

those of another specimen have very sharp edges and contain splinters of gypsum, though these latter were probably *in situ*. Possibly the explanation of the occurrence of rounded grains, intermingled with sharp-edged ones, which appears to characterise the Desert of Lop, may be this: the former come from the most eastern parts of the Kuruk-tagh and the Bei-schan, and consequently have a very long way to travel before they reach the Desert of Lop, while the latter are derived from the western Kuruk-tagh, and thus have travelled but a relatively short distance. And support is lent to the view, that this really is the cause of their contemporaneous presence, by the general summary given above. If we compare (2), (3), (4), and (5), we shall notice that the smoothness and roundness of the sand-grains increase regularly from north to south: in the extreme north they are not rounded at all, at Camp. No. III they are sharp-edged, at bajir No. 32 not especially rounded, and at Tschapan-kaldi, in the extreme south, they are described as beautifully rounded. The last-named are derived from the mountainous regions in the extreme east-north-east and north-east, where the wind-relations are the same as those which obtain in the Desert of Lop. Specimen (4) may come from the region east of the Alt-misch-bulak; and specimens (3) and (2) from the extreme west of the Kuruk-tagh, e. g. the region of Budschentubulak and Sugetbulak. But on this point we cannot feel quite certain until we have a large number of specimens taken along one straight line running right across the desert from the one side to the other, beginning at Ullugh-köl and proceeding west-south-west all the way to Karghalik; but practically it would be almost impossible to make such a collection.

With regard to the size of the grains, the descriptions given above furnish the following summary: —

From Tus-alghutsch they are, with few exceptions, less than 0.5 mm.

Bajir No. 32 — for the most part greater than 0.5 mm.

In the desert immediately west of the Kerija-darja, 0.2 to 0.3 mm.

In the west of the Takla-makan, the laminæ of mica are 0.5 to 2.0 mm.

In the middle of the Takla-makan Desert, seldom greater than 0.2 mm.

In the western Takla-makan, not seldom 0.2 mm.

In the same desert, immediately east of the Jarkent-darja, frequently less than 0.1 mm.

At Lajlik, generally not more than 0.2 mm.

At Ordan Padschah, generally not more than 0.2 mm.

Although these specimens were gathered at hazard, nevertheless they appear to prove pretty conclusively, that the sand grows finer from east to west; and this is indeed just what we should expect, seeing that the desert is one in which the prevailing wind — the agency by which the movements of the sand are exclusively regulated — blows from east to west. The specimen of rounded mica, 2 mm. in diameter, which comes from the western part of the Takla-makan proper, is only an apparent exception. The laminæ of mica have been sifted by the wind, and are only accumulated on the steep leeward sides of dunes that face the west and south-west, as they do in the Desert of Tschertschen. They occur within a very circumscribed area in the vicinity of Camp. No. IV., situated west-south-west of the Tusluk-tagh and Tschoka-tagh. And equally whether they are derived from any