

the mountain Tugdschar, though this applies, I have no doubt, to some other locality in the vicinity.

On the Scha-gandschum certain details now became noticeable, which we had not perceived before. The great snowy mass resembles in shape a gigantic animal *couchant*, with a sharply sculptured, arched back. Its summit is crowned by certain more conspicuous peaks, and it possesses very well-marked, rugged flanks; but the culminating summit, the very highest eminence, rises but little above the adjacent parts of the »back». Immediately west of the Scha-gandschum there is a gap in the range to which its great mass belongs, and there too there exists, I dare say, a convenient pass. West of that gap the range is less compact and less regular in its construction, for it sends out spurs and offshoots to the north. The strips of snow which impart to the range a streaky appearance are certainly not derived from perpetual snow; that range is, I have no doubt, free from snow during the greater part of the summer. On the other hand, the white mantle that clothes the whole of the principal mountain-mass is perpetual snow, and through it the black cliffs project at the steep places. From the main body of the mountain several fairly short spurs and offshoots reach out north and east, rounded in outline and in part covered with snow. The farther we advanced towards the west, the more evident it became, that ice-formations were not altogether absent on this mountain, for on its western flank we made out four distinct, though extremely short and rudimentary, glacier arms, which stream down by so many separate hollows from their common dome-shaped *firn* origin. They were all covered with snow; but we were able to make out distinctly their side-fissures, and also their terminal moraines.

On our right we perceived a gap in the northern range, and towards it runs a broad glen-opening that starts in the southern range. One of the Cossacks, whom I sent up to it to reconnoitre, declared, that it was a transverse glen cutting right through the range. After that we frequently crossed over very broad and shallow gravelly beds, in which were one or two very thin and brittle ice-sheets. These channels were evidently of the kind that only carry water after heavy rain or snow, but then swell to a considerable volume; though they drop again as swiftly as they rise.

After marching round yet another and relatively low portion of the northern range, which however consists for the most part of bare disintegrated crags, we reached a big watercourse embraced between steep escarpments, which cuts its way through the northern range in a rather narrow gorge in a north-westerly direction. The mountains which inclose this gorge or glen are however so slight that they hardly deserve to be called anything more than hills. At that time there was neither water nor ice in the bottom of the watercourse; but its energetic modelling warrants the conclusion, that in summer, after rain and when the snow is thawing fast, it must serve for the passage of considerable volumes of water. At only one spot in its bed did I observe a tiny spring trickling out; but the rivulet soon died away amongst the gravel. Shortly afterwards this watercourse is joined by a second similar watercourse, which likewise issues out of a transverse glen. Thus between the two glens lies a perfectly detached portion of the northern range.

It was not far below this point that we again fell in with the caravan, encamped in an expansion of the valley, amongst marshes and numerous springs, and