

touched the skin, was above all exceedingly painful to the eyes.

The boats, heavily laden, struggled sluggishly at first, but when the wind freshened to a gale, it seemed as if the bows, so dense was the water, were encountering the sledge hammers of the Titans, instead of the opposing waves of an angry sea.

At the expiration of an hour and a half, we were driven far to leeward, and I was compelled to bear away for the shore. When we were near to it, and while I was weighing the practicability of landing the boats through the surf, the wind suddenly ceased, and with it the sea rapidly fell, the ponderous quality of the water causing it to settle as soon as the agitating power had ceased to act. Within five minutes there was a perfect calm, and the sea was unmoved even by undulation. At 8, P. M., weary and exhausted, we reached a place of rendezvous upon the northwest shore."

The three succeeding days were devoted to sounding. They afterwards proceeded southward, making topographical sketches as they went, and touching at the copious stream which descends from the hot springs, as also at the mouth of the Mojib, the ancient Arnon. They approached by degrees the southern extremity of the sea, which at length proved so shallow, that they could proceed no further. Half a mile from the southern shore they found but six inches of water, bordered by an extensive marsh. The present writer also once attempted to bathe in this part of the sea, nearly opposite the middle of the salt mountain Usdum. The bottom was here of sand, and the water so shallow, that after wading out some twenty rods, it reached little more than half way to the knee.

The following extracts from the letters of Lient. Lynch, in addition to those above given, present the main

results of their examination of the Dead Sea.

"We have," says he, "elicited several facts of interest to the man of science and the Christian.

"The bottom of the northern half of this sea is almost an *entire plain*. Its meridional lines at a short distance from the shore, scarce vary in depth. The deepest soundings thus far are 188 fathoms, or 1128 feet. Near the shore, the bottom is generally an incrustation of salt; but the intermediate one is soft mud with many rectangular crystals, mostly cubes, of pure salt. At one time Stellwagen's lead brought up nothing but crystals.

"The southern half of the sea is as shallow as the northern one is deep, and for about one-fourth of its entire length, the depth does not exceed three fathoms, or 18 feet. Its southern bed has presented no crystals, but the shores are lined with incrustations of salt, and when we landed at Usdum, in the space of an hour, our footprints were coated with crystallization."

Here, then, is the singular fact, "that the bottom of the Dead Sea forms two submerged plains, an elevated and a depressed one. The first, its southern part, of slimy mud covered by a shallow bay; the last, its northern and largest portion, of mud and incrustations and rectangular crystals of salt, at a great depth, with a narrow ravine running through it, corresponding with the bed of the river Jordan at the one extremity, and the Wady el-Jeib at the other." The greatest depth obtained was 218 fathoms, or 1308 feet; apparently in this deeper ravine.

"The opposite shores of the peninsula and the west coast, present evident marks of disruption.

There are unquestionably birds and insects upon the shores, and ducks are sometimes upon the sea, for we have seen them, but cannot detect any living thing within it; although