of marginal spines, and exhibits therefore the same relation to it that *Challengeron* bears to *Challengeria*. Only two species have been observed; the first of these bears, besides the large marginal spines, numerous flinty bristles on the surface of the shell.

1. Porcupinia aculeata, n. sp.

Shell ovate, one and one-third times as long as broad, slightly compressed, covered with short, bristle-shaped spines over the whole surface, similar to *Entocannula hirsuta* (Pl. 99, fig. 20). The keeled margin is armed with numerous long and stout radial spines, which are alternately larger and smaller, as in *Challengeron moseleyi* (Pl. 99, fig. 14); the larger about as long as the radius, the smaller half as long. Peristome with two straight, parallel teeth. Pharnyx funnel-shaped, half as long as the radius, its outer aperture twice as broad as the inner.

Dimensions.—Length of the shell 0.24, breadth 0.18; peristome 0.05.

Habitat.—Tropical Atlantic, Station 347, depth 2250 fathoms.

2. Porcupinia cordiformis, n. sp. (Pl. 99, fig. 16).

Shell heart-shaped, nearly triangular, with a deep, concave bosom at the broad oral base, and a bunch of five to nine divergent spines at the blunt aboral apex, the middle spine (in the main axis) larger than the others. Peristome with two parallel, short, triangular teeth, which are obliquely inclined over the mouth (their upper convex edge nearly horizontal). Pharynx cylindrical, short, curved, and obliquely descending.

Dimensions.—Diameter of the shell 0.2 to 0.25, of the pharynx 0.05 to 0.08.

Habitat.—South Atlantic, Station 332, depth 2200 fathoms.

Family LXXIX. MEDUSETTIDA, n. fam. (Pls. 118-120).

Definition.—Phæodaria with a simple, ovate, hemispherical or cap-shaped lattice-shell of peculiar alveolate structure, and with hollow articulate feet surrounding the widely open mouth. Central capsule excentric, placed in the aboral half of the shell-cavity.

The family Medusettida represents a peculiar group of remarkable Phæodaria, which are similar to the Challengerida and Tuscarorida in the general form of the monaxonian shell and its apophyses, but differ from both families in the strange alveolate structure of the shell and of the hollow articulate feet surrounding its mouth. All the forms of this family here described are new, and not a single species was known before the discoveries of the Challenger. The majority seem to be inhabitants of the deepsea, and occur mainly in those places where other families of Phæodaria (Aulacanthida, Aulosphærida, Cælodendrida) are also well represented; they are, however, nowhere so common as these latter families. Their long feet and the small delicate