

orographical connection is so doubtful. Confining our attention to the particular fact, that these ranges lie farthest north of all the border-ranges of Tibet, it will be sufficient in the meantime to bear in mind, that they actually do decrease in altitude from west to east. And if we look at the purely mechanical aspects of the case, it is evident that the altitudes must be greatest in that part of this vast upswelling of the earth's surface in which the folding and side-pressure have been most powerfully and most energetically exerted, and that is in the extreme west. If now we disregard the many different geological ages of the various mountain-ranges, the varying degrees of denudation activity in different parts of Tibet, the unequal distribution of the rainfall, with its attendant more or less powerful erosion — if in a word, we disregard several intrinsically important factors the investigation of which would require study in many directions extending over several decennia, and confine our attention solely to the *mass*, that is to say the cubic contents of that part of the earth's crust which, duly uplifted and pressed together, finally resulted in the protuberance of the solid body of the earth which forms what we now call the Tibetan highlands, and which we may suppose was originally quadrilateral in shape, we find that this mass or stupendous segment of the earth's crust has been more intensively and more energetically pressed together in the west than in the east. In the west along the route from Srinagar to Jarkent, for instance, the breadth of the swelling is only about two-fifths of what it is between Kara-koschun and Sikkim. If we assume that the mass in the east was originally equal to the mass in the west, it is manifest that the ranges in the latter quarter must be now both higher and more closely compressed together than in the former, and such is indeed actually the case. I do not of course pretend that this theoretical view of the course of events agrees in all particulars with the actual occurrences. It may well be probable, that the latitudinal valleys in the west are in general only two-fifths as broad as they are in the east, but on the other hand it would be absurd to suppose either that the mean altitude of the crests of the ranges in the west, or that the mass of those same western ranges, as compared with those in the east, is as 5 to 2, particularly as such a statement would run directly contrary to all experience. We have also to take into account the effects produced by all the factors which I recently put aside. The interior of Tibet may be looked upon as rigid and immovable; but in the younger border-ranges mountain-building is still going on, and there too the counter-agency of erosion is most actively at work. It is precisely in virtue of the relatively vigorous activity now operative in the Himalaya, that that mountain-system occupies such an exceptional position in relation to Tibet, and it is in the eastern part of the Himalaya that we find its loftiest summits.

It is impossible to say anything with regard to the absolute altitudes, proceeding from west to east, in the mountain-ranges that run right across Tibet. Are they as a rule lower in the direction indicated, as we should indeed expect from the observations which I have just made, or are they altogether irregular? This question can only be answered when the ranges in question have been mapped and traversed along several lines. At the present moment it is impossible with any degree of certainty to give an answer to the above question, even for the region embraced between 31° and 39° N. lat. and 86° and 92° E. long.; for even though