

Stockholm, Lithographic Institute of the General Staff of the Swedish Army 1905, pages 42—50.

The field maps have been worked out by Colonel H. BYSTRÖM, who has checked them when necessary and possible, with later material. Still, it should be remembered that the original sheets presented to Colonel Byström were drawn by a beginner, for as early as the summer of 1894 I had made some maps of the glaciers of the *Mus-tagh-ata* and in the spring of 1895 I had surveyed in the *Takla-makan Desert* on my way from *Khotan-darya* by *Aksu* to *Kashgar*. Therefore, no doubt, my topographical field work in the *Pamirs* was imperfect. In certain parts, later expeditions may have brought home more accomplished topographical material. But it has not been accessible to me, and in the absence of better material I decided to publish my own maps, which also have the advantage of serving as a direct illustration of my geographical observations.

The journey was accomplished from July 10th to October 3rd 1895. Of this lapse of time, however, only fiftynine days were spent for the journey itself, as I was a guest of the Anglo-Russian boundary commission at *Mihman-joli* from August 19th to September 13th. The length of the journey measured on Colonel Byström's map, will be 1,241.5 km. Though the topographical details of this journey are not quite reliable, still I give in the following description the distances and the rate of rise and fall of every day's march. As the first sheet of my original map has been lost, Colonel Byström, in his construction in two sheets in 1:500,000 of my survey, has made use of Russian and British maps for the stretch *Kashgar-Tokusak*, which I travelled June 10th, 1895. On his map, the northern sheet of the *Pamir* map in my Atlas, this distance comes to 23.8 km., and the direction is S. W. *Kashgar* being at 1,304 m. and *Tokusak* at 1,359 m., the rise is 55 m. and the rate 1:433.

The *Kisil-su* is crossed and the whole road goes through villages, fields and gardens. Many *ariks* or irrigation canals are passed, all of them bringing water from the *Kisil-su*.

On July 11th our road proceeds nearly westward 29.5 km. to *Upal*, where the height is only 60 m. above *Tokusak*, or 1,419 m.; the rise being therefore as 1:492. Nearly half the way went through gardens and fields belonging to *Tokusak* and its neighbouring villages. The rest of the way crosses a sandy plain, sometimes interrupted by red loess-formations, which are also common in *Tokusak* and *Upal*. The brook of *Upal* comes from *Ayag-art*, a valley leading to a pass, and situated north of *Ulug-art*. *Upal* is said to have 2,000 *wilik*, houses or families, which seems to be exaggerated. Wheat, barley, rice and melons are the principal products. The rice plantations were said to be partly irrigated by an *arik* from *Gez-darya*, south of our route.

The rainy season had just set in and it rained the whole day and part of the next. In the afternoon a *sil* came down through the bed with enormous quantities