

excessive cost of hickory, chestnut and walnut lumber is also an argument in favor of planting trees of these varieties. With a prospect of ultimate direct and indirect profit and assurance of dividends from such trees during the waiting periods for a lumber harvest, the subject seems worthy of consideration to those who contemplate reforestation.

The veneer door is becoming very popular. The public have learned to appreciate the advantages it possesses and no longer demand the solid hardwood door. In point of lightness the former has a decided advantage, and as the veneer door is now made it cannot warp nor crack. It has been more difficult to introduce hardwood veneer in furniture, but even the prejudice against this is passing away.

Every owner of timber stumpage may feel assured that sooner or later his timber holdings will become very valuable. One by one the so-called valueless woods come into prominence. Just now hemlock is demanding attention as never before. Not long ago regarded as barely worth the time necessary to put it in marketable condition, to-day it is being shipped in deal form to England, and has probably not yet reached its proper status in the timber field.

Considering the large number of persons engaged in the lumber trade of Canada, how little sociability appears to be manifested. In reality there exists as much friendship among the individual members as in other branches of business, but there has been lacking an opportunity of cultivating that friendship. Doubtless it would be found profitable and pleasurable if, as is done in the United States, trade luncheons were held in the cities where a number of lumbermen could assemble. During the present summer let a social function of some sort be arranged which will bring together in a friendly manner the many lumbermen who make their headquarters in Toronto and those at adjacent points who may be able to attend. It might prove to be the forerunner of regular fortnightly or monthly meetings where trade matters could be discussed in an impromptu manner and views exchanged on lumber subjects. The CANADA LUMBERMAN would be happy to chronicle the formation of a lumber exchange in Toronto. And not alone in Toronto is there scope for such an exchange. Wherever a number of lumbermen are located means should be provided of meeting together and profiting by an interchange of ideas.

EARLY SAWYERS AND HEWERS OF SAW-LOGS.

The lumber sawyer and the log hewer were of the utmost importance in early colonial days. There were no saw-mills in New England, nor in New Amsterdam until 1633, and it was many years after this before they became sufficiently numerous to make "pit sawing" unnecessary. So scarce and high-priced were saws that sometimes even pit sawing was impossible, and towns sprung up built of log houses with split shingles, too far in the frontier even to have a board. The town records

of a village in Oneida county, New York, show "the first death in the settlement, a child, buried in its cradle, there being no boards to make a coffin."

Pit sawing was done by two men with a long saw that had cross handles on each end. The log was first hewed square and then either placed over a pit dug in the ground or it was elevated on trestles. The best workman stood on top of the log and pulled the saw up, at the same time guiding it along a chalk line. He was called the top sawyer; the other man, less skilled, pulled the saw down and was called the pit man, says M. E. Stewart, of the U. S. Department of Labor, in a recent article.

Top sawyers were paid 33½ cents a day in New England in 1630; pit men received 25 cents; or where board was furnished they received 25 cents and 16½ cents respectively. When working by the piece they were permitted by "the court" to charge 75 cents a hundred feet for boards "at six score to ye hundred (that is, 120 feet) if the wood be felled and squared for them." If the sawyers cut the trees and squared their own logs they might charge 92 cents for 120 feet. This court regulation did not last long and by 1639 sawyers got \$1.08 for this work.

Late in the year 1621 the Plymouth colony sent the small ship *Fortune* of fifty-five tons burden to England, loaded with hand-sawed "clapboard as full as she can stowe and two hogsheads of beaver and other skins." The value of the cargo was said to be \$2,000. This was the beginning of New England's foreign commerce. Virginia had been exporting shipments for some time.

In New Amsterdam the wages of top sawyers was 50 cents and pit men 40 cents a day, and this continued to be the rate of wages in sawmills after they became quite common. Although Manhattan was settled in 1614, the West India Company did not see fit to erect a sawmill until 1633. It is not strange that none was erected in New England until the same year, for there was none in England for over 100 years after this; but the Hollanders in Manhattan must have seen mills in their native land, and so had the Swedes who first settled Pennsylvania. The Swedes had a sawmill before the landing of Penn. The greatest drawback was the scarcity of tools, for even as late as 1792, when the first sawmill was built in Rensselaer county, New York, by a millwright named Cross, he "had no tools but an axe, saw and auger." The wages of millwrights were then \$1.50 a day in New York and from \$1 to \$1.17 a day in Massachusetts.

In a list of articles to be sent to the Dutch colony on the Delaware in 1662 we find the "iron works for a saw mill" charged at "450 florin," the equivalent of \$180. A completed mill sold in Massachusetts in 1684 for \$337. A sawmill of that value was able to cut about 1,000 feet of boards a day, a day being from sunrise to sunset.

The colonies hedged these sawmill franchises around most carefully. So characteristic of the colonial idea of the rights of the community as against the individual interest are these regulating franchises that one of them is here quoted. Permission was given three men by the

town of Scituate, Mass., to erect a sawmill. The document is dated Nov. 10, 1656, and the mill must be finished within three months from that date. The regulating clause reads: "That in case any of the townsmen do bring any timber into the mill to be sawed the owners of the mill shall saw it, whether it be for boards or plank, before they saw any of their own timber, and they are to have the one-half for sawing the other half. And in case any man of the town that doth bring any timber to the mill to be sawed shall want any boards for his particular use, the owners of the mill shall sell him boards for his own use so many as he shall need for the country pay (farm produce) at 58½ cents an hundred inch sawn; but in case the men of the town do not supply the mill with timber to keep it at work the owners of the mill shall have liberty to make use of any timber upon the common to saw for their benefit."

One peculiarity of these regulations always is that a higher price may be charged to people who do not live in the town granting permission to build; also that work for "strangers" must not be done at this advance price if any townsman wants work done at the lower price.

New York was equally careful to secure favorable rates for the people of the granting town as against outsiders, even where a fixed rate was not named. In 1673 Oyster Bay gave a right to James Townsend "and his heirs forever" to cut and use any timber they found on the commons and sell the lumber to any one, whether in the town or out of it. But Jamaica, a town in the same county, granted in 1673 to Carpenter & Carman permission to erect a mill and use timber from the common land "except clapboard and rayle trees under eighteen-inches, provided they saw for the town 12 pence in the hundred cheaper than any other persons of any other town; and for citizens of the town that bringeth the timber one-half of the sawn stuff for their labor, provided that it is only for their own use." Jamaica did not like the Oyster Bay franchise.

New England seems never to have granted any rights to a man "and his heirs forever." The objection to primogeniture and entail came as ballast in Mayflower. Some of the quaker colonies stipulated in their saw mill franchises that the owners must saw boards for Indians for their own use free of charge.

These mills had but one upright saw, the blades being attached directly to the low frame and rendered steady by side pressure from guide blocks. The first mills built both in Manhattan and in New England were driven by wind; later by water power, a rude and small overshot wheel being used.

Hand sawing was by no means done away with by the introduction of these crude saw mills. Many of them would not take a log long enough to make sills and beams, and all the heavy timber continued to be sawed by hand. In the white-pine districts of New York the trees were so large they could not be handled by the early mills.

The Rainy Lake Pulp & Paper Company, whose concession was recently approved by the Ontario Legislature, has been granted incorporation, with a capital of \$500,000 and head office in Toronto. The provisional directors are: Hon. Geo. E. Foster and W. J. Elliott, Toronto; William Blackwood, Winnipeg; W. A. Preston, Mine Centre.