



PUBLISHED  
SEMI-MONTHLY.

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

(SUBSCRIPTION  
\$2.00 PER ANNUM.)

VOL. 2.

PETERBOROUGH, ONT., DECEMBER 15, 1882.

NO. 24.

### THE RINGS OF TREES NO INDEX TO THEIR AGE.

The London *Timber Trades Journal* says— An important discovery appears to have been recently made, that is calculated to upset a theory which has hitherto been accepted as furnishing an authentic rule for ascertaining the age of trees.

We take the following from the CANADIAN LUMBERMAN, a very well conducted paper, which seems to take particular care to keep its readers well posted up as to the state of timber trade in the British Isles. It is published at Peterborough (capital of the county of that name, in Ontario), and claims to be "the only newspaper devoted to the lumber and timber industries published in Canada."

"An interesting observation on tree rings is recorded by Professor Bachelart, in *La Nature*. During a visit to the ruins of Palenque, Mexico, in '89, M. Charnay caused all the trees that hid the facade of one of the pyramids of the palace to be cut down. On a second visit, in 1880, he cut the trees that had grown since 1859, and he remarked that all of them had a number of concentric circles greatly superior to their age. The oldest could only have been twenty-two years of age, but on a section of one of them he counted 250 circles; the tree was 60 to 65 cm (about 2 English feet) in diameter. A shrub, eighteen months old at most, had 18 concentric circles."

"M. Charnay found the case repeated in every species and in trees of all sizes. He concluded that in a hot and moist climate, where nature is never at rest, it may produce, not one circle a year, as with us, but one a month. The age of a monument has often been calculated from that of trees that have grown on its ruins. For Palenque, M. Larainzar calculated 1,700 years, having counted 1,700 rings in a tree. M. Charnay's observations require the number to be cut down to 150 or 200 years, making a considerable difference—1,500 years. Prof. Bachelart asks whether M. Charnay took account of certain coloured rings which some tropical trees present in cross section, and which are to be distinguished from the annual circles."

If this be so—and it must be observed we have only one witness yet—the learned in arboriculture, ancient and modern, have been at least doubtful, if not false, teachers. And if this deviation from the old rule is peculiar to "hot and moist climates," where shall we draw the line? There must be some intermediate stage of average barometrical temperature at which this perplexing change commences in the development of tree growth, or is the whole hypothesis imaginary, and no rule at all?

This important question cannot be allowed to remain in its present unsatisfactory state. The account given by M. Charnay, as recorded by Professor Bachelart, will have to be either contradicted or confirmed; and a very pretty con-

traversy among adepts, or, as is now the fashion to call them, experts, is likely to result from it. The able and experienced authorities who instruct us on the peculiarities of vegetable growth in the pages of our very useful contemporary, the *Journal of Forestry*, will doubtless take up the subject and sift it to the bottom. It seems almost impossible that two theories so opposite to each other can both be true, and, if there be found a connecting link between them, how shall we know to which side of it our specimen may belong? Hitherto these "concentric circles" in trees were as religiously believed in as the revolutions of the planets. Are we now to unlearn all we have been taught about them?

### FORESTS AND CLIMATE.

A paper has been prepared by Dr. Schomburgk, the Director of the Botanical Gardens at Adelaide, on the influence of forests on climate. The object of the author is to prove that the destruction of forests usually has the effect of reducing the rainfall, while, on the contrary, the planting of trees broadcast over a country is one of the best methods which can be adopted for ameliorating its climate and increasing the annual fall of rain. It cannot, indeed, be said that the climate of South Australia is altering for the worse in this respect. In fact, a comparison of the meteorological records will show that the annual average rainfall for the colony during the past ten years has been 21.1 inches, as compared with 20.1 inches for the previous ten years. The fact is, that in the agricultural districts of the colony, and especially in those which were not originally timbered, the bringing of the land into cultivation has had the effect of slightly favouring the fall of rain. Plowed land attracts moisture to a much greater degree than unbroken soil. In considering the effect which the removal of the forests *per se* has in altering the climate in South Australia, the only direct test that could be taken from the records issued by the Government Astronomer is the experience of the neighborhood of Adelaide. If the time is divided which has elapsed since 1839, the year in which observations were commenced, into two periods, there is found for the first an average rainfall of 22.3 inches, and for the second one of 21.7 inches. It will thus be seen that, on the whole, the rainfall at Adelaide is diminishing, though very slightly, and perhaps the diminution in the amount of timber may have something to do with the change. Dr. Schomburgk, in searching for illustrations of the effect of trees on climate, goes farther afield, and brings forward some striking instances, in which it is evident that loss of forest means loss of rainfall, and *vice versa*. He recalls how the Russians, by burning down some of Transcaucasian forests at the time of the struggle with the Circassians, converted the country from a fertile land into a desert, simply through the cutting off of the supply of rain,

Similar instances of rain having deserted a country denuded of forests have occurred in the Mauritius, in Jamaica, the Azores, and, it may be also added, to a still more remarkable extent in several of the smaller West India islands. No sooner had the forests of these places been destroyed than the springs and rivulets ceased to flow, the rainfall became irregular, and even the deposition of dew was almost entirely checked. On the other hand, it is generally accepted as a fact that Mehemet Ali increased the fertility of Egypt enormously by planting trees. He alone planted some 20,000,000 on the Delta, his successors followed up the work, and it is a noteworthy circumstance that the rainfall rose from six to forty inches. Planting has also, it would seem, produced remarkable effects in France and Algiers. Extensive regions have been planted with gums and other trees, which, for the most part, grow to about 30 feet or 40 feet in height, and it is noticed that the quantities of rain and dew which now fall on the adjacent land are double what they formerly were.—*Architect*.

### WINNIPEG LUMBER INTEREST.

The *Winnipeg Commercial* of the 21st of Nov. has an article on the extent of the local lumber trade during the past season and its prospects in the succeeding one, in which, after warning its readers that its "figures only represent sawed and dressed lumber, which has been or is being used for building and such purposes," it goes on to say:—

"In local manufactures only one saw mill has had run steadily during the season, and its products since the opening of 1882, amount to 9,000,000 feet, 1,000,000 of which was oak. Other two manufacturers who have only run for a small portion of the season, have produced 4,500,000 feet, making the total product 13,500,000 feet. The lumber purchased at other mills in the North West and handled by parties in Winnipeg figures, up to 12,500,000 feet making the gross trade in domestic lumber for this city during the present year 26,000,000.

In reaching figures on lumber imported from Ontario and the United States, we have consulted the lumber dealers and manufacturers of the city, and their aggregate importations for the season reach 29,500,000 feet. The heaviest importer of the twelve has a gross of 10,000,000 feet, and the lightest was 750,000 feet. The amount imported by private parties we can only approximate, but we believe we are safe in fixing the figures at 3,000,000, which would bring the gross imports of the season up to the present date to 32,500,000 feet. In these figures we do not include importations made by the Canadian Pacific Railway direct, and the aggregate of those which have passed through Winnipeg must reach several million feet for building purposes, not to mention the millions of ties and other rough lumber. The total lumber trade

for Winnipeg for 1882, up to the present date, is somewhat in the neighborhood of 58,000,000 feet, when we confine ourselves to purely commercial parties, and it must be remembered that the importations for the year are not completed, and when they are the figures will probably reach 65,000,000 feet.

Accepting these figures as representing the lumber business of 1882, let us look ahead and see what the prospects is for 1883. The local dealers and manufacturers have arrangements made for getting out the following quantity of logs during the present winter. For the use of the mills of the city about 16,000,000 million feet to which must be added 7,000,000 feet now on hand, with which to commence operations as early in spring as possible. Thus a total of 23,000,000 feet of logs will be at the disposal of city manufacturers, which is within 3,000,000 ft of the capacity of their mills. There are seven mills who have contracted their products for the Winnipeg market for 1883, and the gross capacity of these for the season is somewhere near 70,000,000 feet. Arrangements have been made to get out for these mills during the winter over 37,000,000 million feet, or within 13,000,000 feet of their capacity. These figures give a grand total of 78,000,000 feet of lumber manufactured in the North West, which will be available for the Winnipeg market during 1883. Should the importations from the United States and Ontario for that year show a corresponding increase over 1882, they would reach over 97,000,000 feet, which would raise the total lumber trade of Winnipeg for the coming year to 175,000,000 feet, or nearly three times as great as that of the present. There is reason to believe, however, that the imports of 1883 will not increase as rapidly as local manufactures. The milling capacity of the North West has made rapid growth during the present year, and railway communication has, and is still opening up lumber districts of the country which have hitherto been closed to the Winnipeg market. Making a liberal allowance for the gain which local manufacturers will make on imported goods there is every reason to believe that the supply of lumber available for the Winnipeg market in 1883 will not be less than 130,000,000 feet. These figures seem almost fabulous, but they are based upon carefully collected statistics, and are certainly not exaggerated. The lumber trade of a new city is one of the most reliable indexes to its prosperity, and with the foregoing figures before us we may with safety challenge any city on the American continent, or in fact in the universe, to show such unmistakable signs of rapid growth and development."

ABOUT 140,000,000 feet of logs were rafted the past season at the Penobscot boom. The logs rafted at the Bangor boom amount to 18,000,000 feet.