

CHAPTER VII.

GEOGRAPHICAL REPORT.

WHEN the Government of India had decided to send a diplomatic Mission to the Atálik Ghází of Káshghar it was determined to appoint an officer of the Indian Survey Department to accompany the expedition as Geographer; and Captain Henry Trotter, Royal Engineers, of the Great Trigonometrical Survey of India, was selected for the post.

The preliminary arrangements were left by Mr. (now Sir Douglas) Forsyth entirely in the hands of Captain Trotter, subject to such advice as he might receive from Colonel Walker, R.E., the Superintendent of the Great Trigonometrical Survey. The only restrictions insisted on were that everything was to be arranged for mule carriage, and the survey baggage was to be limited to three mule loads, also that the services of two khalasies (carriers) only could be allowed to assist generally in the work. Abdul Súbhán, a Sub-Surveyor in the Topographical Survey Department, was subsequently permitted to accompany Captain Trotter to act as recorder and general assistant. Two of the Great Trigonometrical Survey "Pundits"* with their assistants were also placed at Captain Trotter's disposal.

It has been found convenient to arrange this Chapter in the shape of a General Report by Captain Trotter, to which is added an appendix shewing in some detail the results of the observations, astronomical, meteorological, hypsometric, and magnetic, taken by that officer and his assistants. The appendix includes some observations by Captain Biddulph on the Ling-zithung plains and on the road to Maralbáshi, and also contains detailed accounts descriptive of the various routes followed by members of the Mission, as well as of others compiled from native information, principally by Dr. Bellew.

CAPTAIN TROTTER'S REPORT.

Introductory.

THE first point to be decided was as to the instruments and equipment to be taken, and this was an anxious matter; it was impossible to say what sort of a reception we should meet with in Yárkand, and whether I should be allowed to use openly any survey instruments at all; I had also to bear in mind the, to me, totally new condition, that my instruments would have to be packed and carried on mules, and taken over the highest passes in the world. (In the Indian Survey Department delicate instruments such as theodolites, &c., are always carried by men, and even in the survey party attached to the Abyssinian Expedition this rule, I believe, was never departed from.) This condition imposed the necessity of taking only moderate sized instruments and such as were not likely to be injured by violent shakes and jars. Fortunately among the instruments of the department there was one that had already done good service at Magdála, *viz.*, a 6-inch Transit Theodolite, with micrometer eye-piece, by Troughton and Simms. On Colonel Walker's recommendation I took this as my mainstay for astronomical observations, and I may here add that I have used it constantly throughout my absence from India, and have been very much pleased with its performance. A few slight

* The term by which it has been customary to designate natives employed by the Great Trigonometrical Survey Department on Trans-Frontier Explorations.