

rupted. It may have been some species of *Hylonomus*. On the whole, these footprints differ from those found by Dr. King in Pennsylvania; but they do not prove the existence of any kind of animal distinct from those to be described in the sequel, and known to us by the preservation of portions of their skeletons.

The study of these impressions shows that the animals which produced them may, in certain circumstances, have left impressions of only two or three of their toes, while in other circumstances all may have left marks; and that, when wading in deep mud, their footprints were altogether different from those made on hard sand or clay. In some instances the impressions may have been made by animals wading or swimming in water, while in others the rain-marks and sun-cracks afford evidence that the surface was a sub-aerial one. They are chiefly interesting as indicating the wide diffusion and abundance of the creatures producing them, and that they haunted tidal flats and muddy shores, perhaps emerging from the water that they might bask in the sun, or possibly searching for food among the rejectamenta of the sea, or of lagunes and estuaries.

III. BAPHETES PLANICEPS.

Plate II.

In the summer of 1851, I had occasion to spend a day at the Albion mines; and on arriving at the railway station in the afternoon, found myself somewhat too early for the train. By way of improving the time thus left on my hands, I betook myself to the examination of a large pile of rubbish, consisting of shale and ironstone from one of the pits, and in which I had previously found scales and teeth of fishes. In the blocks of hard carbonaceous shale and earthy coal, of which the pile chiefly consisted, scales, teeth and coprolites often appeared on the weathered ends and surfaces as whitish spots. In looking for these, I observed one of much greater size than usual, on the edge of a block, and on splitting it open, found a large flattened skull, the cranial bones of which remained entire on one side of the mass, while the palate and teeth, in a more or less fragmentary state, came away with the other half. Carefully trimming the larger specimen, and gathering all the smaller fragments, I packed them up as safely as possible, and returned from my little excursion much richer than I had hoped.