

eastern border of the kingdom of Lou-lan', and that to this point were carried supplies of water and provisions against the arrival of the Chinese missions. In order to appreciate rightly the burden involved in this obligation, it is enough to bear in mind that this shore was fully fifty miles from the nearest point where water could be found on the Lou-lan side, near L.I., and that over twenty-five miles more had still to be covered to reach thence the nearest cultivated ground near the Lou-lan station. It is possible that the springs of Yetim-bulak and Kaurük-bulak may then have furnished drinkable water, which they no longer do now, and also some forage in the shape of reed-straw and scrub. But the distance to be traversed from these points would not have been appreciably less.

For the two long marches during which the ancient route skirted the eastern shore of the dried-up sea, between Camp cvi and the vicinity of Camp civ (Map No. 32. c. 3, 4), the supply of water, &c., would probably have entailed less effort if arranged for from the side of the Bēsh-toghrak valley; for on that side the flat stony Sai favoured transport and the severe trial implied by the crossing of the great expanse of hummocky salt crust would be avoided. But on the other hand it should be remembered that while water, fuel and reed-straw could be obtained near the western end of the Bēsh-toghrak valley, all supplies needed by men had to be drawn from the side of Tun-huang, the nearest cultivation being fully 220 miles away from Camp cvi, the approximate position assumed for the *Sha-hsi* well.

Supplies  
drawn from  
Tun-huang.

For the conditions under which traffic was maintained on the eastern portion of the route, those observed along the present An-hsi-Hāmi road through the Pei-shan 'Gobi' may supply an approximate parallel. For the first nine of its eleven stages no local supplies are obtainable beyond a limited amount of water, distinctly brackish in places, and such reed-straw as is brought on camels to the wretched hovels representing postal 'stations', from patches of vegetation more or less distant, and sold at exorbitant prices. Yet we know that, in spite of these great difficulties of supply, the Chinese military administrators carefully prepared, and finally in 1877 accomplished, the reconquest of Chinese Turkestan after the great Muhammadan rebellion. For this purpose they contrived gradually to assemble a considerable force, probably not less than forty thousand men, in the Hāmi oasis, having moved them from Su-chou to An-hsi and thence in successive small detachments along this desert route. Ever since its first opening by the Chinese in A.D. 73,<sup>9</sup> it had served as the main line of communication between China and Central Asia. It is therefore certain that during former periods also of Chinese expansion westwards, under the Later Han, the T'ang dynasty, and again in the time of Ch'ien-lung, it must have seen a great deal of troop movements and traffic under conditions closely resembling those which prevail there at present.<sup>10</sup>

Parallel of  
conditions  
on present  
An-hsi-  
Hāmi road.

But when we compare the conditions on the An-hsi-Hāmi road, whether in the past or the present, with the difficulties which beset the use of the ancient Lou-lan route, a very important difference must be noticed. Ten marches across the Pei-shan Gobi bring the traveller to the outskirts of a fertile oasis, exceptionally well fitted by nature to serve as a bridge-head for the route crossing the desert south-eastward. On the ancient Lou-lan route a journey of corresponding length would leave him still one hundred and twenty-five miles or so away from the nearest water and a hundred and fifty miles from Lou-lan cultivation, and Lou-lan, owing to its precarious irrigation and other physical conditions, could never have offered resources equal to those of Hāmi.<sup>11</sup>

Difficulties  
of Lou-lan  
route far  
greater.

<sup>9</sup> Cf. Chavannes, *T'oung-pao*, 1907, p. 156.

<sup>10</sup> Cf. *Serindia*, iii. pp. 1143 sq., 1147, 1149. The effort involved in the use of the route across the Pei-shan for operations on a large scale is well illustrated by the record of Hsüan-tsang's adventurous crossing of this desert in A. D. 630. It shows us the trials attending travel along the route during

times when Chinese policy of seclusion barred its use for intercourse with the 'Western Regions'; cf. my paper, 'The Desert Crossing of Hsüan-tsang', in *G.J.*, 1919, pp. 265 sqq.

<sup>11</sup> See *Serindia*, iii. pp. 1148 sq.; also the description of the Lou-lan territory in the Former Han Annals, Wylie, *J. Anthropol. Inst.*, x. pp. 23 sqq.