noted in connection with the barking house, that the logs are being handled in 16 ft. lengths instead of the customary shorter lengths. Experiments with this system of rotating discs were made with 4 ft. logs, and the idea has been enlarged to include logs 16 ft. in length.

#### Piling Ground

After passing through the barking house, the logs are conveyed over the Kipawa Co.'s sidings to the piling ground, in which are constructed five standard gauge tracks with 72-lb. rail. Straddling each track is a wide-gauge



RIVETED STEEL PENSTOCK

track for an overhead traveller. The centre lines of the five standard gauge tracks have been located about 60 ft. apart to enable the overhead cranes to pile three rows of logs between the tracks and a fourth row on the track as the cars pull out. From the piling ground, the logs are reloaded and conveyed to the wood room, where they are chipped into pieces about  $\frac{1}{4}$  in. by  $1\frac{1}{2}$  ins. in size. These chips are carried by an outside, closed conveyor to the top of the digestors.

# **Digestors and Acid Towers**

The digestors, three in number, are housed in a reinforced concrete and brick building, six stories in height. Each digestor is constructed of steel plate, is 17 ft. in diameter and 56 ft. high, and is brick-lined for protection against acid corrosion. The capacity of each digestor per run is approximately 20 tons, and the ultimate capacity of the battery will be about 100 tons a day. The acid towers are of reinforced concrete, circular, 9 ft. in diameter and 80 ft. high, and at present two in number. They, also, are lined with brick and are insulated by sheet lead. The limestone is loaded into these towers by an elevator located in adjoining rectangular structure. The acid, diluted, is stored in separate tanks which are located near the digestor building.

## Screen Room, Bleachery and Press Room

The chips, after passing through the digestor, continue in pulp form through the screen room, where the pulp is thoroughly washed and screened. From the screen room, the pulp goes to the bleachery, and then to the machine shop, where it is rolled into sheets of convenient sizes and pressed into blocks ready for shipment to the paper mills, the hydraulic presses removing nearly all of the moisture.

### **Boiler House**

The acid towers digestor room, screen room, bleachery, machine shop and shipping room, are constructed to a uniform street line. Across this street are located the transformer sub-station, boiler house and chimney. The boiler



JACK LADDER AND CONVEYOR PLATFORM

house, also constructed in concrete and brick, contains five Babcock & Wilcox boilers of the superheater type, fitted with economizers, automatic stokers and appliances for using bark as fuel. The chimney, which is about 16 ft. in diameter at the base, is approximately 200 ft. high and was erected by the Canadian Custodis Co.

### 4-ft. Wood-Stave Pipe Line

The water to be used throughout the mill will be obtained from the dam at Lumsden's mill through a continuous



MACHINE ROOM DURING CONSTRUCTION

wood-stave pipe line 4 ft. in diameter, constructed on bents and sills, supported by a 12-in. floor of boulders and stone, and situated on the southerly side of Gordon creek. The water, controlled by a cast-iron valve in the gate house at