

relatively high pass between Atschik-bulak and Luktschin, evidently situated in the mountain-range which Grum-Grachimajlo on his map calls Tschol-tau;\* Ba-bulung, a salt spring with vegetation, encircled by mountains; Atschi-tagh, a region in which wild camels are said to be plentiful; Siksan-bulak (the Eighty Springs), said to be 3 long days' march south-east of Luktschin, the track running through nothing but desert the whole way; Tägirmän-taschi, a mountainous district, three days south-east from Luktschin, where in 1898 a mineral (rock-crystal), is reported to have been discovered which the Chinese employ for making spectacles; Bir-ataj, due west of Siksan-bulak, a spring heavily charged with salt, which wild camels are fond of visiting; Köbrük, one day south of this spring; Julghun-bulak, 3 potaj south-east of the same, with water slightly saline; Saj-bulak, one day south-east of the last-named, which sometimes has drinkable water; Usun-bulak, one day east of the same, with very salt water; Setemse-bulak, one day west of Saj-bulak, yielding salt water at certain times only; Toghrak-bulak,\*\* with fresh water, a long day's journey west of Setemse-bulak. From Altmisch-bulak it is said to be a short day's march northwards to Kuruk-toghrak; thence one day to the east to Ak-bulak; thence one day east-north-east to Otun-nodscha; thence half a day north to Pavane-bulaghi. Ak-bulak is said to yield copiously, but the water is saltier than that of Altmisch-bulak; there too grazing is abundant, and there are plenty of antelopes. Kuruk-toghrak only yields water in years in which there is an abundance of rain and snow. The other two are salt. As a general rule, the springs may be considered to grow saltier towards the east.

With regard to the orography, I gathered the following particulars. The track from Altmisch to Ak-bulak, a day's journey, crosses by an easy pass the mountain-chain which runs north and north-east from the first-named. On the other hand the portion of the same range which lies south of Otun-nodscha is more difficult; horses can indeed be used, but not tame camels. Kuruk-toghrak and Ak-bulak are both situated at the foot of identically the same main chain, which is however lower than the Kuruk-tagh at Budschentubulak, and has no connection with the chain at Singer. Both this range and the one north of Altmisch-bulak are stated to run east-north-east. This last, the southernmost of the middle ranges of the Kuruk-tagh, is said to be bigger than the parallel chains that lie to the north of it. Between the more distinctly marked crests there are said to be several parallel ridges of low elevation, all of them easy to cross. The main chain of the system is believed to pass near Singer, but it too is stated to be broken in several places: for instance, it is possible, I understand, to travel from Altmisch to Singer without crossing over a single pass. North of Ojman-bulak and Bisch-bulak there is stated to be the important, but broken, range of Tschöl-toghrak, clearly identical with Tschöl-tagh. South of Bisch-bulak there is also another broken range, terminating at Otun-nodscha. The country south-east of Luktschin is said to be a complete desert. And just as the spring water grows saltier towards the east, so it may also be said, that in that same quarter the springs grow also fewer, as I indeed

\* That is, Tschöl-tagh or Desert Range.

\*\* All the springs which the Musulmans call Toghrak-bulak bear in Mongolian the name of Tora-buluk.