of the necessity of recognizing a great system east of Beaver river as distinct from the Selkirk system. The reasons for giving the name "Purcell range or system" to that mountain group are given in Memoir No. 38 and need not be repeated.

The Purcell trench is not much over 200 miles in length. At the International Boundary and for scores of miles northward it is almost as impressive in depth and width as the Rocky Mountain trench. In the portion drained by Beaver river, the Purcell trench is only from 3 to 5 miles broad, measured from crest to crest of its mountain walls, and its floor is correspondingly narrow. The general form is that of a fiord-like, heavily glaciated valley (Plate IV). Opposite the hanging valley of Bear creek the trench floor is 3,000 feet above sea; the Prairie hills range from 7,000 feet to 8,000 feet or more in height (Plate V), and the opposing Selkirk peaks are of various heights, culminating at 10,808 feet in Mount Sir Donald.

The strength of relief in the Selkirks at the railway belt is further given by the altitude of the Columbia river at Revelstoke, which is approximately 1,450 feet above sea-level. For details concerning the topography of these splendid mountains the reader is referred to Wheeler's excellent map and its accompanying text[1] (Plate VIII).

Within the railway zone covered during the reconnaissance, the highest peak of the Columbia range is Mount Begbie, 8,946 feet above sea (Plate IX). Though not so high as the Selkirks, this range is one of the roughest in the Cordillera. North of the Arrow lakes no part of it has ever been properly mapped and a chief reason is the truly great difficulty of travel in most of the range. Much more forbidding than the general steepness of slopes is the density of the forest cover, and especially of the overwhelming thickets that have grown up in fire-swept areas.

The Selkirk valley (Plate X), sharply delimits the Columbia range on its eastern side, except at the north, where it is obliquely truncated by the Rocky Mountain trench. The western limit cannot be closely fixed since the range merges

[1]A. O. Wheeler, The Selkirk Range, Department of the Interior, Ottawa, 1905, 2 vols.