

alive in their box. Within a very short time I always noticed such flies either glued to the side of the box or the glass-lid, or creeping slowly with wings or legs glued together. On touching *Peripatus* it usually shoots out a delicate spray of gummy material from two apertures on the pair of oral papillæ under the head. This gum or slime is so tenacious that it is difficult to remove from the hand, and one of its uses is to capture active prey like flies, etc.

Why is it that *Peripatus* is of such surpassing interest that Professor Moseley declared it to be an animal of great antiquity and my friend Dr. Shipley, Master of Christ's College, Cambridge, pronounced it "one of the most interesting animals known," from a morphologist's standpoint?

Its distribution indicates its ancientness. It is nowhere very abundant, but it occurs in New Zealand, Australia, the Cape, South America, St. Thomas and the West Indies, Panama and possibly Sumatra. To the naturalist such a sparse but widespread distribution means that it is a dying type, once abundant and of former wide occurrence. But it is a stem form, or connecting link, and just the kind of animal so rare, and yet so eagerly looked for by the evolutionist. It seems to be the very form from which the two vast animal Phyla, the Annulata and the Tracheata, have sprung. Nay, even the Echinodermata and the Mollusca seem to have features which they may have derived from *Peripatus*; and forms like the ancient Crinoids and the Xiphosuran, *Limulus*, or King-crab, though so ancient, possess features less ancient and more specialized than *Peripatus*. Its archaic generalized features are so many and so striking that it is impossible to treat them adequately in this brief note. To refer only to two salient points, it may be mentioned that the Echinoderms, though radiate, have essentially a right and left half in the form of the body; and in larval stages the symmetry of the body is most strikingly bilateral: but this is disguised later by the radial arrangement of parts. In the King-crab the compound eye is not a primitive feature, and the presence of internal skeletal elements (endosternite) a complete capillary system in the blood-vascular arrangements, the specialized nephridium, or kidney, in the shape of the coxal gland with attached lobes, and the massed nervous system (brain, oesophageal collar and reduced ventral cord) are all far less primitive than the annulate *Peripatus*. Indeed as one facetious observer says, *Limulus* must be later than the Annulates, for it fed upon them, the food of the King-crab being various marine annelids. *Peripatus* is an annulate in many features, being like a chætopod or worm in its cylindrical, bilaterally symmetrical, body, its anterior nerve ring and pair of