

In most parts of Canada and America, railways are used to handle the log supply. A railway consists of a permanent main line and spurs which are projected into the forest and are moved from time to time as the timber is taken out. A steam "skidder," operating on the railway track, pulls the logs to the railway line. There they are picked up by a steam loader, which is a crane with a swinging boom, and are loaded on flat cars.

Arrival of Logs at the Sawmill

A great sawmill in operation is one of the most interesting places to visit. The logs, which float in the water within the confines of a "boom" or chain of other logs, are guided to a "log-slip" or runway where a continually moving cable snatches them from the water and, after carrying them under a cleansing spray of hot water, lands them into the mill. Here they fall upon a carriage which brings them to the saw.

Formerly circular saws—mounted one above and one below for big logs—were used; and it was a fine sight to see the log carriage go racing to and fro like a shuttle while the sawyer moved the levers controlling its course, and shifted the log each time with skilled judgment so that it should be sawed to the best advantage. The "zip" of the saws—now high, now low—

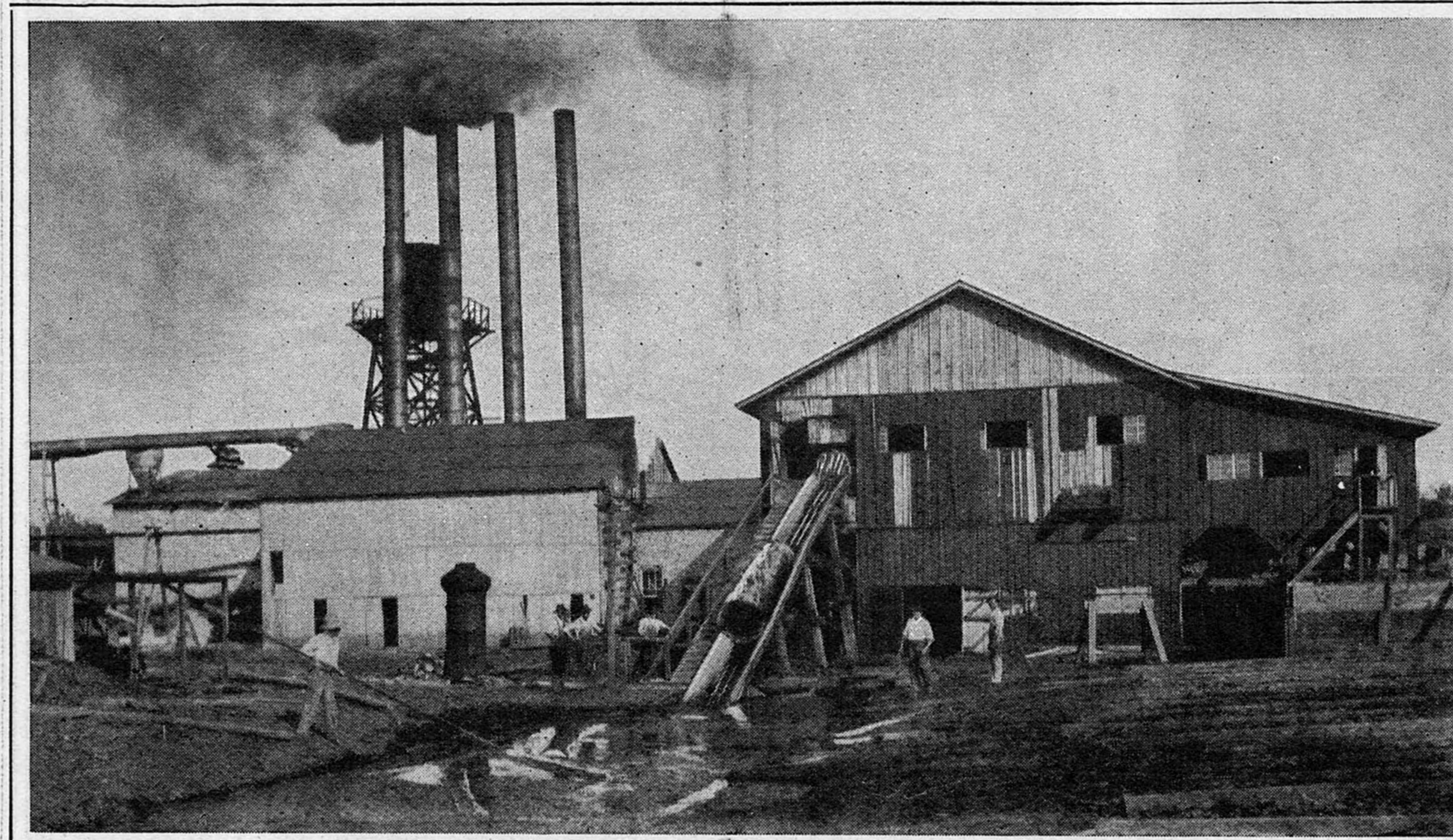
telling of the progress of the sawing made a music as fascinating as the spectacle, while the odour of fresh sawdust added to the pleasure.

To-day circular saws are used in the big mills only for trimming boards and for similar minor operations. The sawing of the logs is done entirely by "band-saws," so mounted that each makes a continuous band or ellipse, travelling at a tremendously rapid speed over one wheel above and another below the sawpit. Such saws move at more than 20 times the speed of a "reciprocating" saw, one which moves up and down in the jig-saw fashion. Often a number of band-saws are mounted in "gangs," so that the entire operation of sawing the log into boards is done with one forward movement of the log carriage. Another advantage of the band-saws is economy, for they waste much less of the log than is the case with the circular saws.

Circular Saws With False Teeth

An interesting fact in regard to the circular saws of to-day is that they often have false teeth! It was discovered that no matter how finely the teeth were tempered and how hard the steel was made, the sawing through the hardwood logs tended to break them off. So saw-makers now make the teeth separately and set them in the blade, and when one breaks or wears out a new tooth is easily inserted.

WHEN THE LOGS ARRIVE AT THE MILL



When the logs get to the mill they will climb right up the "moving stairway," just as you see this log doing here. The logs with which the big saws are supplied are kept "in store" in the water at the foot of the conveyer, and there, with the help of a man with a long pole to guide them, they are taken from the water by an endless chain with cleats or fasteners. The logs rest against the cleats, and are carried up into the mill. But before the saws are set to work on them, these logs are given a hot bath—that is to say, they are sprayed with hot water. Remember that these logs have been lying on the ground and have been dragged about more or less, and the rough bark collects sand, small pebbles, and bits of stone. These would not be good things for the teeth of the saw to bite into.

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