in the North Pacific, have been incompletely described—*Epibulia chamissonis* by Eysenhardt (**77**, Tab. xxxv. fig. 3), and *Epibulia erythrophysa* by Brandt (**25**, p. 34). Unfortunately the excellent figure of the latter species, which Mertens in 1817 had drawn from life, has never been published. It is much to be lamented that this, as well as all the other wonderful drawings of Siphonophoræ, which Mertens had executed with the most admirable accuracy, have never found their way into literature. Comparing Mertens' figure of *Epibulia erythrophysa* with a similar splendid Cystonect which I myself observed in Ceylon (1882), I have no doubt that both species belong to one and the same genus. The accurate examination of this Indian *Epibulia ritteriana* (Pl. XXII. figs. 6–8), and their comparison with the closely allied Physalidæ, has led me to the opinion that this genus represents a new family, intermediate between the latter and the Rhizophysidæ. Another genus of this family may be perhaps *Angela cytherea* of Lesson, which, however, is too imperfectly examined (**3**, p. 496, pl. ix. fig. 1).

The Epibulidæ agree with the next allied Physalidæ in the bag-shaped form of the short and wide trunk of the siphosome. But the large pneumatophore does not extend along the dorsal side into the cavity of the vesicular trunk; it occupies rather the apical half of the corm, whilst the siphosome occupies its basal half. The Epibulidæ agree in this respect with the other Cystonectæ, and differ essentially from the true Physalidæ, with which I had united them (in 1887) in my System (**95**, p. 46, Genus 73). A further consequence of this important difference is that the main axis of the large pneumatophore stands subvertically or obliquely inclined in the Epibulidæ (as in the other Cystonectæ), whilst it is subhorizontal in the Physalidæ; the stigma, therefore (or the apical air-pore), occupies in the former the superior pole, in the latter the anterior pole of the floating corm. A further difference is, that the ventral line of the shortened trunk, from which the budding cormidia arise, is circular or rather spiral in the Epibulidæ, straight in the Physalidæ, and that a complete corona of palpons surrounds the base of the float in the former, but is wanting in the latter.

The whole form of the corm, as well as the structure of its single parts, is in the Epibulidæ very like that in the Cystalidæ (Pl. XXII. figs. 1–5); but the important difference between them is that the former are polygastric, the latter monogastric. It is very probable, however, that the Epibulidæ have arisen directly from the Cystalidæ (by secondary multiplication of the siphons and tentacles), as well from a phylogenetical as from an ontogenetical point of view (compare above, p. 315).

Nectosome (Pl. XXII. fig. 6, *p*; fig. 7, longitudinal section; fig. 8, transverse section).—The pneumatophore has in the Epibulidæ the same structure as in the Salacidæ and Rhizophysidæ; it includes eight radial bunches of hypocystic villi. Its apex bears the stigma typical of all Cystonectæ. The living *Epibulia*, when it wishes to sink down, expels at will the gas through this apical pore; as I have observed in Ceylon. The apical part of the pneumatosac is intensely coloured by a pigment-cap (mitra ocellaris, *pp*).