cart traffic. Beyond Liang-chou no natural difficulties of any sort are encountered, as the road passes from one fertile tract to another. Abundant streams, fed by the perpetual snowfields of the Nan-shan, water these submontane tracts and render them capable of supporting a fairly close population. The volume of the two main rivers of Kan-chou and Su-chou, which gather most of these streams, is large enough for their united course to penetrate a considerable distance northward into the desert region of Southern Mongolia. To the east of Kan-chou a notable change in climatic conditions permits cultivation to be carried on along the foot of the mountains even without irrigation.<sup>5</sup>

Natural protection of road along Nan-shan.

Relatively narrow as this fertile submontane belt is, stretching from Liang-chou to Su-chou, 5a its produce is amply sufficient to provide for the needs of any number of men and animals that trade. and military movements might bring along it. But what must have made this great natural thoroughfare still more advantageous for the Chinese advance towards Central Asia is the protection it enjoys from physical features on both flanks. All along it to the south-west rises the high snowy Richthofen chain, like a mighty rampart. The very few alpine tracks which cross it are easily guarded against inroads from Tibetan nomads in the narrow gorges through which they debouch towards the foot of the mountains.6 On the other flank, to the north-east, stretches the western Ala-shan hill chain, relatively low but extremely barren, and beyond it a wide desert area, largely drift-sand. Through this, as I had occasion to convince myself in the course of my explorations in 1914, only small parties could ever penetrate, owing to the great scarcity of water and grazing.7 Beyond Su-chou, the cultivable area along the great route becomes restricted to a succession of small oases.7a This is due to the limited chances of irrigation which the increasing aridity of the outer chains of the western Nan-shan allows here. But the physical conditions securing protection on both flanks continue much the same, and suitable stages, habitable and amply provided with water and grazing, are to be found along the ancient highway right through to the big Tunhuang oasis.

Border commands from Liangchou to Tun-huang.

This brief survey of geographical features will help us to understand better the direction taken by the Chinese conquests after the Emperor Wu-ti had decided upon his policy of expansion towards the Tārīm Basin. It fully explains also the line which the extension of the Chinese Limes wall followed in rapidly advanced stages. After the severe defeat inflicted upon the Hsiung-nu by the successful campaigns of the general Ho Ch'ü-ping, the regions which correspond to the present Liang-chou and Kan-chou were, in 121 B.C., brought under Chinese control. First, as M. Chavannes concludes from a comparison of the several Chinese historical records, the command of Chiu-ch'üan 恐 was instituted in 115 B.C. in the locality represented by the present Su-chou.<sup>8</sup> It appears to

5a Cf. Maps Nos. 88, 91, 93.

which Chingiz Khān passed on his first conquest of Kan-su in 1226, duly guarded by the remains of the ancient Han Limes which I traced north of Mao-mei; cf. loc. cit.

Colonel Kozloff's surveys in 1899-1901 and 1908-9 have done much to clear up the topography of this portion of the Southern Mongolian 'Gobi'; for his travel experiences there, cf. Geogr. Journal, 1910, Sept., pp. 303-5.

<sup>7a</sup> See Maps Nos. 81, 83, 85, 86, 88.

<sup>&</sup>lt;sup>5</sup> Cf. my *Third Journey*, etc. *Geogr. Journal*, xlviii. p. 199. For a synopsis of the general features of this submontane region, see also below, chap. xxvII. sec. iii, iv.

<sup>6</sup> Cf. regarding these defiles and the Chinese chiusas which were built to guard them, Desert Cathay, ii. pp. 257, 263, 268 sq., 302, 331; also below, chap. xxvII. sec. i-iii, passim.

<sup>&</sup>lt;sup>7</sup> Cf. Geogr. Journal, xlviii. pp. 196 sqq. The only route practicable for a large force bent on striking the Lan-chou-Tun-huang road from the north, and thus forcing its way into the north-west provinces of China proper, leads along the Etsin-gol, the terminal course of the rivers of Kan-chou and Su-chou. I found this threatened gate of invasion, through

<sup>8</sup> Cf. Chavannes, *Documents*, p. v, note 5, for the passages of the Former Han Annals and other texts bearing on the progressive organization and settlement of the newly conquered territories. The removal from them of the original inhabitants is distinctly recorded in chap. xcvi of the *Ch'ien Han shu*, as translated by Wylie, *J. Anthrop. Inst.*, x. p. 22.