

THE CANADA LUMBERMAN

VOLUME XVIII.
NUMBER 4.

TORONTO, ONT., APRIL, 1897

TERMS, \$1.00 PER YEAR
Single Copies, 10 CENTS.

MANUFACTURING EAST INDIA TEAK.

The following particulars of the East India teak trade, taken from a special number of *Timber*, of London, Eng., will prove interesting to Canadian lumbermen, the methods of manufacturing being so entirely different from those practiced in this country.

Teak wood is the product of Burmah and Siam and is exported almost entirely to Great Britain. It is used for ship-building, cabinet making, electrical and telephonic instruments, building purposes, etc. As a rule it does not require seasoning the same as other woods.

The teak tree before it is felled in the forest is "girdled" at about 2 feet and even in some instances up to 6 feet from the ground. This girdling consists in making a deep circular cut through the bark and sap into the hardwood so as to completely sever the communication between the bark and sapwood above and below the cut. The girdled tree dies after a few days, if the operation has been effectually performed, but if the smallest band of sapwood is left connecting the outer layers of wood above and below the girdle, the tree is not killed and often recovers completely, one side of the tree being clothed again in fresh bark. The girdled tree is allowed to stand one or two years, and often longer if a large tree, and being exposed to the wind and to the action of the sun, "seasons" more rapidly and more completely than a tree that has been felled green. Timber seasoned in this manner is generally drier and lighter than timber felled green.

When teak is felled green it will not float at once, and the logs have nevertheless to be placed in a sloping position to allow the sap to run out before they will float. This, however, has its disadvantages, as the logs get attacked by a large insect which bores large holes into the wood. Some would-be experts in the matter of girdling assert that the process tends to a certain extent to make the timber brittle, but this has never been proven. As, after felling, the logs have to await the rains in the forests for floating and the bulk are neaped in the first year in the creeks, it takes really three to four years from the time of girdling till the logs are actually brought into the saw mills for conversion. Therefore the teak logs can be said to be fairly seasoned before they are converted. It is true that teak in bulk seasons but slowly, but it must be remembered

that the great heat in February to April seasons the logs very considerably, as can be seen by the sunsplits on the surface of the logs.

For the rapid conversion of teak, circular saws are preferred in the saw-mills, but these entail a good deal of waste owing to the thickness of blades which have to be used for such a hard wood.

Elephants are used in the forest, and without them large logs could not be worked out. A drag-hole is made at both ends of the log, which holes are also used afterwards for rafting the logs in the streams. In the case of large logs, they are tapered on the dragging side to some extent to make them slide more easily over the ground, which often causes a serious loss afterwards in the conversion and butting of squares to make them better fit for export. Where logs

the piling elephants, who slowly and sedately place it in its resting place.

The most difficult, or perhaps we should say intellectual, work is the piling. Say a square has been brought to the piling ground by the dragging elephant, one of the pilers would then begin by putting the squares in position alongside the pile, the end of the squares being about 6 feet past the butt of the pile. He then lifts the end of it on to the top of the pile, and with his tusks holds it in a position while his mate slowly raises the butt and with his tusks pushes it into the pile. When the pile is low, that is up to 6 feet, the front of the tusks are used in pushing the square into position, but in the case of the pile being higher the forehead is used. If, however, the square should be

above the level of his forehead, the elephant throws his head well back and with the points of the tusks high in the air will push the square safely home, his mate all the time keeping a watchful eye on it to see that it goes straight and gently guiding it with his tusks when necessary.

When the squares are wanted for shipment again the elephant comes to the fore and gently one by one takes them from the pile and lays them out ready for butting, after which he pushes them down to the riverside and into the water, and if necessary will follow them into the water and hold them jammed together while the raftsmen are busy binding them.

When the day's work is over the animals revel in a bath in a river, and often nothing but the tips of their trunks are visible above the water, while their mahouts are doing balancing feats on their backs as the huge bodies loll about under the water. When the bath is over each is loaded with his evening's allowance of grass, and slowly wends his way homewards, doubtless well pleased that his labor is over for the day, and thinking of the grass on his back and what he will do with it.

An elephant is always accompanied by a mahout, either walking by his side or mounted on his back. When working the driver is always on his back. Curious as it may appear, elephants are very liable to sunstroke, and those employed at outside work, such as piling, where they are a long time exposed to the heat of the sun, only work up to ten o'clock in the morning and after three in the afternoon. The others, who are more or less under cover and work all



ELEPHANTS PUSHING AND DRAGGING TEAK SQUARES.

have to be dragged over heavy and uneven ground, the tapering of logs is much larger, and, in case of long distances, the logs wear very flat on the dragging side, and when the logs get converted the squares often show the heart on that side.

One elephant in a forest can drag from 100 to 200 logs per annum, according to distances to streams in the forests that the logs have to be dragged. A good deal also depends upon the supervision, as the elephant drivers in the forests are very lazy and unreliable, and require a good deal of urging and looking after.

In some saw mills the elephant is in use in almost every department. One will, when harnessed to a round log, drag it out of the water to the rack bench, and there with its tusks place it on the table, while at the other end his mate is waiting, and when the log has been squared he takes it in tow and marches off to the piling ground with it, where he in turn hands it over to