concave lower (or ventral) side; the proximal end being attached to the trunk by a short pedicle, which can be raised and lowered by a muscle. The peripheral margin is usually thin, often with a few teeth. Sometimes the dorsal face is provided with a prominent median crest, or a number of parallel or divergent ribs (three to five or more) which are armed with cnidocysts and prominent at the distal end as free teeth. More rarely the bracts are very thick and compact, either roundish clubs (in the Apolemidæ) or prismatic bodies (in the Crystallodinæ). In these latter they are so thick and densely apposed one to another, that the movable stem loses its contractility and the siphosome becomes rigid. Each bract contains a simple canal, which arises from the trunk, runs along the ventral side of the bracts (usually in the median line), and ends blindly near to its distal end.

Siphons.—The Physonectæ have usually large and well-developed siphons, in which the four usual portions or segments may be distinguished; these exhibit, however, a rather various development in the different groups. The pedicle, or the first portion, is usually a short cylindrical tubule; but it is longer in some Agalmidæ, and very prolonged (similar to a very long lateral branch of the trunk) in the Forskalidæ. The basigaster, the second segment, is usually small, hemispherical or ovate, with a narrow cavity and a thickened exodermal wall, full of cnidocysts; it is often elongated and pyriform, in the Brachystelia (mainly in the Discolabidæ). The true stomach, or third portion of the siphon, is usually the largest part, with a wide and very extensible cavity, the exoderm of which is very muscular, the entoderm glandular. The hepatic glands are usually developed in the form of long parallel hepatic ridges, more rarely in the form of numerous scattered hepatic villi, as in the Athoridæ and Brachystelia (Nectalidæ, Discolabidæ, Anthophysidæ), also in the gigantic *Bathyphysa* among the Forskalidæ. There is, however, no sharp boundary between these two forms of liver; sometimes the hepatic villi are arranged in regular longitudinal series and thus pass over into true liver-ridges ("Leberstreifen"). The number of the latter is usually eight, more rarely four, six, twelve, or sixteen; sometimes four larger perradial ridges alternate regularly with four smaller interradial, and between these are interpolated eight shorter adradial ridges (Pl. IX. fig. 7). The proboscis, or fourth and last portion of the siphon, is usually a cylindrical, very mobile and contractile tube; its distal mouth opening may be expanded in the form of a very large and thin suctorial disc, sometimes circular, at other times polygonal, often octagonal or square. The edge of the mouth is usually armed with peculiar cnidoblasts and palpoblasts. The outside of the siphon is often covered with vibratile epithelium, especially the proboscis.

Tentacles.—Each siphon bears a single tentacle attached to its basal portion, either to the distal part of the pedicle, or to the basigaster itself, often in a constriction between them. The tentacles in all Physonectæ are very long and contractile, cylindrical, tubular filaments, of the same structure as the trunk, with an outer strong layer of exodermal longitudinal muscles, and an inner thin layer of entodermal circular muscles.