

at HEYDER's three enormous charts with their complicated system of triangles in all forms and sizes. As fixed points HEYDER had used every single obo to be found in the vicinity. These obos formed a point on dominating hill-tops and heights that could always be clearly seen with the theodolite. Where there was no obo a stone cairn had been built, often as much as two meters in height. The angles between these points were then measured and checked. The whole thing grew into a permanent net of triangles, needing only a couple of astronomically determined points to be able to be inserted in its right place in the geodetic net.

Triangulation, however, is a lengthy business, and we calculated that the surveying work that had now gone on since July 1st would keep us, if it were continued all the way to Ghashun-nor, rather too long in these tracts. I reckoned six weeks' march for the main caravan to this lake; and I now placed a period of nine weeks at the disposition of our topographers. HEYDER needed a month and a half to carry the triangulation as far as the monastery Bayan-shandai-sume; and after a thorough discussion of the matter it was decided that his work should for the present stop at that monastery.

We sat for hours in the magnificent tent of the three Swedes, turning over sheet after sheet of maps. We argued, discussed, compared notes and measured with compasses. I showed my maps of the route to this camp, and HAUDE and DETTMANN explained the astronomically determined points. NORIN's maps were regular masterpieces, with their hypsometric contours and the geology in colour.

The topographical work was thus to proceed in a simpler form from Bayan-shandai-sume onwards, and NORIN and his column were to be given three weeks to finish the route between the monastery and the lake. In case it should prove necessary he was free to prolong this period. I should in any case await their arrival at the Edsen-gol, where we had more than enough to do for an indefinite period.

In the afternoon I had a conference with HAUDE, DETTMANN, HEMPEL, NORIN and LARSON on the subject of staff distribution at the stations, particularly at the Edsen-gol, where we should soon enough be arriving. NORIN declared that he could not do without the splendid help he had in HEYDER and MASSENBACH in making the maps both detailed and exhaustive, and he begged to be allowed to retain them as long as possible. The original idea had been that HEYDER should be put in command of the Edsen-gol station. Now, however, we had to look about for other likely persons for this post, and our choice fell upon ZIMMERMANN and MARSCHALL V. BIEBERSTEIN.

It was further decided that Professor SIU should write to YUAN, who was not very far away, and ask him to come over to our camp to discuss his work on the way to Ghashun-nor and the allotment of work at this lake.

BERGMAN, who had discovered various prehistoric sites on the way, now made rich finds of small elegant flint objects: arrow-heads, knives, scratchers, drills, flakes and cores, which he brought and demonstrated for me.