

parison. These are Púz, Tarz, Gújard, Aspaj, Kuh-i-Gabr, Dahnah, Búghín, Bassab, Radk. The position of Kuh Banán is stated to lie between Bahabád (a place also mentioned by Yáqút as producing *Tutia*) and Ráví, but this does not help us, and for approximate position we can only fall back on the note in Mr. Abbott's field-book, as published in the *J. R. G. S.*, viz. that the *District* lay in the mountains E.S.E. from a caravanserai 10 miles S.E. of Gudran. To get the seven marches of Polo's Itinerary we must carry the *Town* of Kuh Banán as far north as this indication can possibly admit, for Abbott made only five and a half marches from the spot where this observation was made to Kermán. Perhaps Polo's route deviated for the sake of the fresh water. That a district, such as Mr. Abbott's Report speaks of, should lie unnoticed, in a tract which our maps represent as part of the Great Desert, shows again how very defective our geography of Persia still is.

[“During the next stage to Darband, we passed ruins that I believe to be those of Marco Polo's ‘Cobinan’ as the modern Kúhbenán does not at all fit in with the great traveller's description, and it is just as well to remember that in the East the caravan routes seldom change.” (Captain P. M. Sykes, *Geog. Jour.* X. p. 580.—See *Persia*, ch. xxiii.)

Kuh Banán has been visited by Mr. E. Stack, of the Indian Civil Service. (*Six Months in Persia*, London, 1882, I. 230.)—H. C.]

NOTE 2.—*Tutty* (*i.e.* *Tutia*) is in modern English an impure oxide of zinc, collected from the flues where brass is made; and this appears to be precisely what Polo describes, unless it be that in his account the production of *tutia* from an ore of zinc is represented as the object and not an accident of the process. What he says reads almost like a condensed translation of Galen's account of *Pompholyx* and *Spodos*: “*Pompholyx* is produced in copper-smelting as *Cadmia* is; and it is also produced from *Cadmia* (carbonate of zinc) when put in the furnace, as is done (for instance) in Cyprus. The master of the works there, having no copper ready for smelting, ordered some *pompholyx* to be prepared from *cadmia* in my presence. Small pieces of *cadmia* were thrown into the fire in front of the copper-blast. The furnace top was covered, with no vent at the crown, and intercepted the soot of the roasted *cadmia*. This, when collected, constitutes *Pompholyx*, whilst that which falls on the hearth is called *Spodos*, a great deal of which is got in copper-smelting.” *Pompholyx*, he adds, is an ingredient in salves for eye discharges and pustules. (*Galen, De Simpl. Medic.* p. ix. in Latin ed., Venice, 1576.) Matthioli, after quoting this, says that *Pompholyx* was commonly known in the laboratories by the Arabic name of *Tutia*. I see that pure oxide of zinc is stated to form in modern practice a valuable eye-ointment.

Teixeira speaks of *tutia* as found only in Kermán, in a range of mountains twelve parasangs from the capital. The ore got here was kneaded with water, and set to bake in crucibles in a potter's kiln. When well baked, the crucibles were lifted and emptied, and the *tutia* carried in boxes to Hormuz for sale. This corresponds with a modern account in Milburne, which says that the *tutia* imported to India from the Gulf is made from an argillaceous ore of zinc, which is moulded into tubular cakes, and baked to a moderate hardness. The accurate Garcia da Horta is wrong for once in saying that the *tutia* of Kermán is no mineral, but the ash of a certain tree called *Goan*.

(*Matth. on Dioscorides*, Ven. 1565, pp. 1338-40; *Teixeira, Relacion de Persia*, p. 121; *Milburne's Or. Commerce*, I. 139; *Garcia*, f. 21 v.; *Eng. Cyc.*, art. *Zinc*.)

[General A. Houtum-Schindler (*Jour. R. As. Soc.* N.S. XIII. October, 1881, p. 497) says: “The name *Tútíá* for collyrium is now not used in Kermán. *Tútíá*, when the name stands alone, is sulphate of copper, which in other parts of Persia is known as *Kát-i-Kebúd*; *Tútíá-i-sabz* (green *Tútíá*) is sulphate of iron; also called *Záj-i-síyah*. A piece of *Tútíá-i-zard* (yellow *Tútíá*) shown to me was alum, generally called *Záj-i-saffíd*; and a piece of *Tútíá-i-saffíd* (white *Tútíá*) seemed to be an argillaceous zinc ore. Either of these may have been the earth mentioned by Marco Polo as being put into the furnace. The lampblack used as collyrium is always called *Surmah*. This at Kermán itself is the soot produced by the flame of wicks, steeped in castor oil or goat's fat, upon earthenware saucers. In the high mountainous districts of the province,