Pectyllis,1 Hæckel, 1879.

Trachynemidæ with eight genitalia in the course of the eight radial canals, without centripetal canals. The genitalia are cut in two by eight radial mesogonia or leaf-shaped mesenterial bands, and connected with the bases of the stomach. Oral cavity without oral funnels, and without side pouches. Tentacles with sucking-cups very numerous and placed closely one over the other in several rows on the umbrella margin. Numerous (8 or 16?) auditory clubs.

The genus Pectyllis, with the two following genera Pectis and Pectanthis, form the special small group of the Pectyllidæ, which I placed in the System der Medusen (1879, p. 265) as a sub-family in the family of the Trachynemidæ. The Pectyllidæ are, however, so strongly distinguished by several striking peculiarities from the remaining Trachynemidæ, the Marmanemidæ, that it is better to separate them as a special family. The Pectyllidæ agree with the Marmanemidæ in having eight radial canals and eight genitalia hanging from them, in the form of the depressed umbrella, and in the absence of a gelatinous gastral peduncle; on the other hand, they are distinguished from them by two peculiar characteristics which are wanting in the other Trachomedusæ, in having eight mesogonia and numerous sucking-tentacles furnished with terminal sucking-cups. auditory clubs of the umbrella margin are free as in the Aglauridæ, not enclosed in "marginal vesicles" as in the Marmanemidæ. The peculiar "mesogonia," or genital mesenteries, are thin, membranous, vertically-placed leaves, which extend in the radial plane between the central œsophagus on the one side and the eight sac-shaped reproductive glands on the other, are inserted in the middle line of the latter, and sometimes pass along the radial canals almost to the umbrella margin. The upper part of the umbrella cavity is, therefore, divided into eight radial sections ("infundibula subumbralia"). The peculiar sucking tentacles of the Pectyllidæ are hollow or solid, very elastic and contractile threads, which bear a powerful sucking-cup at the free end, and are used for adhering by suction. Part of them resemble the "ambulacral-feet" of the echinoderms in form and in the mode of motion. The sucking tentacles are very numerous in all three genera of the Pectyllidæ, sometimes closely packed together in several rows, one above the other, on the margin of the umbrella; sometimes grouped more or less distinctly in separate bunches; in all of them we can distinguish sixteen (or 32 to 64) bunches more or less divided by marginal incisions, so that the umbrella margin appears almost lobed. A further peculiarity of the Pectyllidæ is the extremely broad, powerful volum, which apparently, in all three genera, can be extended till, like a sphincter, it completely closes the umbrella cavity; they surpass all other Craspedotæ in this extreme development of the velum. The Pectyllidæ are finally distinguished by a peculiar formation of the

¹ Πημτύλλις, Pectyllis, derivative of Pectis.