in many instances—especially in the true deep-sea species—the eyes are wanting (a matter to be discussed hereafter), it never happens that the tubercle has totally disappeared. Most genera have this tubercle placed nearly in the middle between the two ovigerous legs; but in some genera (*Phoxichilidium*, *e.g.*) it is situated much nearer the front of the segment.

The thoracic part of the cephalothorax and the three following true thoracic segments are furnished with lateral processes for the insertion of the legs; these lateral processes in the different genera, and even in different species of the same genus, are of very different lengths. The segments of the body themselves are also of very different lengths. There are extremely slender forms with long segments and widely separated lateral processes, and there are also forms so highly concentrated, that the lateral processes are not separated at all; and between these extremes, which are often met with in one and the same genus, numerous intermediate forms are to be observed. The dorsal surface of the body is either smooth or furnished with knots, spines, strong prickles, &c.

At its extremity, between the two lateral processes for the insertion of the last pair of legs, the last thoracic segment has a rudimentary abdomen of varying length, which is sometimes (*Colossendeis*, *e.g.*) connected with the segment by means of an articulation, and also sometimes (*Zetes*, Kröyer) shows traces of being divided into two segments.[1] At its extremity the anal aperture is found.

The legs begin at the ends of the lateral processes; they are eight-jointed. For the joints I retain the names proposed by Johnston; these names are the same as those used in entomology, but it is evident that in this case identity of name does not necessarily go along with identity of meaning; neither analogical nor homological comparison is meant by it.

The first three (the coxal) joints are as a rule very short; the following three, the thigh and the two tibial joints, are much longer (the second tibial being in most cases the longest of all). The two tarsal joints are again a great deal shorter. The first tarsal as a rule is shorter than the second; in many instances it is even extremely small, its function then being only to furnish a highly movable articulation to the last joint of the leg. At its extremity the last joint is furnished with a claw, which is, or is not, accompanied by two accessory claws.[2] In some genera (*Colossendeis*, *e.g.*) accessory claws are never observed, while in other genera (*Nymphon*) they occur in some species and are wanting in others. Therefore the presence or absence of accessory claws alone should not be made use of in establishing new genera.

[1] *Rhynchothorax mediterraneus*, Cos., Microdoride mediterranea, Napoli, 1861, has a seven-jointed abdomen (Addome angusto e brevissimo di 7 articoli).

[2] I think there is not a single reason for calling this claw a ninth joint. At any rate the homology of the claw with its accessory claws is much greater than that between the claw and the joints of the leg, and, therefore, if the claw is considered as a ninth joint in those cases where accessory claws are observed, we must speak of a joint having two lateral joints close to its origin, which would be absurd.