

Probable causes of abandonment.

The signs of far-advanced decay were too obvious here to be denied by the villagers. But their usual evasive reticence made it difficult to elicit from them any definite statements about the cause of this decay. They did not attribute it to want of water or to uncertainty in its supply, but talked vaguely of the difficulty of coping with the sand and of the devastation which had attended the raids of the Tungan rebels. Want of adequate labour for safeguarding cultivation in these outlying portions of the Nan-hu oasis seemed an important, if not the main, cause of trouble, and in this want, at any rate, a lasting effect of that great catastrophe can be recognized with certainty. The extent of the depopulation then brought about was strikingly demonstrated by further observations made on the day's march, which proved in fact a very instructive antiquarian lesson.

Abandoned hamlets N. of Shui-i.

For this I was little prepared, since the Nan-hu people, when before questioned, had stoutly denied any knowledge of a route through the desert northward and of ruins to be found along it. Yet we had followed the lively stream which carries the drainage of the Nan-hu 'Yār' down past the Shui-i fields, as previously mentioned, for only about a mile and a half when I noticed a fairly large but scattered group of houses, not far from its east bank and encircled by small dunes. The crest of these dunes rose nowhere to more than about eight feet, but the cut tree-trunks in what were once adjoining arbours or fenced fields, as well as the dismantled condition of the houses, showed that occupation here had been definitely abandoned. 'Chiang-huan', the old Nan-hu villager, who had acted as my guide before within the oasis, and whom I had engaged to look after our local contingent of labourers, now acknowledged that he knew quite well these deserted homesteads of Shang-Yen-chia, or 'Upper Yen-chia' (Map No. 79. A. 1), and those of Hsia-Yen-chia, or 'Lower Yen-chia' (Map No. 78. A. 4), which we passed after another mile and a half to the north-north-west. He definitely asserted that the two hamlets had been abandoned in consequence of the desolation wrought by the great Tungan inroad of T'ung-chih 4, i. e. A. D. 1866, when Nan-hu was sacked and the greater part of the population killed. Since then those who reoccupied the main oasis, new colonists in the main brought from the interior of China, had carried off beams and posts from the ruined dwellings when they were in need of timber or dry fuel, and the trees once growing around them had been cut down for the same purpose.

Water available for cultivation.

It was curious to note how the drift-sand, here fine and evidently composed of eroded clay or loess, had accumulated over what was once cultivated and, potentially, still fertile ground. Obviously the trees, fences, walled enclosures, and other obstacles had helped to retain it, while to the west of the stream there stretched away the gravel 'Sai' long before swept perfectly clear of any cover of fertile soil that its surface may have had during some earlier period. The stream flowing past the long strips of old cultivation still carried about twenty-two cubic feet of water per second where I measured it near Shang-Yen-chia, a volume amply sufficient for bringing them under irrigation again. A little below Hsia-Yen-chia this stream emptied itself into a sheet of water, about one mile long and from a quarter to half a mile wide, which now represents the terminal basin of the drainage from the springs of Nan-hu. This lake is likely to have been much larger at one time; for it occupies only the middle of a well-marked dry depression, lying fully sixteen feet below the level of the flat gravel 'Sai'.

Deserted settlement of Kuan-tsou.

That canals, probably fed by the drainage of springs rising in the now dry river-bed east of the ruined town of Nan-hu, must within living memory have carried water much further to the north was proved when, after covering about six and a half miles from Shui-i, I reached the southern edge of another abandoned settlement. My 'guide' from Nan-hu knew it by the name of Kuan-tsou, and declared that, according to local tradition, it had been deserted earlier than Yen-chia and about sixty years before my visit. The hamlets composing this settlement were represented by scattered groups of farm dwellings, extending for close on four miles to the north-west and all in an advanced