. S. SILBURN & CO., Proprietors, Toronto.

HILLOCK & KENT,

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

VULCAN IRON WORKS (ESTABLISHED 1812.)

STEWART & FLECK, Jr.,

Manufacturers of every Description of Saw and Grist Mill Machinery, Water Wheels, Steam Engines, Derricks, Boilers, Steam Pumps, Mining Machinery. 202 REPAIRS PROMPTLY EXECUTED. 17 Wellington Street, OTTAWA, Ont.



(ESTABLISHED 1852.)

CURRIE BOILER WORKS

MANUFACTURERS OF Steam Boilers NEW and SECOND HAND ENGINES and other Machinery on hand and for Sale.

CURRIE, MARTIN & Co.

Esplanade, Foot of Frederick Street, TORONTO.

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



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

A New and Direct Line, via Seneca and Kalkaska, has recently been opened between Richmond, Norfolk, Newport News, Chattanooga, Atlanta, Augusta, Nashville, Louisville, Lexington, Cincinnati, Indianapolis and Lafayette, and Omaha, Minneapolis and St. Paul, and intermediate points. All Through Passengers Travel on Fast Express Trains. Tickets for sale at all principal Ticket Offices in the United States and Canada. Baggage checked through and rates of fare all ways as low as competition that offer less advantage. For detailed information, get the Maps and folders of the GREAT ROCK ISLAND ROUTE. At your nearest Ticket Office, or address: T. R. GABLE, E. ST. JOHN, The Trust & Safe Co., One 1/2 Th. & Park Sts. CHICAGO.

The American Hotel,

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

J. K. POST & CO. LUMBER MERCHANTS

And Shipping Agents. OSWEGO, N.Y.

J. T. LAMBERT,

Lumber and Commission Agent. ORDERS FOR DIMENSIONS AND ALL OTHER KINDS AND GRADES OF

American Lumber

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

WM. AHEARN

MANUFACTURER OF HAND SPIKES AND CANT DOGS

Lumberman's Tools, etc.,

HIGHEST AWARDS IN CANADA and U.S. CHAUDIERE, OTTAWA.

EPPS'S COCOA

BREAKFAST. "By a thorough knowledge of the natural laws which govern the operations of digestion and nutrition, and by a careful application of the fine properties of well-selected Cocoa, Mr Epps has provided our breakfast tables with a delicately flavored beverage which may save us many heavy doctor's bills. It is by the judicious use of such articles of diet that a constitution may be gradually built up until strong enough to resist every tendency to disease. Hundreds of subtle maladies are floating around us ready to attack wherever there is a weak point. We may escape many a fatal shaft by keeping ourselves well fortified with pure blood and a properly nourished frame."—Civil Service Gazette. Made simply with boiling water or milk. Sold in tins only (4-lb and 1-lb.) by Grocers, labelled thus: JAMES EPPS & Co., Homoeopathic Chemists, 1y21 London, England.

THE GREAT CANADIAN PAPER WEEKLY MAIL

It has the Largest Circulation, the Latest News, both Local and Foreign. A Splendid Story Page. First-class Agricultural Page. Reliable Market Reports. Legal Column. Household Department, Children's Department, etc.

THE MAIL is the great medium for advertisements of FARMS FOR SALE

Agents wanted ADDRESS THE MAIL Toronto, Canada.

ONE DOLLAR A YEAR

THE MAIL CANADA



DEVOTED TO THE LUMBER AND TIMBER INTERESTS OF THE DOMINION.

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

Terms of Subscription:

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

Advertising Rates:

Per line, for one year..... \$0 90
Per line, for six months..... 50
Per line, for three months..... 30
Per line, for first insertion..... 15
Per line, for each subsequent insertion to 3 mo's..... 09
Cards not occupying more than 12 lines (1 inch) per annum..... 8 00
Cards not occupying more than 12 lines (1 inch) for six months..... 5 00
Cards not occupying more than 6 lines per annum..... 5 00
Cards not occupying more than 6 mo's..... 3 00
Special rates will be made for page, half page and column advertisements.

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

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

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

THE CANADA LUMBERMAN is filed at the Offices of MESSRS. SAMUEL DRAGON & Co., 164 Leadenhall Street, London, England, who also receive advertisements and subscriptions for this paper.

PETERBOROUGH, Ont., MAR. 1, 1884.

The Flint & Pere Marquette railroad hauled in January 24,246,182 feet of logs, the largest record yet made by the road.

The Merchants Bank of Montreal has instituted an action for nearly \$1,500,000 against Castle & Schoulenberg, a lumber firm. The suit represents a claim written off the books of the bank seven years ago, and every effort will be made to collect it now.

A RETURN was laid before parliament the other day, as to Manitoba's imports of lumber. It was shown that the total value of lumber brought into the Province of Manitoba during 1880 was \$50,250, the duty thereon being \$9,263, and for 1882, \$482,672, duty \$66,592. In the year last mentioned there was imported dressed timber alone to the value of \$332,997.

It has been said above a whisper that officials in Arkansas, Wisconsin, Minnesota, as well as in some of the other states have winked at, and abetted timber frauds, and now it is learned that an official in California who should have his eye on timber land grabbers, had it in another direction, while grabbing was going on. It is claimed that 88,000 acres in Humboldt county have been fraudulently obtained through the collusion of public officials.

The *Montreal Times* says:—The movement of lumber in Ontario is not lively, but there is considerable demand from the United States for good lumber, which is not in heavy supply at any Canadian points. The prospects are that all the dry, choice lumber will be picked up in the spring at prices nearly as good as those of last year. The price of the new cut will depend largely on the current of general trade. The quantity, it is expected, will be at least one third less. Outside of the Ottawa district, the impression is that there is no more lumber at present cut in Ontario than will be required for our own purposes or for the usual export demand. As to coarser grades, some reduction in price is not unlikely.

Logging in Manitoba has been very dull this season, but enough was left over to ensure a fairly active summer. Bulmer & Co. are the only ones at work in the woods. The Rainy Lake Company has quite a quantity of logs on hand but it is doubtful if their mill will be rebuilt in time for the season's work. The Kewatin Lumber Company did not cut any this winter, satisfied that the 5,000,000 or 6,000,000 feet on hand would be sufficient.

A SALE of timber was held on the 25th inst., at Callington, when some 420 oak, 150 ash, 113 sycamore, and a quantity of lino, elm, beech, chestnut, fir, and other trees, grown on the Whitford Estate, the property of the Duchy of Cornwall, were offered by Mr. W. J. May, auctioneer, Liskeard. The total sum realized by the sale was £832 12s. 6d., the attendance and competition being very satisfactory. The whole was divided into about seventy-two lots, the highest price being obtained for lot 59, nine oak trees, £38 10s.

The *Ottawa Citizen* of Feb. 21, says:—Yesterday Mr. Allen Gilmour, one of our great lumber kings, whose mills on the Hull side were destroyed by fire last season, visited the site of the old mill and to the great disappointment of all said that for the present idea of rebuilding had been abandoned. This is much to be regretted, for this mill furnished work and bread to many a hour hold. It is much to be regretted that the Messrs. Gilmour at the present moment do not see their way clear so as to guarantee them in putting up a new mill. It is earnestly hoped that ere long a revival in our great lumber trade will put this substantial old firm in such a position as to guarantee them in once more launching out in a new mill.

OREGON CEDAR.

The *Lumberman's Gazette* says:—A San Francisco paper notes the departure from that port of a ship destined for Europe loaded with redwood and other finishing timbers of California growth. The shipment is in the nature of an experiment, but it is stated that the conditions of cost, transport and market have been carefully studied, and that there is no doubt of the success of the enterprise; and it is predicted that other ships, and many of them, will follow. It is a fact well known that Oregon produces a greater variety and much finer woods than California. The Port Orford cedar is of the same general character, but in every practical respect a better timber than the redwood. Its color is better for panel and other fine work, and its grain is more distinct. We have a dozen or a score of other fine woods, but the best and most plentiful of all is the myrtle, which grows along the streams of the southern coast. The beauty of this wood is beyond comparison. It is nearly as dark as the black walnut, mottled with mahogany colored streaks, is hard and susceptible of a perfect polish, and retains its toughness when sawed into the thinnest veneering. There is no ornamental timber except rosewood equal to it. Even the curly and bird's-eye maple, so much admired, is dingy and cheap looking beside it, and the famous redwood is as inferior as ordinary cedar is to mahogany. If this beautiful timber were once introduced in the east or in Europe, we believe that it would soon be in great demand. It grows in forests in the counties of Coos, Curry and Douglas, easily accessible to the ocean. Who will introduce it?

INTUITIVE FOREST PRESERVATION.

"We notice in a northern New York exchange," says the *Northwestern Lumberman*, "the statement that coal stoves are becoming a common means of heating houses in the rural districts of that part of the State. This suggests two facts. That in that once timbered country wood is becoming so valuable that coal is a cheaper fuel, and that a stop is being put to the destruction of forests for fuel purposes. The latter condition corroborates what has before been asserted in the *Lumberman*, that the owners of woodlands in northern New York are economizing the second growth groves that everywhere abound, which are largely maple, and are reserved for sugar making. The

prospect is that in New York, as in England, there will be more timber ten or fifteen years from now than there was ten or fifteen years ago, and that not the effect of legislative interference, but through the law of personal interest, which is stronger than legislative enactments. All this leads to the conclusion that the best way to promote the cause of forestry is by the dissemination of an influence in favor of tree preservation, the value of the woods, and the economy of saving or making the most of all that are standing."

A GOOD EXAMPLE FOR US.

The evil from which France suffered in the seventeenth century our country is enduring today, and it will require prompt measures to correct it. Our apparently limitless territory, studded over with forests, has made us profligate, even to wastefulness, and we have been in danger of entirely destroying the greatest of our heritages.

In Prussia and Germany the laws relating to forestry exhibit the wisest forethought on the part of the Government, and the people sustain it in every effort to preserve what other generations had well nigh deprived them of. These nations set us an example which it would be wise to consider. Their laws have given rise to a large system of tree planting, thinning and preserving, and also to an enormous literature regarding arboriculture and cognate subjects. Millions of trees are annually set out, examined and transplanted, and great rainfalls and droughts are obviated, while malaria from both causes is greatly diminished. The ill results of the old, denuding process are rapidly disappearing, showing that nature's capillary clothing must be respected, for utilitarian as well as sentimental reasons.

In the United States the general state of extravagance prevailing in respect to forests is largely due to ignorance. Only lately has the scientific man impressed upon him of average intelligence the necessity of tree preservation, and the desirability of using other materials than lumber for many purposes in which wood was formerly considered indispensable. The wakening anxiety in regard to forestry culminated, a little more than a year ago, in the formation of what was denominated a forestry congress, of which Professor Loring, of the Agricultural Department was elected chairman. Following their interesting sessions were the dissemination of much information in regard to arboriculture in the United States, and the inception of village and country societies for the purpose of tree-planting.—*C. Holloway in Manhattan.*

Northwest Timber.

In a speech in the House of Commons Mr. Ferguson, M. P., said:—Mention is made of people leaving there on the ground that there is neither fuel nor building material. I will confine my remarks chiefly to Alberta. As to wood, there is not much in that country, but nature, through its wisdom, has compensated that district by supplying a almost unlimited quantity of coal. The result of my observation is that I can unhesitatingly state that in the whole province of Alberta I saw no place, nor do I believe there is a locality, where a farmer with his own cart need haul fuel more than a distance of five miles, and in half the cases within that distance. As to building material as far west as Brandon—I am now coming back to Manitoba—I know good building material. American pine and our own Rat Portage pine, is sold within a few cents per thousand as cheaply as it can be purchased to-day in the lumber yards at Ottawa. I saw as good siding for buildings sold retail to hundreds of people at \$25 per thousand, as you see in Ottawa market to-day. Doors, frames and window sashes, with glass, can be bought even cheaper than in Ottawa.

Asbestos.

Asbestos in its purest form has recently been discovered in almost unlimited quantities in Canada. The fibres are described as long, white, flexible, and as fine as silk. Large amounts of asbestos have been mined in the last two years in Thotford and Lorrains, Megantic County, and it is claimed that the county has produced

more of the article than the total output of the world during the same time. Wolfe county also has several large mines, which are to be operated next year by English capitalists. All these mines referred to are situated within a short distance of the Quebec Central Railway, offering good facilities for shipping. The mineral is taken to Quebec, where it is crushed and cleaned, and thence sent to England. Among the many uses for asbestos is the manufacture of a paper which is indestructible by fire. This has been successfully accomplished in Franco, as well as the discovery of an indelible ink with which to write on the paper. The manufacture of this paper will prove of value in case of fire, as all important documents can be drawn up on it. The weaving of asbestos cloth is also likely to be extensive, as well as other textile fabrics such as gloves, table linen, etc. The article is also extensively used in fire proof paint, fire-proof roofing, for packing safes and for piston rods in steam engines.—*Portland, Me., Argus.*

An Unlucky Cargo.

A load of staves for Rondout, which had been on board of five different vessels and wrecked three times, was loaded at Ellsworth a few weeks ago for the sixth time, on board an Ellsworth vessel for its port of destination, under a most careful and skillful master. In the course of the voyage the vessel was, one morning, broad off Salem, where she had been for a harbour. The captain was on deck congratulating himself on the prospect of having a fine run, with a fair wind, over the shoals, when he was suddenly filled with consternation at the sight of a steamer only a very short distance off, heading right for them. A collision seemed inevitable, and he called all hands. The watch below started at the sound of the captain, sprang on deck for their lives; when, lo, the steamer had faded into thin air! No sound of her was heard and no trace of her was seen afterward. The captain felt certain that he saw the steamer, and concluded that he had an ill-fated cargo. So he ran back to Gloucester, and a few days later went to Boston where he hauled his vessel up for the winter, discharged his crew and came home to Ellsworth. At any rate such is the story first related by the captain and then to credulous audiences by Ellsworth skippers on the street corners.—*Ellsworth Cor. Mount Desert Herald.*

The "Running Season."

Present indications are unmistakable that the coming spring will be an excellent one for the "running of logs." The vast accumulations of snow in the woods must furnish a heavy volume of water, and unless an extremely warm spell and continued rains succeed in rushing this body of snow in a melted condition into the streams in too short a period, the probability is that the "running season" will be as favorable and successful as has been the "logging season." Reports from northern Michigan pineries, as well as from those of Wisconsin are to the effect that the snow is nearly three feet deep on the level, which is an unusual body of "the beautiful" at this season of the year, and any disappearance of the same seems to be at once replenished by a fresh supply. Lumbermen generally are jubilant at the success which has thus far attended their logging operations, and the flattering prospects which abound for successfully securing the log crop, and making it available for operations during the manufacturing season, which will soon be upon us.—*Lumberman's Gazette.*

Pine Plantation in Delaware.

A northern man bought a farm in Kent County, Delaware, a number of years ago, the land having been worn out by tobacco growing, and been without cultivation about 20 years. He planted ten acres of his purchase to yellow pine, sowing the seed broadcast. When our informant saw the plantation the trees had been growing ten years, and stood in clusters, according to the natural way pine groups itself. The trees ranged in size from four to 16 inches, and were 30 to 60 feet tall. Their bodies were smooth and straight, and free from limbs from 20 to 30 feet upwards from the ground. This was a good example of what can be done in

tree growing in Delaware. Doubtless the same thing can be repeated on much of the worn out land of the Atlantic states of the South, and the question arises, would it not be profitable to rehabilitate a portion of the land in Delaware and Virginia, at least, in the way indicated. Certainly there is no need of going without wood and lumber in any of the older states when such timber as that on this Delaware plantation can be raised in ten years.

HOW THE INVENTOR PLAGUES HIS POOR WIFE.

A facetious chap connected with one of our daily newspapers gives the following amusing burlesque on the trials of an inventor's wife:—
 "It is all very well to talk about working for the heathen," said one, as the ladies put up their sewing, "but I'd like to have some one tell me what I am to do with my husband."
 "What is the matter with him?" asked a sympathetic old lady. "William is a good man," continued the first, waving her glasses in an argumentative way, "but William will invent. He goes inventing round from morning till night, and I have no peace or comfort. I didn't object when he invented the fire escape, but I did remonstrate when he wanted me to crawl out of the window one night last winter to see how it worked. Then he originated a lock for the door that wouldn't open from midnight until morning, so as to keep burglars out. The first time he tried it he caught his coat-tail in it, and I had to walk around him with a pan of hot coals all night to keep him from freezing."
 "Why didn't he take his coat off?" "I wanted him to, but he stood around till the thing opened itself, trying to invent some way of unfastening it. That's William's trouble. He will invent. A little while ago he got up a cabinet bedstead that would shut and open without handling. It went by clockwork. William got into it, and up it went. Bless your heart, he staid in there from Saturday afternoon till Sunday night, when it flew open and displayed William with the plans and specifications of a patent wash-bowl that would tip over just when it got so full. The result was that I lost all my rings and a breastpin down the waste pipe. Then he got up a crutch for a man that could also be used as an opera glass. When ever the man leaned on it, up it went, and when he put it to his eye to find William, it flew out into a crutch and almost broke the top of his head off. Once he invented a rope ladder to be worn as a guard chain and lengthened out with a spring. He put it around his neck, but the spring got loose and turned it into a ladder and almost choked him to death. Then he invented a patent boot heel to crack nuts with, but he mashed his thumb with it and gave it up. Why, he has a washtub full of inventions. One of them is a prayer-book that always opens at the right place. We tried it one morning at church, but the wheels and springs made such a noise that the sexton took William by the collar and told him to leave his fire engines at home when he came to worship. The other day I saw him going up the street with the model of a grain elevator sticking out of his hip pocket, and he is fixing up an improved shot-tower in our bedroom."

RAILROAD TIES IN A HOT CLIMATE.

At a meeting of the Institute of Civil Engineers for Ireland some short time back a paper was read on "Railroad Ties in Mexico," from which we extract the following:—The sleepers used are 9 ft. long, 10 inches wide, and 5 in. thick. The selection of suitable wood for sleepers has occupied much attention. Good, well-crooked Baltic sleepers have been tried on a large scale, and found to become decayed and useless at the end of about four years. Hard, strong oak sleepers, obtained in the country, have also been tried in large quantities, and found not to last more than three or four years. The timber of both the Baltic and oak sleepers seemed to undergo a rapid change and become quickly converted into a dry spongy consistency. There was no appearance of insect ravages, the timber had evidently not been able to withstand the great heat or dryness of the atmosphere. The best wood yet discovered for sleepers is zapote. It is essentially a tropical timber, and is exceedingly durable for outdoor

or indoor work above or below ground. Samples of this wood taken out of buildings said to have been erected more than two centuries ago did not show the slightest signs of decay. The wood was as sound as the day it was put into the building. This wood, however, is very scarce and very expensive. In color it is nearly as dark as logwood. It is very heavy and sinks in water, and is so hard that the boring of the holes for the spikes and forming the grooves for the rails is very laborious work. It appears to be almost impervious to decay, but it has a tendency to split if exposed to the heat of a tropical sun for a few months. For this reason the zapote sleepers must be kept equally covered with ballast. The next best quality of timber yet found in the country, and of which by far the greater number of the sleepers on the line are made, is sabino, a species of cedar. The general colour of the wood is either a light yellowish brown or a light pink, and in appearance is very similar to the cedar used for ordinary lead pencils. It is a resinous wood, with a peculiarly fragrant odour, and its straight-grained, readily-worked, and does not appear to be attacked by any insects. In many of the very old buildings on the upper plains, beams and posts of this timber are still standing, and show very little signs of decay. For sleepers it is very durable, and those that have been down for several years indicate that they are more likely to give way from the actual wearing or cutting in of the rail flange than from natural decay.

The Lost Forests of France.

A writer in *L'Union Medicale* laments the destruction of the French forests, and the lesson for us cannot be learned too soon. The writer says:—
 "How many regions formerly prosperous have become sterile deserts by the incensate destruction of forests? When the forests disappear the soil dries up, the water is replaced by sand, the water-courses are alternately arid paths and devastating torrents. Our attention is naturally drawn to the great forests of Gaul and of ancient France; we follow with pleasure the description of the first clearings made by the monks, which, kept within certain limits, prepared the fertile France of to-day. But it is with sadness that we observe the increasing impoverishment of our forests and the perilous effects resulting from it, whether it be in our water courses and our cities or for our bodily health. The author in giving our present status as to woodlands, tells us that in the extent of our forests as compared with our whole territory we rank but eighth among European nations."

The Hudson Bay Route.

There is a difference of opinion as to which side of Lake Winnipeg a Hudson's Bay railway ought to take. Alderman Clement Smith, of Brandon, favors the west side. The east side, where he wandered four years, he describes as a country of innumerable rocks. "In many cases the rocks rose to a height of 20 feet. Muskogs intervened. The timber was stunted and worthless. On the west side of Lake Winnipeg there was considerable improvement, but the country was flat, free from rocks and the land was good, but the best country was west of Lake Manitoba." Mr. Adam Nelson, of Salkirk, from personal knowledge, makes a similar statement.—*Monetary Times.*

A Remarkable Oleander.

The largest oleander tree to be found anywhere, perhaps, is on G. H. Packwood's place, at Spanish Town, Fla. It covers a piece of ground 39 feet in diameter; from the ground to the top of the topmost limb is a distance of 25 feet; at the surface of the ground the trunk is divided into 20 or 25 separate stems, the group being at least five feet through, and one single stem is 14 inches thick. The tree is a very old one.

Rosewood.

There are several specimens of rosewood, and the botanists have not entirely conquered this branch of their study. Not everyone knows why the name "rosewood" was applied to the dark wood so highly prized for various purposes,

When first cut the fresh wood of the tree gives out a fragrance that is strong and agreeable, much resembling the odor of roses.

TORONTO NEWS.

TORONTO, Feb. 23.—A terrific explosion occurred in the Bank of Commerce this morning. Shortly after nine o'clock when the clerks had just commenced work, George Shaw, the messenger, proceeded to open the vault, and struck a match to enable him to see more clearly, when a sheet of flame shot up and there was a loud explosion. Shaw was lifted from his feet and thrown a distance of twenty feet, being severely injured about the head and face. Twelve clerks seated at their desks were knocked down like nine-pins, and Fuller, the paying teller, who was standing looking out of the window on to Yonge street, was blown through the sash into the road and picked up insensible and bleeding. Heavy plaster rained down in showers, the railings and guards were twisted off the counters and flying pieces of glass inflicted innumerable cuts, on the bewildered clerks. Every window in the lower part of the building was blown out. The iron doors of the vault were almost twisted off the hinges. Everything was confusion, and the wildest rumours got afloat of burglary, &c. The bank was soon besieged with customers and others to ascertain the real state of affairs. It appears that plumbers were at work on Saturday, and either through their neglect or that of the clerks a jet in the vault had been left open, and the gas had been escaping since closing work on Saturday. The shock was felt for a considerable distance. The contents of the vault sustained no injury. The damage is variously estimated at from \$1,000 to \$3,000. Those injured are Mr. Bolster, sub-manager; Mr. Fuller, teller (severely); Mr. Beauregard, clerk, and Shaw, the messenger. Several others are slightly cut.

WM. LATCH

Wholesale Dealer in All Kinds of
PINE and HARDWOOD LUMBER
 SHINGLES AND LATH.
 COMMISSIONS BOUGHT AND SOLD ON COMMISSION.
 28 Adelaide St. East, TORONTO, ONT.

WANTED.

15 RED CEDAR POSTS,
 10 Feet Long, at least 5 inches thick.
 Address, giving price, S., Review Office, Peterborough, Ontario. d3060

HENDERSON BROS.
LUMBER AND TIMBER.

Building & Bridge Timber Sawn to Order.
 Pine, Spruce and Hemlock Lumber by the Cargo.

232 Steam Saw Mills, Box Factory and Yards.—342 to 390 William St., and 130 St. Constant St., Montreal.
 Steam Saw Mills, L'Assomption, P.Q.
 P. O. Box 304. 1y121

WATER POWER
 TO LEASE.

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

R. & G. STRICKLAND

1d83 LAKEFIELD, NT. w1619

WANTED AGENTS to sell
TUNISON'S

NEW AND SUPERIOR
CANADA MAPS & CHARTS
 As paying as any agency in the world. For particulars, full and free, address H. G. TUNISON, 388 Richmond St. LONDON, ONT.

AGENTS wanted for The Lives of all the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLAM Box Co., Portland Maine.

E. S. VINDIN,
 Commission, Shipping, Forwarding and General Agent.
LUMBER MERCHANT
 Office, Tempest's Block, Fort Hope. 112

PRITCHARD & MINGARD
 GENERAL ENGRAVERS.
 Stencil Plates, Steel Stamps, Rubber Stamps, &c.,
 OTTAWA, - ONTARIO. 123

WM. E. DODGE & SON,
Pine & Hardwood Lumber
 Office - Cor East Falls Avenue and Stiles Street,
BALTIMORE, MD., U.S.A.
 Correspondence Invited 1y112

LUMBER
 Shingles, Doors, Sash, Flooring, &c.,
WANTED,
 STATE QUANTITIES AND PRICE TO
SHORE & DAVIS,
 Head Office, 514 Main Street, Waukegan, Ill.

A. & T. J. DARLING & Co.
 TORONTO, ONT.
 Specialties—"Darling" Axes, Saws, Cutlery, "Black Diamond" Files.
HARDWARE.

BOILERS
 FOR SALE.

Locomotive Type about 70 Horse Power, Lowmoor Fire Boxes, Steel Barrels.
 APPLY,
Canadian Locomotive & Engine Co., Limited, Kingston, Ont.

100 COILS
Pure Manilla Rope
 Assorted Sizes up to 2 in. diameter.

3 TONS EXTRA
Dry Tarred Lath Yarn
 Single and Double Tie Samples free by mail.

5 TONS
Best Proved Boom Chain
 3/4, 9-16 and 3/4 inch. At the very lowest figures.

Gandy Cotton Belting
 Under the fullest guarantee, all sizes. Delivered free of freight. Prices supplied on application.

Dynamite, Detonators, Platinum Fuse and Safety Fuse, always on hand. Large Orders Delivered Free.
 Iron, Steel and Hardware, both Heavy and Shelf, for Lumbermen and Mill Owners.

GEORGE STETHEM
 PETERBORO J.G.R.

IGNORANCE WANTED.

Under this curious heading the *Northwestern Lumberman* in a late issue prints a thoroughly practical and sensible editorial. From it we clip the following paragraphs:—

There is considerable questioning among the wholesale dealers of this city, (Chicago), and probably elsewhere, as to the usefulness of lumbermen's exchanges, the gathering and publication of statistics, and the information that is conveyed in lumber journals. There are those who, on the spur of the moment, would be inclined to annihilate the whole outfit of informative means, at one blow. They claim to think that the reason why wholesaling lumber of late years has become less profitable than it was a few years since is because of the publication of statistics, and the circulation of exact and comprehensive data about the manufacture and trade in lumber. How such information cuts down margins and destroys profit the reactionary individual who croak at knowledge do not attempt to explain. This is doubtless because the reason, if any at all, must appear to their own discredit, since full and accurate data regarding logging, manufacture, visible supply, state of demand, prices, transportation, new fields of operation, etc., can do no hurt to anybody, save in one way; it may prevent an individual or a class from getting the advantage of some other individual or class. It must be confessed that the tendency of the times is to narrow down profitable margins in all kinds of business. But the recalcitrant individuals in the lumber trade make a mistake when they think, or pretend to think, that a thorough knowledge of the business at large is the cause of the loss of profits. The general survey of the situation now obtainable through exchanges and trade journals prevents a blind following of surface, or only apparent indications, that would surely lead the trade into many an irretrievable disaster from which it is now able to escape. In fact if the trade would more closely follow the light as it is reflected by the exchanges and the trade journals it would often be saved from losses it now experiences.

When the reactionary lumberman attributes a loss of profits to the general spread of information by means of exchanges and trade journals, he is getting the vehicle in front of the team, so to speak. The causes of an overloaded market, and a consequent decline in values, would have existed the same without the means of circulating data. The evil results of overproduction and overtrading would, in the absence of widespread knowledge, be much worse than now.

Let us suppose that there were no lumbermen's exchanges, and no lumber journals, and the manufacturers and dealers in lumber were obliged to rely on the daily press for their information. Every intelligent lumberman knows that what lumber news there would be sifted through the news columns of the daily press would either be wide of the truth through lacking of means for acquiring accurate information, or else it would be garbled for private advantage. It would be utterly without benefit, and often would be a cause of damage by conveying a false impression.

An extensive circulation of trade knowledge no doubt prevents a monopoly of advantages by a single class. All are reduced to a legitimate basis. The retailer becomes as well informed as to the sources of supply and the ways of reaching them, the cost of freights, prices, etc., as the wholesale merchant himself. On the other hand the general trade is kept fully posted on the amount of log crop, and the outlook for supplies, the development of producing districts, and the new directions of trade. The manufacturer also has the benefit of obtaining a comprehensive view of the whole situation.

The publication of facts concerning the lumber business may prevent the hoodwinking of any section of it, and thereby deprive some men of the advantages they had contrived for their own benefit; but at the same time all are guarded against surprises and sudden disaster. It would seem to a close observer that the latter benefit were immeasurably greater than the former.

The man who grumbles at trade associations and the collection and dissemination of data

concerning his own business is behind the times. He acknowledges that he is not equal to the situation. He the same as a vera that unless he can take advantage of his neighbors' ignorance he cannot make money. There is no use in arguing with such a man. The subject has been referred to in this article in order to straighten up the few really good men who, under the disappointment of the past unprofitable year, have unthinkingly snatched at a fallacious reason for their misfortune. We are confident that if they take a second thought in the matter they will conclude that what they need is more, instead of less, light on the lumber business.

SAWDUST.

One of the greatest eye-sores to a mill man of anything in connection with his business is the huge pile of sawdust usually obtained in vast proportions in the neighborhood of his mill. Inventions for the utilization of this large output of waste material have become quite numerous of late. Alcohol, gas, and other commodities have been evolved therefrom. Sawdust conveyors have been patented to take this waste and dump it into the fire-box for fuel, which is one of the best methods yet discovered for disposing of it, as it is a valuable labor saver; but while the sawdust is thus consumed the slabs and edgings formerly used for fuel accumulate about as fast as did the former before being utilized as above. A prominent Luddington man says they have introduced gangs in order to save a good percentage of this waste, and thereby increase their output of lumber from the same quantity of logs by the great reduction of the saw kerf. This may do in large establishments, but we apprehend it will be after the present generation of mill men shall have passed off the stage of action, and pine timber has become much scarcer than at present, before the circular saw will lose caste, as it is almost an absolute necessity in any well regulated saw mill of either large or small proportions, and stands without a rival in the mills of the smaller class. The introduction of lath machines and other manufacturing devices with a view of utilizing the slabs, edgings, and other waste product of a mill, in connection with a sawdust carrier to the furnace, is the best plan yet devised for disposing of what is useless material under other conditions.

JAPANESE HOUSES.

The Japanese houses are generally one-storied, but roomy, and of exceedingly neat appearance in and outside. They much resemble Swiss chalets, with the roof protruding over a basement veranda, from six to eight feet wide. The wooden framework of the main walls is filled with bamboo lath, covered with clay, and heavy rafters are put on it for the roof, to give the whole structure the necessary stability. No permanent partitions are found in the interior, and light wooden panels, moving on grooves in porcelain castors, divide the different compartments. They can be removed and transposed at will to form new partitions. Transparent paper serves for the window frames, and the same material, made of the bark of mulberry tree and painted over in colors with elaborate patterns, is used for curtains, portieres, and many other items of ornaments. The floors are covered with mats made of rushes, which all over Japan have the same dimensions—six feet long, three feet wide and two inches thick. The size of these mats or kins, as they are called, regulates all the measurements of a house; and if the Japanese wants to have one built, he only states to the architect the number of kins it has to contain. These mats are always kept scrupulously clean, and never allowed to be trodden upon by the sandals of the natives or the boots of foreigners, but only with stockings or bare feet. Chairs, tables, and bedsteads being almost unknown, the Japanese sit and sleep on this matting, and, except some ornamental cabinets and screens, hardly any other furniture incumbers the room. The reception and business apartments open toward the street, and the back of the house contains the living and sleeping rooms, as well as the kitchen, which are all more or less open to the view of the passersby. All the household utensils are made of lacquered paper

mache or bronze in curious shapes, elaborately ornamented, and with a view to stow them away after use in the smallest possible space, economy of space being a cardinal virtue in the construction and management of Japanese houses.

In winter the rooms are warmed by coal pans—a very insufficient method in a climate like that of Japan, but counteracted by the number of quilted gowns both sexes wear one over the other in cold weather.—*The Builder*.

THE SEQUOIA.

In Miss Gordon-Cumming's book, *Granite Crags*, we get some further information as to the mighty trees to be found in the Yosemite Valley, California. Speaking of the Sequoias, which are called in this country Wellingtonias, Miss Gordon-Cumming sees nothing admirable about them but their bigness. They reminded her, when looking at them of the old Dutch toy trees in a Noah's ark, with a small tuft of foliage on the top of a large red stem. She prefers for beauty the Indian lowland, perhaps also the Kauri pine of New Zealand, the bunya bunya of North Australia, and the Norfolk Island pine, all of which surpass the giant trees of the Yosemite Valley in elegance and beauty of form.

It is even doubtful if the Sequoia is entitled to be considered the loftiest of trees. The Eucalyptus amygdalina, which has been asserted to attain the height of 450 feet in the Victoria Ranges, is about 100 feet higher than any Sequoia of which we have heard mention. In girth, however the California trees stand pre-eminent, if Miss Gordon-Cumming's account be correct, for she tells us that a specimen has been discovered in Visalia county which measures 132 feet in circumference.

The age of some of these trees is computed at more than 2,600 years, so that accepting that date as an approximation to accuracy, they must have been growing when Constantinople (then called Byzantium) was founded by the Greeks, and when the prophet Jeremiah was in existence. It is feared, however, that these vestiges of creation must soon disappear, like the Red Indians, before the encroachments of civilization, and (as far as trees are concerned) the pitiless lumberman.

"Wield the axe on every side,
Pity not the Forest's pride."

It is said that a law was passed by the California Government to prohibit the cutting down of trees over 16 feet in diameter, but this is rendered nugatory by burning them down, and destroying those of smaller dimensions, against which there is no penalty.

We learn from the same authority that wheat farms in California are 60,000 acres in extent (over 33 square miles.) This bends the trees, if it is to be understood that the cultivation of such a territory is under one farmer. They then have potatoes of 15lbs. weight, and cabbages 6 ft. high.

It seems almost to bring Gulliver's Travels within the bounds of probability, though of the immensity of some of the Sequoia tribe of trees there is no longer any question.—*Timber Trades Journal*.

Exhibit of Building Materials.

The "Permanent Exhibit and Exchange of Building Materials and Improvements," Chicago, is now receiving exhibits, and will soon be in shape for visitors. It is located on the third floor of the building at the northeast corner of Wabash avenue and Washington street, occupying a space 90x150 feet, less only the space necessary for stairways add light shaft, and to this may be added the floor above, if necessary. This large floor is fitted with platforms which will be rented to parties desirous of making a permanent exhibit of their goods in such a central and favorable place. The receipts from rentals will furnish the financial support for the enterprise, as no admission fee will be charged. Thus far the space has been held for the acceptance of Chicago firms, but, after this time, space not taken up by home parties will be let to eastern exhibitors, many of whom expressed a wish to take advantage of this opportunity to show their goods in the west. The range of displays will cover everything that goes into the construction and fitting up of buildings of the better class. Stone, brick, terra-cotta, woods,

roofing materials, builders' hardware, plumbers' and gas fitters' goods, etc., will be represented. With the prospect that the new Builders' Exchange will have its rooms in the same building, and their space all applied for, the managers of the exhibit think that their enterprise will not only be successful peculiarly but that its influence will be great.

An American View of the Hudson Bay Route.

The *Northwestern Lumberman* says:—The project for a northwestern outlet to Europe by way of Hudson's bay, British America, is making headway in the minds of the people of the Canadian North-West. Even the farmers of Dakota are awakening to the importance of the scheme. Surveys of a railway from Winnipeg to Hudson's bay have been made. The only question of feasibility now is as to the length of the navigation season on the great northern sea. Tests of this will be made the coming summer. The entire project is yet a problem, and may utterly fail on account of the difficulties of northern navigation. At the most the Hudson's bay route would become only a competing one to Europe for the surplus grains of the Northwest. It must not be forgotten that the old routes are yet sufficient to glut the grain markets of Europe, and that a new northern route over a single railroad cannot cut much of a figure in the general American grain traffic. It should not be overlooked, also, that the future grain product of this continent will mostly be wanted at home, to feed our rapidly growing population. A Hudson's bay outlet to Europe would be a benefit to the far northwestern farmer, while it would to no appreciable extent change the old lines of traffic.

Forest Preservation.

Appropos of the important question of the preservation of our forests, Canadians and Americans might profit by the experience of continental forestry schools and from the experiments carried out on the tree farms of Central Italy. Whole districts which had been stripped of timber on the Alps have been re-forested, and in the Apennines woods are systems of forest-farming which not only preserve the trees, but make an excellent investment on the operation. A Belgian writer reading near Ardennes says that the proprietors found that the land cultivated in trees and cut once in a hundred years—that is, the trees being selected according to their condition, and cut at the rate of 1 per cent. per annum—paid just as well as raising wheat on the same extent of land. What is wanted, then, in our forest management is the application of a vigorous system of intelligent official superintendence to the cutting of the trees, none but those marked for cutting to be allowed to be cut. This would pay even now as the management, and in the course of the not long time which will see all our unregulated forests exhausted, the forests so controlled and policed would furnish an excellent investment for the capital employed in keeping them from present destruction.

Advice to Mothers.

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

30 Days Trial.

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

A Stir in Northwest Lumber.

The Winnipeg Times of a late date says:— There is every prospect of a very lively summer in the lumber business, says the Progress. There are greater chances of the water being higher than last year, owing to the fact that the ice has never settled all winter. The Rainy Lake, Winnipeg and Keewatin lumbering companies will all operate on an extensive scale next summer. If the water remains high a great number of logs, which have been lying on the banks for the past year, will be towed down to Rat Portage. Nearly seventeen million feet of logs are lying on the American side of Rainy river, awaiting transport. Major Camp, of Minneapolis, says he has an interest in 100,000,000 feet of timber which is tributary to the Lake of the Woods, and must eventually find a market at Rat Portage, but does not expect that it will be touched for some time yet.

Clearing a Log Jam of 25 Years Ago.

About 25 years ago a man named Eastbrook was running 1,000,000 feet of logs from the mouth of the Shiawassee river, Michigan, to Saginaw, when the logs stuck in the narrows about seven miles from Cheaning, Mich., and the jam could not be broken. The logs made a dam in the river, and year by year the river formed a new channel until the old channel gradually filled up. A sand bar formed for two miles back of the dam, and there is now a growth of oak and elm trees two feet through on the bar formed by the jam of more than a quarter of a century ago. At every flood the land for several miles in that vicinity is overflowed, and the roads are rendered impassable. Six years ago efforts were commenced to have the construction cleared away, and the contract has recently been let to H. C. Thayer, of Cheaning, for \$4,000.

Reducing Lumber Rates.

The executive committee of the Southwestern Railway Association decided at its last meeting to reduce the rates on lumber from Chicago to western points—Kansas City, St. Joseph, Atchison, Council Bluffs and Leavenworth—from 15 cents to 10 cents per hundred, and Commissioner Midgley ordered the reduction to go into effect on Wednesday, February 6, so that the lower rates are now in force. At the same time, rates from the Mississippi river between St. Louis and Rock Island to the same western points were reduced to a uniform rate of eight cents. This reduction was made on account of complaints of rate cutting on the part of the Burlington, and in order to equalize the rates and give all the roads in the association an equal chance at the business.

Minneapolis Lumber Mills.

The Minneapolis Minn., lumber mills cut 272,792,222 feet of lumber in 1883, as compared with 314,363,168 feet in 1882, a decrease of 41,569,944 feet. The total cut in 1881 was 233,500,074 feet. The number of shingles in 1883 was 90,146,200, against 133,546,000 in 1882, and 89,818,600 in 1881. The decrease in 1883 as compared with 1882 is 47,399,000. The production of lath in 1883 was 60,170,260, against 61,518,380 in 1882, a loss of 1,102,120 and against 49,253,700 in 1881. The figures show a falling off in the receipts of lumber at Minneapolis amounting to 1,545,000 and of 8,143,000 in the shipments. The steady falling off in the shipments during the last four years is the marked feature of the exhibit, however.

The Forestry Exhibition.

The Executive Committee of the coming Forestry Exhibition to be held at Edinburgh have obtained a site in every way suitable for their purpose, in the grounds of one of the large hospitals which form a conspicuous feature in the suburbs of the northern capital of the kingdom. The building itself will be erected in the park in front of Donaldson's hospital, while the outdoor exhibits will be displayed in the grounds immediately adjoining, which belong to the Governors of Heriot's hospital. The tramway line from Edinburgh to the favorite district of Murrayfield runs directly in front of this ground, and there are two railway stations within a short five minutes' walk.—London Times.

Chips.

RAILROAD ties and telegraph poles are in great demand throughout Michigan.

RAILROAD men report that lumber is beginning to move more freely by rail.

DAILY, HEIMBACK & Co. have put a planing mill into their saw mill at Duluth.

WITHIN three years the number of saw mills in Arkansas has increased from 349 to over 1,200.

MR. STRACHAN'S planing mill at Pittsburgh, Ont., was obliged to shut down on account of the heavy snowfall.

LARGE quantities of poplar fiber wood are being shipped from Essex county, N. Y., to a mill at Mechanicville.

A portable saw mill has been set up near Bethel, Me., to saw a large tract of timber that was blown down last fall.

MORE woodmen have gone into the woods from Bay City, Mich., within the past few days than during any month since October.

A GENTLEMAN who has a great deal to do with booming logs recently stated that as logs usually laid in still water 1,000,000 feet required four acres.

SHARELES & Co., lumber merchants at Quebec, who failed last November, have just completed a settlement with their creditors on a basis of 80 cents on the dollar.

A NUMBER of teamsters in the Ontario woods quit work during the recent very heavy snowfalls, the lumbermen refusing to pay for the extra work entailed by the snow.

THE new match factory at Gainesville, Ga., is turning out 300 gross of matches per day; everything from Georgia material except the chemicals, and part of them are Georgia production.

It is estimated that about a million feet of logs, belonging to Snoqualmie, Washington territory, loggers went out to sea in a late freighter. The loss amounts to about six thousand dollars.

JOHN E. PORTER, of Detroit, has sold to Canada parties 72,000 acres of Michigan timber lands, situated in the counties of Otsego, Crawford, Montmorency, Roscommon, Ogemaw, Iosco, Oscoda and Alcona.

IN 1880 there were seven establishments in Maine with an aggregate capital of \$439,000, and employing 2,200 people, engaged in the manufacture of wood pulp. Since that time the business is said to have increased four-fold.

A. BACKUS & Co., at Detroit, Michigan, have completed a warehouse for storing lumber, situated on Fort William street, near Tenth. It is 290 feet in extent on Fort street, and reaches back to the alley, 140 feet. It was 18 feet high, and has two stories in which lumber is stored. Four wide wagon ways extend through the length of the building. Its capacity is 4,000,000 feet of lumber.

A DREDGE is now being built at Lockport, N. Y., to be taken to Winnipeg for the purpose of dredging out Red river between that city and Lake Winnipeg. There are only about 1,000 yards of shallow water to be improved by dredging, and the construction of a dam and lock at St. Andrews, when vessels can pass from Winnipeg into the lake, and open up 350 miles of water route northward.

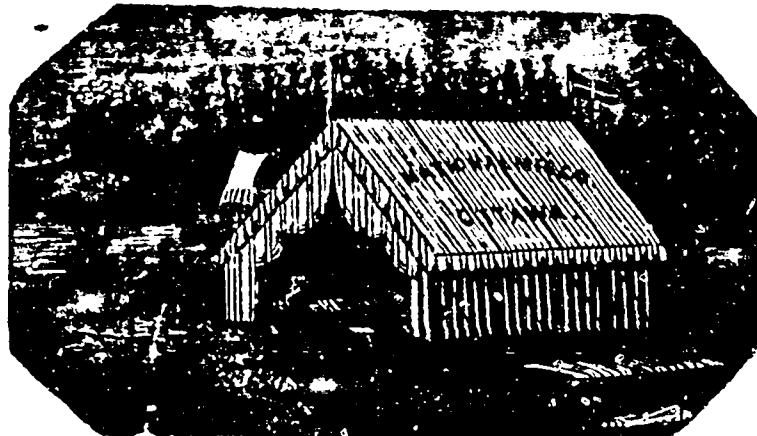
THE Duluth, North Shore & Southern Railroad Company is an enterprise for constructing a railroad from Duluth southwest into Nebraska. It is said to be backed by English capital, as the design is to ultimately build the road from Port Arthur to Duluth, along the Northern Shore of Lake Superior. Such a road would bring a large amount of grain to Duluth, and carry out large quantities of lumber.

MR. THOMAS PRAY, jr., until recently managing editor of Cotton, Wool and Iron, of Boston, has accepted the same position on the Manufacturers' Gazette which will hereafter be run in the interest of the cotton industry. Mr. Pray left the first named paper to follow the business of consulting mechanical engineer, and while he is an expert in this line, he is also an expert trade journalist, and such being the case, it is better that somebody else should run around the country looking after balky engines.

National Manufacturing Co.

160 Sparks Street, Ottawa,

MANUFACTURERS OF



TENTS!

Camp Furniture and Hosiery.

OUR GOODS ARE THE BEST IN THE WORLD!

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

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



Lumbermen's Tents

A SPECIALTY!

At Prices Lower than ever before.

HEAVY SOCKS

Our own make, and at Prices Very Low!

SHANTY BLANKETS

IN GREAT VARIETY.

Liberal Discount to Large Buyers. Send for Catalogue.

National Manufacturing Co.

160 Sparks Street, Ottawa.

P. O. BOX 245

Market Reports.

TORONTO.

From Our Own Correspondent

FEB. 25.—The clogs have been taken off the wheels of trade to some extent, although it will require fine spring weather to open up the building trade to any great extent. Yet there is not much cause for complaint, taking into consideration the severe frosts and heavy snows of the present winter, and the fact that the few fine days we have had lately has had the effect of starting quite a number of new buildings in various parts of the city, tends to the belief that with the opening of spring considerably more than the usual amount of building will be gone on with, and choice building lots, except on the outskirts of the city, will soon be a thing of the past.

Trade with western Ontario is also opening up, and signs are apparent that more than the usual amount of trade will be done with western points, this will be partly due to the fact that small stocks are now being carried by western dealers and while the severe weather lasted they did not feel like purchasing, and still their stocks kept dwindling down during the winter months until there is nothing left on hand to dispose of, so that a replenishment of their stocks has now become imperative in view of the approaching spring trade. Wholesale dealers are now speculating upon the opening up of the season's trade with the American markets. Two months ago it was fondly hoped that the duties on lumber would be taken off, but that delusion is over, and if stocks at the mills are even only moderately large the coarser grades must to a considerable extent be a drag on this market. The percentage of good lumber in the stocks got out is lessening, year after year, and the total quantity manufactured is increasing, so that it is becoming a serious question what shall be done with the surplus of the coarser grades. The Americans are open to purchase our good lumber, but can do without our common during the lives of the present generation, so that in my humble opinion the only answer to the question "What shall we do with our coarse lumber?" is, cut less.

On making a tour by the various yards throughout our city I find that stocks are light in most of them, more especially is this the case in bill stuff ranging from 20 to 30 feet long, some of the commonly used sizes would not be found of the length named in any of the yards in the city. Millmen do not pay that attention to the wants of the trade in getting in a good stock of logs from 25 to 30 feet, which their own interests, and that of the trade, generally warrants them in doing.

Table listing lumber prices for various grades like Mill cull boards, Shipping cull boards, Scantling and joist, etc.

Table listing lumber prices for various grades like 1-inch flooring, Beaded Sheeting, etc.

MONTREAL.

From Our Own Correspondent.

FEB. 23.—Business here has been very dull during the past week or two, although we hear of several pretty large contracts having been given out, viz. for a church, convent and two schools. It is likely that building will be pretty brisk this summer, especially of houses of the smaller kind as rents have advanced very considerably. We continue to hear of purchases of lumber in Ottawa to some extent at last year's prices. The report is still current that the cut

of lumber this year will be considerably smaller than last, but in the meantime this cannot be confirmed. Prices remain unchanged as under:

Table listing lumber prices for various grades like Pine, 1st quality, Spruce, Hemlock, etc.

OSHWAGO.

There has been a fair quantity of wood prepared in the country districts, but the roads have been too heavy to draw it out. The demand has been very slack for the past two weeks, and any transactions have been on a very limited scale. Prices, however, are very firm as follows. We quote at the wharves ex cartage.

Table listing lumber prices for various grades like Long Meris, Long Birch, etc.

LIVERPOOL MARKETS.

Latest mail advices state that the weather has been unusually open, but the timber trade keeps very quiet although the consumption may be considered satisfactory. Stocks contrast favorably with last year, but only very low offers will tempt merchants to increase their stocks. Spruce deals St. John, N. B., sold by private bargain at an average of £6 16s. 3d. per standard and at auction at £5 17s. 6d. which shows a steady decline since 1892 as the following comparative figures will show. St. John, N. B., spruce—1892, £7 10s. to £7 15s.; 1893, £7 5s.; 1894, £6 16s. to £6 17s. 6d.

WINNIPEG.

The Winnipeg Commercial of Feb. 12, says: The demand is very light and hardly worth speaking about. Quotations are:

Table listing lumber prices for various grades like Pine lumber, Sheathing, Timber, etc.

QUEBEC.

Notwithstanding the present winter has been generally favorable for the manufacture of timber and saw logs, the supply for next season of almost all sorts of timber and lumber will be very much less than last year. This is accounted for by the fact that prices have declined to a point that leaves the limit holders and millmen little or no margin of profit, and in many cases a serious loss, hence they prefer leaving the timber standing rather than face the markets with so unsatisfactory an outlook.

There has been six weeks of excellent sleighing in Ohio and Michigan, and all the timber manufactured this winter will be got out, but the recent frosts in Ohio have of course put a stop to the supply of oak, which will not exceed 700,000 feet, or considerably less than one-half of what was made last year.

Elm is exceedingly difficult to procure; there is now little rock elm remaining in Canada large enough for square timber. Owing to the enhanced value of this wood, the supply will be somewhat larger than last year, including about 150,000 feet from Michigan. The supply will be much under the average of the last five

years,—most of this will be late in arriving in port,—and as the stock wintering is extremely small, there will no doubt be an active demand for it early in the season.

RED PINE.—The supply this year will not be over 150,000 feet. Pitch pine seems to have run this description of wood out of consumption in the English markets.

WHITE PINE.—The supply will be about two-thirds of what it was last year in square and wayney, but as a large portion of it is made at a long distance from navigable waters the chances are that the whole of it will not reach Quebec next season.

SAW LOGS.—There is an enormous decrease in the estimated supply of pine logs. On the Ottawa, it is said, there will be over 1,500,000 logs less than last year, which, at an average of 140 sfer. feet to the log, will be equal to 210 million feet of lumber. On the St. Maurice we learn the supply will not exceed one-third of what it was last year. This leads us to believe that pine deals have touched bottom, and when we consider that the Montmerenci mills will in all probability be closed up next season, we should not be surprised to soon find an upward movement in prices. If the United States duty on lumber is repealed, there will no doubt be a smart advance, particularly in the lower grades.

Spruce deals are now selling at a price that many millmen say does not cover cost of manufacture, allowing nothing for the wood. We understand the supply will be considerably less than last winter.—Quebec Chronicle.

MANITOBA.

"The lumbering interests on the Lake of the Woods" says the Manitoba Free Press, "are not as active this winter as in previous years, but from the quantity of logs left over from last season, there is every prospect of a fairly active summer at Rat Portage. Bulmer & Co. are at work in the woods, getting out 2,500,000 feet of logs which, with 2,000,000 previously on hand will keep their mill pretty busy. The Rainy Lake Company may not have their mill rebuilt in time for this season's operations. The Winnipeg Lumber Company and Cuyg & Walker of Minneapolis have a large number of logs on the American side of the Rainy Lake. The Keewatin Lumber Company have not cut any this winter, satisfied that the five or six million feet of logs they have on hand will be sufficient to meet the demand for lumber this year. On the whole, however, matters look very satisfactory.

ALBANY.

Table listing lumber prices for various grades like Pine, Spruce, Hemlock, etc.

CHICAGO.

The Northwestern Lumberman of Feb. 27, says: A spring approaches holders of lumber begin to manifest some anxiety about the effect of the opening season on prices. This anxiety is clearly manifest from Boston to St. Paul. A

heavy stock, especially of coarse lumber, was carried into the winter after a season of hard pushing, to make profitable sales. It was felt that the old tub of trade had been grinding on the bottom all the season, and it was a source of relief when the grip of winter froze the rivers, lakes and canals, and congealed trade at the same time. But the grip held a little too long, the winter has been dull in most markets and at the East does not start yet. Contrary to general expectation, also, the log crop is going to be large. There is no ground to hope for a meagre supply of lumber. The signs are plain for another season of heavy mill output. As a consequence of apparent conditions the injury is everywhere met, "What do you think about prices the coming spring; will they remain steadfast about the present range, or will they go lower?" It is to be noticed that there is never a suggestion of possibly higher prices. This is significant. It indicates a knowledge of large stocks on hand, of heavy expected output, and offerings to sell beyond the capacity of the country to absorb.

It is barely possible that the holders of lumber are, at the present, underestimating the coming demand for their stock. It may be strong enough to maintain values at about their present range, though an advance can hardly be expected, no matter how good the demand may be, for it is likely that the capacity of the mills and the disposition of their owners is such as to prevent any scarcity of lumber. The absence of a speculative tendency in all lines of trade, and weakness of prices shared by all other commodities, must, as long as such conditions continue, have an influence on lumber prices, and prevent them from making any considerable advance. Besides, the general observation is as pat here as anywhere, that lumber seldom advances in the spring.

The conclusion is that there will be plenty of lumber for sale—fully equal to the demand—a large consumption in house building, and a range of prices not much different from those now prevailing, though a little lower towards summer on all common grades.

Receipts of lumber, shingles, etc., for the week ending Feb. 21, as reported by the Lumberman's Exchange:—

Table showing receipts and stock on hand for lumber and shingles.

OSWEGO, N. Y.

From Our Own Correspondent.

We cannot change quotations excepting on coarse lumber, which seems to be in excess of demand, and is being sold at ruinous prices, probably to make room for spring arrivals. Trade continues dull, the weather being very unfavorable for outdoor work:

Table listing lumber prices for various grades like Three uppers, Pickings, etc.

BOSTON.

Cotton, Wool and Iron of Feb. 21, says:—The weather has been unfavorable to general trade, but as the season advances and building plans develop it is evident that there is to be a very fair average call for soft lumber during the spring. Prices seem to keep along just about the same as of late. In yellow pine there has been a good deal doing of late on large schedules for both foreign and domestic use. Hard-

woods are having a very good call. The demand for whitewood is improving. Desirable grades of walnut are moving well. Ash holds its own. Choice cherry is in request. Clear maple for flooring also goes quite well.

CANADA PINE.

Sale dressed.....	\$48 00	\$60 00
Shel. Dressed, 1st	40 00	\$42 00
" " 2nd	33 00	\$35 00
Dressed shippers.....	37 00	\$29 00
Dressed Box.....	18 00	\$20 00
Sheathing, 1st quality.....	42 00	\$45 00
" 2nd ".....	34 00	\$35 00

BUFFALO.

We quote cargo lots:—

Uppers.....	\$46 00	\$48 00
Common.....	18 00	\$22 00
Culls.....	15 00	\$16 00

TONAWANDA.

CARGO LOTS—BAGINAW INSPECTION.

Three uppers.....	\$45 00	\$46 00
Common.....	18 00	\$24 00
Culls.....	12 00	\$14 00

LONDON.

The *Timber Trades Journal* of Feb. 9, says: From Canada, owing to the flatness of trade out there, great difficulty is being experienced by shippers and their agents in passing over their first open water stocks, notwithstanding these are understood to be short. The rates for tonnage to the United Kingdom from Quebec and Three Rivers, &c., are 60s., and from the Lower ports, 57s. 6d., and the prospects of improvement seem entirely dependent on the sales made to this country. It is a welcome feature the intelligence that the colonial stocks are light, as, by the present outlook, we shall not require much over here.

LIVERPOOL.

The *Timber Trades Journal* of Feb. 9th, says:—There is a fair and steady business done, and, although no large orders are in the market, the consumption of timber and deals progresses in a manner not unfavorable. Doubtless the present extraordinary mild and open weather has had considerable influence upon the trade, for building operations and public works have progressed without interruption thus far into the new year.

The import continues light, and has been limited to two cargoes of pitch pine and one cargo of Nova Scotian spruce deals and birch timber, in addition to the usual consignments per steamers from the United States.

The market continues without material change in prices, although spruce deals are firmer and an advance has been made in these goods. The stock is now about the same as at this time last year, whilst there is a much smaller import, with a probability of its continuing so; it is therefore not unreasonable to presume that prices will stiffen.

GLASGOW.

The *Timber Trades Journal* of Feb. 9, says: There has been within the past week one public sale of timber held at Grocock. There was a fair company and a good many lots were disposed of by the brokers, Messrs. Allison, Counsel and Hamilton.

A general feeling of quietness in the trade is at present experienced, but as imports are meantime almost nil, and a considerable consumption of wood going on, joiners and other wood-workers being very well employed, an improvement in the market may be expected as the spring advances.

At a meeting of the Clyde trustees, held on Tuesday, a return was ordered to be made of the amount of timber dues at the Yorkhill Wharf, and the rental per square yard of the whole of the ground at Yorkhill and Kelvinhaugh, belonging to the trustees, from the storage of timber there; also a return of the probable cost of a dock at Yorkhill and Kelvinhaugh, and the probable return of dues from such dock.

Mr. James L. Mitchell (of Messrs. Edmiston & Mitchell) next moved to the effect that the amount of dues paid on wood goods of all kinds for the year ended on the 31st of December, 1883, and also for a return of dues on live cattle for same period and the rents exigible from both. The dues levied on mineral ore, it was also moved, should be included in the return. The object of these motions is evidently to

ascertain the relative importance of the different kinds of traffic specified.

TYNE.

The *Timber Trades Journal* of Feb. 9, says: The arrivals of wood goods during the last seven days have been very small, and with the exception of a parcel of American doors per Japanese SS. from New York, and a parcel of about 50 standards floorings from Christiana by the regular boat, do not call for any special comment.

The terribly boisterous weather has prevented some of the Gothenburg boats coming forward, the August Blanco having been obliged to put back and repair at Gothenburg.

Trade remains in the same quiet condition, and the prospect is certainly not very reassuring.

Be Somebody.

Robert J. Burdette, the facetious editor of the *Burlington Hawkeye*, has been lecturing to large audiences in different parts of the country, and in his amusing style he imparts to the rising generation so much wholesome advice. The following is from one of his lectures:

"Be somebody on your own account, my son, and don't try to get along on the reputation of your ancestors. Nobody knows and nobody cares who Adam's grandfather was, and there is not a man living who can tell the name of Brigham Young's mother-in-law." The lecturer urged upon his hearers the necessity of keeping up with the everyday procession, and not pulling back in the harness. Hard work never was known to kill men; it was the fun that men had in the intervals that killed them. The fact was, most people had yet to learn what fun really was. A man might go to Europe and spend a million dollars, and then recall the fact that he had a great deal more fun at a picnic twenty years ago that cost him just sixty-five cents. The theory that the world owed every man a living was false. The world owed a man nothing. There was a living in the world for every man, however, provided the man was willing to work for it. If he did not work for it, somebody else would earn it, and the lazy man would "go left." There were greater opportunities for workers out West than in the Eastern cities, but men who went out West to grow up with the country must do their own growing. There was no browsing allowed in the vigorous West. An energetic man might go into the far West, and in two or three years possess himself of a bigger house, a bigger yard, a bigger barn, and a bigger mortgage than he could obtain by ten years' work in the East. All young men ought to marry, and no young man should envy old men or rich men. In conclusion, Mr. Burdette said that a man should do well whatever he was given to do, and not despise drudgery.

A Kerosene Ship on Fire.

When the American ship *Aurora* took fire at Calcutta a few days ago, there were 27,000 cases of kerosene aboard, and it was feared the wind and tide would drive the burning oil to a crowded part of the river. Fortunately the wind shifted and the flaming liquor was driven upon the beach. The scene was wonderful beyond description. The river seemed to be on fire. The cases exploded with a sound like volleys of musketry, and a dense black smoke enshrouded the town. The escape of the shipping and town from a disastrous conflagration was very narrow. The event has revived the scheme for the establishment of a subsidiary port for kerosene ships.

Proposed Canal in Tartary.

It is stated that Russia has invited England to join in constructing a canal from the sea of Aral to the Indian frontier.

The *Winnipeg Times* of Feb. 21, says:—The office of Messrs. Patterson & Mitchell, of the North Star planing mills, has been fitted up with a very handsome counter and screen, made of all kinds of hardwoods and designed by G. L. Mitchell. This is the first of such work executed in this city, it having been procured from St. Paul and Minneapolis heretofore.

The Improved CLIMAX Sash Lock

MANUFACTURED BY MILLER BROS., GUELPH.

Holds the Sash in any position so that it cannot be moved either up or down, can be put on by anyone, only requiring two screws.

AGENTS FOR CANADA:—

RAE & WATSON, 22 Church Street, TORONTO, Ont.

JONES & SON, Wholesale Lumber & Timber Dealers

39 Broadway, NEW YORK.

Oak, Ash, Cherry, Black Walnut, Poplar, Butternut

And all other Kinds of HARDWOOD LUMBER.

White and Yellow Pine Lumber and Timber.

Oak Ship Plank and Timber. Pine Deck Plank and Ship Stock Generally.

J. S. MAYO

IMPORTER AND MANUFACTURER OF

MACHINE OILS

OF EVERY DESCRIPTION.

9 Common Street, Montreal.

AMERICAN LUBRICATING OILS A SPECIALTY.

As I carry the LARGEST and BEST assorted Stock of OILS in the Dominion, I am prepared to fill all orders Promptly and at

LOWEST MARKET PRICES.

WARNING.—If troubled with constipated bowels, never neglect it, or the system becomes clogged, the secretions dried up and the system poisoned with foul gases. Burdock Blood Purifiers cure constipation by unobscuring the secretions and regulating the glandular system.

HOPE IN HOPEVILLE.—Mrs. McArthur, of Hopoville, declares she could not keep house without Hagyard's Pectoral Balsam. It is a remedy in which the sufferer may safely hope for speedy relief and effectual cure of Coughs, Hoarseness, Bronchial, Throat and Lung Troubles, which neglected end in hopeless consumption.

GREAT EXCITEMENT.—There is always great excitement in case of sudden accident and injury. Everyone should be prepared for an emergency. Hagyard's Yellow Oil is the reliable friend in need; it is for internal and external use, curing Burns, Scalds, Bruises, Lameness, Croup, Sore Throat, Rheumatism and painful affections and wounds.

A PRIZE Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex, from first hour. The broad road to fortune opens before the workers, absolutely sure. Address Tarr & Co., Augusta, Maine.



FREEMAN'S WORM POWDERS.

Are pleasant to take. Contain their own Eurgative. Is a safe, sure, and effective Destroyer of worms in Children or Adults.

MONTREAL AXE WORKS

T. J. MOCOCK & Co.

St. Gabriel Locks, - Montreal,

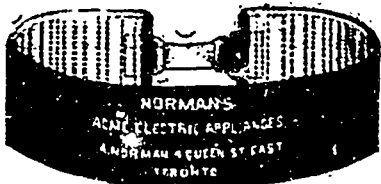
-MANUFACTURERS OF-

AXES and EDGE-TOOLS

OF EVERY DESCRIPTION.

Old and Reliable, the Best Axes made in Canada.

12x20



Established 1874.

Established 1874.

NORMAN'S ELECTRO CURATIVE APPLIANCES

RELIEVE AND CURE

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

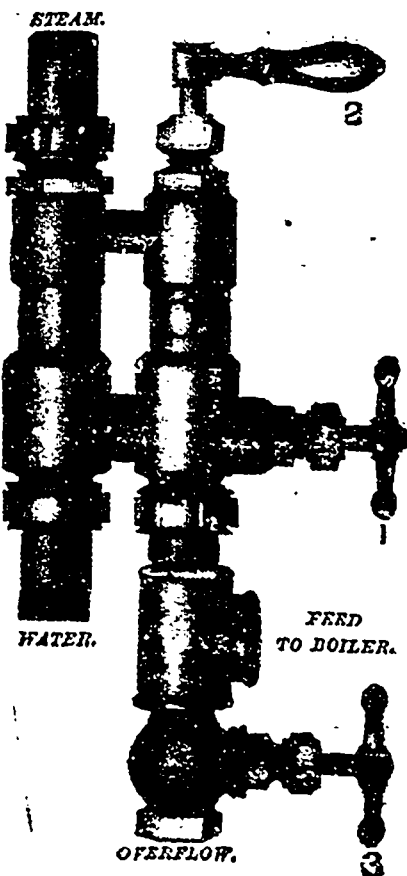
Ask for NORMAN'S ELECTRIC BELTS and you will be safe against imposition, for they will do their work well and are cheap at any price.

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

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

A. NORMAN, 4 Queen Street East, Toronto.

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



THE

Hancock Inspirator

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

THE INJECTOR PERFECTED!

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

Over 50,000 Now in Use.

MANUFACTURED BY THE

Hancock Inspirator Co'y

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

Manufacturers of Inspirators, Ejectors, and General Jet Apparatus.

15x20

EAGLE FOUNDRY

GEORGE BRUSH

14 to 34 King and Queen Sts, MONTREAL,

MAKER OF

Steam Engines, Steam Boilers, Hoisting Engines, Steam Pumps, CIRCULAR SAW MILLS, BARK MILLS, SHINGLE MILLS, Water Wheels, Mill Gearing, Shafting, Hangers and Pullies, Hand and Power Hoists for Warehouses &c., &c.

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

AND AGENT FOR

17x21

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

EXTRA HEAVY AMERICAN

Oak Tanned Leather Belting.

RUBBER BELTING, RUBBER PACKING, RUBBER HOSE, LINEN HOSE and COTTON HOSE.

A Full and Complete Stock always kept on hand. WRITE FOR PRICES and DISCOUNTS.

We have the Largest and best equipped RUBBER FACTORY in the world for the manufacture of VULCANIZED INDIA RUBBER GOODS for Mechanical Purposes.

Our trade here has increased to such an enormous extent that in order to keep up with the demands, we have purchased from Major John Gray, M.P.P., Parkdale, the plot of ground situated on West Lodge Avenue, adjoining the Credit Valley, Toronto, Grey and Bruce, Northern and Grand Trunk Railways, for the erection thereon of a BRANCH RUBBER FACTORY, works to be in full operation January 1st, 1884.

THE GUTTA PERCHA AND RUBBER MANUFACTURING CO.

T. McILROY JR.

WAREHOUSE:—10 and 12 King Street East,
P.O. BOX 556. TORONTO.

THE TRADE

Will always find a Large Stock of

SHANTY BLANKETS

In every Size and Weight, and

HORSE BLANKETS

AT LOWEST MILL PRICES.

JOHN MACDONALD & Co.

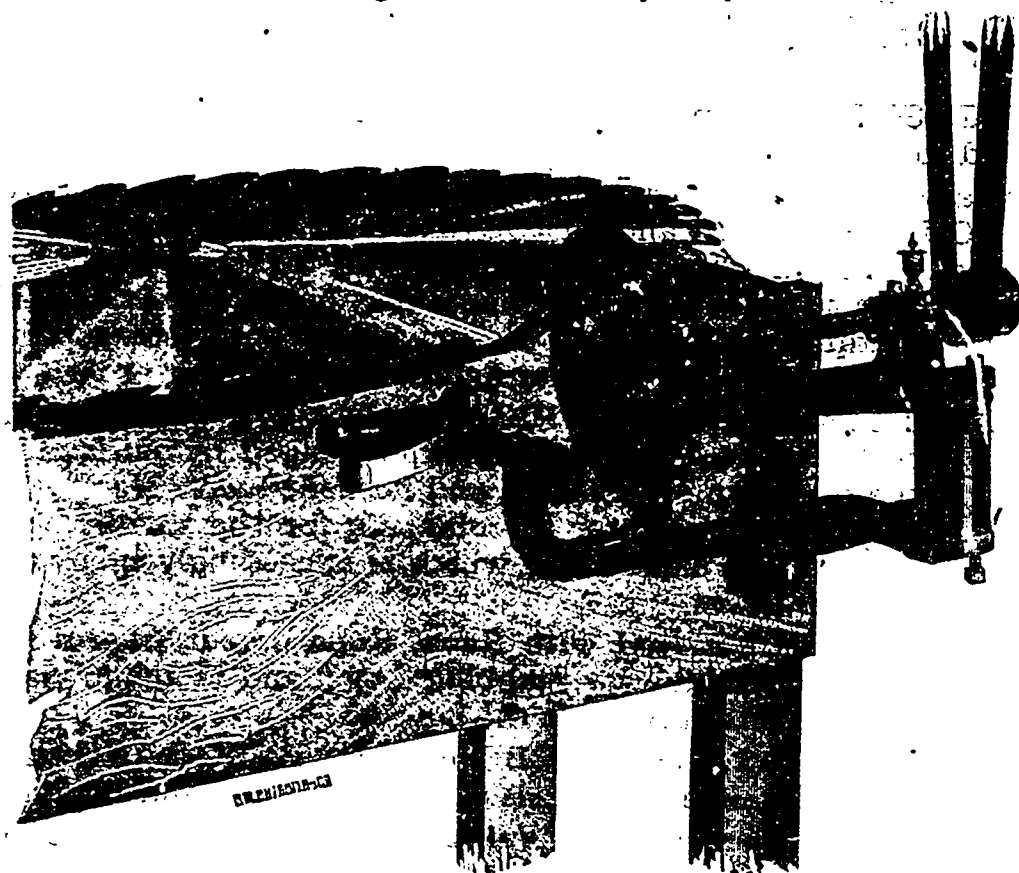
TORONTO.

A Magnificent Line of All Wool Fawn Blankets.

SAMPLE ORDER WILL HAVE OUR BEST ATTENTION.

ROGERS' PATENT SAW GUMMER and SHARPENER

The Handiest Machine for these purposes ever Invented.



Don't Heat!

Cheap!

Very Simple!

Accurate!

Works Fast!

Complete!

Lumbering Season, 1884

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

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

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

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

CHAS. ANDERSON, Anton Mills, says:—

"I have given it a good trial, and am well pleased with it.
"I find it is one of the indispensables in a saw mill." * * *

ROBT. R. WEIR, Orillia, writes:—

"It works like a charm, and is very accurate in its work."

CRONE & PATTON, Hec Roo Mills, Gravenhunt, says:

"The Rogers' Saw Gummer purchased from you gives
"good satisfaction, * * it cannot be beat."

D. DAVIDSON, Pentanguishene, writes:—

"We are well pleased with the Gummer."

W. W. BELDING, Wyvale, writes:—

"I have the Gummer running and it is giving good
"satisfaction."

ADDRESS ALL ORDERS TO THE

Hart Emery Wheel Company, Limited - Hamilton, Ont.

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

The William Hamilton Manufacturing Co'y

MANUFACTURERS OF (LIMITED)

SAW MILL GENERAL MACHINERY

We make a Specialty of Heavy Saw Mill Machinery.

OUR SAW MILL ENGINES are made Strong, Neat, and Durable, knowing well the ever varying strain they are subjected to in driving a Saw Mill.

We wish to call the attention of our Canadian Lumbermen to our First Class HEAVY SAW MILL MACHINERY for CIRCULAR MILLS and CIRCULAR and GANG MILLS of the most improved designs. We are prepared to submit Plans and Specifications, together with any information that our many years of close application to the Saw Mill Business may have suggested to us, also when required to enter into contract for building and supplying the machinery complete, superintending the starting of the same, and handing over the mill to its owner in first-class running order.

OUR HEAVY SINGLE CIRCULAR SAW RIG, Complete, with or without Top Saw, Rack, Rope, or our Improved Steam Feed (Patent applied for), is acknowledged by our leading lumbermen to be a first-class article, got up in the best manner possible, and furnished with Headblocks and Dogs to suit our Customers. We also manufacture a lighter Circular Rig for the smaller class of mills (or where there are two circulars required in the same mill), which is exceedingly smart in its movements, and supplies a long felt want in this direction.

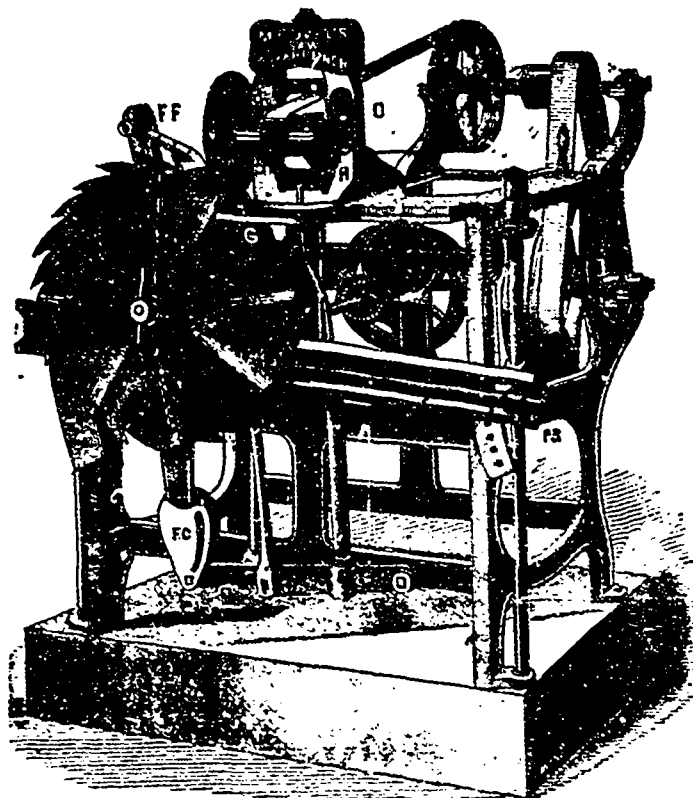
OUR PATENT TWIN CIRCULAR RIG with Rack, Rope, or our Improved Steam Feed (Patent applied for), is now the favourite Machine for Slabbing Logs, and is acknowledged by all to be the smartest and the best Machine for this purpose in the market.

OUR IRON FRAME OSCILLATING SLABBING and STOCK GANGS are fitted up with the most improved Machinery, which for Strength, Class of Workmanship and Design cannot be excelled.

OUR DOUBLE EDGER is the best, most useful and most substantial article of the kind in the Market, which is proven by the number we are called upon to supply; we put on any desirable number of saws on the Spindle; they can be arranged to suit the work especially required to be done. We also furnish them with one or two Guages for sawing Scantling or re-sawing Lumber.

Our PATTERN WROUGHT IRON ENDLESS LOG CHAIN for drawing up logs, keeping a constant supply of logs in the mill, and requires, from its construction, very little power to drive it. We have furnished the majority of the best Mills in Canada with this Chain, and many Mills in the United States are using it. We also supply when required Trout's Log Counter (Patent applied for), to count the logs as they are drawn into the Mill. By this simple device the proprietor is able at a glance to know at any time during the day how many pieces have been cut, thus enabling him to judge if the Mill is up to her work.

Our most improved LOG CANTERS for Turning Logs on Carriage. We also furnish them with Weirs' Patent Incline Attachment for rolling logs from Skids on to Carriage.



We still continue to manufacture
THE

Scovell Saw Sharpener

with all the latest improvements, which Machine has only to be known to be appreciated.

We also manufacture LATH MACHINES, LATH BOLT-ERS, LUMBER TRIMMERS, LUMBER MARKERS, SLASH TABLES, TIMBER CANTERS, LOG DECK CANTERS, SHINGLE MACHINES, KNOT SAWS, DRAG SAWS, SHINGLE JOINTERS, BOLT-ERS, WATER WHEELS, and a variety of the best kinds of Wrought Iron Refuse and Sawdust Carrier Chain (that can be relied on to do their work). Even log required in a first-class Saw Mill.

PETERBOROUGH, ONTARIO.

—IT WILL PAY YOU—
TO SUBSCRIBE

FOR THE

Canada Lumberman

FOR THE FOLLOWING REASONS:

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

TO ADVERTISERS.

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

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

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

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

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

SAVE YOUR TIMBER By using THIN Saws.

McLAUGHLIN Bros., Arnprior, run two 66-in. Brooke Bit Saws, 800 revolutions per minute on 6 to 10-inch feed.

They use Steam Feed

No. 1 TOOTH.

VIZ.

AMERICAN SAW Co.

Emerson, Smith & Co.

R. HOE & Co.

Hubbard, Bakewell & Co.

Inserted Tooth, BIT TOOTH,

AND SPECIALLY

THIN SOLID SAWS



It will be noticed this Tooth Socket is exactly the same as the TRENTON TOOTH, and is interchangeable with the Trenton Saw.

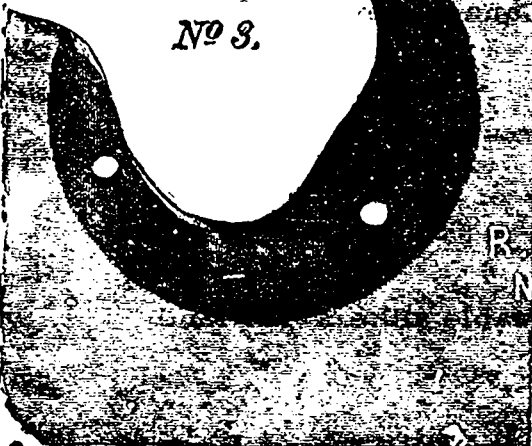
With this Saw you have either a Bit Tooth Saw or ordinary Inserted Tooth Saw, with teeth two-and-a-half inches long, both fit same socket and are interchangeable in a few minutes. These Bits require no gumming, and very little filing; are so firmly held that they will stand all necessary sawing, and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

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

Two sets No. 1 Bits have cut 500 m. feet pine, in 60-inch saw, running 800 revolutions per minute, on 6-inch feed. E. E. PARSONS, Arnprior.

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

McLAUGHLIN Bros., Arnprior, run two 66-in. Hoe Saws, on 6 to 10-in. feed, 800 revolutions per minute. Write them.



HOE'S PATENT BIT SAWS.

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

SAVE TIMBER



GROW RICH

EMERSON'S EXTRA THIN SOLID SAWS

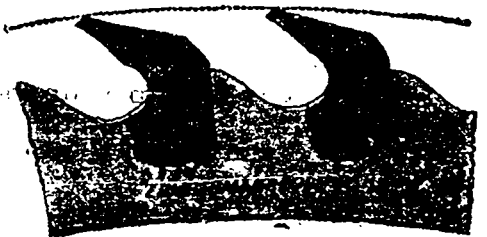
Having special facilities for the manufacture of extra thin saws for board mills, we are prepared to receive orders for Circular Saws as follows: 54 inches in diameter, as thin as 12 gauge at rim and 11 at center, 64 to 68, 11 gauge at rim, 10 at center, 66 to 72, 10 at rim, 9 at center. Our unparalleled success with thin saws during past few years has induced us to recommend them to our customers. Our superior facilities are: 1st, Evenness of Temper, 2nd, Perfect Accuracy in Thickness, Saw balances perfectly; 3rd, Properly Hammered, to have equal strain in all its parts and at same time run true. This department is under the special supervision of J. E. Emerson, who has had 30 years experience and is without doubt the most successful circular saw maker in the world.

NO EXTRA PRICE FOR THIN SAWS.

EMERSON'S LUMBERMAN'S CLIPPER SAW

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

Extra Teeth 25c. each.



Extra Teeth 25c. each.

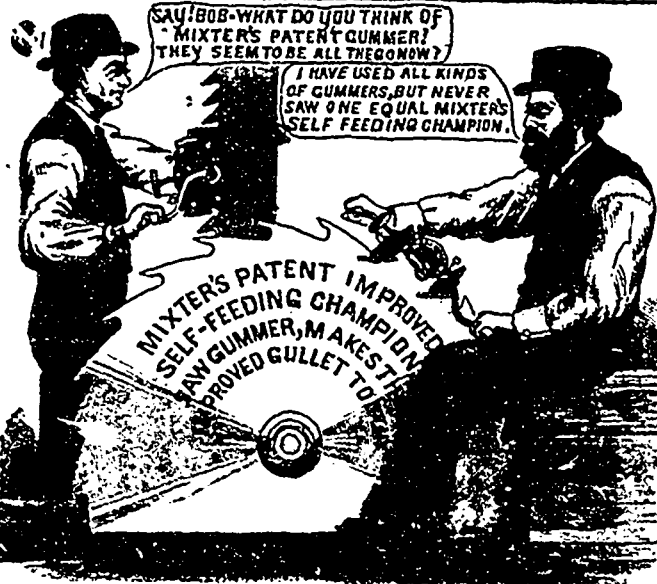
Designed specially for Thin Saws not thicker than 6 gauge at rim, or thinner than 15 gauge at rim.

The CLIPPER FLANGE SAW EXPRESSLY FOR HEAVY FEED.

Extra Teeth 50c. each.



Two and a half inches long.



SAV! BOB—WHAT DO YOU THINK OF MIXTER'S PATENT GUMMER? THEY SEEM TO BE ALL THE GONOW?

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

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

Alligator Jaw Wrenches

5 sizes, grip from 1 to 3 inches, Long. Solid Steel Jaw. Price 50c. to \$5.00.



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

JARECKI'S PATENT SOREW, PLATE, and PIPE CUTTER, 1/4 inch to 2 inches, \$23.00; smaller ranges in proportion. Band Saws, Scroll Saws, Rainbow Saws for felling trees, American Shingle Saws, Lace Cutters, Cant Hooks, Fine Scrapers, Leather, Cotton and Rubber Belting. SPECIAL AGENTS FOR GANDY'S PATENT MILL BELT, runs wet or dry; the best and cheapest main driver. WORTHINGTON and BLAKE'S PATENT STEAM PUMPS, ECONOMIST PLANER and MATCHER COMBINED, large range of work, light, handy, durable, cheap.

Ewart's Detachable Chain

For Log Jacks, Refuse Carriers, Sawdust Carriers, all sizes. Live Rolls, Trainers, Slow Speed Driving Belts, Tie Loaders, Slash Tables, Trimmers, Lumber Sorters, Shingle Block Elevators, and many uses about a saw mill.

HIGH CLASS HEAVY and PORTABLE SAW MILL MACHINERY our Specialty.

Waterous Engine Works Co., Brantford

Send for New Price List and Chain Circular.

Mention this Paper.

WE KEEP IN STOCK ALL KINDS OF

Saw Mill Furnishings

SAW GUMMERS:—Stone's Original, large and small size; Mixer's Self-feeding Champion; Emory's Wheels and Stands. SAW SWAGES:—Hoe's, Emerson's, Mixer's, and American Saw Co.; from \$1.50 to \$8.00.

SIDE FILES, BELT STUDS, Detachable Belt Fasteners.