

4,000 feet high, between the two branches of Cascade river; the Big Missouri ridge, 3,400 feet, between Cascade river and Salmon glacier, and Mt. Dillsworth, a round dome-shaped, completely snow-covered elevation, rising to an altitude of 5,600 feet between Long Lake valley and Salmon glacier. Skirting the southern base of Mt. Dillsworth is a narrow, broken, and hummocky belt sloping towards the Salmon glacier. Mt. Miter, so called by the miners on account of its notched summit, is a conspicuous object in the view up Long Lake valley. It has a broad spreading base deeply buried in snow and ice from which a bare, seemingly almost perpendicular, mass of rock shoots up to a height of over 8,000 feet.

The glaciers of the district are a prominent feature. Salmon glacier, the source of Salmon river, has a length of nearly 8 miles and occupies the summit of a through valley connecting the Salmon with the Nass. It is fed mainly by two branches from the west, one joining it at the summit almost at right angles and from this the ice flows east and west down both slopes. Its elevation at the summit is approximately 3,000 feet and at its termination in the Salmon valley 480 feet, the lowest point reached by perennial ice in this portion of the Coast range. The Nass branch ends in a lake at a much higher elevation. A number of small glaciers descend from the large permanent snow-field which crowns Mt. Dillsworth, and a line of ice tongues creep down the slopes of the Bear River ridge, none of them reaching the valley. The western slopes of this ridge are less steep than those fronting on Bear River and American creek and large snow-fields are more prominent.

The general aspect of the Salmon River district above an elevation of 3,000 feet is exceedingly bleak and arctic looking. Long lake at the time of our visit, August 2, was still covered with ice, and except on projecting rocky knobs and sunny slopes the preceding winter's snow lay thick everywhere. Below an elevation of 3,000 feet, the valleys and mountain slopes are generally well wooded, principally with large hemlock and spruce of good quality.

## GEOLOGY.

The formations represented in the Salmon River district are the Bear River greenstones, the Nass argillites, and the granitic rocks of the Coast Range batholith.

The eastern edge of the Coast Range batholith on the western slope of Bear River ridge, and in the Salmon River valley, occurs on the Alaskan side of the International Boundary and was not traced out. Following the boundary line, small granitic areas, some of which may be spurs from the main