0·008 mm. wide, and the prosodus very short. The choanocytes present no unusual characters.

The Incurrent Conduit (*Conditus*).—The cortex is continued into the wall of the conditus, which may be regarded as a tubular extension of the cortex (Pl. XLI. figs. 3*b*, *c*). It is a simple open tube, undivided either by transverse or longitudinal diaphragms. The radiating spicular sheaves of the body extend up to its base, but do not proceed further, the spicules which support its walls being similar to the oxeas of the cortex, arranged longitudinally and transversely parallel to the surface. The wall, at first thick and rigid, soon becomes thin and very flexible; and is perforated by poral canals which lie in the rectangular interspaces sketched out by the underlying transverse and longitudinal oxeas. The external epithelium with its associated sanidasters can be traced down the sides of the poral canals into continuity with the epithelium, also incrusted with sanidasters, which lines the inner surface of the tube. The tissue composing the thickness of the wall is collenchyma traversed by longitudinal, parallel-sided, thin bands of fusiform cells, which run continuously for a considerable distance; in a preparation 3 to 4 mm. long some of the bands could be individually traced from end to end, maintaining the same breadth, and only ceasing with the preparation. It is very unfortunate that the natural termination of the conditus is not preserved, as sense-cells might be expected to occur in it.

The only spicules of the conditus are oxeas and sanidasters.

The Cloacal Tube.—This is cylindrical, tapering, polygonal or circular in transverse section, terminated distally by a conical disc. It is composite, consisting of from four to fifteen (normally sixteen) contiguous, longitudinal, cylindrical tubes, which extend throughout its whole length, taking a slightly spiral direction, to the extent of twisting through an angle of about 180° between the two extremities. The component tubes are circular, oval, or triangular in section; they are arranged in tetragonal symmetry. *Stage of four component canals* (Pl. XLI. fig. 3, *a*; Pl. XVIII. fig. 15).—When only four tubes are present, they are so disposed that tangents drawn common to them in pairs would form a square; they touch each other in two places, leaving a curved quadrangular area in the middle; this is sometimes occupied by a spicular axis, which is easily parted in the middle, leaving a vacant space, or the spicular axis may not be present, and its space is left void; in either case a deceptive appearance, as that of a fifth and central canal, is present; it is possible that the central canal represented by Marshall in *Agilardiella*[1] and by Ridley (pl. xliii. fig. *l'*, *loc. cit.*) is to be thus explained. When the cloaca formed of four tubes has a quadrangular section, each side is formed by the external part of the wall of one of these tubes, which then have the form of an equilateral triangle with a curved base facing outwards. *Stage of eight canals.*—Ridley figures a cloacal tube composed of nine canals; if, however, the central one be disregarded, this would give us a stage of eight such as

[1] *Abhandl. d. k. Akad. d. Wiss. Berlin* for 1883, fig. 7.