

*Bracts* (Pl. XI. figs. 1, 2; Pl. XII. figs. 14–16).—The hydrophyllia, or bracts, which make up the main part of the nectosome, form an elegant corona around the pneumatophore, similar to a double rose, or other flower with numerous petals. Their number is usually between twenty and forty, sometimes more than sixty. They are always thick sickle-shaped scales of a more or less elliptical or lanceolate outline, strongly curved, and attached to the stem by a short pedicle. Sometimes these pedicles are rather broad lamellæ, similar to the pedicles of the nectophores in the Rhodalidæ (Pl. XII. figs. 7–9, *bp*). The inner or axial face of the bract is concave and smooth, the outer or abaxial face convex and armed with a variable number of longitudinal ribs or crests, which bear a series of cnidocysts. The thick and firm jelly-substance of the cartilaginous bract encloses a simple canal or phyllocyst, which runs near the inner surface in the median line, and ends blindly at the distal end (fig. 14, *bc*).

No doubt the bracts of the Anthophysidæ are either parts of divided nectophores, or entire reduced nectophores which have lost the nectosac with the subumbrella and the four radial canals, but developed more strongly the jelly-substance of the umbrella, forming a firm protecting scale, or a “cartilaginous shield.” The bracts of *Rhodophysa* still possess a small rudimentary nectosac at the distal end, similar to that of *Athoria*, and of the *Athorula* larvæ of many Physonectæ (Pl. XXI. figs. 5–12). The arrangement of the bracts in a simple corona, or in several concentric closely apposed circles (one over the other), is very similar to that exhibited by the simple or multiple corona of nectophores in the Rhodalidæ (Auronectæ). As in these latter, the apparent radial arrangement is at the same time bilateral, since the series of buds in the median ventral line (Pl. XII. figs. 7–9, *ib*) bisects the corona into two symmetrical halves. The corona of bracts in *Anthophysa* (Pl. XII. fig. 7, from the dorsal; fig. 8, from the left; fig. 9, from the ventral side) is distinguished by the peculiar bilateral arrangement of the arched ribs of the nectosome, which bear the pedicles of bracts (*bp*). Each ridge is composed of four parallel finer ribs; therefore four bracts are associated in a smaller group. This quadripartite structure may be perhaps explained by the supposition, that each bract is originally the quadrant of a quadripartite umbrella; the more so as the number of bracts is about four times as great as the number of siphons (the dislocated manubria?).

The bracts are organs of protection as well as of locomotion. They cannot change their form; but they can be elevated and depressed by means of a pedicular muscle, which is attached to their basal pedicle. When freely swimming at the surface of the tranquil sea, the corona of bracts is alternately closed and opened by slowly elevating and depressing the single bracts; the water protruded from the cavity surrounded by the bracteal corona (and comparable physiologically to the swimming cavity of Medusæ) propels the body in the apical direction, the pneumatophore forwards. But when the animal is alarmed the bracts are contracted closely together and surround a subspherical, nearly closed cavity, in which the retracted palpons, siphons, tentacles, and gonodendra are hidden.