

and their left sides, which faced our way, were heavily charged with morainic gravel and full of marginal fissures. Nevertheless there were a couple of smaller hanging glaciers wedged in between them; so that this mountain appears to possess, at any rate in part, an ice canopy of the same kind as that of the Mus-tagh-ata. As it rained and hailed a good deal during the 18th August, we had an opportunity to observe directly the active renewal which took place on and around the great glaciated mass. Whilst it was raining in the immediate vicinity of our camp, it was snowing simultaneously on the mountain, and during that one day alone its firn basin must have received a very appreciable augmentation. The front of the nearest glacier-arm, which approached quite close to us, may have been only some 50 m. above the camp. On bright and sunny days it must melt to such an extent that the glacier stream must have a considerable volume all summer through. On cloudy days it is of course smaller; but then, on the other hand, as on the occasion of our visit, it often rains or snows, so that the stream swells to such an extent as to be anything but easy to ford, even so high up as we were. On the 18th August it received such considerable additions from every direction that it rolled down the glen in one solid flood, emitting a hollow rumble as it hurried past. The rain and hail clouds came from the south. It makes a curious impression upon you when you witness one of these violent hail-storms sweeping across the face of the country. You hear in the south the trickle as of a waterfall; the sound approaches nearer and nearer, increasing in strength, while the ground becomes whitened over directly underneath the oncoming clouds, just as though it were being painted with a gigantic brush. In the next moment the tempest bursts over the camp with a noisy pattering, and the hailstones pelt down with such force that you become extremely careful how you expose your hands and face to them. All the mountains of the vicinity become swallowed up in the impenetrable mist, and it is only through chance breaks in the clouds that you see in glimpses how they are literally pouring out their contents with prodigious generosity over the firn basins of the great glaciated mass.

This atmospheric moisture can scarce have any other origin but the Indian Ocean, and is brought by south-westerly and westerly winds. The clouds no doubt discharge the greater part of their contents on the southern slopes of the Himalayas, but the moist higher strata of the atmosphere sail tolerably unimpeded above the summits of that great protective bulwark, and subsequently divide and distribute themselves over the Tibetan plateau in such a way that the moisture diminishes progressively towards the north. As a general rule it may be said, that it is the central, and at the same time highest, parts of the country which receive the minimum amount of rainfall; while the maximum quantity falls in its peripheral regions, where so many mighty rivers, to wit the Hwang-ho, Irawadi, Brahmaputra, Indus, and even in part the Tarim, have their origins. The rainfall which descends upon the central uplands of the plateau, which are divided into an immense number of self-contained drainage-basins, is therefore so much deducted from the masses of water that reach the oceans by means of these rivers. We have already seen, that where it falls as rain, it penetrates straight down into the ground and disappears, or — but that is exceptional — reappears in the form of springs, while in part it runs