

ever, the only parts usually seen, and it was only after collecting the species for a number of years that I obtained evidence that what had come to be looked upon as wholes were, in reality, only parts of much more extensive impressions."

The species was more fully described by Mr. Ford, in 1881, under remarks on the genus *Obolella* (*Amer. Jour. Sci.*, 3d ser., vol. xxi, pp. 131, 132).

"The shell of *Obolella crassa* is suborbicular, with the beak of either valve extending slightly beyond the peripheral contour. As a rule, the beak of the dorsal valve is curved downward so as to almost touch the short, indistinct hinge-line, while that of the ventral valve is less depressed and slightly more projecting; and these are the only features by which the two valves may be externally distinguished. The majority of the specimens of the ventral valve have an extremely shallow depression running from the beak to the anterior margin along the median line; but I have found that even this is not distinctive, inasmuch as some of the dorsal valves exhibit it. The specimens in my possession vary in length and breadth from $1\frac{1}{2}$ to 6 lines, the two diameters being generally nearly equal. The surface of both valves, when perfect, is both radiately and concentrically striated. The shell is thick and solid, showing no tendency to break up into successive laminae on weathering. I have had portions of it ground and polished for microscopic examination, but am unable to make out any definite structure.

"In the interior of the ventral valve there are two small, ovate muscular scars, situated close to the beak, one on either side of the pedicle groove; and immediately in advance of these a pair of large, elongate, curved scars, which sometimes extend forward into the anterior fourth of shell. Between these latter, and somewhat above the mid-length of the valve, there are two small subcircular impressions. All of these scars are, in well preserved specimens, deeply impressed, and, taken together, constitute a conspicuous and beautiful system. There is usually a distinct ridge running along the middle of the large lateral impressions, dividing them at bottom into two portions; and in some cases its wider upper portion is minutely pustulose. The rostral portion of the valve is often much thickened, the several scars bounding the elevation. The interior surface of the forward portion of the valve is marked by fine radiating striæ.

"The dorsal valve possesses a small though distinct area, which is divided into two equal portions by a feeble longitudinal ridge. The slender cardinal line is delicately notched in the middle, and has immediately in advance of it a deep transverse groove.¹ On either side of the longitudinal ridge referred to, there is a small, ovate, cardinal muscular scar. These scars have their apices directed downward and outward, their upper portions cutting across the extremities of the cardinal line

¹ Fig. 2h in original.