

passed through seventeen years before. In the same way Chia-yü kuan still retains the character of a customs station, where duty is levied on all goods passing from Turkestan into China proper by the high road.

SECTION II.—THE WALLS OF CHIA-YÜ KUAN

That the line of wall flanking Chia-yü kuan and completing the barrier, or 'chiusa', to the south and north-west¹ is in its present state coeval with the modern gate-fortress itself, or else was thoroughly repaired at the time of its construction, was made clear from the first by its good preservation almost throughout. Yet its examination offered distinct points of interest, were it only by its being a late pendant to the Limes wall that I had traced past the Yü-mên of Han times. My survey of the north-western section of the wall showed that it starts from the north-east corner of the *ch'êng* of Chia-yü kuan and continues unbroken along the eastern foot of the precipitous hill range through which the stream of Hao-shan-k'ou has cut its narrow valley, as described above. The wall consists of a well-built clay rampart 11 feet thick at its base and 12 feet high, with a parapet about 4 feet high on its top. Adjoining this wall on the inside are watch-towers, which stand at an average distance of about $1\frac{1}{2}$ miles one from the other. The tower nearest to the Gate, of which Plate 47 reproduces the ground-plan, measures 36 feet by 33 and is built, like the wall, of layers of stamped clay 4-5 inches in thickness.² The top of the tower bears a loopholed wall about 6 feet high, as well as a small watch-room in one corner. A double line of foot-holes ascending one of the sides was intended to help the watchmen, who had to climb up by a rope. A brick-built wall, of the same height as the main wall but of only half its thickness, forms an enclosure round the tower. Small ruined quarters within were meant to shelter the soldiers who were to provide the watch and to guard this section of the wall. Thus each tower could serve as a rallying-point and be defended independently in case of need, just as on the ancient Limes.

Line of wall
flanking
Chia-yü
kuan.

Outside the line of wall, and at distances varying from one to two furlongs from it, there rise three detached towers of massive but modern-looking brickwork, built on spurs at the foot of the hill range westwards. The towers, measuring about 40 feet at their base and over 30 feet high, are surrounded by square entrenchments and obviously intended to serve as outworks guarding the ravines which descend from the scarp of the range and could not be effectively watched otherwise.³ The wall at a distance of about a mile from the third of these outlying towers reaches the hamlet of Huang-ts'ao-ying, which clusters behind it, at the mouth of the Hao-shan-k'ou gorge. Thence crossing this well-cultivated ground and the little stream which irrigates it, the wall runs on for half a mile more and is carried up the rocky spur on its left bank to a height of about 200 feet above the bottom of the valley; beyond this the precipitous rock face becomes practically unscalable. Here the wall ends with its flank excellently protected by nature. The rugged range, of which this spur is an offshoot, continues to ascend unbroken north-westwards till it attains, as the map shows, a height of over 9,200 feet at a direct distance of about 10 miles. All along this distance, and beyond too, the range with its very steep cliffs, absolutely bare of vegetation (Fig. 253), forms an impassable barrier needing no defence.

End of
north-west
section of
the wall.

It was curious to note how much care had been taken to defend also the triangular area formed by that portion of the mouth of the Hao-shan-k'ou valley which lies outside the main wall just described. From the point where this approaches the first farms of Huang-ts'ao-ying on the south, a short branch wall strikes off from it at right angles to the south-west and is carried up the steep

Wall closing
Hao-shan-
kou valley.

¹ See Map No. 88. B. I.

² In Pl. 47 the tower is shown by an error of the draughtsman as built of brick.

³ At T. ix. a of the Limes west of Tun-huang we have met already with an outlying watch-post of corresponding position and purpose; see above, p. 662.