Forskalia tholoides, n. sp. (Pls. VIII.-X.).

Forskalioma tholoides, Hkl., 1866, MS. Canar.

Habitat.-Lanzerote, Canary Islands, December 1866 (Haeckel).

Nectosome (Pl. VIII.; Pl. IX. fig. 6).—The swimming apparatus is very large, campanulate or cupola-shaped, and has a diameter of 35 to 40 mm. The axial trunk is a slender tubule, slightly curved and twisted spirally, of a reddish colour. Its apex bears a small pyriform pneumatophore. The nectophores are very numerous, and so densely aggregated that no intervals remain between them. They are arranged as regularly in a continuous spiral as the bracts in a fir-cone. In the lateral view of the nectosome of a middle-sized specimen (fig. 1) about sixteen to twenty longitudinal rows of nectophores may be distinguished, and nearly the same number of alternating transverse rows, so that their total number may amount to three hundred or four hundred, and in the larger specimens more.

Pneumatophore (figs. 1, 6, p).—The float is an ovate, relatively small vesicle, slightly prominent over the surrounding corona of nectophores at the top of the stem, and coloured pink in the upper or apical half. Its outer membrane, or the pneumatocodon, is connected with the inner membrane, or the pneumatosaccus, by eight vertical radial septa. These divide the cavity of the pneumatophore into eight radial pouches. Its structure is the same as figured by Claus in *Forskalia edwardsii*, which, however, has only six radial pouches (35, Taf. xlvii. fig. 16). The apex of the pneumatophore (Pl. X. fig. 24) has the form of an ocellus, a dark circular apical spot (similar to a closed opening), being surrounded by a clear colourless ring, and this again by a regular pink pigment-cross. The four rays of this cross are forked, and the eight fork-branches, composed of elegant pigment-cells, are divergent and equidistant towards the equator of the pneumatophore, corresponding to the abaxial insertion of the eight internal radial septa.

Nectophores (Pl. VIII. figs. 1-5).—The nectocalyces are irregularly prismatic, with polygonal lateral faces produced by mutual compression. They are attached to the axial trunk of the nectosome by long pyramidal pedicles (np). These are shorter in the superior, longer in the inferior nectophores, where they attain double the length of the umbrella. A long nectocalycine duct (ns) enters into the axial apex of the pyramidal pedicle and runs in its axis towards the top of the campanulate subumbrella. It divides here into four radial canals (nr), which are united above the small velum (v) by a ring-canal (nc). Figs. 2-5 exhibit four different stages in size in the development of the nectophores (fig. 5 a very young one).

Siphosome (Pl. VIII. fig. 1, inferior half, seen in profile; Pl. IX. fig. 6, apical view).—The siphonophorous part of the entire corm, or the siphosome, has a very