A MODERN SAW MILL.

Among the many saw mills on the shores of the Georgian Bay, that of Tanner Bros. at Waubaushene ranks high in its equipment and management. The mill was started thirty years ago by the father of the present owners. About ten years ago, Messrs. G. M. and W. H. Tanner, the present proprietors, assumed control, and five years afterwards rebuilt the mill, extending its size and capacity, and it now covers a large area on the shore of the bay.

The main building is 142 feet long by 40 feet wide, with a transfer wing 40 × 60 feet. In addition to this is a lath mill 30 feet square. A separate solid brick and stone boiler house, with three boilers of a total of 250 horse power, complete the buildings.

The average daily capacity of the plant is from 60,000 to 80,000 feet per day. The mill contains two single cut band mills of the Allis improved style. Up to last spring one band mill and a circular saw were employed, but

time. Mr. G. M. Tanner looks after the mill and the shipping, while Mr. W. H. Tanner has charge of getting out the stock. The piling yard capacity is equal to about 10,000,000 feet, and the lumber cut is entirely white and red pine.

Adjoining the mill is a large booming ground capable of holding eight million feet of logs. The timber limits of the firm are located on the Spanish and French rivers, and cover an area equal to four townships, half of which have not yet been touched.

AUTOMATIC ELECTRIC SAW MILL.

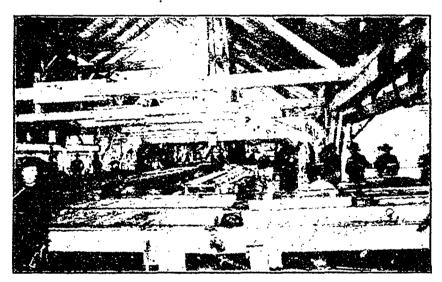
A Swiss firm have been making experiments in the direction of an automatic electric circular saw mill, in which the saw is fed along the log instead of the latter being fed to the saw. There are two kinds of mills being experimented with—log saws and resaws. In the log saw mill there is an iron track, which is made fast to the middle line of the log by means of clamps extending down to grip the center of

saw can handle, then turned 180 degrees about their axis, so as to bring the kerf directly under the former line, then a second set of cuts is made, meeting the former ones. This seems to be the weak point of the invention, as very little lost motion in the machine will make the kerfs "come blind".

The resaw is lighter and more simple. The balks or planks are laid on round wooden supports and piled up to the maximum height of 30 centimeters, or, say, one foot. The planks are clamped together. The track and carriage are then set on the pile and fastened thereto by clamp bolts at the ends.

The inventor is a Herr Kottman, who has a plantation on the island of Sumatra. The invention was made by reason of the difficulty which he experienced in the primeval forests with the mills of the present construction. The largest and best trees could not be sawed in place. The new system does away with this disadvantage. For small logs the power required, including the loss in transporting the





VIEWS OF THE SAW MILL OF TANNER BROS., WAUBAUSHENE, ONT.

the latter was taken out and replaced by another band mill, a second engine also being added. The interior photograph shown herewith was taken previous to the latter installation. Steam loaders, steam niggers, and steam kickers are also employed.

Every machine is placed upon an independent concrete foundation, and nearly all were supplied by the Waterous Engine Company, of Brantford, Ont. Everything is done in an orderly and systematic manner. All the rough edged lumber is carried away by chains to the edger, the stock lumber continuing its course over live rolls to the transfer table, where it is trimmed, marked, and loaded on cars for the pilers. Meanwhile the slabs are dropped automatically on to the slash table, where they are cut into four feet lengths. Here they are sorted, those suitable for lath being culled out, and the remainder dropped into a hopper and carried away to the yard. All the edgings and refuse from the lath mill are tied up on the spot and dropped into another hopper. Five carts are sufficient to handle all the refuse.

Since the new mill was erected five years ago, about 40,000,000 feet of lumber has been sawn, and yet the owners claim that less than \$500 would cover the cost of repairs in that

the log. On this track there runs a carriage which bears a small electric motor; there is also upon the under carriage a cross-carriage which can be rotated about a vertical axis by means of a handwheel and screw. On the cross side or carriage is borne the principal motor that carries the saw.

A correspondent of the Wood-Worker says that the carriage is fed along the track by means of the small motor, and during the cut the large motor runs the saw through the wood. The cross-carriage or slide permits feeding the saw across the log the width of the desired board, plus the kerf. The arrangement by which the carriage can be turned about a vertical axis enables the saw to be turned ninety degrees about such axis and make the cut in the reverse direction at the same speed as during the first cut, thus saving the time necessary to run the carriage back, also avoiding the shock at the reversing points in both directions.

Of course, power can be brought any desired distance to the machine, by the usual insulated wires. Logs up to a diameter of 70 centimeters, or say, 28 inches, can be cut by a saw of 180 centimeters, or say, 6 feet diameter. Logs of greater diameter than 28 inches are first sawed from above to the depth that the

current 3,000 meters, or, say, 3,250 yards, is about 60 horse. The same amount of power does for two resaws. In order to work advantageously it is desirable to have at work together two log saws and three sets of tracks. While one log is being sawed, the second machine and track are being mounted on a second log, and the third track clamped to a third log.

NEW LUMBER SECTION.

A Woods Section has been formed in connection with the Toronto branch of the Canadian Manufacturers' Association. The following are the officers: Convenor, R. S. Gourlay, of Gourlay, Winter & Leeming; Committee, J. Phillips, of Cobban Manufacturing Company; William Smith, of J. B. Smith & Sons; W. J. McMurtry, of Gold Medal Furniture Company; A.H.J. Eckardt, of Eckardt Casket Company.

REDUCTION IN FIR STUMPAGE.

The New Brunswick Government have reduced the stumpage on fir in accordance with the request of the Lumbermen's Association. The reduction is from \$1.25 to 80 cents per thousand superficial feet, and took effect about two months ago.