

clay became increasingly frequent after we had sighted from afar the low black line of wall of the fort, L.E., which Afrāz-gul had reported. Thus progress became easier for the porters over the last portion of the day's tramp which, just as darkness was approaching, brought us to the ruined circumvallation, at a distance of close on 19 miles from the Lou-lan station.

Arrival  
at ruined  
circumvallation.

The first rapid examination, effected in the dusk of that evening, revealed, to my great satisfaction, a circumvallation agreeing absolutely in constructive features with the Limes wall of Han Wu-ti along the Tun-huang border. Here, as there, it was the ingenious method of building with regular alternate layers of stamped clay and of carefully secured reed fascines that had saved the walls from destruction by the relentless attack of wind-erosion. How powerfully this destructive force here operated was strikingly illustrated by the deep hollows and Yārdang trenches which it had scoured out within the ancient circumvallation (Fig. 162). Outside, the ground had been lowered by it to a fairly uniform level of about 20 feet below the original surface of the soil, as marked by the foundations of the fort walls (Fig. 161).

L.E., *point d'appui* on Han route.

The close examination of the fortified *castrum* made next day left no doubt that it dated, like the Tun-huang Limes itself, from the first military advance of the Chinese into the Tārīm basin, about the last years of the second century B.C. My subsequent explorations have fully confirmed the conclusion then drawn that it had been constructed to serve as a *point d'appui* for Chinese missions and troops on their first reaching habitable ground in Lou-lan territory, after having crossed the dry salt-encrusted sea-bed and skirted its absolutely barren north shores. It thus represented, as it were, the bridge-head of the desert route by which that advance had been made, and which the Tun-huang Limes was intended to safeguard at its eastern end. Having become so familiar with that ancient Limes and the technical skill displayed in its construction, I was particularly pleased to see how well the same old Chinese engineers had also done their work at the western end of the desert route. For two thousand years it had successfully withstood the attacks of wind-erosion, the most formidable enemy of all human constructions in this region. In spite of the terrible havoc wrought by it within the enclosed area, the walls had nowhere been completely breached, in marked contrast with the fate of the walled enclosures of L.A. and L.K., which had been far less carefully constructed.

Orientation  
of walled  
enclosure.

As the sketch-plan Pl. 12 shows, the ruined *castrum* had approximately the shape of a rectangle. The walls are not correctly orientated to the cardinal points of the compass, as, in accordance with Chinese tradition, walled towns or *ch'êng* usually are, but show a divergence of 8 or 9 degrees. This divergence, though not as marked as in the walled enclosure of L.A. and in all buildings within it, had the same result as it had there. It made the approximate 'north' and 'south' walls lie closer to the direction of the prevailing east-north-east winds, while bringing the other two wall faces straight across them.<sup>3</sup> This agreement in the modified bearings of the walls in both enclosures seems to justify the conclusion that the special orientation was in L.E., as in L.A., an intentional adaptation of the traditional scheme, meant to secure protection from the prevailing and most trying winds of this region.<sup>4</sup> The length of the east and west walls, measured outside, was about 450 feet, while that of the north and south faces was about 400 feet. The main gate, about 10 feet wide, led through the southern wall (see Fig. 160), but not exactly in the centre; and another somewhat narrower through the north face. Scanty remains survived of the timber frame-

<sup>3</sup> Cf. *Serindia*, i. p. 388; also above, p. 214.

<sup>4</sup> It deserves to be noted that in the Mīrān fort, an irregular oblong in shape and probably of Tibetan origin, one of the walls faces similarly to the east-north-east and shows special protection against the erosive force of the prevailing winds; see *Serindia*, i. pp. 456 sq.; iii. Pl. 30.

In L.K. one of the fort walls faces to the north-east, and the same orientation is observed in all the surviving quarters of the interior; see Pl. 10. It is of some interest that none of them has an entrance from the north-east, i. e. the direction most exposed to the winds.