

on this ground, MM. Potanin, Obruchev, and Colonel Kozlov and his companions. The route sketches of M. Obruchev and M. Kaznakov, of Colonel Kozlov's expedition of 1899-1901, are on too small a scale to furnish topographical details such as might replace descriptions; but they have proved very useful in supplementing the data about the western portion of the delta.

River-course
above head
of delta.

The first two marches beyond those outlying defences of Mao-mei took us along a portion of the river-course where the sandy bed, wide but practically undivided throughout, winds between gentle slopes of gravel. That on the west was clearly recognizable as the glacis descending from the south-eastern fringe of the Pei-shan hills. Along this portion of the river-course alluvium was found deposited on either bank only in isolated and comparatively small patches. Rows of fine Toghraks were to be found on most of these from above Ulan-else (Camp 141); but welcome as the growth of scrub and reeds on these patches of fertile soil is to the animals of passing travellers, their extent is far too limited to permit of their use as grazing grounds. The sandy soil of the river-bed, where we crossed it to the right bank at Camp 141, swayed badly under the camels' feet owing to the presence of quicksands. But water was to be found here and farther down only in small pools formed at rare intervals under steeply eroded banks.

Ruined
watch-
towers.

Near one of those patches of vegetation known as Hsi-wan-tun to the Chinese of Mao-mei and as Sēre to the Mongols, there rose a ruined tower (Fig. 232) presenting some interest. As shown by portions of fallen masonry on the south and east, the original structure built in bricks of $14'' \times 8'' \times 5''$ had been enlarged to 27 feet square at the base by the addition of later masonry showing vertically set bricks of quite a different size, $16'' \times 6'' \times 3''$. Another tower, known as Pei-tun-tzū, which was passed about six miles higher up on the right bank, was built of stamped clay and rose in fair preservation to a height of 25 feet. Considering the great distance, over seventeen miles, which separates these towers from T. XLVIII. f and the Ulan-düröljin fort, it appeared to me rather doubtful whether they could possibly have served as advanced signal posts in connexion with the Limes of Mao-mei. The same remark applies also to a tower raised on a base of clay but built of bricks of the same ancient size of $14'' \times 8'' \times 5''$, which was passed about a mile to the north of Camp 142. It measured 16 feet at its base and rose to a total height of 20 feet.

Approach of
Kök-ula
hill chain.

Long before we approached the end of the second march at Buk-tokhai (Camp 142), there came into sight the low but boldly serrated hill chain of Kök-ula. It stretches from the north-east towards the river, above which the cairn-marked knoll of Bayin-bogdo (Fig. 229), at the southern end of the chain, rises some five hundred feet. On the opposite side of the river there juts out towards the Kök-ula ridges a broad spur, rising considerably higher, an eastern outlier of one of the Pei-shan ranges which we crossed subsequently on our way to Ming-shui. The two approach near Bayin-bogdo to within five miles of each other, and in the defile thus formed lies the well-defined head of the Etsin-gol delta (Map No. 45. B. 2). Even before we actually reached it, the ground on both sides of the river-bed underwent a marked change. The jungle belt on either hand widened considerably, and the subterranean drainage from which it draws moisture was found to gather in springs, which form open sheets of water within a fine reed-lined basin (Fig. 230).

View at
head of
Etsin-gol
delta.

A rocky ridge, the last offshoot of the Bayin-bogdo hill, bars this basin on the north. From its summit crowned by a clay-built tower of uncertain age, a splendid view opened over the head of the Etsina delta (Fig. 231). A mile or so beyond the ridge, the river-bed, which here once more contained a narrow channel of water derived from the above-mentioned springs, broke up into three distinct branches. Between them and to the foot of the receding gravel Sai on either side there spread a wide expanse of luxuriant reed-beds and scrub. Many groves of thick-set Toghraks rose above it, their dark green foliage well set off by the yellowish hue of the reed-beds. All the soil here at the head of the delta was a fine sandy alluvium. Yet nowhere could dune formations be