further east we find the Coquihalla River, capable of developing 20,000 H.P. North of Howe Sound along the line of the Pacific Great Eastern Railway is the Cheakamus River and Falls, with a possible development of 50,000 H.P.

A very interesting undeveloped power project in the vicinity of Vancouver is that proposed by the Westminster Power Company, which contemplates two developments, one on the Meslilooet or Indian river with a head of approximately 400 feet, and another using the flowage from three tributary creeks of the Indian River under a head of approximately 2,000 feet. The two proposed developments are close together about three miles from the head of the North Arm of Burrard Inlet and about 20 miles from Vancouver. It is understood that a total of about 40,000 H.P. is possible of development.

The basin of the Fraser River* and its extensive tributaries offer a great field of study for the utilization of many water powers. The Fraser River is 695 miles long and receives the drainage of an area of 91,700 square miles. Of its principal tributaries, the Thompson drains 21,800 square miles and is 270 miles long; the Chilcotin drains 7,500 square miles and is 145 miles long; the Black Water drains 5,600 square miles and is 140 miles long; the Nechaco 15,700 square miles and is 225 miles long; the Stuart is 220 miles long; the North Thompson 185 miles, and the South Thompson 120 miles. The Fraser River rises near the summit of the Yellow Head Pass at an altitude of 3,710 feet. In 52 miles it falls to 2,400 feet near Tete Jaune Cache; thence, flows north-west in the "Inter-montane" valley to latitude 54°; then, like the Columbia at the "Big Bend", it turns westward and southward. At Fort George, near its most northerly point, it is at an altitude of 1,900 feet—a descent of 500 feet in about 200 miles. Steamers have ascended it to Tete Jaune Cache, a circumstance which indicates a swift-flowing stream without considerable fall at any point. The Grand Trunk Pacific grade on its banks would probably debar extensive damming except below the moutn of Bear River. During the season of navigation, steamers ply between Fort George and Soda Creek, which would, for the present, prevent the utilization of power sites on this stretch—such as Cottonwood canyon. The construction of the Vancouver branch of the Grand Trunk Pacific railway down this river, however, will, probably, result in the abandonment of this steamship line. Below Chimney Creek, the river enters the Fraser canyon to emerge near Hope. Between Fort George and Lillooet, about 255 miles, it falls 1,240 feet. Allowing a fall of, say, 3½ feet per mile for the 150 miles between Fort George and Chimney Creek, there is left a descent of nearly 740 feet in the 105 miles between the latter and Lillooet. Between Lillooet and Lytton bridge, it falls 244 feet in 40 miles, and between the bridge and Hope, it falls 300 feet in 60 miles, having an altitude at Hope of about 115 ft. above sea level.

Below Lytton, irrespective of the difficulty—if not impossibility—of harnessing this raging torrent, the presence of the Canadian Pacific and Canadian Northern lines debars any attempt to generate power in this portion of its course. Above Lytton, as indicated above, there is even a greater fall per mile than below; but here, again, the construction of

* For much of this information regarding undeveloped powers, the writer is indebted to "Water Powers of Canada," by L. G. Denis and A. V. White, published by the Commission of Conservation, Ottawa, 1911.