

Hydro-energy has had widespread application to the development of other rich resources of the district. Hydro-power from the Klondike River drives the great placer gold-mining dredges of the Yukon Territory. In the far south, approximately 250,000 h.p. from the Kootenay River, is the foundation of the immense mining, metallurgical, and electro-chemical operations at Trail, with their production of zinc, lead, and fertilizer for world markets. In Fernie district, in the southeast, and on Vancouver Island, hydro-power operates the coal mines, while along the coast great pulp, paper, and lumber mills at Powell River, Ocean Falls, and other points are based on hydro-power.

The development of water power in the Cordilleran Region has grown very rapidly, and there is now a total installed capacity of 737,000 h.p. An exceptionally wide urban and rural distribution exists carrying the comforts of electrical conveniences to a large percentage of the population. Vancouver Island is well served with hydro-power.

The Appalachian and Acadian Region.—This comprises the Maritime Provinces and that portion of eastern Quebec south of the St. Lawrence River and east of Quebec City south of the St. Lawrence Lowland. This area is drained by numerous rivers, many of them short and with relatively small drainage basins but with steep descents.

The Appalachian and Acadian Region includes hydro-power resources totalling 550,000 h.p., which would sustain a turbine installation of about 700,000 h.p. An extensive development aggregating more than 400,000 h.p. has already taken place. Of the power rivers worthy of special mention, the Mersey in Nova Scotia has an extensive present development; the Saint John in New Brunswick is a power river of considerable proportions; while the St. Francis River in Quebec, lying in the western fringe of the area, has outstanding power resources, a large part of which is now developed.

Industrial progress and domestic comfort, based upon low-priced hydro-power, have contributed greatly to the economic and social progress of the Region. Hydro plants serving the publicly and privately owned transmission and distribution systems of Nova Scotia, New Brunswick, and eastern Quebec, as well as privately controlled industrial enterprises, provide substantial supplies of power for industry and for domestic use. Most of the leading municipalities and industrial centres of the Maritimes and southeastern Quebec are served with hydro-power. Major pulp and paper enterprises are so supplied at Liverpool, Nova Scotia; Edmundston and Dalhousie, New Brunswick; and Windsor Mills, Bromptonville, and East Angus, Quebec; while the famous asbestos mines of the Eastern Townships of Quebec are also hydro-operated.

The Interior Plains Region.—This is roughly a triangular area with its base on the International Boundary and its apex on the Arctic Ocean at the mouth of the Mackenzie. It is bounded on the east and north by the Canadian Shield, and on the west by the easterly range of the Cordilleran Region. The Plains are covered with great depths of soil, through which the streams cut themselves down into deep coulées and the rivers into deep, wide valleys. The rivers and streams generally flow with gradual gradient and few rapids or falls occur, the main water-power resources available for the Plains area being those located near its border in either the Cordilleran or Precambrian Regions.

The geological structure of the southern plains is such that there is no concentration of river flow into natural heads suitable for the development of power. In the northern areas, however, on such rivers as the Saskatchewan, Athabaska,