

The most important points in Cunningham's Kara-korum are, that he regards the system in connection with the Bolor Mountains, as running from east to west; that it is only one chain, the eastern continuation of which, beyond the Shayok, is unknown; the Kara-korum Pass is situated in the Kara-korum Range and not in the Kwen-lun; and that the northern regions of the chain also are nearly unknown.

The beautiful map of JOHN WALKER, a part of which is shown on Pl. XLIII,<sup>1</sup> shows the Kara-korum as a nearly semi-circular range with its convexity towards the north, and the Kara-korum Pass in its vertex. To the S. E. this range is interrupted, and only N. E. of Panggong-tso there is a range that has the same direction. The Nubra River is running between two considerable ramifications from the Kara-korum Range, both directed to the S. E. The range between the Indus and lower Shayok is called Kailas or Gangri Range. The Singi-kamba or uppermost Indus has one range on each side, both stretching N. W.—S. E., and the Sacred Kailas is represented without connection with any other mountain. The source of the Indus is not on the Kailas, but on the N. E. slopes of the range between the two Indus branches. The source of the Satlej is Tso Mapham or Manasarovar and Tso Langak or Rakas Tal. Cunningham has illustrated his orographical views with a »Section through the Mountain Ranges of the Panjab, from Kangra to Karakoram«, on which he shows the Trans-Tibetan or Karakoram System as a separate range between Rudok and Pamir (Pl. XLIV).

CUNNINGHAM'S journeys in Ladak were accomplished in the years 1846 and 1847. Dr. THOMAS THOMSON travelled in 1847 and 1848. The journeys of the latter mark an epoch in the exploration of these regions so difficult of access and inaugurate a new era in our knowledge of the Kara-korum Mountains. Thomson was a scientifically trained man and a geologist of high rank. He had already made some excursions to Skardo, the Sabu valley, Digar and Nubra, when, July 19th., 1848, he left Leh for a new visit to Nubra *viâ* the Kardong Pass, and then to the Kara-korum Pass. If we don't count CHERNICHEFF, he may be said to be the first European who ever reached this important point on the great continental water-parting.<sup>2</sup>

I will now quote a few of the most important passages in THOMSON'S book.

Judging from the horizontally stratified white clay, »the lacustrine formation of Karsar«, which is at least a thousand feet thick, — and from the similar clay he

<sup>1</sup> Its title runs: *Map of the Punjab, Western Himalaya, and adjoining parts of Tibet from recent surveys and based upon the Trigonometrical Survey of India, Compiled by order of the Hon<sup>ble</sup> Court of Directors of the East India Company by John Walker, 1854.*

<sup>2</sup> Just after returning from his journey, Thomson wrote: »The natives of Ladakh have no name for the extensive range of snowy mountains which runs from E. S. E. to W. N. W. . . . The name Karakorum is confined to the range N. of the table-land, and in particular to the pass which I ascended. . . . It is curious, that though much lower than the range farther south, it is in fact the dividing range between the central or Yarkand basin and the basin of the Indus, several streams breaking through to get to the Indus.« *Journal R. G. S.*, 1849, p. 25.