funnel-cavity opens outside by a pore (or stigma) in the median line of the dorsal side, on the base of the pneumatosac; the animal can expel the air through this basal stigma voluntarily (compare **33**, p. 3, and **84**, p. 35).

Nectophores.—The swimming-bells of the numerous Physonectæ exhibit a great variety in number, form, and arrangement. They appear to be wanting in two families, the monogastric Athoridæ (Pl. XXI. fig. 5) and the polygastric Anthophysidæ (Pl. XI.); but in reality they are here replaced by paddling bracts, which are nothing else than modified nectophores. One genus only, *Dicymba* (Pl. XVIII. fig. 1), has two opposite nectophores, similar to *Diphyes* and *Praya* among the Calyconectæ; and the same condition occurs in the young larvæ of Discolabidæ (Pl. XIX. fig. 8), and probably of many other Physonectæ. Usually the number of nectophores is six to twelve or more, in the largest forms thirty to fifty or more. They are arranged in two longitudinal opposite rows in most Apolemidæ, all Agalmidæ (Pls. XIII.-XVII.), some Nectalidæ (*Nectalia*) and Discolabidæ (*Physophora*). Some other genera of the two latter families have four cruciate longitudinal rows (*Sphyrophysa* and *Discolabe*, Pl. XIX.). All Forskalidæ (Pl. VIII.), and *Stephanospira* among the Discolabidæ, possess a strobiliform nectosome, with several spiral rows of nectophores, arranged like the scales of a fir-cone. The Circalidæ (Pl. XXI. fig. 1), finally, are distinguished by the possession of a horizontal corona of nectophores radially arranged, similar to that of the Stephalidæ (Pl. VII. fig. 39). The same arrangement, either in a single horizontal corona, or in several flat, densely apposed spiral rings, is seen in the numerous bracts of the Athoridæ (Pl. XXI. fig. 5) and the Anthophysidæ (Pl. XI. fig. 1). Sometimes the distal end of these paddling bracts still possesses a rudimentary nectosac (*Athoria*, *Rhodophysa*), and thus proves its nature as a modified nectophore.

Umbrella of the Nectophores.—The fundamental form of the umbrella in all Physonectæ is bilateral and composed of two symmetrically equal halves (antimeres); but it is at the same time quadriradial, marked by the four radial canals. Usually its principal axis is more or less obliquely inclined towards the axial trunk, sometimes almost horizontally; so that the position of the proximal apex is higher than that of the distal ostium. The nectophores of most Physonectæ are depressed and shortened in the dorso-ventral direction, so that the sagittal axis is shorter than the frontal. Usually there arise from the truncate apex two lateral horns or wings, which embrace the trunk. The ventral (or inferior) face of the umbrella has a concave groove, and from its middle line, near the apex, arises the short pedicle which attaches it to the stem. More rarely (in the strobiliform nectosome of the Forskalidæ) the pedicle is longer than the nectophore and arises from the very apex. The jelly-substance of the umbrella is usually rather consistent and firm, sometimes almost cartilaginous.

Nectosac.—The muscular subumbrella of the swimming-bells is of very variable size and form, sometimes little smaller than the umbrella, at other times scarcely half as