

done, we moved in two parties and by different routes in order to increase the extent of the area mapped. I was still unable to walk or to bear the strain of riding and was obliged to get myself carried on an improvised pony litter. This made the responsible task of directing our moves still more difficult.

At Mao-mei I had secured the only two guides available, both Chinese, who professed to have crossed the Pei-shan with caravans that had proceeded to Barkul, north of the T'ien-shan. But their local knowledge, even when combined, proved very inadequate, and after less than half the journey it gave out altogether. We were thus obliged to trust mainly to the guidance of the faint caravan tracks traceable, and often where these were confusing to take our direction from the compass. This greatly increased the difficulty of finding the rare springs and wells which alone render travel possible across this inhospitable region of bare rocky hills and detritus-covered valleys. The scarcity of water and grazing implied serious risks in this mode of progress. Only a single small Mongol camp was encountered in the course of twenty-eight marches, and there too no guide could be obtained.

At last, after passing the well of Ming-shui, the snowy massif of the Karlik-tagh, the easternmost great elevation of the T'ien-shan, came into view, far away to the northwest, and served as a rough direction. But serious difficulties still awaited us in the last barren hill range through which we had to make our way, owing to want of water and the very confused and in places rugged configuration of its valleys. When we had safely emerged from it through narrow, tortuous gorges which ever threatened to stop our