

THE PROCESS OF MANUFACTURE.

The saw-logs when got out of the forest are taken to the nearest point on the Ottawa, and left to be drifted down by the stream, each firm having a private trade mark on each log by which they are recognized. At the Chaudiere they are caught by booms spread across the river above the falls, and guided through the different slides to the respective mills where they are to be sawn.

At the mills the logs are hauled up out of the water by a powerful wheel always in motion, and so placed in the cradle which guides them through the saws.

There are various kinds of saws, each performing its particular duty in the process. The slabber-gate, which contains from 18 to 20 saws, cut the outside of the log into boards of 1-in. thick, leaving the bulk in a slab of 14 inches in thickness, and of different width according to the size of the log, 37-in. being the largest. As the saw gets through the end of the log, these outside pieces are taken away and trimmed to the required size by the butter and edger.

The large slab is then turned over on the flat side and run through the stock-gang which contains from 30 to 40 saws placed about 1-inch apart and sawing the slab into 1-inch boards. These saws can be changed at will to saw 2-inch or 3-inch boards. It takes these saws about eight minutes each to get through a log of the ordinary size. The Yankee-gate is a combination of the slabber and stock gate, and contains about 32 saws. The gang saws both ways, the teeth of the slabber facing one way and those of the stock the other. By this means the log is sawn by the slabber as described above and the slab turned over and sent back through the stock-gate, so that while the slabber gang is dividing one log the stock is finishing off another. The single saw is used for sawing the loges into pieces of about three inches square, the gate acting in the same way as the other gangs, but with only one saw which performs the whole work. These gangs are all worked on upright pivots, the machinery underneath forcing the gate up and down at a considerable rate on the same principle as the old saw pit fashion, where one man works on top of the log and another underneath.

The butting and edging tables are for the purpose of taking off the rough sides and ends of the planks as they come from the larger gangs, and are fitted with counter saws for this purpose.

The planks are laid on the table, and a revolving chain with catches in it carries the wood along past the circular saw which takes off the outside pieces leaving the plank the required width and length, and disposing of the waste and damaged wood.

As the planks pass over these tables the foreman marks each one according to its size, and they are then wheeled out on hand trucks to be taken to the piling grounds.

These piling grounds are of vast extent, and are in many cases supplied with railways over which the lumber is drawn in horse trucks; but in some cases the lumber is slid through a hole into a large trough of running water which carries it to its destination.

THE OTTAWA DISTRICT SLIDES AND BOOMS (1870).

The government works connected with the descent of timber in this district are on the following rivers:—On the Ottawa, main river, 11 stations; on the Gatineau, 1; on the Madawaska, 15; on the Coulonge, 1; on the Black, 1; on the Petawawa, 31; on the River Dumoine, 11.

List of Slide and Boom Stations on the Ottawa River.

The distances given are measured on the latest maps, following the channel through which lumber is floated down the river:—