

when the baggage had rejoined us we moved down to it through a narrow gorge flanked by rocky knolls. This presently debouched into a wide boulder-strewn basin, enclosed on all sides by boldly shaped hills (Fig. 285). Some of these rise about a thousand feet above the level of the basin, for which the mercurial barometer indicated an elevation of 6,660 feet. Near the centre of the basin was found the well, about 8 feet deep, yielding good water in plenty; south of it stood a ruined mud enclosure, and to the north on a low knoll the remains of a small Chinese shrine. Some fair grazing was available for the ponies in the small nullahs descending into the basin, and after the last trying march an extra day's halt was needed by all.

Well of
Ming-shui.

At Ming-shui we had struck the route leading from Su-chou via Shih-êrh-tun (Map No. 40. c. 5) to Hāmi, and also the point whence I proposed to detach Surveyor Muḥammad Yāqūb towards the latter place. By letting him carry a route traverse first along the caravan track from Hāmi and then to the small oases of Tāsh-bulak and Khotun-tam, our previous survey work to the south of the Karlik-tāgh would be usefully supplemented⁷ (Map No. 37. A, B. 3). From Hāmi he was then to proceed to the depression of the Shona-nōr basin where the drainage from the western portion of the Karlik-tāgh finds its end, and subsequently to map the route through waterless desert to the eastern extremity of the Turfān district. Though the caravan track towards Hāmi was likely to be well marked and the younger of our two Chinese, whom I proposed to send with the Surveyor, stated that he was familiar with it, detailed written instructions were needed to safeguard the little party from possible mishap; for experience had unfortunately shown that the young Surveyor, though very estimable and plucky, could not be trusted to carry out exploratory work alone with safety. So there was plenty of work to keep me busy during this short halt, besides resting my injured leg. Strained perhaps by such short attempts at walking as were necessary for the direction of the plane-table work, &c., it had shown little signs of improvement during the month that had passed since our start from Kan-chou.

Surveyor
sent to
Hāmi.

SECTION II.—ACROSS THE EASTERNMOST T'IENT-SHAN

On September 20th both our parties started from Ming-shui after a halt which, in spite of the bitterly cold north wind blowing almost uninterruptedly, had been refreshing for us all. I did not disguise to myself that the last portion of the journey still before us might have its trying parts. My aim was to cross that wholly unexplored eastern extremity of the T'ien-shan which lies beyond the snowy portion of the Karlik-tāgh range and thus to make my way to Bai, which the Russian maps and Mr. Carruthers' survey showed as the last permanently inhabited place to the north-east of that range. Thence I proposed to skirt the northern slopes of the Karlik-tāgh to the towns of Barkul and Guchen over ground comparatively well known. The map of MM. Grum-Grizhmailo and also the Russian Trans-frontier Map marked, indeed, a route derived from native information which might take us in the desired direction from Ming-shui. But as these records showed very considerable discrepancies as regards the positions of the localities named and the distances between them, I was not disposed to place much reliance on such scant indications as they afforded. Still less confidence could be reposed on the local knowledge of our remaining Chinese 'guide', who, indeed, stated that he had once marched with camels from Ming-shui to Barkul, but could not indicate any stages identifiable on the map—where a map was available.

Uncertain-
ties of route.

However, the general direction to be followed lay clearly to the north-west, and this we followed together down the valley from Ming-shui for a distance of over three miles from Camp 213. There the well-marked caravan-track towards Hāmi diverged from the dry stream-bed in a westerly

Snows of
Karlik-
tāgh
sighted.

⁷ See Map No. 37. A-D. 3, 4.