two fect and a half in length, exclusive of the tail, which is wanting; but the armor in which it is cased might have served a crocodile or alligator of five times the size. It lies on its back, on a mass of red sandstone; and the scales und plates still retain their bony color, slightly tinged with red, like the skeleton of some animal that had lain for years in a bed of ferruginous marl or clay. The outline of the occipital portion of the specimen forms a low Gothic arch, of an intermediate style between the round Saxon and the pointed Norman. This arch is filled by two angular, rane-like plates separated by a vertical line, that represents, if I may use the figure, the dividing astragal of the window; and the under jaw, with its two sweeping arcs, or branches, constitutes the frame. All of the head which appears is that under portior of it which extends from the upper part of the belly to the snout. The belly itself is thickly covered by huge carved scales, that, from their massiveness and regular arrangement remind one of the flags of an ancient stone roof. The carving varies, as they descend towards the tail, being more in the ridged style below, and more in the tubercled style above. So fairly does the creature lie on its back, that the ventral fins have fallen equally, one on each side, and, from their semicircular form, remind one of the two pouch holes in a lady's apron, with their laced flaps. The entire outline of the fossil is that of an elongated ellipsis, or rather spindle, a little drawn out towards the caudal extremity. The places of all the fins are not indicated, but, as shown by other specimens, they seem to have been crowded together towards the lower extremity, like those of the Glyptolepis, an ichthyolite which, in more than one respect, the Holoptychius must have resembled, and which, from this peculiarity, presents a brushike appearance — the head and shoulders representing the