

became still easier after passing, some fourteen miles below Merki-chat, the point where the Kara-tāsh river flows in from the west (Fig. 72). Its volume seemed less than that of the drainage coming from Merki, and as the valley continues its direction from south to north below the junction, the Merki stream may be considered as the true head of the river. But the Kara-tāsh valley gives access to the Kara-tāsh pass, which communicates with the Little Kara-kul basin north of Muz-tāgh-atā and the Pāmirs beyond, as appeared from our survey of 1900; and in view of the importance of this route—the only one which crosses the Muz-tāgh-atā range—the retention of the name Kara-tāsh for the whole valley and river right down to its outflow appears justified.

Defiles
below
Ghijak
stream.

The first patch of Kirghiz cultivation is found close to the Kara-tāsh junction, at an elevation of over 10,000 feet, and there is an increase in the number of fields intermittently sown and alternating with pasture as the valley descends towards the marked bend which a conspicuous massif, snow-covered at the time, forces the river to make to the north-west. From the point where the stream coming from the Ghijak pass joins it, some three miles below the junction with the Kara-tāsh river, the valley bottom widens sufficiently for the arable ground to be almost continuous. The rest of the day's long march, done with camels from the Kirghiz camp near the Kara-tāsh junction (Fig. 74), led through a succession of defiles along the winding bed of the river. Earlier in the season these crossings from one bank to the other would not have been free from risk. As it was, we were able to complete in darkness without mishap these last few miles down to Chimghan-aghzi, where we camped.

Chimghan
valley.

The valley of Chimghan, the mouth of which we had reached here, was found to descend from the south-west and to be remarkably open as far as the view up it extended, a distance of some five miles (Fig. 73). The river draining it was much larger than the Kara-tāsh river where we crossed it above its junction. The volume and colour of its water left no doubt that it is fed by glaciers of considerable size. Though it was impossible to spare time for a survey of the Chimghan valley, the mapping done in the course of my 1900 expedition makes it practically certain that these unexplored glaciers must be situated on the east flank of the great ice-clad range north of Muz-tāgh-atā, which, as the revised results of the triangulation effected in 1900 show, comprises two peaks, above the Kongur-debe and Kōk-sēl glaciers, exceeding even Muz-tāgh-atā itself in height.¹¹ The Chimghan valley showed cultivation along its flat open bottom as far as the eye reached, and we also passed fields with modest arbours for about a mile and a half on the left bank below the river junction. Grazing grounds below the glaciers at the branching head of the valley (Bāsh-chimghan) were said to be abundant, and I saw no reason to doubt the statement crediting Chimghan with over fifty 'Oiliks' or households of more or less resident Kirghiz.

Difficulties
of Kara-
tāsh river
gorges.

From the river junction at Chimghan-aghzi the valley resumes its trend due north, and we had not proceeded on the morning of September 18th more than a couple of miles along it before it turned into an almost continuous succession of tortuous gorges confined between towering rock walls. These defiles appeared to me a worthy Turkestan counterpart of the Hunza river route, only lacking its glaciers. They extended, as the experience of two trying days proved, for a total marching distance of twenty miles. In many places progress through them involved distinct risks, not only for the baggage. Had the river been swollen only a few feet higher it would have been wholly impossible to attempt it. Reduced as its volume then was, the very numerous crossings of the river, as it tossed between sheer walls of rock or conglomerate, could not have been effected without the help of the Kirghiz camels that we had been so fortunate as to secure at Chimghan, and none but such hardy local camels accustomed all their lives to the difficulties

¹¹ See Map 2. c. 3. Regarding the correct elevation, 25,146 feet, of 4/42 N peak triangulated on my first expedi-

tion, in 1900, cf. now *Memoir on Maps*, pp. 6, 64, 109; for peak 15/42 N, 25,350 feet, cf. *ibid.*, p. 121.