One specimen from Khādalik, now numbered v (labelled 'plaster stucco', while No. iv is labelled 'fibre stucco').

This is plaster of Paris; and, though hard, does not contain, as some of the burnt plaster from Khotan did, any calcium oxysulphide produced by a reducing process from the sulphate.

One specimen from Khādalik, now numbered vi (labelled 'soft red').

This seems to be loess which has been slightly burnt.

One specimen from Kara-sai, now numbered vii (labelled 'plaster stucco').

An extremely hard specimen of plaster of Paris. It contains no calcium oxysulphide, while the percentage of water present is quite normal, namely 12·21 per cent. lost at 100° with a total percentage of 21·78. This specimen of hard stucco from Kara-sai presents some features of peculiar interest. It is difficult to explain how it has come to be so much harder than ordinary plaster casts of to-day. The analytical figures do not account for this phenomenon. I here compare the results of an examination of the Kara-sai plaster with the theoretical percentages of normal plaster of Paris:—

	Kara-sai.	*Gypsum.*
Lime (CaO)	32·16	32·56
Sulphur trioxide (SO_3)	45·25	46·50
Water (H_2O)	21·78	20·93
Silica, Iron oxide	0·71	

The only difference between these numbers lies in this, that there is a slight deficiency of sulphuric acid in the Kara-sai specimens, which therefore contain about one per cent. of lime-salts other than the sulphate. The traces of silica and iron oxide present are quite negligible. The only explanation which I can offer of the peculiar hardness of the Kara-sai plaster is that it has been gently burnt after having been fashioned into form. This burning must have been intentional, not accidental, for there is a coating of pure white plaster of Paris, quite soft, upon the grey surfaces of the little six-petalled flowers which decorate the specimen. I take it that the maker of the ornament, not being satisfied with the dull greyish hue of his work after burning, painted it over with a cream of pure plaster of Paris, in order to restore the whiteness of its aspect.

One specimen from Ak-terek, now numbered viii (labelled 'hard red [burnt?] stucco').

This specimen closely resembles a sound red terra-cotta. It is in reality a burnt clay, and contains practically no calcium sulphate and very little lime in any form, but much ferric oxide (Fe_2O_3).

One specimen from Ming-oi, now numbered ix (labelled 'fibre-stucco, unburnt').

This specimen contains no notable amount of calcium sulphate and no calcium oxysulphide; in fact there are little more than traces of sulphuric acid, but some calcium carbonate is present. This resembles some sorts of calcareous plaster more nearly than any other specimen of this series, but it contained much clayey loess.

One specimen from Ming-oi, now numbered x (labelled 'fibre-stucco, partially burnt').

Rather fine loess, partially burnt.

One specimen from Ming-oi, now numbered xi (labelled 'fibre-stucco, burnt hard').

This is essentially burnt loess. If the sulphuric acid in it is all present as calcium sulphate and the rest of the calcium be regarded as in the form of carbonate, then it contains:—

Calcium sulphate 1·83 per cent.
Calcium carbonate 0·62 per cent.

Part of the calcium carbonate occurs in the form of minute crystals.

One specimen of fibre-stucco from Tun-huang now numbered xii.

This is a clayey loess, commixed with animal hairs as well as with vegetable fibres.