gypsum; the grains not rounded; strongly calciferous; a heavy percentage of magnetite.

From the Desert of Gobi on 30th January 1901 — fine, reddish yellow drift-sand, consisting principally of quartz, felspar, close black-grained rocks, and mica; most of the grains rounded, moderately calciferous, strongly impregnated with magnetite. The same day I took from a »jardang» terrace another specimen of reddish yellow, fine powdery sand, the grains predominantly round, moderately calciferous, with a large percentage of magnetite.

On the 5th February 1901 I took the following remarkable specimen of fine, rather round and polished gravel out of a very thin layer lying upon low dunes of drift-sand. It consists of 6.5 per cent of grains of quartz, and silicious slate, together with some eruptive rocks of younger age, exhibiting a semi-porphyritic structure. The grains consisted of 65 per cent. bigger than 3 mm.
and 35 » » less than 3 mm.

On the same day I took a specimen out of a high detached jardang, forming a table-like elevation — yellow powdery sand, strongly calciferous, no perceptible trace of magnetite.

On 7th February I selected a specimen from the clay terrace at Toghrak-kuduk, consisting of (1) reddish, calcareous clay; (2) cemented sand, consisting principally of grains of quartz and felspar less than 0.5 mm., and strongly calciferous.

From the distinctly marked terrace which borders on the north the part of the Desert of Gobi that I crossed over, I took on 9th February 1901 a specimen of yellowish brown dust, which Aminoff considers, and rightly, to have belonged to a loess formation; it consists principally of grains of quartz but slightly rounded.

The specimen of fine gravel or coarse sand described next came from the clay desert which we crossed on the 18th February 1901. It contains:

(1) well-rounded grains of quartz, very often with their surfaces slightly abraded by the wind;

(2) similarly rounded grains of silicious slate;

(3) a few grains of felspar;

(4) crystals of gypsum, showing facies of (110), (010), and (111); also a twin crystal.

The grains are 71 per cent. bigger than 2 mm.
and 29 » » less » » »

The quartz + felspar = 24 per cent.
Silicious slate = 57 » »
Gypsum = 19 » »

Here it may be convenient to adduce the information which Prof. De Geer and Aminoff have given me regarding the vertical section, alluded to in the chapter of Lôu-lan where it is also reproduced. The section belongs to the 6th March 1901, and is that of a deposit of Lop sediment. The bottom layer is of a yellowish grey colour, is rather strongly calciferous, but contains no appreciable proportion of magnetite. The second layer is light grey, is rather strongly calciferous, and contains fragments of finer grey matter. The third layer is also light grey and rather strongly calciferous. In this connection it is especially interesting to notice the evidences of organic life;