welche manchmal nur undeutlich ausgebildet sind und in die Verlängerung der von der Vagina ausstrahlenden Falten fallen.

Auf Zweigen von Populus euphratica Oliv., Salix persica

Boiss. und Salix zygostemon Boiss., Persien.

Die vorstehenden Zeilen sollen als vorläufige Mitteilung aus einer Untersuchung über die Gattung Leucaspis dienen. Die Untersuchung wird demnächst im Jahrbuch der hamburgischen wissenschaftlichen Anstalten erscheinen.

Hamburg, 10. Juni 1905.

5. Decalopoda and Colossendeis.

By T. V. Hodgson, Plymouth, Marine Biological Association.

eingeg. 14. Juni 1905.

While in Southern Regions with the Discovery and engaged in the biological investigation of our Winter Quarters from time to time specimens of a ten-legged Pycnogonid were captured. I thought then that I had secured a prize which would-alter many existing opinions concerning this group. On returning to civilisation I very soon learnt that our Scotch colleagues had also captured some ten-legged Pycnogonids. More recently it has fallen to my lot to describe this group for both Expeditions and the ten legged species being considered of exceptional interest were examined forthwith. The "Discovery" specimens were described in the Annals and Magazine of Natural History for December 1904 and owing to their very obvious relationship to Nymphon were given the name of Pentanymphon antarcticum. The "Scotia" specimens were fifteen in number and were fully described in the Journal of the Royal Physical Society of Edinburgh Vol. XVI Part 1 which was issued about the end of last April. They proved to be identical with the Decolopoda australis of Eights, a species which has been completely lost sight of for upwards of seventy years and it is extremely curious to notice how many Zoologists were on its track and the different points of view from which they regarded it.

My present purpose is to correct certain views of Dr. J. C. C. Loman of Amsterdam, as expressed in this Journal, p. 122. Vol. 28. Eights' description is remarkably accurate and the figure is little, if any, worse than many produced at the present day. As he made it clear that he obtained a number of specimens it is out of the question to consider the species as a monstrosity. As a larval form it must be regarded as of somewhat excessive size but to identify it with Colossendeis robusta of Hock is surely an error of judgment. Decalopoda is unquestionably a close ally of Colossendeis but it is equally certain that it is very distinct from that genus. My paper on the subject was written at the beginning of January, since which time I have been dealing with the genus Colossendeis and am now in a position to add a little information concerning both genera.

I remodelled Eights' generic description as follows.

"Body, including lateral processes, elliptical, smooth, not always

distinctly segmented, with five pair of ambulatory appendages; cephalic portion wide, with a constricted neck.

Proboscis — longer than the body, clavate, bent downwards.

Abdomen — long, slender, subclavate.

Mandibles — three jointed, chelate, well developed.

Palps — ten-jointed.

Ovigerous legs — ten-jointed, terminating in a claw, the last four joints with several rows of non-denticulate spines."

To these characters may now be added.

Proboscis movably articulated to the body.

Genital apertures in both sexes on the second coxa of all the legs. The sexes are readily distinguishable by the position of these apertures. In the male they are small and lie in the mid ventral line quite close to the distal extremity of the joint. In the female they are much larger, generally with pigmented lips and lie also in the mid ventral line but quite close to the middle of the joint.

The genus *Colossendeis* of Jarzynsky may be re-defined as follows. Body ovoid or elongate with lateral processes close together or widely separated; as a general rule without segmentation.

Proboscis very large, often much longer than the body and movably

articulated to it.

Abdomen of moderate dimensions, movably articulated to body, subclavate.

Eyes well developed or absent.

Mandibles very rarely present, rudimentary.

Palps very long, ten-jointed, more or less setose.

Ovigerous legs very long, ten-jointed, the last four joints bearing several rows of spines which usually have dentate margins.

Ambulatory legs without auxiliary claws.

To the above characters the position of the genital apertures on the second coxa of every limb might fairly be added. Information with regard to this feature is deficient, Hoek being the only auther who has consistently examined his specimens upon this point. In no less than six species he records these apertures on every limb and in two others he was only able to find them on the two posterior appendages. Four species brought by the Discovery from the Ross sea also exhibit these apertures on all four legs and, from all the available information, it is not unreasonable to assume that they may be developed from behind forwards as sexual maturity is attained. Omitting those species in which the genital apertures have not been recorded Colossendeis agrees with Decalopoda, not only in the number but in their position in the two sexes. As to the presence of mandibles, a satisfactory explanation of their occasional presence is not yet forthcoming. They have been recorded in immature specimens of two species, C. gracilis Hoek and C. angusta G. O. Sars, but they are by no means a constant mark of immaturity. Möbius has recently described a species, C. qibbosa from the "Valdivia"

Expedition, but this is an error. *C. gibbosa* is not a *Colossendeis* at all, the second coxa, the tarsus and the auxiliary claws prohibit its being included in the genus. The proboscis too, though large is of unusual form and not that usually associated with *Colossendeis*.

I think I am right in saying that the ova of Colossendeis have not been seen outside the body of the female and that nothing is known concerning the development of the genus; the same remark applies, but with greater weight to Decalopoda. In both these genera it is extremely probable that the ovigerous legs are not strictly ovigerous. They appear to be of greater importance as feeding organs and, as general rule, bear only too obvious traces of being used for raking the sea-bottom, moreover the four terminal joints make a very efficient grasping organ. The animals move about on the tips of their claws and the large proboscis with its mobility on the body, the great length of the ovigerous legs together with their condition just alluded to, clearly indicate subservience to some such function as this. Among the "Scotia" specimens of Decalopoda one specimen was put apart from the others and labelled as bearing ova. A second specimen was found to be in a similar condition. Close inspection revealed the fact that one of these specimens was a male, the other a female, that the so called ova were contracted masses of hydroid polyps, and that they were held by the mandibles close against the base of the ovigerous legs.

From the foregoing it will be readily seen that *Decalopoda* and *Colossendeis* are two distinct genera, more conspicuously so than many modern ones. Though distinct, they are unquestionably closely allied and present many features in common, the details of which are set forth in my contribution to the Royal Physical Society of Edinburgh already cited.

II. Mitteilungen aus Museen, Instituten usw.

Deutsche Zoologische Gesellschaft.

Da bis zu dem durch die Publikationsordnung der Gesellschaft für die Ablieferung der Manuskripte bestimmten Endtermin (spätestens 14 Tage nach Schluß der Versammlung) diesmal noch nicht die Hälfte der Manuskripte der gehaltenen Vorträge eingeliefert wurde, so ist dadurch das geplante Erscheinen der »Verhandlungen« vor Beginn der Universitätsferien von vornherein unmöglich gemacht.

Marburg, den 2. Juli 1905.

Der Schriftführer. E. Korschelt.

III. Personal-Notizen.

Dr. S. Prowazek, früher Rovigno zoologische Station, wohnt jetzt Berlin-Halensee Karlsruherstr. 3.

Berichtigung.

In dem Aufsatze von Woltersdorff Ȇber Triton vulgaris subsp. graeca«, Zool. Anz. 29. Bd. No. 5, S. 138, Zeile 10 bzw. 11, Spalte 2 und 4, ist statt Flettenreihe Fleckenreihe zu lesen.

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Zoologischer Anzeiger

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