The sand of Khotan differs strikingly from the sand specimens collected by me in the vicinity of the Kia-yü-kuan Gate, and around An-si-fan and Sha-chou which show rounded, smoothed and polished grains. Not only the quartz but also the shales and the carboniferous limestone grains are of similar size; mica is almost completely absent; of dust there is none here. It is clear that in the drift-sand of the Kan-su Gobi the river-mud does not play as large a part as in that of the Khotan region, but that, particularly in the vicinity of Sha-chou (Tung-huan), the decomposition of the desert subsoil has supplied the sand of polygenous substance and uniform grain. Near An-si-fan the sand is more angular, and rare mica scales are found in it; composed of otherwise similar minerals the riverine angular sand shows there more cohesion, i.e. more clayey admixture (comp. *Gróf Széchenyi utazásának tudományos eredményei*, i. p. 483; German edition, i. p. 522).

III.—DANDĀN-UILIQ.

Specimen No. 1.—Sand from Buddhist shrine D. II, sticking to stucco reliefs found 3–4 ft. above floor.
Specimen No. 12.—Sand sticking to MS. from ruin D. VII.
Specimen No. 13.—Sand with decomposed paper from the floor of shrine D. X.

The specimen No. 1 is relatively large-grained sand containing a good deal of gypsum particles and reed fragments. The sand grains are mostly angular quartz flakes; half-rounded grains as well as magnetite and pyrite are rare among them. The grains vary about the average diameters of 0·047–0·07–0·14 mm. The specimen contains fine dust with a diameter of 0·0035–0·0095 mm. The coarser grains consist chiefly of mica scales.

The fine sand from the Dandān-Uiliq ruins, in view of its angularity, and still more on account of its large mica contents, must be considered river deposit, which has scarcely as yet undergone wind transport, and which has been carried into the ruined structures from immediately adjoining ground. It can be distinguished at a glance from true drift-sand. This sand is homogeneous with the material composing the strata of loess mud at Yōtkan, though its grains are far larger.

The sand of specimens Nos. 12, 13, which stuck to the MSS. lying on the floor of ruined structures, does not differ materially from the upper sand. It contains angular quartz grains, 0·0685–0·14 mm. in diam.; plentiful mica, 0·135–0·20 mm. in diam.; also fine dust, with diameters 0·004–0·014–0·058 mm. Worn grains of quartz are very scarce in it. The fibres of the paper rags bind the sand into a thin crust resembling felt. The sand sticking to the paper in specimen No. 13 contains fragments of tree leaves, turned brown, and plant fibres. Small pieces of straw or grass are also found in it. It appears that moisture has reached this vegetable material.

There is no difference between the finer portions of the upper and lower sand specimens from Dandān-Uiliq. Even in the finest dust there is so much mica as to place its character as river deposit beyond all doubt. The wind could have transported it only for a very short time, and from a very short distance.

IV.—NIYA SITE.

Specimen No. 8. Sand found in wooden tablet, from N. XV.
Specimen No. 14. Sand sticking to ancient guitar, from N. XII.
Specimen No. 20. Sand sticking to wooden tablet, from N. IV.

All three specimens contain identical sand, plentifully mixed with vegetable fibres, straw, grain-husks, &c. The sand is composed of angular quartz grains and mica scales. In No. 8 fine quartz grains prevail, varying from 0·009 to 0·047 mm. in diam. The larger quartz and biotite grains measure 0·09–0·14 mm. in diam. In specimen No. 14 the sand adheres in small brownish clumps and scales. No. 20 shows coarser grains with much mica. The diameter of the larger quartz and mica grains varies between 0·095–0·38 mm., that of the finer grains between 0·047–0·095 mm.

The sand from the Niya Site closely resembles that of Dandān-Uiliq, and is also river deposit which the wind has scarcely yet carried and abraded.