



Arrow points to the newly discovered Salmon River Glacier.

## A New Glacier on Mt. Hood

By L. A. NELSON

One of the outstanding discoveries made by Mazamas this year is that of a new glacier on the south side of Mt. Hood. It is between White River and Zig Zag glaciers. Before this year it was merely considered as a part of one of the larger glaciers.

A NAMELESS glacier on Mount Hood seems incredible but nevertheless it has been proven true. Mazamas in making the ascent of Mount Hood had passed close to or over this glacier and always considered it a snow field not worthy of exploration, especially during the ascent, for what is one ice field more or less when there is a mountain to climb? Those who had been over the field and taken any notice of it generally spoke of it as ice covered with moraine and snow and probably connected with White River and Zig Zag glaciers.

The open Winter of 1923-24 with its lack of snowfall combined with the warm Summer of 1924 worked a change in the ice and snow field of Mount Hood; ridges of rock developed in the snow fields where formerly unknown, and crevasses opened up where we had not seen them before. This is one of the phenomena of weather on the mountains—glaciers may lie hidden under a blanket of snow until the right kind of climatic conditions remove the blanket, and behold a glacier. This is what happened on Mount Hood, and as the result we have one more glacier to talk about and to point out to visitors.

The first time that the crevasses were definitely noticed was in early Fall, when a Mazama party on a trip to White River glacier, saw the openings in what was formerly an unbroken snow field. On

this and subsequent trips, the change was the subject of considerable discussion. A party of Mazamas later visited the newly uncovered glacier and made some measurements, as well as taking moving pictures of the glacier and its crevasses. At a later date the research committee of the Mazamas explored the glacier, surveyed its position and size. I was very fortunate in being invited to accompany this party of explorers. One member of this committee, just to prove that there were crevasses and therefore we were on a real glacier, broke through a blind crevasse — but without casualty more than falling in to his shoulders supported only by his outstretched arms.

The location of the glacier has been definitely determined and will be included on the reprints of the Mount Hood quadrangle of the U. S. G. S. It lies below Triangle Moraine between White River and Zig Zag glaciers, at an elevation of from 7200 to 8000 feet, and is the source of the Salmon river. Several branches of this river flow from this ice field but the main one comes from the extreme eastern side. The lower portion is covered with debris which at a distance might be mistaken for morain, and I believe a great many have had this impression. The upper part is generally covered with snow but when last visited it was clear ice broken with crevasses.

It is rather difficult to determine the extreme upper or lower portions as the extreme upper portion runs into a snow field while the extreme lower portion is covered with morain. The east and west boundary is definitely determined by rock ridges separating it from the White River and Zig Zag glaciers.

The question of a name for the glacier was very thoroughly discussed, and the name finally determined upon was Salmon River glacier. Thus it will be marked on all future maps.

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## The Research Committee's Report

Portland, Oregon, October 20, 1924.

TO THE MAZAMA COUNCIL:

Your Committee on Research makes the following report of its activities:

On Sunday, October 13, 1924, an effort was made to establish a line of stakes across Reid glacier with the idea of determining the rate of movement and lines of flowage during the ensuing year.

Due to inclement weather this effort was abandoned for the time being and the expedition turned its attention to the investigation of a reported glacial field south of Triangular Moraine and just west of White River glacier. This glacial field is the eastern half of what has been commonly known as The Big Snow Field.