

was a strangely refreshing sight for eyes which had almost forgotten to associate with mountains aught but rock, detritus, and snow.

My delight was still greater when I reached the broad grass-covered ridge which at an elevation of about 12,380 feet forms the watershed. A grand panorama spread out before us, comprising to the south and south-east a long line of snow-clad peaks which belong to the western To-lai-shan range, and with their drainage give rise to the Po-yang Ho (Fig. 220). The wide gravel bed of the latter spread itself in the valley below us. Some particularly striking massifs to the south-east, bearing big beds of snow on their slopes, proved subsequently to attain heights over 19,000 feet, as ascertained by clinometrical observation. Westwards we were particularly glad to be able to recognize a number of peaks of the To-lai-shan and of the northernmost range, which had been sighted from our plane-table stations above Ch'ang-ma. So it was possible for the Surveyor to complete the mapping of a good deal of interesting ground which so far had been entirely a cartographical blank.

Tu-ta-fan proved, in fact, quite an ideal 'hill station.' Amongst other orographical points, it permitted us to make certain that the Richthofen range of the Nan-shan, which with its snow-clad peaks dominates the plains between Su-chou and Kan-chou, has its direct continuation in the bold, but considerably lower, chain which runs north and east of Ch'ang-ma, and through which we had passed in the gorge of Yen-mên-tzŭ. But it was, as subsequent observations convinced me, not merely the lesser height of the western part of the range which would account for its utter barrenness as compared with the part we were now beginning to survey. The change in vegetation, first noticed in such striking fashion on my visit to the Tu-ta-fan, was but an indication of the altered climatic conditions of the whole region into which we were now about to pass near the plateau occupied by the 'Great Wall.' We were here leaving behind the extreme eastern limits of the great arid basin of innermost Asia, and were entering that portion of Kan-su which is affected in its