

DESCRIPTION OF SPECIES.

Order I. APODA.

Body cylindrical or fusiform, devoid of pedicles and processes. Tentacles pinnate or digitate or peltate—digitate or simple unbranched.

Suborder I. APNEUMONA.

Respiratory-trees absent. Ciliated cups, attached to the mesentery, present. No radial ambulacral vessels.

Family SYNAPTIDÆ.

Genus *Synapta*, Eschscholtz, 1829.

Synapta beselii, Jæger, 1833 (Pl. I. fig. 12).

Habitat.—Zebu Reefs; several individuals. Amboina; several specimens. Reefs at Papiete; numerous individuals. Station 177, August 18, 1874; lat. 16° 45' S., long. 168° 7' E.; depths, 130 fathoms; a few specimens.

All the specimens dredged at the different localities above mentioned seem to agree most certainly with those described by Jæger, Müller, Semper, &c. However, no one has, so far as I know, noted anything with regard to the peculiarity, that the very numerous Polian vesicles are, as it were, branched, that is, that four or five of them arise from the same base, and that some of these always appear to be more or less rudimentary. This arrangement of the Polian vesicles is very conspicuous in the individuals from Zebu Reefs. Amongst the specimens brought home from the reefs at Papiete there are several provided with two branched madreporic canals, of which, as is well known, the typical forms have but a single one.