described the type species, accompanying it with figures, two of which we reproduce, together with the description.

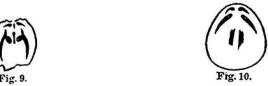


Fig. 9.—Diagram showing the position of the scars of the ventral valve of O. chromatica. Fig. 10.—Diagram showing the position of the scars of the dorsal valves (after Billings).

"Generic characters.— Shell unarticulated, ovate or sub-orbicular, lenticular, smooth, concentrically or radiately striated, sometimes reticulated by both radiate and concentric striæ. Ventral valve with a solid beak and a small more or less distinctly grooved area. In the interior of the ventral valve there are two elongated sublinear or petaloid muscular impressions, which extend from near the hinge line forward, sometimes to points in front of the mid-length of the shell. These are either straight or curved, parallel with each other or diverging towards the front. Between these, about the middle of the shell, is a pair of small impressions, and close to the hinge line a third pair, likewise small, and often indistinct. There is also, at least in some species, a small pit near the hinge line, into which the groove of the area seems to terminate. In the dorsal valve there are six impressions corresponding to those of the ventral valve, and sometimes an obscure rounded ridge along the median line.

"If we compare the interior of the ventral valve of an Obolella with that of Obolus Apollinis, we see that there are six muscular impressions in each, but not arranged in the same manner. The two small scars aa at the hinge line are most probably the same in both genera. The two lateral scars bb of Obolus have no homologue in Obolella, unless they be represented by the two large ones, dd. Should this be the case, however, the great difference in their position would no doubt be of generic value. I think it more probable that the large scars dd of Obolella represent the central pair cc of Obolus. Again, Eichwald says that in the interior of the ventral valve of O. Apollinis there is a longitudinal septum (shown in the above fig. at s), which separates the two adductors, cc, and extends to the cardinal groove (I suppose he means the groove g on the area). No such septum occurs in any species of Obollela. have not seen any description of the dorsal valve of the O. Apollinis sufficiently perfect to afford a means of comparison with that of Obolella, but the differences in the ventral valve alone are so great that the two genera can scarcely be identical. They are, however, closely related, and occur in nearly the same geological horizon."

In the rocks below Quebec and at the Straits of Belle Isle, we find the following species of Obolella:

<sup>1. &</sup>quot;O. desquamata Hall = Avicula? desquamata, Pal. N. Y., vol. i, p. 292, pl. 80, fig. 2. Occurs at Troy, New York.