

The Canadian Engineer

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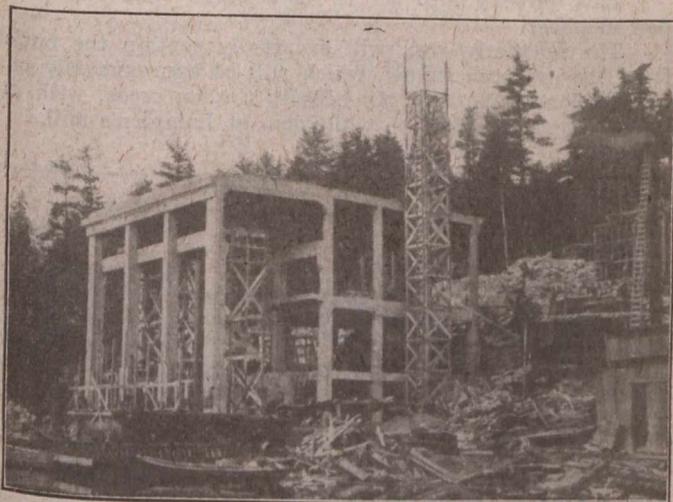
Kipawa Co.'s Pulp Mill and Power Development

First Unit of Bleached Sulphite Pulp Mill Nearing Completion—Ultimate Capacity, 30,000 Tons of Pulp Per Annum—Development of Gordon Creek Utilizes Approximately 200 Ft. Net Head—Wood Stave Power Pipe Line 8 Ft. in Diameter

WITHIN a couple of months the Kipawa Company, Ltd., will have completed the first portion of their construction program in connection with the new pulp mill and townsite at Timiskaming, P.Q.

Situated on the Ottawa river, at the outlet of Gordon creek and adjacent to the Dominion government dams forming the toe of Lake Timiskaming, the site of this new pulp mill is ideal. Pulpwood may be obtained from any or all of four distinct sources of supply: (1) From the northern end of Lake Timiskaming by towing; (2) from the Kipawa Lake district through Kipawa river and chutes to Lake Timiskaming, and thence to plant by towing; (3) from the Kipawa Lake district through Gordon creek, which is an improved creek for lumber interests; and (4) from the south by rail over the Mattawa-Timiskaming branch of the Canadian Pacific Railway.

Upon completion of the full program of construction at Timiskaming, the Riordon Pulp & Paper Co., Ltd., which controls the Kipawa Company, Ltd., will have three large plants supplying material for the pulp and paper industry,



POWER-HOUSE ON LAKE TIMISKAMING

the existing plants being at Merritton, Ont., and Hawkesbury, Ont.

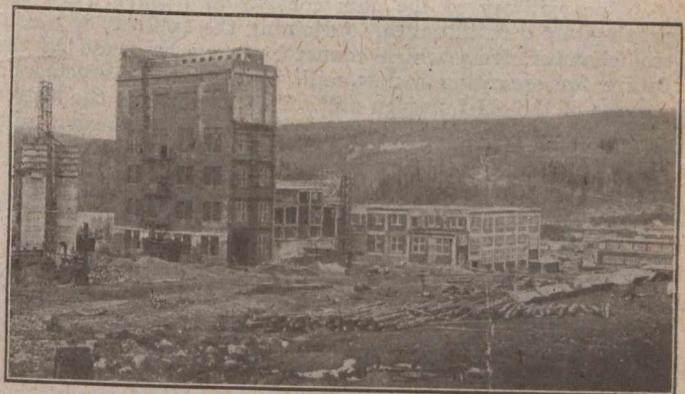
The new plant is being developed under a charter obtained from the province of Quebec, which has leased from the federal government all water rights in connection with the Kipawa lakes for power development or logging on either the Kipawa river or Gordon creek.

The interests of John Lumsden, owner of Lumsden's mill, and of other property owners were purchased, and a compact area of about eleven square miles was brought under control. (See *The Canadian Engineer*, issue of February 27th, 1919, page 260).

Ewing, Lovelace & Tremblay, consulting engineers, Montreal, were instructed to prepare topographical surveys, and Thomas Adams, town planning adviser to the Commission of Conservation, prepared preliminary plans for the model

townsite. Upon this plan were located sites for approximately 280 buildings, including churches, hospital, convent, club, hotel, school and institute.

The first portion of the construction program includes the gate house and dam on Gordon creek at Lumsden's mill; a continuous, wood-stave pipe line of 8 ft. diameter; reinforced concrete forebay; riveted steel penstock; power house; combined railway and highway steel girder bridge; barking house; spur lines from the Canadian Pacific Railway; sidings in piling ground; wood room; digester house; acid



SOME OF THE MILL BUILDINGS—FROM LEFT TO RIGHT, ACID TOWERS, DIGESTORS, SCREEN ROOM, MACHINE SHOP AND SHIPPING ROOM

towers; storage tanks; screen room; bleachery; press room; machine shop; transformer sub-station; boiler house; chimney; shipping room; elevators; office building; dwellings; roads; culverts under the Canadian Pacific Railway line to Kipawa; a continuous, wood-stave pipe line of 4 ft. diameter for supply of water to the mill; revolving screen house on mill supply line; sewers; water mains; pressure filter unit and pumping station.

Construction of the above-mentioned works is expected to be complete by the end of November, and the first unit of the mill will likely be in operation early in December. The first unit represents about 30% of the ultimate planned mill construction, but the work now being done on the townsite is only about 10% of that planned by Mr. Adams and the consulting engineers.

Future construction will include a second 8-ft. continuous wood-stave pipe line to the forebay, or else a tunnel through the hill from the dam at Lumsden's mills to the forebay, or possibly both tunnel and pipe line; four more steel penstocks; additions to power house and its equipment; sewage disposal works or sewage-chlorinating plant; street lighting system; filtered water mains crossing Gordon creek to mill; domestic water storage reservoir; hospital; school; churches and hotel.

To control the waters of Gordon creek at the site of the old Lumsden mill, the Kipawa Company have constructed a reinforced concrete dam with wing walls and foundations anchored to solid rock. The crest of the spillway, elevation