Absence of marked climatic change.

facts prove as regards the improbability of any marked climatic change having taken place on this border between the construction of the ancient Chinese Limes and the present day. The climate in the desert region of the westernmost Su-lo Ho basin must have been exceptionally arid in Han times and must have remained the same ever since, as it has allowed such perishable remains as documents on thin slips of wood, bits of fabrics, etc., to say nothing of mere reed straw, dung, and other unsavoury contents of the rubbish-heap, to survive in practically perfect condition, even when covered up only by a few inches of gravel, as I found them at T. VI. b and in more than one refuse layer elsewhere. Had this ground been liable to be visited annually even by a very few heavy showers during the years while the refuse lay practically exposed on the surface of the gravel slopes below the watch-stations, such relics could certainly not have survived in so remarkable a state of preservation for twenty centuries more.[5]

Precipitation on Nan-shan determines marsh levels.

The level of the lakes and marshes here discussed must, no doubt, depend directly or indirectly upon the amount of rain and snow annually deposited on the high mountains to the south and south-east, which enclose the drainage area of the Su-lo Ho basin. In the present state of our knowledge it is impossible to make any definite assertion as to the connexion between climatic conditions of the Su-lo Ho basin and the amount of precipitation received by the high ranges overlooking it. Yet it is certainly noteworthy that the conclusions to be drawn from the available archaeological evidence agree in the case of both factors, and this agreement seems to me to justify the presumption that neither in the desert portion of the basin nor in the mountains which supply its drainage has desiccation perceptibly changed conditions during the last 2,000 years.

SECTION III.—THE RUINED WATCH-STATIONS T. XI AND T. XII. A

Position of watch-tower T. XI.

We may now return to the westernmost of the small lakes which the Limes crosses and describe the remains of the latter from where its wall starts again eastwards. It would have been difficult to determine this point or, in fact, to trace the wall at all here but for the ruined watch-tower T. XI (Fig. 178), which occupies a conspicuous position a little over half a mile from the easternmost edge of the lake. It stands, as the map in Plate 33 shows, on a small knoll rising above the narrow southern end of a steep gravel-covered plateau which skirts the lake from the north-east and divides it from a wider marsh-filled depression eastwards. Placed as it is in a detached position about 100 feet above the reed-covered ground close to the marshes, it completely overlooks them for a considerable distance as well as the route which winds round the foot of the plateau. The nearness of comparatively fresh springs must have been an additional advantage to the watch-station placed here.

Limes wall near T. XI.

Immediately to the north of T. XI the top of the plateau, everywhere much worn by the action of water and here less than half a mile wide, is cut across by two small ravines. These start from the depressions on either side and, nearly meeting in the middle, form a kind of natural fosse for the wall of the Limes. This ran along a narrow ridge at about 40 yards distance from T. XI. Its remains stretched there over fairly level ground for only about 30 yards and then descended steeply on either side. Westwards, the layers of reed fascines which marked the line of the wall could be traced for nearly half a mile, ending in a thicket of Toghraks and tamarisks about

[5] In support of this statement, though it is convincing enough by itself, I may refer to the negative evidence afforded by the observations I made at certain sites in the Seistān desert. There, at the watch-stations of an ancient border line, curiously recalling the Tun-huang Limes but constructed on a far smaller scale, I found the refuse-heaps decayed into mere odorous layers of earth. Yet the rainfall of Seistān, according to careful observations now extending over a fair number of years, amounts only to about 2 inches per annum; cf. my *Third Journey of Exploration*, *Geogr. Journal*, xlviii. p. 222.