shallow median canal. Their outer surface has a large, round mamelon (an exaggeration of the articulating shoulder) having above a central gulley to admit the umbo of the next bone; and below a minute articulating peg with a small depression on either side to admit the knobs of the succeeding bone. The whole is not unlike *Ophiochondrus* (Pl. XLIII. figs. 12, 13), and shows a leaning towards the Astrophytidæ. By doing away on the outer face with the articulating peg, and deepening the central gulley, we get a shape like *Sigsbeia*, and by flattening the tentacle sockets in this last we arrive at the proper transverse hour-glass projection.

Taking then the inner face, and widening the umbo above (fig. 13, 1) and the knobs below (2), there results a form like that of *Sigsbeia* (fig. 6), and by further enlarging this figure and diminishing the muscle fields, there is produced a true vertical hour-glass projection (compare Pl. XXV. figs. 24, 25). In a word, the Astrophytons, with their slender arms, rolling in a vertical plane, and furnished with small tentacles, have simple hour-glass joints, muscle fields little and flat, and small tentacle sockets.

The short mouth angle of *Ophiomyxa* is covered quite to the inner edge of the nerve ring by a pair of stout, triangular peristomial plates. A further *Astrophyton*-like feature is the arrangement of the arm plates, whereof the under one is small (Pl. XLIII. fig. 2), and sometimes even in three pieces (*Ophiomyxa pentagona*), and has attached to it a massive side arm plate (figs. 1 and 3, *i*), of which the greater portion is on the under side of the arm, bearing stumpy, thorny spines (*p*), and continued upward by a number of thin pieces homologous with upper arm plates (*j*). In *Ophiomyxa vivipara*, however, there are no upper arm plates, a want which brings the species near *Ophioscolex*.

See Plate XLIII. figs. 1–3.

Table of Species of *Ophiomyxa*.

Although *Ophiomyxa* has only four species, a table of them is given, because they are distinguished chiefly by internal characters.

Radial shields short and thick. Marginal disk scales small and thin. Under arm plates in three pieces. Upper arm plates in two pieces. Disk skin with small thin lime plates, ...	*Ophiomyxa pentagona.*
Radial shields long and rounded. Marginal disk scales large, thick, few. Under arm plates wider than long with an outer notch. Upper arm plates in several pieces on each side. Disk skin thick, with small scattered lime nodules, .	*Ophiomyxa flaccida.*
Radial shields short and wide. Marginal disk scales small, numerous, regular. Under arm plates as long as wide with an outer notch. Upper arm plates in several pieces, and connected along ridge of arm by other pieces. Disk skin thin and naked, ...	*Ophiomyxa australis.*
Radial shields short, wide, flat. Marginal disk scales small and narrow. No upper arm plates. Under arm plates hexagonal with re-entering curves. Disk skin beset with calcareous plates, ...	*Ophiomyxa vivipara.*