

posing appearance, seeming to be disconnected from the ground and to be hovering in the air. All day we saw at the distance of about 4 km. to the west a stretch of hills, apparently a continuation of the left-hand terrace already described. In the same direction there were also a few solitary dunes occurring at intervals. Both deserts, the sandy desert and that of the clay terraces, were considerably broader in the west than along the line where we crossed them.

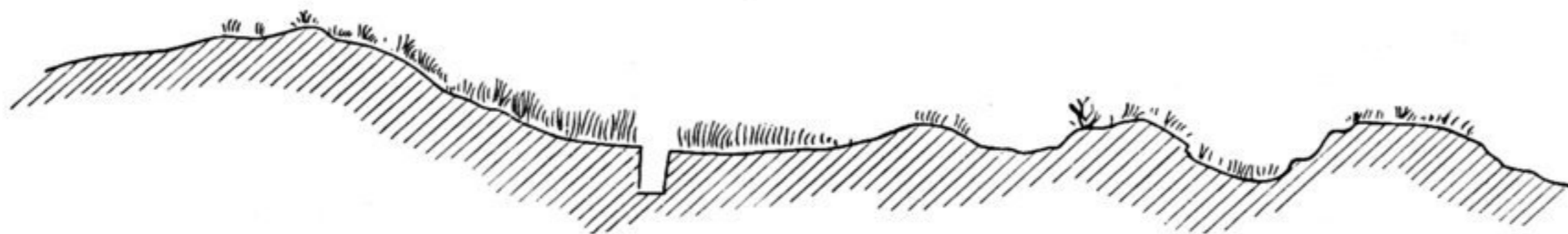


Fig. 218.

Here again we dug a well; and while the temperature of the air was -1.6° , the temperature of the ground at the surface was -0.95° , at 25 cm. -0.53° , at 40 cm. -0.40° , at 59 cm. $+0.22^{\circ}$, and at 84 cm. $+2.22^{\circ}$. The ground was frozen as hard as a stone to the depth of 55 cm., and the water, of precisely the same character as in the last well, was met with at a depth of 84 cm. The principal reason that the ground here was frozen to a greater depth than at the preceding well was that we dug it at the northern foot of a little sand-hill, where the shadows remained longer (Pl. 56). The water trickled out in some abundance, though slowly; and the areometer indicated a sp. gr. of 1.0065.

From this camp we were just able to make out faintly the mountains on the north as well as those on the south. In the latter direction we inferred rather than actually saw the sandy desert from the light yellowish glare which vibrated above its surface. On the 4th February quite a stiff westerly breeze blew all the afternoon.

In the sandy ground we frequently came across vertical holes a couple of decimeters deep. We soon ascertained what was the cause of these, for in some of them we found stalks of kamisch, with all their leaves on, still remaining. When the wind starts swaying the stalk to and fro, the part which is fast in the ground gradually enlarges the socket in which it stands, until finally the stalk breaks off at the root, and leaves a gaping hole behind it. Almost every individual kamisch stalk, after being bent to the ground by one or other of the different winds, had described on the sand or on the schor as many concentric circles round its base as it possessed leaves. Although seldom more than half complete, and seldom distinctly marked for more than half-way round, these rings are gradually deepened by the hard, sharp points of the leaves (fig. 220). How the future geologist would puzzle his brains to explain the origin and meaning of these regular geometrical circles if he came across them on the horizontal face of some bed of sandstone!

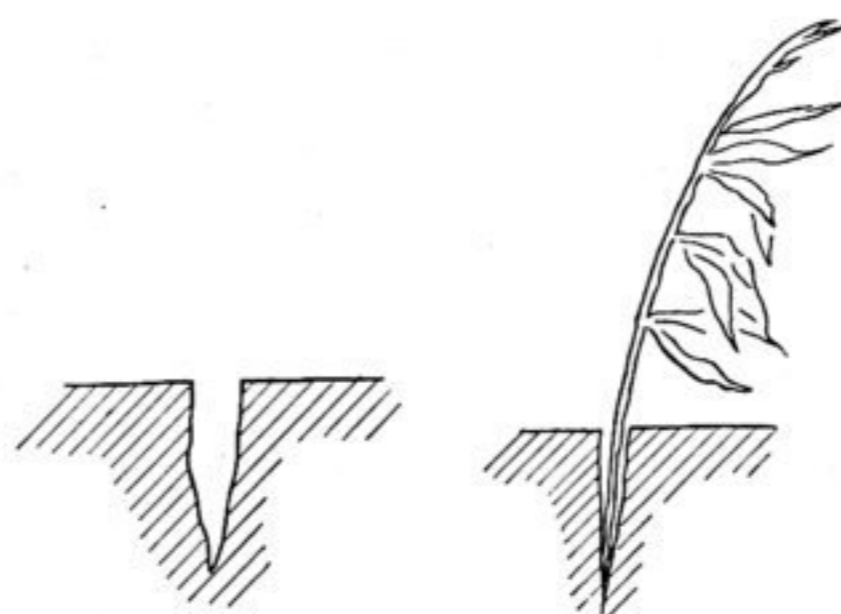


Fig. 219.

On the 5th February we travelled north-north-west and north towards Atschik-kuduk, passing on the way the following configurations and arrangements of the