

females. The females are viviparous, and the process of development of the young shows that the horny jaws of the animal are the slightly modified claws of a pair of limbs turned inwards over the mouth as development proceeds; in fact, "foot-jaws," as in other Arthropods.

Before I studied *Peripatus* at the Cape, nothing was known of its manner of development, nor of the fact that it breathed air by means of tracheæ. It was generally placed with the Annelids, though its alliance with the Myriapods had been suspected by Quatrefages.

That *Peripatus* is a very ancient form is proved by its wide and peculiar distribution. Species of the genus occur at the Cape of Good Hope, in Australia, in New Zealand, in Chili, in the Isthmus of Panama and its neighbourhood, and in the West Indies. If its horny jaws were only larger they would no doubt be found fossil in strata as old as the Old Red Sandstone at least.

The animal is provided with large glands, which secrete a clear viscid fluid, which it has the power of ejecting from two papillæ, placed one on either side of the mouth. When touched or irritated, it discharges this fluid, with great force and rapidity, in fine thread-like jets, which form a sort of network in front of it. The net looks like a spider's web with the dew upon it, and appears as if by magic, so instantaneously is it emitted.

The viscid substance, which is not irritant when placed on the tongue, is excessively tenacious, like bird-lime, and when I put some on a slip of glass, some flies approaching it were at once caught and held fast. It appears from the observations of Captain Hutton on the New Zealand species,* that the jet of slime is used by the animal not only as a means of offence, but to catch insects, on which it feeds.

I found only vegetable matter in the stomachs of the Cape *Peripatus*, and concluded that it was a vegetable feeder. The Cape species live in or under dead wood, and I found nearly all my specimens at Wynberg, in Mr. Maynard's garden, in decayed fallen willow logs, which were in the condition of touchwood. I tore the logs to pieces, and found the animals curled up inside.

They are very local, and not by any means abundant, so that an offer of half-a-crown for a specimen to boys did not produce a single example. My colleague, the late Von Willemoes Suhm, and I both searched hard for *Peripatus*. He was unsuccessful; but I was lucky enough to be the first to find a fine

* Capt. F. W. Hutton, "On *Peripatus* Novæ Zealandiæ." Ann. and Mag. Nat. Hist., 1876, p. 362.