

traverse the body of these Keratosa in all directions, and replace mechanically the absent scaffold of stout spongin main fibres. This peculiar adaptation is found in sixteen species, viz., in all the Stannomidæ (nine species), in all the Spongelidæ of the deep sea (five species), and in two species of Psamminidæ; the symbiotic Hydroids are wanting in most of the smaller forms, in the remaining five species of Psamminidæ, and in all the Ammoconidæ (five species). A full description of the various symbiotic Hydroids is given in the Appendix. Their chitinous tubes are usually filled by a dark brown mass, which former observers supposed to be the phæodium of a large Rhizopod. Closer examination proved it to be the coenenchyma, which is usually more or less destroyed, and showed also the gonangia and the hydranths.