

that the southern slopes of the chains I have spoken of would be gentle and long, and smoothed and filed by the ice-stream, while the northern slopes, as being on the sheltered side, away from the ice-stream, ought to be almost precipitous. This rule holds good, for example, for the region of the primitive rocks that were glaciated in the Scandinavian peninsula. But I hasten to add, that it would be rash to compare the Scandinavian glacial region directly with the Tibetan. The former has been thoroughly investigated, especially by Swedish geologists; it is a particularly favourable field for glacial investigations, because the traces of the icy covering are to be seen everywhere unimpaired and accessible to the light of day. There is no need to travel very far from Stockholm to find the most beautiful examples of glacial striations, moraine ridges, and erratic blocks. The abrasive forces of the atmosphere have not had much effect in levelling down, at any rate they have not succeeded in planing away, the traces of the old ice-covering. But in Tibet the conditions are very different. I have already pointed out above, that the results of my investigation, with the view to discovering evidences of former glaciation, were entirely negative. There do not exist the smallest grounds for believing, that any such glaciation ever extended over the whole of the Tibetan highlands, or that its plateaus were ever buried under a compact ice-sheet of the same character and appearance as that of Greenland. Indeed, if we do allow ourselves to suppose that the glaciers which exist in Tibet at the present day are still diminishing, then we must also restrict our conception of the former glaciation of the country to its highest swellings, that is to say, to the regions in immediate proximity to the crests and peaks which still carry perpetual snow and glaciers. It is for this reason that I say it would be rash to compare Tibet with Scandinavia, and for precisely the same reason the external appearance of the mountains around Naktsong-tso lends no support whatever to the supposition, that an ice-stream once flowed from the mountainous regions south of the lake. Had an ice-stream of the same extent and thickness as that of Scandinavia spread itself out from the south to the north over the interior of Tibet, the Naktsong mountains would have their southern slopes flat, rounded, and smoothed, while they would be steep and rugged on the north, and this altogether independently of the dip of the strata and the strike of the outcrop. But if, on the other hand, we confine ourselves to the supposition of purely local glacial centres, from which glacier-arms more or less considerable proceeded, then there no longer exist grounds for astonishment at the relief forms which the Naktsong-tso mountains now exhibit. These mountains are, it is true, of relatively insignificant altitude: I estimate that the ranges on the northern shore of the lake reach an elevation of 300 m.; the others, both beside the lake and on the islands, are still lower. At any rate they are protected, and would have been in even a yet higher degree protected formerly, against the supposed ice-stream coming from the south-west, for it would only have been able to cover the very lowest mountains, for instance those which now form the small islands beside the northern shore. These are indeed equally rounded on all sides, a fact which led me to compare them to dolphins' backs. But the higher mountains were able to offer effective and unconquerable resistance to the ice-stream. This is in a particular degree true of the most southerly of the parallel ranges which are piled up on the large