

but, as far as my observations went, they are confined exclusively to those parts of the country which have been more or less completely covered by glaciers during the Pleistocene epoch. Beyond the limits of the glaciated region no lakes were seen.

GLACIAL FEATURES

EXTENT OF THE SNOW AND ICE

While the Chilcat mountains are almost buried in snow throughout the year, very little snow is to be seen in summer on this "interior plateau," and any small glaciers that do exist are in some of the higher mountains close to the Chilcat range.

Though the ice-fields of the present day are confined almost entirely to the Chilcat mountains, the ice-fields of the Glacial period were much more extensive, for they spread northward as far as Five-fingers rapids on the Lewis river and to a short distance beyond Aishihik lake in the Aishihik valley. The northern limit of glaciation is not by any means an approximately straight line, for it indicates the lengths to which the glaciers filled the valleys rather than the even margin of a great confluent ice-sheet. The higher mountains rose above the level of the ice, just as they do at the present time in the Chilcat range, and small glaciers moved down their sides to join the larger glaciers in the valleys.

The Chilcat-Alsek valley gives a beautiful idea of the former depth or thickness of the ice. The bottom of the valley is almost flat, and the sides rise in gentle willow-covered slopes for 2,000 feet or more to the foot of the ungraded rocky peaks on either hand. Rock is everywhere exposed above this line, while below it rock exposures are comparatively rare, and the country is underlain by a loose unassorted till, on which willows and dwarf birches grow in dense thickets. As seen from the bottom of the valley, the upper limit of the willow-covered slope forms a fairly regular line along the sides of the mountains, and indicates approximately the depth to which the ice-sheet filled the valley, a depth which here varied from 2,000 to 3,000 feet. Above this line the higher mountains rise in broken, jagged peaks, while any lower mountains which do not rise above the level of the top of the till have their summits evenly rounded and unbroken.

THE TILL

The till which fills the bottom of this valley, often to depths of 100 feet or more, is a mass of unassorted material, in part local and in part derived from a distance. It contains pebbles and boulders, usually