

during our run across, except at a depth of 50 fathoms; the lowest surface temperature being 54° . Immediately previous to our arrival there had been few southerly winds, afterwards they blew with great regularity for a fortnight, and if they extended any distance southwest of the Cape colder water might naturally be looked for."

Peripatus.—During the stay at the Cape, one of the most important of the zoological discoveries of the voyage was made by Mr. Moseley, namely, that of the affinities of a remarkable animal well known to naturalists under the name of *Peripatus*, believed at the time to be a peculiar and aberrant form of earthworm. The uncertainty and misapprehension as to its affinities had arisen from the fact that it had never been examined by any professed naturalist in the fresh condition, but was only known from specimens preserved in spirit. Professor Moseley writes:—

"The animal has the appearance of a black caterpillar, the largest specimens being more than 3 inches in length, but the majority smaller. A pair of simple horn-like antennæ projects from the head, which is provided with a single pair of small simple eyes. Beneath the head is an opening surrounded by plicated lips, leading into a space which may be termed the præoral cavity. Within this cavity lie a pair of muscular organs each



FIG. 113.—*Peripatus capensis*; viewed from the dorsal surface (after Balfour).

bearing two stout horny jaws behind which is situated the mouth. The animal has seventeen pairs of short conical feet, provided each with a pair of hooked claws. The skin is soft and flexible, and not provided with any chitinous rings.

"The animal breathes air by means of tracheal tubes like those of insects, but these, instead of opening to the exterior by a small number of apertures,—'stigmata' arranged at the sides of the body in a regular manner as in all other animals provided with tracheæ,—are much less highly specialised. The apertures are in *Peripatus* scattered more or less irregularly over the greater part of the surface of the skin. In the freshly killed animal the tracheæ, being distended with air, are readily seen, whereas in specimens which have been steeped in spirit, and in which the air is absent, they are almost invisible.

"The sexes are distinct in *Peripatus capensis*. The males are much smaller and fewer in number than the 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