altogether and, passing a bare gravel plateau between the Kan-chou River and the marshy depression of the Po-nan Ho, enters a wide belt of scrub and reed-covered steppe, which extends for about 40 miles in a direct line from east to west (Map No. 91. A-C. 2). In former times this big area, though covered by drift-sand in parts, must have had considerable value, as it is ground well fitted for winter-grazing. The watch-towers, and in places the wall, too, of the Ming border line were clearly seen from the high road, skirting the foot of the low flat hill range northward. It was interesting, as I passed along this ancient highway in the early days of September, to meet successive caravans of camels and donkeys carrying goods right through from Khotan to Kan-chou and Lan-chou, just as they had in the days of Marco Polo and long before him.

Ming wall crossed to Chin-t'a. From the roadside station of Shuang-ching-tzŭ I struck off to the north-west for the sake of a reconnaissance beyond Chin-t'a & ... Its object was to ascertain whether the line of the ancient Han Limes, which, I suspected, might have lain to the north of Chia-yü kuan and well beyond the still known mediaeval border wall, could be traced in that direction. The attempt failed owing to the very limited time I was able to spare for it, only a few days, and the often proved difficulty of extracting any helpful local guidance from the ever secretive dwellers on these Kan-su borders. But it yielded some useful observations all the same. On my way to Chin-t'a I crossed the line of the Ming wall (Map No. 91. A. 1) and assured myself that its construction, as well as that of its watch-towers, agreed here closely with what I had noted at the line to the north-east of Chia-yü kuan and north of Su-chou. The advanced watch-towers on the top of the low hill chain skirted by the wall were clearly meant to form part of this defensive system. The oasis of Chin-t'a, watered by canals from the Pei-ta Ho, or Su-chou River, had prudently been left outside this 'Great Wall' of a period of cautious seclusion. But evidently its inhabitants had tried to obtain safety from raids, etc., by similar means; for I found a much-decayed clay wall running round the southern and south-eastern edges of the cultivated area.

Abandoned cultivation beyond Chin-t'a.

The ground beyond Chin-t'a, a picturesque little town with some five hundred homesteads, exhibited in a very instructive fashion physical features typical of terminal oases in the Tārīm Basin. Strips of cultivation following the canal lines gradually gave way, as the map (No. 90. A. 4) shows, to patches of fields scattered amidst extensive wastes of scrub or tamarisk jungle. Some fields were still tilled, others seemed to have been abandoned for a long time. In a few places I came upon small clearings, evidently attempts at recent reclamation. At T'ou-tun (Map No. 90. A. 3), one of these outlying small cultivated areas, there were the usual complaints about inadequate watersupply for irrigation and an increasing frequency of dry seasons. Yet there could be no doubt that most of the land now lying waste had been abandoned in consequence of the terrible devastations accompanying the Tungan rebellion. Without very careful and prolonged study of local conditions it seemed impossible to decide whether and to what extent the present half-deserted aspect of this northern portion of the Chin-t'a oasis was due to desiccation or to the depopulation which resulted from the Tungan inroads. The Niya or Endere Sites may well have presented a similar appearance some time before their final abandonment—and, perhaps, the same difficulty for a passing traveller to judge of the direct cause of it. The ruins at Hsi-yo, which I had found marked on the Russian map and which I visited on September 11 from Tou-tun, proved to be those of a shrine of no great age, destroyed by the Tungans. The river-bed close by, though fully a mile wide, was completely dry at the time; yet cultivation had been started afresh some years earlier at an isolated farm near the ruins. I little guessed, when turning back from this point, that the line of the ancient Han Limes led past it at a distance of only three miles, and could be traced thence practically

Desiccation or depopulation?

¹² It is still used for this purpose in places by the Sarö Yögur tribe; see above, p. 1129, and Mannerheim, Visit to the

Sarö and Shera Yögurs, pp. 4 sqq. ¹⁸ See above, pp. 1120 sqq.