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(BEING A CONTINUATION OF THE 'ANNALS' COMBINED WITH LOUDON AND
CHARLESWORTH'S 'MAGAZINE OF NATURAL HISTORY.')

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THE ANNALS

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MAGAZINE OF NATURAL HISTORY.

[SIXTH SERIES.]

No. 74. FEBRUARY 1894.

XIV.—*On some new and rare Crustacea from Scotland.* By THOMAS SCOTT, F.L.S., Naturalist to the Fishery Board for Scotland, and ANDREW SCOTT.

[Plates VIII. & IX.]

A CONSIDERABLE quantity of material (mostly marine), obtained by dredging and shore-collecting, has been examined by us during the past few months. The material was from various places in the Moray-Firth district and from the Firth of Forth. The examination of the material has yielded a number of species of rare and interesting Crustacea, and especially of Copepoda, and descriptions, with suitable drawings, of these are being prepared; those we now propose to record comprise five species of the Harpacticidæ and two of Ascomyzontidæ, with notes on a few other apparently rare forms.

Harpacticidæ.

Amymone nigrans *, sp. n. (Pl. VIII. figs. 1-7.)

Length .4 millim. ($\frac{1}{25}$ of an inch). The ventral edge of the first body-segment is truncate and sinuate, and the free portion of its posterior edge slightly crenate; the ventral edge of the posterior body-segments is produced into four irregular tooth-like processes (fig. 1). The two male postero-ventral processes (*a, a*) are more acutely angular than those of the male of *Amymone spherica*, Claus. The anterior antennæ (antennules) are seven-jointed; in those of the female the

* *Nigrans*, blackish.

first joint is considerably longer than any of the others, the second to the fifth joints gradually decrease in length, while the penultimate joint is about one third of the length of the preceding one and half the length of the next; the formula shows the proportional lengths of the joints—

$$\frac{15 \cdot 11 \cdot 9 \cdot 7 \cdot 6 \cdot 2 \cdot 5}{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7}$$

In the male antennæ the third and fifth joints are much shorter than either of the joints that precede or follow them, and the sixth and seventh, which are subequal, are each fully twice the length of the fifth. Posterior antennæ nearly as in *Amygone spherica*. Mandibles and maxillæ also somewhat similar to those of that species, but the second joint of the mandible-palp is proportionally considerably longer, while the mandible is armed with longer apical teeth. The anterior foot-jaws are provided with a claw-like terminal spine, and the marginal process at the base of the last joint bears two spiniform terminal setæ. The posterior foot-jaws resemble those of *Amygone spherica*, but the interior edge of the last joint is not so densely fringed with hairs. The outer branches of the second and third pairs of swimming-feet are two-jointed (fig. 4), and of the fourth pair three-jointed; the first joint of the outer branches of the fourth pair is much shorter than either the second or third joints, and a strong spiniform seta springs from the inner edge and near the middle of the last joint; the length of this spiniform seta is at least equal to the whole of the outer branch (fig. 5); the first and second joints of the inner branches are nearly of equal length and shorter than the last joint; the only setæ on the inner branches of the fourth pair are—one on the inner margin near the distal end of the second joint, and three (two terminal and one subterminal) on the last joint. The basal joint of the fifth pair in the female is broadly foliaceous, the inner margin is rounded and bears three short plumose setæ, while the apex is somewhat oblique and angular and armed with two stout spiniform setæ; the secondary joint is narrow and extends to the apex of the basal joint, and is furnished with three stout hairs on the outer edge and a small terminal hair. The male fifth foot has no secondary joint, it is long and very narrow and slightly curved, and furnished with three marginal and two terminal setæ; one of the terminal setæ is much longer than the other. Colour irregularly diffused, dark cinereous, nearly black in some parts, as at the posterior end.

Hab. Cromarty Firth, near Invergordon, frequent. The

bottom here, in mid-channel, is composed largely of irregular lumps of hardened mud, formed of the agglutinated tubes of a species of *Sabella*. Some of this mud was dredged and carefully washed; the water in which the mud was washed was then passed through a muslin sieve, and when the contents of the sieve were afterwards transferred to a bottle of sea-water numbers of the little *Amymone nigrans* appeared as blackish specks swimming about, and their peculiar movements characteristic of this remarkable genus formed an interesting study.

Remarks. Though *Amymone nigrans* does not agree with any described species known to us, it is yet possible that it may be the form ascribed by Boeck to *Amymone spherica*, Claus, and which he described as having the outer branches of the swimming-feet two-jointed. It is supposed by some authors that Boeck has somehow mistaken the number of joints in the outer branches, because the outer branches of the second and third as well as of the fourth pair of swimming-feet in *Amymone spherica* are all three-jointed, and certainly the Scottish specimens of what we believe to be that species have three-jointed outer branches to the second and third pairs; but the discovery of *Amymone nigrans* will tend to show that Boeck's description may be right after all, and that the mistake was made in ascribing to *Amymone spherica*, Claus, a form that was probably quite distinct from that species. But, whatever be the explanation, there can be no doubt that the form we have here described as *Amymone nigrans* has the outer branches of the second and third pair of feet in both sexes two-jointed.

In all the specimens of *Amymone spherica* examined by us we observe that each stylet is furnished with a broad lancet-shaped seta, the breadth of each seta at the widest part being equal to about two fifteenths of the length. We have not observed these peculiar setæ on any other species of *Amymone*.

Ameira exilis *, sp. n.

(Pl. VIII. figs. 18-20; Pl. IX. figs. 1-3.)

Body elongate, slender. Length 1.4 millim. ($\frac{1}{15}$ of an inch). Anterior antennæ of the female nine-jointed, somewhat longer than the first body-segment and sparingly setiferous, and with the seventh and eighth joints very small; the lengths of the joints are nearly as shown in the formula—

$$\begin{array}{cccccccccc} 13 & . & 18 & . & 13 & . & 10 & . & 8 & . & 9 & . & 3 & . & 3 & . & 12 \\ \hline 1 & & 2 & & 3 & & 4 & & 5 & & 6 & & 7 & & 8 & & 9 \end{array}$$

* *Exilis*, slender.

The male anterior antennæ are ten-jointed, and the last six are more or less modified for grasping; the sixth and seventh joints are very short, but the others are of moderate length. Mandibles elongate, narrow, and with an oblique tooth-apex; the basal part of the mandible-palp is considerably dilated, while the secondary joint is narrow and furnished with one marginal and four terminal setæ. Maxillæ and foot-jaws nearly as in *Ameira longipes*. The first pair of swimming-feet are elongate and somewhat like those of *Ameira longipes*, but the first joint of the inner branches is only about one sixth longer than the combined lengths of the second and third joints; while the outer branches reach to near the middle of the second joint of the inner ones (Pl. IX. fig. 2). In the female the inner branches of the next three pairs reach to about the middle of the second joint, and are scarcely equal to half the length of the elongate outer branches; in the male the inner branches of the third pair reach to the end of the second joint of the outer branches, and each of the three joints is rather longer and narrower than the joint that precedes it, while the last joint, besides being furnished with four long plumose marginal setæ, is armed with a terminal spine (Pl. IX. fig. 3). The basal joint of the fifth pair in the female is broadly triangular, and its blunt-pointed apex bears five setæ, the second one of which, counting from the outside, is very long, being more than double the length of the seta on either side of it; the secondary joint is oblong-ovate, its greatest breadth being equal to about two fifths of the length; there are five setæ of variable length, ranged at intervals from the middle of the exterior margin to the apex, in addition to a very long intero-subapical seta; the apex of the basal joint reaches to about the middle of the secondary one (Pl. VIII. fig. 19). The fifth pair in the male are smaller than those of the female, and both joints are proportionally shorter and broader, and want the very long setæ of the female fifth pair. Caudal stylets shorter than the last abdominal segment and broadly pyriform; the principal tail-setæ are as long as the abdomen.

Hab. Obtained by washing some black sandy mud near low-water mark at Seafield, in the vicinity of Leith, Firth of Forth.

Remarks. *Ameira exilis* somewhat resembles *Ameira longipes*, Boeck, but is larger and more slender, and the proportional lengths of the joints of the female anterior antennæ differ considerably in the two species; they also differ in the proportional lengths of the branches of all the swimming-feet.

Stenhelia dispar *, sp. n. (Pl. VIII. figs. 8-12.)

Length .55 millim. ($\frac{1}{18}$ of an inch). Rostrum prominent. Anterior antennæ eight-jointed; the first four joints are robust, the next three are small, and the last is comparatively long and narrow, being equal to the combined lengths of two preceding joints. The formula shows the proportional lengths of the joints—

$$\frac{27 \cdot 19 \cdot 13 \cdot 14 \cdot 6 \cdot 9 \cdot 8 \cdot 18}{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8}$$

The secondary branch of the posterior antennæ is three-jointed, the first being nearly equal to twice the combined lengths of the other two. The mouth-organs are nearly as in *Stenhelia ima*, Brady. The first four pairs of swimming-feet also somewhat resemble those of that species. The fifth pair are broadly foliaceous, like those of *Stenhelia hispida*, Brady, but the distance between the various setæ with which they are furnished is greater in *Stenhelia dispar*. Abdomen and caudal stylets nearly as in *Stenhelia ima*.

Hab. Vicinity of the Bass Rock, Firth of Forth, dredged in 23 fathoms; bottom sand and gravel.

Remarks. *Stenhelia dispar* appears to be intermediate between *Stenhelia ima* and *Stenhelia hispida*; it resembles *Stenhelia ima* in the form of the first four pairs of swimming-feet and *Stenhelia hispida* in the form of the fifth pair, but differs from both in the structure of the anterior antennæ.

Cletodes irrasa †, sp. n. (Pl. VIII. figs. 13-17.)

Length .8 millim. ($\frac{1}{30}$ of an inch). Body elongate-cylindrical, all its segments except the first furnished with a transverse fringe of small hairs a little in front of the posterior margin. Anterior antennæ stout and sparingly setiferous, shorter than the first body-segment, six-jointed; the second and last joints are longer than any of the others, while the fifth joint is very small, as shown by the formula—

$$\frac{20 \cdot 26 \cdot 20 \cdot 10 \cdot 3 \cdot 24}{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6}$$

Posterior antennæ three-jointed, the first and second joints are nearly of equal length and about one and a half times the length of the next; a very small secondary branch bearing

* *Dispar*, different, *i. e.* from any known species.

† *Irrasus*, unshaven.

a single apical seta springs from the end of the first joint. Mandibles stout, the biting part armed with short blunt-pointed teeth, except at the lower angle, where there is a moderately long conical tooth. The inner branches of the first pair of swimming-feet are composed of two nearly equal joints, and reach to about the middle of the second joint of the outer branches; they are also furnished with two short spiniform apical setæ; the first joint of the outer branches is somewhat longer and the second joint shorter than either of the other two joints. The inner branches of the fourth pair consist of two nearly equal joints bearing a few short setæ, the extremity of these branches does not reach to the end of the first joint of the outer branches; the outer branches are elongate, and the second joint is shorter and the third somewhat longer than either of the other two. The basal joint of the fifth pair forms a broad shallow lobe, bearing one short and two long setæ, the inner one being spiniform and plumose; the secondary joint is elongate-narrow, being about four times longer than broad and furnished with four unequal setæ at the apex and one near the proximal end of the outer margin. Caudal stylets slender and as long as the last abdominal segment; each stylet bears two small setæ on the inner margin, one on the outer margin, and three or four at the apex.

Hab. Vicinity of the Bass Rock.

Remarks. *Cletodes irrasu* belongs to a group the distinguishing character of which is the more or less nearly obsolete basal joints and the elongate and narrow secondary joints of the fifth pair of thoracic feet, and *Cletodes limicola*, Brady, may be considered the type of this group. The form of the fifth pair in this group presents a marked difference to the fifth pair in those other species of the same genus that have both the basal and secondary joints well developed, as, for example, in *Cletodes linearis*, Claus.

Thalestris forficuloides, sp. n. (Pl. IX. figs. 4-9.)

Length .73 millim. ($\frac{3}{4}$ of an inch). Anterior antennæ in the female nine-jointed and provided with long slender setæ; the joints gradually decrease in length from the second to the fifth, while the sixth joint is one and a half times longer than the fifth and equal to the combined lengths of the next two; the last joint is as long as the sixth; the proportional lengths are as shown in the formula—

$$\frac{15 \cdot 18 \cdot 13 \cdot 10 \cdot 8 \cdot 11 \cdot 6 \cdot 5 \cdot 11}{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9}$$

The secondary branches of the posterior antennæ are composed of two moderately long joints; the first joint is provided with a plumose seta at the distal end and the second with two marginal setæ near the base and three at the apex; all the setæ are plumose. Posterior foot-jaws stout, the last joint somewhat ovate, its greatest breadth being equal to fully half the length; it is furnished with a comparatively long slender seta near the middle of the inner margin, and the terminal claw reaches to beyond the proximal end of the joint to which it is attached. The first pair of swimming-feet have the inner branches slender and considerably longer than the outer ones; the outer branches are only about two thirds the length of the inner; the inner terminal claw of both branches is very slender and elongate, and, like the others, only slightly curved at the extremity. The second, third, and fourth pairs are somewhat like those of *Thalestris forficula*, Claus, but the proportional lengths of the joints are slightly different; in the fourth pair the last joint of the inner branches is only equal to three fourths of the combined lengths of the first and second joints; the inner branches of the third pair in the male are armed with a spiniform and slightly hooked claw-like terminal appendage (fig. 7). The basal joints of the fifth pair are broadly triangular and the apex reaches to near the middle of the secondary joints; the inner and outer margins are fringed with small close-set hairs, the basal joints are also each furnished with five plumose setæ of unequal length arranged round the distal end—one at the apex, one on the outer margin, and three on the inner margin; the apical seta is considerably longer than any of the others; the outer secondary joints are subcylindrical, fringed with small close-set hairs on both margins, and furnished with eight setæ—three on the distal half of both the outer and the inner margins, and two at the apex; the inner apical seta and the one on the inner margin next to it are much longer than any of the others; there are only two small spiniform apical setæ on the basal joint of the fifth pair in the male. Abdomen and caudal stylets nearly as in *Thalestris forficula*.

Hab. Among mud near low-water mark at Seafield, in the vicinity of Leith, Firth of Forth.

Remarks. This species somewhat resembles *Thalestris forficula*, Claus, but differs in the following among other particulars:—The anterior antennæ (the antennules) are nine-jointed, and the sixth and last joints are each of them equal to the combined lengths of the seventh and eighth and of greater length than either of the fourth or fifth. The inner branches of the first pair of swimming-feet are very long and slender,

while the outer branches are only equal to two thirds the length of the inner ones. It also differs in the proportional lengths of the other thoracic feet, as shown by the description and figures.

Ascomyzontidæ.

*Dermatomyzon gibberum**, sp. n. (Pl. IX. figs. 10-14.)

Length .5 millim ($\frac{1}{50}$ of an inch). Cephalothorax very tumid, broadly obovate or pear-shaped, the forehead being regularly and boldly rounded; the first body-segment is more than half the entire length of the cephalothorax and abdomen combined, and its breadth is about one and one sixth times the length; the abdomen is very short, and, including the caudal stylets, is scarcely equal to one fourth of the length of the cephalothorax. Anterior antennæ stout, seventeen-jointed, but the second joint from the base appears to be formed of two (or three) coalescent joints; the proportional lengths of the joints are shown by the formula—

$$\frac{40. (19. 10. 7) . 8. 10. 12. 16. 9. 9. 16. 12. 12. 12. 12. 16. 18. 8. 26}{1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17}$$

The mandibles are stylet-shaped, stout, and elongate; the mandible-palp consists of a single oblong joint, the length of which is rather greater than twice the breadth, and three stout, moderately long, and nearly equal setæ spring from its truncate apex. The maxillæ are composed of two parts of nearly equal length; the one part (the primary) is subtriangular in form and furnished with three apical setæ, while the other (the secondary part) is narrow, cylindrical, and provided with four setæ at the apex (fig. 13). The basal joint of the anterior foot-jaws is stout, but the end joint is slender and curved and forms a claw-like appendage. The posterior foot-jaws are nearly as in *Dermatomyzon nigripes* (Brady and Robertson). The swimming-feet are also somewhat similar to those of that species: the fifth pair are simple, two-jointed; the first joint is short, and its breadth is about equal to twice the length, it also bears a seta at the upper distal angle; the second joint is longer and narrower than the first, its breadth being only equal to half the length, and it is furnished with two setæ at the apex. The caudal stylets are nearly as long as broad, and equal to the combined lengths of the last two abdominal segments.

* *Gibberum*, hunch-backed.

Hab. Vicinity of the Bass Rock, Firth of Forth. Hitherto only one specimen, a female, has been obtained.

Remarks. The proportionally large and tumid cephalothorax gives this species a curious and striking appearance, that at once distinguished it from any of the other Copepoda observed by us. It possesses all the characters of a *Dermatomyzon*, except that the anterior antennæ are apparently only seventeen-jointed; the second joint, however, is probably composed of three coalesced joints, so that the difference in this respect is trifling. It differs also in the abdomen being composed of only three instead of four segments, and so far it agrees more closely with *Asterocheres*, Boeck, than with *Dermatomyzon*, Claus. The Forth specimen would thus appear to form an intermediate link between these two genera, but with a closer affinity to the last.

Acontiophorus elongatus, sp. n. (Pl. IX. figs. 15–20.)

Length 1 millim. ($\frac{1}{25}$ of an inch). Cephalothorax and abdomen elongate; the abdomen slender and equal to about two thirds the length of the cephalothorax. Anterior antennæ slender, seventeen-jointed; the fourth, fifth, sixth, and eighth joints are shorter, and the first and last longer than any of the other joints; the formula shows their proportional lengths—

24	12	14	6	6	6	9	6	8	14	12	13	13	14	14	14	24
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The posterior antennæ are three-jointed, and a very small secondary branch springs from near the end of the elongate basal joint; end joint small, and furnished with a long, slightly curved, and slender terminal spine and a small marginal seta. Mandibles extremely long and slender, being about equal in length to the elongate siphon; the siphon, which reaches to near the end of the cephalothorax, consists of two slender filaments of equal length, one of which has a ring-like structure and is armed with a small apical stylet; the basal part of the siphon is stout and cone-shaped, and encloses for some distance the proximal ends of the filaments (fig. 18). Maxillæ two-branched—one branch stout and conical in shape, and furnished with one short and two long setæ; the other branch narrow, not half the length of the first, and bearing three setæ of unequal length. Anterior and posterior foot-jaws somewhat like those of *Acontiophorus scutatus*, Brady and Robertson; but the last two joints of the posterior foot-jaws are proportionally much longer than

in that species. The swimming-feet are also somewhat similar to those of *Acontiophorus scutatus*, but the fourth pair has remarkably broad and stout dagger-shaped spines on the exterior margins of the outer branches, as well as broad sabre-like terminal spines on both outer and inner branches; the setæ on the inner margins of both branches are also densely plumose. The fifth pair of feet consists each of a single broadly elliptical joint, which is furnished with three apical setæ (fig. 20). The first or genital segment of the abdomen is equal to twice the length of the next, and three and a half times longer than the third segment. Caudal stylets very short; they are each provided with two moderately long plumose terminal setæ in addition to a few small hairs.

Hab. Vicinity of the Bass Rock, Firth of Forth, frequent.

Remarks. The species now described is an easily recognized one, because of its being more slender and having a longer abdomen than any other of the described species. It agrees with *Acontiophorus armatus*, Brady, in having the anterior antennæ seventeen-jointed (though sixteen joints is the number stated in the description of *Acontiophorus armatus* in 'British Copepoda,' the figure shows seventeen joints). The posterior antennæ have only one long and slender spine at the apex instead of the "two lancet-shaped" apical spines that form one of the generic characters; but otherwise the Forth species now described is a true *Acontiophorus*.

Stenhelix hirsuta, I. C. Thompson.

Stenhelix denticulata, I. C. Thompson.

These two distinct species have been obtained by us during the past summer in material from the Firth of Forth, dredged two or three years ago. They have not been previously recorded for the east of Scotland.

Nannopus palustris, Brady.

This apparently rare Copepod has recently been obtained in material collected by hand-net in 1891, at the mouth of the "Cocklemill Burn" near Largo, Firth of Forth.

Pseudanthessius Sauvagei, Canu.

This interesting addition to the British fauna was obtained in dredged material from the "Fluke Hole" off St. Monans, Firth of Forth. Only two specimens have as yet been obtained.

Sunaristes paguri, Hesse.

A single specimen (a male) of this rare and curious species was captured in the Cromarty Firth in September last; it occurred in material dredged near Invergordon, and although it was not taken on a hermit-crab, or in the shell occupied by a hermit-crab, several hermit-crabs were observed in the same material in which it was obtained. The Cromarty Firth specimen measures 2·3 millim. ($\frac{1}{4}$ of an inch). The terminal claws with which the powerful anterior antennæ are armed are of a dark horn-colour, and so also are the large spines on the inner branches of the second pair of swimming-feet. *Longipedina paguri*, W. Müller, is very likely the same species as that described by Hesse; and in fact our specimen agrees better with Müller's figures than with those of Hesse; but we have adopted Hesse's name as having priority over that of W. Müller.

AMPHIPODA.

Harpinia crenulata, Boeck.

A few specimens of this *Harpinia* have been obtained in the Moray Firth and in the Firth of Forth. The more prominent and distinctive characters of the species appear to be the following:—The second-last pair of pereopods are very long, and, when bent backwards, extend considerably beyond the body of the animal; the posterior expansion of the basal joint of the last pair of pereopods has the margin irregularly serrate and furnished with several comparatively long hairs; and the last pair of epimeral plates of the metasome have the lower distal angles rounded and furnished posteriorly with a single small tooth or with two or three small teeth of unequal size. But the long second-last pair of pereopods seem to be in themselves a very obvious character, and one by which the species may be readily distinguished.

Amphilochoides pusillus, G. O. Sars.

Several specimens of this Amphipod have been obtained by us in material from the Firth of Forth and from St. Andrews Bay. The Forth specimens were dredged in the vicinity of the Bass Rock in twenty-two to twenty-three fathoms. This species is readily distinguished from *Amphilochoides odontonyx* (Boeck), which has already been recorded for the Forth, by the absence of a basal tooth on the claws, or *dactyli*, of the first gnathopods, and by the inner margin of the hand of the same gnathopods being distinctly angular;

the palm of the second gnathopods is finely serrate only on the distal half, while the proximal half is even or nearly so and bears a few minute setæ. The postero-lateral angles of the last epimeral plates of the metasome are also simply angular, and not produced posteriorly into a tooth-like projection as in *Amphilochooides odontonyx*.

Metopa robusta, G. O. Sars.

A few specimens of this interesting species were dredged this summer in deep water in the Moray Firth; it was easily distinguished by the structure of the gnathopods, the form of the large fourth pair of coxal plates, and by the very robust posterior pereopods; the posterior part of the meros of these pereopods, and especially of the seventh pair, is greatly developed. The contrast between the feeble and slender first pair of gnathopods and the powerful second pair is very marked in this species.

So far as we know, the three Amphipods just referred to do not appear to have been previously recorded as British.

ADDITIONAL NOTE.

Cletodes monensis, I. C. Thompson.—In our paper in the 'Annals and Magazine of Natural History' for October last we recorded the occurrence of this Copepod in the Moray Firth, and in doing so we inadvertently called it *Laophonte monensis* instead of *Cletodes monensis*.

Stephos minor, T. Scott.—This genus and species were described and figured in the 'Tenth Annual Report of the Fishery Board for Scotland (1892).' Dr. W. Giesbrecht, in a paper recently published by him*, refers to this genus and identifies it with the genus *Mobianus* described in his new and great work on the Pelagic Copepoda of the Gulf of Naples. He makes a few remarks on the question of priority, and appears to be in doubt as to whether *Stephos* or *Mobianus* was published first. As the result of personal investigation and inquiry we are now able to say that we quite agree with Dr. Giesbrecht as to the identity of the two genera; but the species from the Gulf of Naples is, we think, different from that from the Firth of Forth, additional specimens of which have been recently obtained by us. As

* "Mittheilungen über Copepoden," von Dr. W. Giesbrecht (Abdruck aus den Mittheilungen aus der Zoologischen Station zu Neapel, 11 Band, 1./2. Heft) p. 102.

to the question of priority, we find that the 'Tenth Annual Report of the Fishery Board for Scotland,' in which *Stephos* is described, was published on September 22nd, 1892, and that Dr. Giesbrecht's work on the Pelagic Copepoda of the Gulf of Naples, in which *Mobianus* is described, and which bears the date 1892, was published on January 26th, 1893.

EXPLANATION OF THE PLATES.

PLATE VIII.

Amymone nigrans, sp. n.

Fig. 1. Male, seen from the side, $\times 80$. 2. Anterior antenna, female, $\times 190$. 3. Mandible and palp, $\times 380$. 4. Foot of third pair, $\times 170$. 5. Foot of fourth pair, $\times 170$. 6. Foot of fifth pair, female, $\times 253$. 7. Foot of fifth pair, male, $\times 190$.

Stenhelia dispar, sp. n.

Fig. 8. Female, seen from the side, $\times 70$. 9. Anterior antenna, female, $\times 380$. 10. Foot of first pair, $\times 190$. 11. Foot of fourth pair, $\times 127$. 12. Foot of fifth pair, female, $\times 253$.

Cletodes irrasa, sp. n.

Fig. 13. Female, seen from above, $\times 70$. 14. Anterior antenna, female, $\times 253$. 15. Foot of first pair, $\times 506$. 16. Foot of fourth pair, $\times 506$. 17. Foot of fifth pair, female, $\times 380$.

Ameira exilis, sp. n.

Fig. 18. Female, seen from the side, $\times 36$. 19. Foot of fifth pair, female, $\times 127$. 20. Abdomen and caudal stylets, $\times 40$.

PLATE IX.

Ameira exilis, sp. n.

Fig. 1. Anterior antenna, female, $\times 100$. 2. Foot of first pair, $\times 127$. 3. Foot of third pair, male, $\times 84$.

Thalestris forficuloides, sp. n.

Fig. 4. Female, seen from the side, $\times 54$. 5. Anterior antenna, female, $\times 190$. 6. Foot of first pair, $\times 190$. 7. Foot of third pair, male, $\times 127$. 8. Foot of fifth pair, female, $\times 127$. 9. Abdomen and caudal stylets, $\times 53$.

Dermatomyzon gibberum, sp. n.

Fig. 10. Female, seen from above, $\times 80$. 11. Anterior antenna, $\times 253$. 12. Mandible, $\times 304$. 13. Maxilla, $\times 304$. 14. Foot of fifth pair, $\times 253$.

Acontiophorus elongatus, sp. n.

Fig. 15. Female, seen from above, $\times 48$. 16. Anterior antenna, $\times 190$. 17. Mandible, $\times 152$. 18. Siphon, $\times 152$. 19. Foot of fourth pair, $\times 127$. 20. Foot of fifth pair, $\times 253$.



Andrew Scott del. ad. nat.

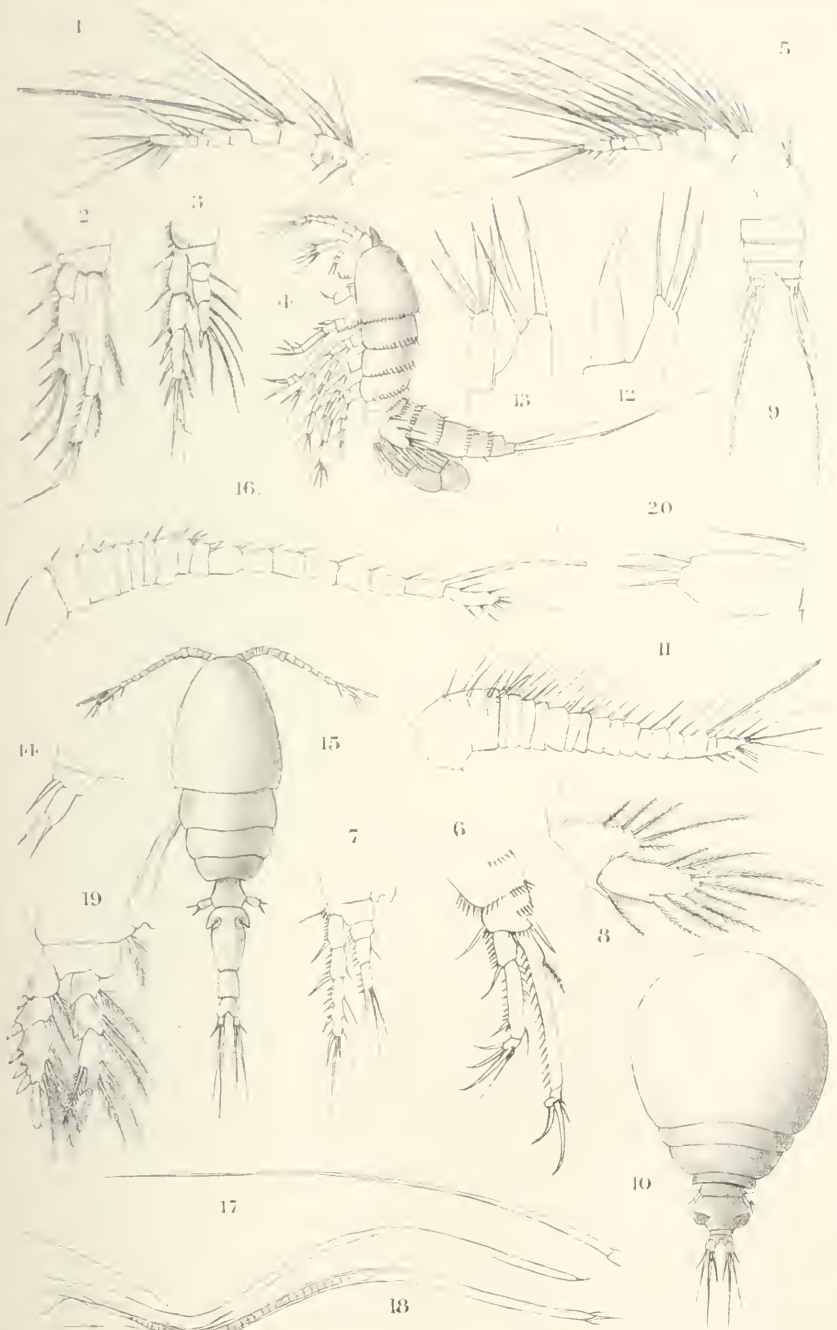
Murten Bros. lith.

1-7. *Amymone nigrans*, sp. n.

8-12. *Stenohela dispar*, sp. n.

13-17. *Cletodes irrasa*, sp. n.

18-20. *Ameira exilis*, sp. n.



Andrew Scott del ad nat.

Mintern Bros lith

1-3. *Ameira exilis*, sp. n.

4-9. *Thulestris forficuloides*, sp. n.

10-14. *Dermatonyx gibberum*, sp. n.

15-20. *Acentiopherus elongatus*, sp. n.