

Boundary Surveys, which greatly facilitated the geological work. The topography had been mapped for a distance of 2 or 3 miles or more on each side of the Boundary line; and the geological mapping and investigations south of Porcupine river were restricted, almost entirely, to this belt which has an average width of at least 5 miles. The topographic mapping was performed by the plane-table method, and was plotted in the field to the scale of 1:45,000 and is to be published to the scale of 1:62,500 or about one mile to the inch, with a contour interval of 100 feet. The sheets furnished for geological purposes were partly on the field scale and partly on the scale of publication.

The writer desires to express his indebtedness to the various members of the International Boundary Survey with whom he came in contact, all of whom were most courteous and obliging. Particular thanks are due Messrs. J. D. Craig, D.L.S., and Thos. Riggs, Jr., who had charge respectively of the Canadian and United States parties during 1911 and 1912. These gentlemen rendered numerous favours to the different members of the writer's party and to himself, during both summers, and facilitated the geological work in every way in their power.

During the summer of 1911, the geology along the Boundary line south of Porcupine river, was mapped from Orange creek at latitude $66^{\circ}10'$ north to latitude $67^{\circ}00'$, a distance of about 58 miles. In 1912, the writer commenced work at Porcupine river at latitude $67^{\circ}25'$, and worked south, a distance of 28.8 miles, to latitude $67^{\circ}00'$ where mapping had been discontinued at the close of the previous season. Camp was then moved southward to Orange creek, traversing longitudinally in so doing, the entire belt worked during 1911. Geological work was then resumed and continued to Yukon river, a distance of 104 miles from Orange creek.

Due to the short summer season at this northern latitude, and owing also to the fact that so much time was necessarily consumed each year in travelling to the area to be investigated and returning therefrom, only about 65 days in 1911 and 80 days in 1912 were spent actually in the field of work, and these included a number of days during which climatic conditions