

the largest specimen, however, of this species dredged. These mandibles are very long and slender, three-jointed, little shorter than the proboscis. The third joint terminates in a pair of small and slender pincers.

Of the palpi the third joint is longer than the fifth. Of the last three joints the first is extremely small and broad (Pl. IX. fig. 7), and the ninth is inserted, not into the middle of the front part of that joint, but quite laterally. This ninth joint itself is cylindrical, and more than twice as long as the foregoing, whereas the tenth is a little more slender and still longer than the ninth joint.

The joints of the comparatively long ovigerous legs have characteristic proportions in all the species of the genus *Colossendeis*. The claw at the end of the tenth joint is very small. The denticulate spines on the last four joints are not numerous, the number of rows not exceeding four. Of these two are very regular, with the spines placed close to one another, but those of the two other rows are much more irregularly scattered over the remaining part of the inner surface of the joint (Pl. IX. fig. 8; Pl. X. fig. 7).

The lengths of the several legs of one and the same specimen only show slight differences. The third leg is, in the three specimens I have examined, the longest, and measures nearly three and a half times the length of the body. The claw is very long, still longer than the second tarsal joint. Genital pores are present on the second joint of every leg. As to the sex of the three specimens dredged during the voyage of H.M.S. Challenger, I have only been able to ascertain that the specimen with mandibles is a male.

The body and legs are almost entirely smooth; small hairs are only to be observed on the last joints of the palpi.

Habitat.—This species was dredged between the Cape of Good Hope and Kerguelen Island.

Station 146. December 29, 1873. Lat. $46^{\circ} 46'$ S., long. $45^{\circ} 31'$ E. Depth of the sea, 1375 fathoms. Temperature of the bottom, 1.5° C. Bottom of the sea, globigerina ooze.

Station 147. December, 30, 1873. Lat. $46^{\circ} 16'$ S., long. $48^{\circ} 27'$ E. Depth, 1600 fathoms. Bottom temperature, 0.8° C. Bottom of the sea, globigerina ooze.

Observations.—To this species *Colossendeis media* and *Colossendeis brevipes*, which I shall describe further on, are closely allied. The occurrence of mandibles in one of the specimens of this species is very interesting. Although larvæ of any species of *Colossendeis* have never been observed, they doubtless are furnished with three pairs of cephalic appendages. Of these the adult animal has always lost the first pair; and whenever, as in the case in question, this first pair is observed in the adult animal, it must be considered as a case of atavism, showing that the loss of mandibles in the adult animal has been comparatively recent.