

use them, I had sought to acquire the requisite knowledge. In 1893, when home on sick leave from India, I had begun the study of astronomy and surveying under the guidance of Mr. Coles of the Royal Geographical Society. On several voyages to and from India I was able, by the kindness of many of the P. and O. Company's officers, to practise regularly the taking of sights at sea. At the Trigonometrical Branch of the Survey of India, Dehra Dun, I devoted some time to these studies under Colonel St. G. C. Gore, R.E., to whom I am deeply indebted for valuable instruction and assistance.

To determine the probable error in longitude arrived at from observations of moon culminating stars, a method of ascertaining longitude not the best, but the next best, irrespective of all but local time, I took two series of observations with a six-inch transit theodolite, one series by the kind permission of the Astronomer Royal at the Royal Observatory, Greenwich, and the second at Lucknow, where I was quartered for some time. These observations, but especially those taken at Greenwich, proved of very great value, and I was able to judge with close approximation what degree of accuracy might be expected. The result of five nights' work at Greenwich gave an error of less than one second, and the error at Lucknow was about five seconds of time.

Besides learning astronomy and surveying, I devoted much time to the study both of the theory and the practice of medicine and surgery, for, to my regret, I knew very little about them.

The south-eastern part of the great Central Asian plateau, known to Ladakis and Tibetans as Chang Tang, and to Europeans as Tibet, presents an enormous field for exploration and surveying, but no portion of Asia is more difficult to penetrate, and, owing to the intense dislike of the natives to strangers, the difficulty of