To the north of the little plateau which holds the few homesteads and fields of Singer, the range stretching from west to east flattens out into a broad peneplain, with its surface broken by a succession of low rolling ridges and shallow Nullahs between them. The scrub filling the latter and the eroded forms of the ridges both suggested that this central range receives a greater amount of moisture than the rest of the Kuruk-tāgh, and my subsequent observations farther west fully confirmed this conclusion. The morphological importance of this range is well brought out by the fact that though on the peneplain overlooking Singer it rises, as Lāl Singh's triangulation shows, only to heights of about 4,500 feet, yet it forms throughout a well-marked watershed; for while the drainage channels on the northern slopes of the range all ultimately descend into the Arpishme–Shōr-bulak depression, those to the south either carry their occasional floods right down to the Kuruk-daryā and the Lop basin, or else empty them into the separate drainageless trough south-east of Nanchan-bulak (Map No. 29. B. 2).

Small settlement of Singer.

Owing to the broken ground we were unable to see the small flat-bottomed valley of Singer, about three miles long from east to west, until we were quite close to it. The bold conical hill, however, which rises above its head to the west and from which it probably derives its name, forms a conspicuous landmark for some distance.9 A day's halt, on February 23rd, at this tiny oasis, the only permanently inhabited spot in the whole of the Kuruk-tagh, allowed me to secure an intelligent guide in the person of Muḥammad Bāqir, the youngest of Abdurrahīm's brothers, and to gather useful information about this little settlement isolated in the midst of barren hills and plateaus. Singer owes its occupation by a family, originally settled at Deghar in the Turfan basin, to the presence of a spring (Fig. 334). This issues in a hollow about 400 yards to the west of the small cluster of brick-built houses, or more correctly hovels. It furnishes a permanent supply of fresh water, which at the time of my visit amounted to less than three-quarters of a cubic foot per second. This supply, which may be slightly increased in the early spring, suffices to maintain a little orchard near the homestead and to irrigate an area of cultivation farther east where wheat and oats are grown. The surplus produce is sold to traders and wayfarers. But an economic resource that is probably quite as valuable to the little settlement consists in the meat of wild camels and other game, which can be disposed of at good rates to passing travellers.

Origin of Singer colony.

There can be little doubt that the position of Singer at a point which all direct traffic between Turfan and the Lop tract must pass was the main reason for its occupation, which dates back only to the second quarter of the last century. According to Muḥammad Bāqir, his grandfather, a hunter of wild camels and apparently a man of enterprise, first settled at Singer and started cultivation about seventy years before my visit. The fact that at that time Lop was administratively linked with Turfan and that direct traffic was therefore encouraged may have had something to do with the venture. The original settler died young; but his son, Yūsuf Sālchi, who had come there as a youth of about sixteen and evidently was possessed of energy unusual among Turfan people, developed the settlement and assured its permanence. A great hunter himself, he brought up his four sons to regard the Kuruk-tagh wastes as their own allodial domain. Incidentally, as a result of their hunting expeditions, he bequeathed to them that thorough local knowledge which has benefited Colonel Kozlov and the few subsequent explorers of this region. But as the resources of Singer were obviously insufficient to maintain four growing families, two of the sons (Abdurrahīm, Dr. Hedin's first guide to Lou-lan and Lal Singh's cherished helper, and Abdulmalik, at the time Afrāz-gul's companion in the Lop Desert) had found it advisable, since the patriarch's death, to transfer their homes to Tikenlik and Deghar respectively. While the youngest son, Muḥammad

⁹ Singer, perhaps a local form of the Persian sangar, 'stone heap, breastwork', is found elsewhere in the region

of Turfan as the designation of a prominent rocky hill; see Kizil-singer near Pichan, Map No. 31. A. 3.