

well into the Coast Range system before it turns westward again to reach the Pacific ocean at Vancouver. The drainage from the southern and eastern portions of the area examined northward to the valley of Lac la Hache and northeastward from there, does not flow directly to the Fraser but south and east to the Thompson which reaches the Fraser 50 miles south of Lillooet.

From Lillooet the railway follows the canyon of the Fraser for about 29 miles north of Kelly creek, where it turns northeastward through Junction, or Cutoff valley (Plate VII) and follows that depression for some 16 miles to the village of Clinton. Thence northward it crosses the Green Timber plateau, descends slightly into the valley of Lac la Hache, or San Jose creek, and follows that depression until it again reaches Fraser canyon 116 miles in a straight line north of Lillooet. From there northward the road is within a few miles of the river as far as Prince George.

For the first 30 miles north of Lillooet the waters of the Fraser are less than 1,000 feet above sea-level, whereas to the west within a few miles the peaks of the Coast ranges rise to 6,000 and 7,500 feet above sea-level. Eastward the ridges are from 6,000 to about 7,000 feet high and their summits, which are broad, merge into those of the Interior Plateau. Farther north, however, the continuation of the same ridges, known there as Marble mountains, forms a more distinct range very sharply separated from the plateau to the east with summits rising to 6,500 and 7,500 feet above sea-level.

From Clinton to Prince George the railway traverses the Interior Plateau, a district made up of almost flat plateau areas, of rolling round-topped hills, and broad valleys. An example of an extensive flat area is that of the Green Timber plateau north of Clinton. Typically developed northwest of the railway, about 40 miles wide and from 3,800 to 4,200 feet high, it lies between Marble mountains to the southwest and the Lac la Hache depression to the northeast and is, considering its area, one of the flattest parts of British Columbia. Except along its edges the drainage is poorly developed or wanting. A large number of small saline lakes are dotted over its surface.

North of the Green Timber plateau and at some distance from the immediate canyon of the Fraser, lies a country of broad valleys and rounded hills with perhaps 300 to 500 feet difference in the elevation of valley floors and neighbouring hill tops. This type of topography, but with gradually increasing strength of relief, persists eastward as far as the front ranges of Cariboo mountains, the eastern boundary of the Interior Plateau system. Certain portions of the western ridges of Cariboo mountains, visited in the course of this work, are over 7,000 feet high and others farther east evidently attain increasing altitudes.

Fraser river flows in a gorge that lies from about 400 to 1,500 feet below the general plateau level. Near the main stream its tributaries lie in correspondingly deep gorges; between them the ridges maintain the level of the plateau to the east.

The immediate rough of the Fraser is a narrow trench about 200 to 500 feet deep. Above this there is generally a number of terraces, the upper surfaces of which are broad and slope gently to the river (Plate II). From the terraces the land slopes steeply upward to the rather flat tops of the neighbouring ridges. The level of Fraser¹ river at its confluence

¹White, James, "Altitudes in Canada": Second edition, p. 552. Commission of Conservation, Ottawa, 1915.