

The Canadian Engineer

An Engineering Weekly

THE VANCOUVER ISLAND POWER COMPANY, LIMITED, JORDAN RIVER DEVELOPMENT.

PART I.

Western Canada is growing with such rapidity, particularly the southern coast districts of British Columbia adjacent to the cities of Vancouver and Victoria, that in these communities it has been for some time a serious problem with the public utilities companies to keep pace with the rapidly increasing demand for service.

The British Columbia Electric Railway Company, Limited, owning and operating the traction, lighting, and power systems of Vancouver and Victoria, and territories adjacent thereto, has been for the past five years laboring with this

malt Water Company, and could run at full capacity only during a part of the year on account of water shortage.

Mr. Wynn Meredith, then consulting engineer for the British Columbia Electric Railway Company, was authorized to investigate the available power possibilities, and under his direction an exhaustive series of investigations were carried out, which included practically all the sources of water power within a radius of commercially feasible transmission to the city of Victoria. This preliminary work was continued for upwards of a year, and was accomplished



The Jordan River Development, Bear Creek Dam.

problem. The growth and expansion of the districts which this company is serving have been phenomenal, and the demand for power has been multiplied several times within that period. The capacity of British Columbia Electric Railway Company's plants has been increased constantly, both in steam and water power, and generally in time to anticipate requirements.

As early as 1907 it was realized that material increase in power capacity would be required by the Victoria branch, but that this could be met within a period allowing adequate investigation of the available water power resources on the southern end of Vancouver Island, and the installation of a modern, well equipped hydro-electric power system.

At the time the Jordan River development was actually begun, the British Columbia Electric Railway Company was serving Victoria and adjacent territory with electricity from a steam station in Victoria of 800 kilowatt capacity and a hydro-electric station of 2,000 kilowatt capacity at Goldstream, about ten miles out of the city. The latter plant was operated with surplus water purchased from the Esqui-

under the most extraordinary difficulties, the investigation in many cases being more properly explorations of an unmapped and practically unknown region, untraversed, except for a narrow fringe of coast line, beyond the occasional visit of trapper or timber cruiser. Pioneer work in the forests of British Columbia can only be properly appreciated by those who have undertaken it. Water powers are abundant, but the wild, rugged and inaccessible character of the country renders it difficult in the extreme to acquire even very limited preliminary knowledge of a possible water power development. Most of the virgin country is covered with heavy timber, sometimes cruising 600,000 feet, board measure, per acre; and whether timbered or not the ground is covered with a dense growth of brush and fallen and rotting trees.

The hardships endured by the engineers on reconnaissance work, their heart-breaking conquest of the jungles, struggling with pack on back through the proverbial "impenetrable" British Columbia forest, blazing many paths in order to insure safe retreat in case further advance was im-