Muḥammad Bāqir explained that his father had started cultivation here before the Muhammadan rebellion, but had been obliged to abandon the work owing to the depredations of roving Tungan bands from the Kara-shahr side. They also wrought havoc among the Mongols, many of whom were then still grazing their flocks in the hills to the west and south-west. He had never heard complaints from his father, who had lived to well over eighty, of any diminution of the water-supply or of its salinity; but he was aware of the difficulty of coping with floods on such ground as could be cultivated lower down the stream. The chief difficulty, however, was obviously want of labour.

Tree-growth in valley from Hsita-shan.

On February 26th an interesting march on our way towards Shindi brought me to ground of a strikingly different character. An ascent of about six miles, at first very gentle, led up an alluvial fan abundantly covered with scrub and reeds. Near its head big elm trees, such as were to be seen here and there lower down also along the shallow branching flood-beds, were gathered in large groves. Then rather suddenly we found ourselves entering the valley, flanked by steeply eroded hills from the point where it debouches, in which the whole northward drainage of the Hsita-shan is conveyed. The valley bottom, from about 60 to 80 yards wide and winding between bare rocky spurs, looked as if it were completely washed at times by floods from the melting snow on the high portions of the range and from occasional heavy rain. But by its sides fine elms had found room to grow up, many of them manifestly of great age. One, a large but by no means exceptional specimen, showed a girth of over twelve feet at a height of three feet from the ground. Wherever there were spaces at the bends left untouched by the floods, they were covered by a plentiful growth of scrub and coarse grasses; farther up the Nullah I found similar vegetation, though much thinner, ascending also the foot of the precipitous rock slopes. Considering the general character of this region it looked like a herdsman's paradise, but no trace of his presence was met until some eleven miles from P'o-ch'êng-tzŭ. The lead smelters, however, were evidently alive to the usefulness of the wood, and for some miles up the Nullah traces of a cart track showed where dry fuel had been gathered by them. On an eminence close to the mouth of the valley I noticed a smelting furnace, and a point about two miles up, where the route followed by Lal Singh in 1907 to the Altun-ghol turned into a small side valley westwards, was known to Muḥammad Bāqir as 'Sanzulo'. This manifestly Chinese designation meant according to him 'Three Ovens', and if so may be derived from other smelting-places near by and, perhaps, correctly spelt San-tsao-lu.1

Peaks of Hsi-tashan.

Light snow lay in patches over the valley bottom. So it did not matter to us that above the springs of Chong- and Kichik-tatlik-bulak, known also by the Mongol name of Burgastu, no water was found in the several wells and 'Kāks' passed. But vegetation continued at the bottom of the gradually contracting valley, which all along bears the appropriate designation of Chongaghiz, 'the big ravine'. The rock exposed on its sides seemed to be composed throughout of crystalline slate, striking from east to west with a dip of about 80° to the south. After about fourteen miles of march a point was reached where what seemed the main valley turns to the south-east, and here an impressive view opened towards the wildly serrated central summits of the Hsi-ta-shan. Their extremely precipitous rock faces appeared to rise fully three thousand feet above the fairly open head of the valley, which stretches up to their foot. These rock walls and the sharp pinnacles above them presented a very striking contrast to the much-eroded outer range through which the Chong-aghiz has cut its way, and recalled the fantastic appearance of the Kāka-jāde peaks rising in the Kara-teke range south-west of Uch-Turfan.2 As our route led off to the south-west past the frowning cliffs of a buttress of the main Hsi-ta-shan massif, its highest summits were not sighted again with sufficient clearness for definite identification. Hence no exact clinometrical readings could be secured. But according to the rough estimate made by me at the time, those summits

¹ The conjectural spelling San-hsi-lo in Map No. 29. A. 1 ought to have been corrected.

² Cf. Serindia, iii. p. 1302.