

scattered over the surface (Pl. 116, figs. 1, 2). In some genera a long vertical or oblique spine is developed from the apex of the shell, and is comparable to the "apical horn of the NASSELLARIA (Pl. 118, figs. 2, 3; Pl. 120, figs. 1-4).

The mouth of the shell, or the large opening on the lower pole of its vertical main axis, is usually widely open, circular, or polygonal, more rarely constricted. In many species the peristome is broadened and its margin developed in the form of a horizontal diaphragm, which constricts the entrance into the shell-cavity, and is comparable to the velum of the Hydromedusæ (Pl. 120, figs. 1-4). Sometimes the margin of the velum is fringed and bears numerous small dependent filaments of silica, comparable to the marginal tentacles of many Medusæ (Pl. 118, figs. 1, 3; Pl. 120, fig. 16). Rarely the mouth is strongly constricted and prolonged into a narrow, long, cylindrical tube, comparable to a proboscis; its opening is usually fringed (Pl. 116, figs. 1, 2).

The hollow articulate feet, or the large radial apophyses of the peristome, are the most remarkable organs of the Medusettida, and occur in the same form in no other family of Radiolaria. Their number is variable, from three to twelve or more, and is here employed for the distinction of genera, as it is rather constant; the most frequent number is four (*Medusetta*) or six (*Gazelletta*). The feet are usually cylindrical, much longer than the shell, and more or less curved; more rarely they are straight or slightly compressed. They are always articulate, and divided by numerous transverse parallel septa into hollow compartments or alveoles; the transversely striated appearance of the feet is brought about by these septa. The alveoles have usually the form of short discoidal cylinders, and are broader than long (Pl. 120, figs. 5-13); rarely they are longer than broad (fig. 15). The septa between the alveoles are always perforated by a small opening, and usually this opening is prolonged into a shorter or longer tubule, comparable to the siphuncle in the septa of the chambered shells of Cephalopoda; as in these latter, the succeeding siphons are arranged in a continuous series, which lies either in the axis of the foot or parallel to it (Pl. 120, figs. 8, 13, 15). The siphons are directed towards the distal end of the foot, so that, *e.g.*, the siphon which arises from the septum between the ninth and tenth alveole, projects into the cavity of the latter. The communicating cavities of all the alveoles are filled up by jelly. In the dry shells, which are cleaned by hot mineral acids or by fire, and in which, therefore, the jelly is destroyed, the cavities become easily filled by air-bubbles (Pl. 120, figs. 8, 11, 15). Whilst the alveoles of each foot always form a long simple series, this series becomes doubled on the base of the larger feet, where they are broadened, and pass over into the compartments of the peristome (Pl. 122, figs. 10, 11, 14). The terminal alveole of each foot is closed.

The feet of the Medusettida are rarely quite simple and smooth (Pl. 120, figs. 1, 5, 7, 10, &c.). Usually they are armed with numerous spines or with elegant pencils of spathillæ. These secondary appendages or branches are also hollow, with a