

presently, that the lasso cells of the tentacles of the Ctenophoræ differ also greatly from those of the Discophoræ. I shall take occasion to consider more minutely the direction of the sac containing these interambulacral tentacles, when describing the Cydippidæ in detail. The homologies of the whole chymiferous system of the Ctenophoræ and Discophoræ being thus fully established, it would be idle to animadvert further upon the comparisons which have been made between the Ctenophoræ and Tunicata: their resemblance is merely analogical. There is, however, one point in the structure of the Ctenophoræ, which, in this connection, deserves further consideration.

I have already alluded to the homology of the whole chymiferous system of the Acalephs, and the ambulacral system of the Echinoderms. A careful study of this homology may throw some additional light upon the true nature of the black speck in the centre of the circumscribed area of the Ctenophoræ, and upon the significance of the area itself. Remembering that the eye-specks, or whatever the organs at the peripheric end of the ambulacral zones of the Echinoderms may be, are placed at the tip of the rays in the Star-fishes, and in the Sea-urchins on the abactinal side of the sphaerosome, alternating with the ovarian plates; remembering, further, that similar sensitive specks are placed at the tip of the ambulacral chymiferous tubes in the Discophoræ, while there is but one such speck in the centre of the axial prolongation of the funnel in the Ctenophoræ,—the conclusion seems unavoidable, that the broad expansion of the abactinal surface of the Discophoræ corresponds to the broad field occupied by the dorsal surface of the Star-fishes, and that therefore the eye-specks of the Discophoræ are not only homologous to the eye-specks of the Star-fishes, but also occupy a homological position in the periphery of the sphaerosome, while in Ctenophoræ the single eye-speck has a homological position with the five eye-specks of the Sea-urchins at the abactinal pole of the sphaerosome, with this additional peculiarity, that in Ctenophoræ there is but one single eye-speck, and that there are five in the Sea-urchins. Such a Cyclops-like fusion of the eyes occurs in other types of the animal kingdom, and is not unfrequent in the Crustacea; it cannot be an objection, therefore, to such a homology. Moreover, the single eye-speck of the Ctenophoræ is closely connected with the chymiferous system, as the many eye-specks are in the Discophoræ and Echinoderms; and that connection, in accordance with the central position of the eye-speck, takes place in the axial prolongation of the system.

Whether these sensitive specks are to be considered as eye-specks, or as auditory organs, is another question, which also requires our consideration. Strictly speaking, they are not homologous to either eyes or ears, if the mode of development of these organs of the senses in Vertebrates is considered; nor can they be compared to the eyes or ears of the Articulates, since in the former the higher organs