

gather from a few photographs and tales of my former experiences. Suffice it to say that a party, consisting of Samuel Allen, of the Swiss Alpine Club, Yandell Henderson, Lewis F. Frissell, George Warrington, and the writer of this article, all of Yale University, was induced to go, and arrived on the field early in July.

The outfit consisted of a plane table and telescopic alidade, kindly furnished by the United States Geological Survey, a prismatic compass, two steel tapes, a mercurial barometer, two watch-size aneroids, a thermometer, and compasses. For our mountain work, we had several hundred feet of manilla rope and four ice-axes modelled after the most approved Alpine form. For photography, there were three cameras and twenty-five dozen dry plates of several degrees of rapidity.

It would be in place here to define more accurately the location of the field of operations. Roughly speaking, we may define it as a region in the extreme western part of the province of Alberta, and south of the Canadian Pacific road, in lat. $51^{\circ} 25'$ N. The extent of the area might be approximately indicated by saying that it would all be included in the half-circle formed by the line of the railroad and the arc drawn with a radius of 10 miles from the station called Laggan. That the area thus limited should have occupied us an entire summer will appear less remarkable after a discussion of the extent and character of the difficulties presented.

From the line of the railroad at and near Laggan, one sees to the south a long range of lofty peaks in great part covered with snow and ice, and forming the grandest scenery along the entire road, the Selkirks not excepted. This is the summit range of the Rockies, the watershed of the continent, for on the other side of these mountains the water flows into the Pacific, while here the rushing waters of the Bow river are hastening toward the Atlantic. Two miles south of Laggan there is a small lake hardly $1\frac{1}{4}$ mile in length, but so beautiful in itself and in the grand mountains which surround it, that a waggon road has been opened throughout the forests to the lake, and a Swiss chalet erected near the shore for the reception of tourists. This was first occupied in July, 1894, though as early as July, 1891, there was a log-house with several rooms for the entertainment of travellers. We made the present chalet our head-quarters for the greater part of the summer.

In order to understand the topography of the tract surveyed, in a general way, it may be described as follows: The Bow river valley, running about south-east and north-west near Laggan, has an average width of fully 4 miles. The main range of the Rockies runs nearly parallel to the valley, and lies about 6 miles to the south-west of it. The area surveyed includes five short spur ranges which branch off at right angles from this summit range, and hence cause the valleys between them to open into the Bow valley at right angles. The altitude of the Bow river at Laggan is 5000 feet. Mount Temple, the highest in the