

terminal branches, an odd median ampulla and a pair of lateral horns (fig. 1, *α*). If this explanation be right, *Angela* would bear the same relation to *Epibulia* as *Cannophysa* does to *Aurophysa*.

Family XXIV. PHYSALIDÆ, Brandt, 1835.

*Physalidæ*, Brandt, Prodrömus descriptionis, &c., 25, p. 36.

*Definition*.—Cystonectæ polygastricæ with a short inflated trunk of the vesicular siphosome, which is horizontally expanded along the ventral side of the subhorizontal gigantic pneumatophore. Cormidia in a multiple series along the ventral side of the trunk, usually loose. Pneumatossacus very large, sometimes with a chambered dorsal crest, without radial septa and hypocystic villi.

The family Physalidæ comprises the largest and most interesting Cystonectæ, which surpass all the other Siphonophoræ in the enormous size of the inflated pneumatophore and the vigorous tentacles, the splendid colours of the peculiar siphosome, and the dangerous poisons of the urticating organs. Since some forms of this interesting family, and especially the largest of all, the Atlantic *Caravella maxima*, occur in great swarms floating on the surface of the ocean, they have been well known to travellers and sailors for a long time. In many voyages they are mentioned under the popular names "Caravella, Galera, Fregatta, Ship of Guinea, Portuguese Man-of-War," &c. Nevertheless the natural history of the Physalidæ has hitherto been very imperfectly studied, and there remains much to be done towards a complete knowledge of them.

The genus *Physalia*, generally accepted as the only one of this family, was established in 1816 by Lamarck (90) for those *Caravellæ* which O. F. Müller and Gmelin in the preceding century had described as *Medusa caravella*, Linné, or *Holothuria physalis*. Neither the name *Salacia*, employed for them by Linné in a few editions of his *Systema naturæ* (1756, 1, p. 158), nor the name *Arethusa*, proposed by Patrick Browne in 1789, have yet any application (compare above, p. 330, and below, p. 349). While Lamarck distinguished five different species, with very insufficient definitions, Eschscholtz accepted only three, the common Atlantic *Physalia caravella* (the largest of all, with numerous large tentacles), the smaller *Physalia pelagica* (from the Southern Atlantic and Indian Oceans), and the larger *Physalia utriculus* from the Pacific; the two latter species have only a single large tentacle, and differ mainly in the form of the pneumatophore. Recently Chun, in the latest paper on *Physalia* (83, p. 557), unites these two latter forms, accepting two species only of this genus—*Physalia caravella*, with many large main-tentacles, from the Atlantic, and *Physalia utriculus* (including *Physalia pelagica*) from the Indo-Pacific Ocean. All recent authors have accepted the genus *Physalia* as the only type of this family.