

employed for a Sponge) comprises those Velellidæ which differ from the true *Velella* by the broad lobate margin of the umbrella and by the double or multiple corona of tentacles; usually also by the quadrangular form of the umbrella, which in the former is more elliptical. Although a sharp boundary line between the true *Velella* (*s. str.*) and *Armenista* cannot be drawn, the differences of the extremely divergent forms are very striking; and when the intermediate forms are neglected, they represent two widely different genera. The elliptical umbrella with integral border of the mantle, and the simple corona of tentacles, brings the true *Velella* nearer to the ancestral *Rataria*. On the other hand, the larger *Armenista*, with the broad lobate border of the mantle of the quadrangular umbrella, and the double or multiple corona of tentacles, is a more recent and more differentiated form. To this genus belong probably the following species:—

- (1) *Armenista sigmoides*, n. sp., from the Southern Tropical Atlantic, figured in Pl. XLIII., and taken by the Challenger at Station 346.
- (2) *Armenista mutica*, Lamarck, from the North-western Atlantic, very good figures of which were published in 1883 by Alexander Agassiz (57).
- (3) *Armenista antarctica*, Eschscholtz (1), and
- (4) *Armenista indica*, Eschscholtz (1), from the Indian and Antarctic Oceans, and the Cape of Good Hope.
- (5) *Armenista lata*, Chamisso (21), from the Northern Pacific.
- (6) *Armenista lobata*, n. sp., from the Southern Pacific.

*Armenista sigmoides*, n. sp. (Pl. XLIII.).

*Velella sigmoides*, Hkl., 1881, MS.

*Habitat*.—Station 346, Tropical Atlantic; April 6, 1876; lat. 2° 42' S., long. 14° 47' W. Surface.

*Umbrella* (fig. 1, from above; fig. 2, from below; fig. 3, half lateral, half superior view).—The umbrella is nearly rectangular, with rounded edges, about once and a half or twice as long as broad; the longitudinal or sagittal diameter of the horizontal disc is in the largest specimens 80 to 90 mm., the transverse or frontal diameter 30 to 40 mm. This latter about equals the height of the triangular vertical crest or sail.

*Exumbrella* (fig. 1).—The superior or apical face of the umbrella is divided into the broad lobed mantle-border and the colourless pneumatic disc, both separated by a sharp line which is not parallel to the margin of the border. The vertical diagonal crest divides the exumbrella into two equal halves, an antero-dextral and a postero-sinistral. When we regard the disc in profile from the broad side (its major axis perpendicular to the axis of vision), the crest or sail runs from our proximal and left to our distal and right side; but seen from behind, from the smaller side (the major axis of the disc