

Echinoderma is limited, without exception, to five. Every Star-fish consists of a central, small, body-disc, all round the circumference of which are attached five or several long articulated arms. *Each arm of the Star-fish essentially corresponds in its organization with an articulated worm of the class of Ring-worms, or Annelida (p. 149).* I therefore consider the Star-fish as a genuine *stock or cormus of five or more articulated worms*, which have arisen by the star-wise growth of a number of buds out of a central mother-worm. The connected members, thus grouped like the rays of a star, have inherited from the mother-worm the common opening of the mouth, and the common digestive cavity (stomach) lying in the central body-disc. The end by which they have grown together, and which fuses in the common central disc, probably corresponds to the posterior end of the original independent worms.

In exactly the same way several individuals of certain kinds of worms are united so as to form a star-like cormus. This is the case in the *Botryllidæ*, compound Ascidians, belonging to the class of the Tunicata. Here also the posterior ends of the individual worms have grown together, and have formed a common outlet for discharges, a central cloaca; whereas at the anterior end each worm still possesses its own mouth. In Star-fishes the original mouths have probably become closed in the course of the historical development of the cormus, or colony, whereas the cloaca has developed into a common mouth for the whole cormus.

Hence the Star-fishes would be compound stocks of worms which, by the radial formation of buds, have developed out of true articulated worms, or Annelids. This hypothesis is most strongly supported by the comparative