

Like the crystalline vein-mineral, neither the white nor the green variety of jade is affected by the blowpipe heat, with or without addition of borax or soda. Green jade of a brighter colour and higher translucency is comparatively rare, and, already on that account, no doubt much more valuable. It is usually only found in thin veins of one or a few inches; and even then it is generally full of flaws.

Since the expulsion of the Chinese from Yarkand in 1864, the jade quarries in the Karakash valley have become entirely deserted. They must have yielded a considerable portion of the jade of commerce; though no doubt the workmen made a good selection already on the spot, taking away only the best coloured and largest pieces; for even now a great number of fair fragments, measuring 12 to 15 inches in diameter, form part of the rubbish thrown away as useless.

The Belakchí locality is, however, not the only one which yielded jade to the Chinese. There is no reason to doubt the existence of jade along the whole of the Kuenlún range, as far as the mica and hornblendic schists extend. The great obstacle in tracing out the veins, and following them when once discovered, is the large amount of superficial débris and shifting sand, which conceal the original rock *in situ*. However, fragments of jade may be seen among the boulders of almost every stream which comes down from the range. We also observed large fragments of jade near the top of the Sanju Pass, which on its southern side at least mostly consists of thin-bedded gneiss and hornblendic schist.

Another rich locality for jade appears to exist somewhere south of Kotan, from whence the largest and best coloured pieces are said to come; most of them are stated to be obtained as boulders in a river bed, though this seems rather doubtful. Very likely the Chinese worked several quarries south of Kotan, similar to those in the Karakash valley, and most of the jade from this last locality was no doubt brought into Kotan, this being the nearest manufacturing town. A great number of the better polished ornaments, such as rings, &c., sold in the bazaar of Yarkand, have the credit of coming from Kotan; possibly they are made there by Chinese workmen, but the art of carving seems to have entirely died away, and indeed it is not to be expected that such strict Mahomedans, as the Yarkandees mostly are, would eagerly cultivate it. If the Turkistan people will not take the opportunity of profiting by the export of jade, or if no new locality of that mineral is discovered within Chinese territory, the celestial people will feel greatly the want of the article, and good carved specimens of jade will become great rarities. The Chinese seem to have been acquainted with the jade of the Kuenlún mountains during the last two thousand years, for Kotan jade is stated to be mentioned\* "by Chinese authors in the time of the dynasty under Wuti (B.C. 148—86.)"

*Yarkand, 14th November 1873.*

#### SECTION IV.

GEOLOGICAL OBSERVATIONS MADE ON A VISIT TO THE CHADERKUL, THIAN SHAN RANGE, *by* DR. F. STOLICZKA,  
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AFTER a stay of nearly a month in our embassy quarters at Yangishar, near Kashgar, the diplomacy of our envoy secured us the Amir's permission for a trip to the Chaderkul, a lake situated close on the Russian frontier, about 112 miles north by west of Kashgar, among the southern branches of the Thian Shan range. Under the leadership of Colonel Gordon, we, Captain Trotter and myself, left Yangishar about noon on the last day of 1873, receiving the greeting of the new year in one of the villages of the Artush valley, some 25 miles north-west from our last quarters. On the 1st of January 1874 we marched up the Toyán river for about 20 miles to a small encampment of the Kirghiz, called Chungterek; and following the Toyán and passing the forts Murza-terek and Chakmák, we camped on the fifth day at Turug-at-bela, about 11 miles south of the Turug pass, beyond which five miles further on lies the Chaderkul. On the sixth we visited the lake, and on the day following retraced our steps, by the same route we came, towards Kashgar, which we reached on the 11th January.

\* Yule's Marco Polo, Vol. 1, p. 177.