

The only hard rock we saw during the day consisted of two small conical knobs of porphyry. During the whole of the first half of the march the gravel consisted of black clay-slate and crystalline schist. During the second half it consisted of a peculiar amorphous, yellowish grey variety of rock, which upon being struck exhibited a conchoidal fracture. Otherwise all the hills in the neighbourhood consisted of soft disintegrated material and of sand.

The 22nd of August was devoted to an exploration of this extremely peculiar lake, the surface of which, in the gloriously calm weather that prevailed, stretched like an expanse of glass right away to the low hills which bordered it on the south.

From Camp No. XXX (alt. 4766 m.) the western shore appeared to bend principally towards the south, and by means of a reconnaissance I ascertained that it still maintained the same characteristics, namely low, grass-grown hills. The northern shore ran towards the east in an scalloped line. The shore-line is finely indented and forms a succession of small capes of moist mud, and quite close to it is a little ridge, composed of lighter gravel, and about 50 cm. high, which has been washed up by the beat of the waves. Mingled with this gravel, which is derived from the above-mentioned yellowish grey rock, there were also pieces of almost 1 cubic foot in size. Behind this strip of shore, which is 20 to 30 m. broad, rise the nearest sand-hills, not much more than 4 to 5 m. above the surface of the lake. But we searched in vain for any indication that the lake ever reaches a higher level. That its level does fluctuate is however probable, because the lake possesses no outlet and yet it receives a large river from the west, so that its level must be dependent upon the influx from this latter. It is however fair to suppose that just at that season the lake was at its maximum level, and that that reached exactly as far as the foot of the grass-grown hills. If the inflow in winter diminishes, the level must drop because of the evaporation. After describing the stream that supplies the lake, we will return to this question again.

Close along the water-line and stretching up from it is a continuous belt or crust of hard crystallised salt, 2 to 4 cm. in thickness. Although this upper crust broke under our naked feet, the ground underneath it did not yield, but bore perfectly: the foot did not go deeper than a couple of centimeters into the crushed salt, intermingled with red mud, and when we stepped into the water, it was stained red wherever we put our feet. The saline crust undoubtedly increases in thickness towards the middle of the lake, and when struck with a paddle some distance from the shore, it rang like a stone. In the same parts of the lake the saline crust was covered with a very thin layer of fine red sand, through which the salt showed. This sand is easily crumpled by the movement of the waves, so that in those places the bottom is striped or streaky. About 1½ km. from the shore, where the depth was still only about ½ m., the water was for a short distance slightly muddy, but afterwards it cleared again; this was probably caused by currents from the river that enters the lake, or from other rivers which maybe issue into it.

My first line of soundings ran towards the S. 74° E., towards the southern cape of the only island in sight. Along that stretch, a distance of 4200 m., the depth was nowhere so much as 1 m.; in fact the entire lake is so shallow that I was able to use throughout the graduated paddle, rather more than 2 m. long. The soundings