sea as the Medusæ, with their soft, gelatinous, watery bodies and their natatory life. There are, however, some few species of this class which descend to great depths. In the Memoir only eighteen such species are described, and in many of these cases it is very doubtful whether they are really inhabitants of the deep sea, or whether they have not been accidentally caught by the dredge while it was being drawn up to the surface.

"Two families of peculiar Medusæ can, with a considerable degree of certainty, be regarded as characteristic inhabitants of the deep sea, namely, the Pectyllidæ among the Craspedota, and the Periphyllidæ amongst the Acraspeda.

"The Pectyllidæ (genera Pectis, Pectyllis, and Pectanthis) belong to the order of Trachomedusæ; they are nearly related to the Trachynemidæ, and are especially remarkable for their peculiar suctorial tentacles, which are distributed in great numbers around the margin of the stiff almost cartilaginous umbrella (shown in the contracted state in fig. 200). These tentacles closely resemble the ambulacral tube-feet of the Echinodermata; they are highly contractile and elastic, and are armed at the ends with a strong sucker. The living Pectyllid uses these for attaching itself, and also to creep with, just in the same



Fig. 200 .- Pectis antarctica, Haeckel; twice the natural size.

manner as a starfish or a sea urchin. Another peculiarity of the Pectyllidæ consists in eight radial "Mesogonia" or sexual mesenteries; these are membranous septa in the hollow of the umbrella, which divide it into eight "adradial" partitions, and are extended between the subumbrella, on the one hand, and the eight gonades or sexual glands, which surround the basis of the stomach, on the other.

"The Periphyllidæ (represented by the two genera Periphylla and Periphema) are Acraspedote Medusæ of a very curious and complicated structure, and belong to the peculiar order Peromedusæ, which was first constituted by Professor Hacckel in 1880, in his System der Medusen. They possess many important characteristics common to the Lucernaridæ on the one hand, and to the Charybdeidæ on the other. The highly arched and conical umbrella bears on its margin four interradial sense organs of very remarkable structure, and between these, twelve very long and powerful tentacles (four perradia