

»It seems to have retreated somewhat rapidly of late years.» In June the velocity of the Hoh Lumba Glacier was found to be a quarter of a foot in 24 hours. Its inclination was  $2^{\circ} 32'$ . The surrounding peaks are of granite. Mount Sosbon is gneissoid.

About the Kara-korum watershed on the south side of the Hispar Glacier she says:

In our last two expeditions we have, I might say, attacked it repeatedly, partly because the cols and passes culminating the glaciers we were investigating found their source in it, and partly because we had a hobby for finding a new pass, over which a caravan could be taken to Hispar. I am now of the opinion that the only available coolie route from either side is the Nushik La.

The Hispar Pass is given 17,475 feet and the Alchori Col 17,622 feet. At the head of the Chogo Lungma is the »Pertab Sing La» 19,800 feet; »above this is a fairly good route to Nagar».

The following observation is of interest.

We have thus either climbed or thoroughly examined eight depressions in the mountains forming the south border of the Hispar, and found them with one exception inaccessible from the Hispar or north side. These observations show very fully that in this region of the Kara-korum, the northern slopes are more precipitous and less accessible than the southern.

The Haramosh Glacier rises 3,400 feet in  $11\frac{1}{2}$  miles. The Upper Chogo rises 5,000 feet in 9 miles. The Basin Glacier is one of the upper feeders of the Chogo Lungma and forms a beautiful icefall at the junction with the latter. At the head of the Basin Glacier they climbed a col, 19,260 feet high, which they called Bhayakara Col. The Moraine Glacier is another feeder from the Serac Col, 17,091 feet.<sup>1</sup> About the Tippur Glacier the following observation should be noted.

It has evidently been advancing for several if not many years, for it has built entirely around the part outside the gorge a high and massive terminal moraine, above which the ice towers from fifty to a hundred feet, and against which it crowds, overhanging it in many places. At the extreme end and at one other point the ice has broken over its moraine barrier, and a line of séracs projects half-way down the side of the latter.

The moraine is 415 feet above the village. The glacier is adding to it rapidly, and is at present in an aggressive mood. Formerly it reached considerably farther down the valley than now.

The Chogo Lungma is at 1,184 feet from Arundo; it rises from 9,500 feet to 19,000 at the base of the col and is 30 miles long. Its lower section is covered with »mud, sand, granite, conglomerate, and shaly detritus» of all sizes; it has no terminal moraine worth mentioning. The glacier has been receding since GODWIN-AUSTEN saw the ice encroaching on the Arundo terrace, which it did not touch in 1902.

»A quarter of a mile above the end the side of the tongue has receded more than two hundred feet from the high right lateral moraine.» Other signs prove that

<sup>1</sup> *Ice-bound Heights of the Mustagh*. London 1908.