## ANNALS

OF THE

## SOUTH AFRICAN MUSEUM

> VOLUME XVIII.


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## VOLUME XVIII.

PAR'I IV, containing:-
6.-South Afriean Cirustacea (L'art XI of S.A. Crustacea, for the Marine Investigations of South Africa).-By the Rev. Thomas R. R. Stebbing, M.A., F.R.S., F.L.S., F.Z.S., Fellow of King's Gollegre, London, Hon. Memb. of New Kealand Inst., Hon. Fellow of Worcester College, Oxford. (Plates XIII-XX of Vol. XVII. Plates CVIII-CXV of Crustacea.)
7.-Additions to the Bombyliid Fauna of South Africa (Diptera), as represented in the South African Museum. -By Prof. M. Bezzi.


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TRUSTEES OF THE SOUTH AFRICAN MUSEUM BY ADLARD AND SON AND WEST NEWMAN, LTD., BARTHOLONEW CLOSE, LONDON.
6.-South African Crustacea (Part XI of S.A. Crustacea, for the Marine Investigations of South Africa).-By the Rev. Thomas R. R. Stebbing, M.A., F.R.S., F.L.S., F.Z.S., Fellow of King's College, London, Hon. Memb. of New Zealand Inst., Hon. Fellow of Worcester College, Oxford.
(Plates XIII-XX of Vol. XVIII. Plates CVIII-CXV of Crustacea.)
The fourteen species here considered are distributed over nine families. Six of the species are regarded as new, one of them seeming to require a new genus. The details supplied in the plates for Eucrate affinis, Haswell, and Penaeus longicornis (Olivier) may claim to be of scientific interest, although the specific names have been previously published. In the case of Olivier's species the name is a revival. Also under the heading of the genus Ebatia opportunity has been taken for rectifying some ancient misstatements in nomenclature. The name of the new genus Maxillothrix asks attention to the equipment of the vibratory lamina of the second maxilla, which often passes unnoticed, probably for two reasons, one being its usual uniformity, the other the difficulty of obtaining it undamaged in the manipulation of small Malacostraca.

## BRACHYURA.

## Tribe OXYRRHYNCHA.

Family INACHIDAE.

Gen. ACHAEOPSIS, Stimpson.
1857. Achaeopsis, Stimpson, Pr. Ac. Sci. Philad., vol. 9, p. 219.
1910. ", and Dorynchus, Stebbing, Ann. S. Afr. Mus., vol. 6, p. 285.

Achaeopsis spinulosus, Stimpson, 1857.
(See these Annals, vol. 6, p. 285, and add-
1911. Achaeopsis spinulosus, Rathbun, Tr. Linn. Soc. London, ser. 2, vol. 14, p. 247 .)

Miss Rathbuu notes that $A$. spinulosus has shorter legs than A. thomsoni (Norman), and that in the former "there is no indication in description or figure of the terminal spine on the merus joints." A female specimen laden with eggs agrees in these respects with $A$. spinulosus. Its mouth-organs are the same as those of $A$. thomsoni.
Locality. $34^{\circ} 5^{\prime}$ S. $\frac{1}{2}$ S., $25^{\circ} 43^{\prime}$ E. ; depth 52 fathoms. A 1437 and (juv. ?) Pt. Shepstone, W.N.W., 2 miles; depth 24 fathoms. A 1436 .

## Family BLaS'tidaE. <br> Gen. BLastus, Leach.

## 1814. Blastus, Leach, Edinb. Eucycl., vol. 7, p. 431.

This generic name, with Pemnant's Cancer tetraodon as type of the genus, has page precedence of Pisa.

## Blastus fascicularis (Krauss).

1843. Pisa fascicularis, Krauss, Südafrik. Crust., p.50, pl. 3, figs. 5̌, a-d. 1910. „, Stebbing, Anu. S. Afr. Mus., vol. 6, p. 288.

A male specimen of this little species was obtained by Mr. K. H. Barnard, "washed up on Durban beach." A 2251.

It differs from the description given by Krauss only in having the fingers of the chelipeds comparatively short. His figures of the large smooth hands leave this character indefinite. Krauss attributes the genus Pisa to de Haan instead of Leach, who regarded it as distinct from his own genus Blastus.

Gen. EURYNOME, Leach, 1814.
(See these Aunals, vol. 6, 1910, pp. 288, 289.)

## Eurynome elegans, m. sp.

## Plate CVIII.

This graceful form, a female carrying numerous brown eggs, was unfortunately devoid of both chelipeds. Nevertheless it shows some sufficiently. distinctive features. It is nearly allied to Eurynome longimanus, Stimpson, 1857, redescribed and rather obscurely figured in his posthumous work, edited by Miss Rathbun in 1907. The
proportion of breadth to length of carapace is there given as $1: 1: 38$, no doubt including in the length the divergent horns. In our specimen the breadth is rather less than 7 mm ., with a length, not including the horns, somewhat over 8 mm . The eyes are light orange, not black, as in Stimpson's species. In place of the five teeth on the branchial region there are here a convex row of five little nodules. The ambulatory limbs have each a thin blade-like carina on the fourth joint, not toothed as in Stimpson's species. This transparent carina differs much from the rugosity found in other species of the genus.

- I have figured both mandibles to show that they are not absolutely alike, one having a projecting tooth, which is wanting in the other.

Locality. Cape Vidal, N.N.E. $\frac{1}{4}$ N. 95 miles, Zululand; depth 80 fathoms, whence the specimen was obtained by s.s. "Pieter Faure." A 1610 .

## Family PARTHENOPIDAE.

Gen. PLATYLAMBRUS, Stimpson, 1871.
Platylambrus quemvis, Stebbing.
(See Aun. Durbau Mus., vol. 2, pt. 1, p. 5, pl. 1; 1917.)
A specimen somewhat larger than that previously described has a wider trilobed pleon, presumably due to a more advanced age. It was taken in Natal waters, Tongaat River, N.W. by N. $\frac{1}{4}$ N. $5 \frac{1}{2}$ miles ; depth 30 fathoms. A 384.

## Tribe CYCLOMETOPA.

## Family Xanthidae.

Gen. actaea, de Haan, 1833.
(See these Ammals, vol. 6, pt. 4, p. 298; 1910.)
Actaea hirsutissimus (Rüppell).
1830. Xuntho hirsutissimus, Rüppell, 24 Krabben roth. Meeres, p. 26, pl. 5, fig. 6, pl. 6, fig. 21.
1833. Cancer (Actaea) hirsutissimus, de Haan, Crust. Japon., decas 1, p. 18.
1834. Xantho hirtissimus, M. Edwards, Hist. Nat. Crust., vol. 1, p. 389. 1898. Actaea hirsutissima, Alcock, J. Asiat. Soc. Béngal, vol. 67, pt. 2, pp. 138, 141 (with synonymy).
Rathbun, Mem. Mus. Comp. Zoül., vol. 35, p. 42 .

Milne Edwards, no doubt accidentally, transposes his references to Rüppell's hirsutissimus and asper. Targioni Tozzetti, 1877, studies the genus elaborately under the name $A$ ctea.

Two specimens of this extremely hirsute species were obtained by Mr. Keppel Barnard at Mozambique. The carapace of the larger is 18 mm . broad and the fingers of the chelipeds are black. In the smaller specimen, with carapace about 9 mm . broad, the fingers of the chelipeds are quite pale. A 2207 .

> Gen. GALENE, de Haan.
1833. Galene, de Haan, Crust. Japon., decas 1, p. 19.
1852. ,, Dana, U.S. Expl. Exp., vol. 13, 1p. 229, 231.
1867. Eurycarcinus, A. M.-Edwards, Aun. Soc. Ent. France, ser. 4, vol. 7, p. 276.
1910. ", Stebbing. Ann. S. Afr. Mus., vol. 6, p. 302.

Galene natalensis, Krauss, 1843.
Specimens which I refer to this species were obtained by Mr. Barnard at Delagoa Bay. No one of the authorities which I have been able to consult explains why Galene should be displaced by the much later Eurycarcinus. A 2117.

## MAXILLOTHRIX, gen. nov.

Inter-orbital front undivided, obtuse-angled. Pleon of both sexes broad, telson much broader than long. Second antenna with rather long flagellum. Vibratory lamina of second maxilla carrying elongate setae. Fourth joint of second maxilliped long and tapering, sixth larger than either fifth or seventh. Third maxilliped having the broad fourth joint not much shorter than the third, with the fifth attached to its antero-interior angle, the sixth joint much smaller than either the fifth or seventh.

The generic name, a hybrid, from maxilla and oús, refers, as above mentioned, to an unusual feature in the second maxillite.

## Maxillothrix actaeiformis, h. sp.

Plate CIX.
In general aspect approaching Actaea hirsutissimus, having its numerous tubercles surmounted by tufts of light-coloured, rather stout setae. The inter-orbital front is not notched, and when its contour is brought into view the lower margin of the orbit becomes visible, portions of both pairs of antennae are in view, and the terminal joints of the large third maxillipeds obtrude themselves, all together making a picture difficult to represent distinctly. The antero-lateral margins are divided into four lobules, followed by a very small one which withdraws to the slightly convex postero-lateral margin. In the male pleon the second segment is wider than the third, from which, contrary to custom, the pleon widens slightly to the broad telson. Of this the hind margin is bluntly triangular in the male, but rounded in the female, the whole pleon fringed with setae in both sexes. In both the segments between the second and sixth present obscure delimitation. The male appendage of the large specimen was unfortunately lost during manipulation, and that figured on a larger scale is from a smaller specimen.

The flagellum of the second antenna is as long as the peduncle. The eyes have pale orange corneae. In the second maxillae the vibratory lamina carries at the lower end three very unequal but all very loing setae-a striking contrast to the species here assigned to Nursia, in which this apparatus has no setae at all, but reminiscent of the preduced lower setae in Rhynchocinetes typus and of the long spine in Axius longispina, recently described in these Annals (vol. 17, pt. 4).* The principal joints of the third maxillipeds in the largest specimen retained longitudinal stripes of orange and white. The lower border of hand and thumb in the chelipeds is white and polished, with a broad serrate apex overlapped by the obtuse-ended finger, the curvature of which leaves a gap between it and the thumb. The close matting of the palm above is in striking contrast with the smooth lower border. The ambulatory limbs are very lirsute, with the unguis small and curved. Carapace of largest male, 14 mm . broad, 12 mm . long ; smaller male, 9 mm . broad, 7.5 mm . long.

[^0]Locality. Umhlangakulu River, N.W. by N., 7 miles; depth 50 fathoms, Natal. A 839.

# Trabe CaTOMETOPA. 

Family GONEPLACIDAE. Gen. EUCRATE, de Haan, 1835.

Eucrate affinis, Haswell.
Plate CX.
This species has recently been discussed in these Annals, vol. 17, p. 238 , from a small and very imperfect specimen. The opportunity has now occurred of comparing better and larger specimens, one of each sex, the female having the carapace 15 mm . broad at the third antero-lateral tooth, with a length of 12 mm ., the male carapace measuring 11 mm . in breadth with a length slightly over 8 mm . Some interesting differences may be observed between the second maxillae and third maxillipeds of this species and the corresponding parts of Pachygrapsus polyodous. Both the specimens of Eucrate were collected in Durban waters, the male coming from the Durban Museum, the female from the South African. A 3939.

## Family GRAPSIDAE.

(See these Annals, vol. 6, pt. 4, p. 316, and add-
1918. Grapsidae, Rathbun, U.S. Nat. Mus., Bulletin No. 97, p. 224.)

Gen. PACHYGRAPSUS, Randall, 1839.
(See these Annals, vol. 6, p. 319, and add-
Pachygrapsus, Rathbun, as above, p. 240.)
The new species requires a slight modification of the generic account giveu by Miss Rathbun, as that account admits only a maximum of three antero-lateral teeth on each side of the subquadrate carapace, while here there are distinctly four.

> Pachygrapsus polyodous, n. sp.

## Plate CXI.

The character just mentioned, though found in other Grapsoid genera, is apparently unique among the known species of Pachy-
grapsis. The carapace of the single specimen, a male, measures 22 mm . in breadth by 18 mm . in length. The finely-granulated, nearly straight frontal piece between the orbits is approximately half the total breadth of the front. It has a small median notch. The greatest breadth of the carapace is at the third antero-lateral tooth. The succeeding tooth is much the smallest. The telson is triangular, broader than long. The third maxillipeds, which stood far apart, have the fourth joint broader than long, much shorter than the third, and the sixth joint shorter thin the fifth or the seventh. The chelipeds are notable for the strikingly dentate carinae of the fourth joint, to which allusion is made in the specific name, from the Greek
 have the confronting margins denticulate so as to close pretty closely together, both hands and fingers having various grooves and much granular ornamentation. The ambulatory limbs are closely alike in structure, except that the first and last are shorter than the two intermediate pairs. In all the fourth joint has a single distal tooth, the sixth lias some short marginal spines and the seventh several marginal groups of stiff setae.

Locality. Umhlangakulu River, N.W. by N., 7 miles; depth 50 fathoms. A 851.

## Tribe OXYSTOMATA.

(See these Anuals, vol. 6, p. 333 ; 1910.)
Family LEUCOSIIDAE.
(See these Annals, vol. 6, p. 335 ; 1910.)

Gen. EBALIA, Leach, 1817.
(See references above, p. 337, and add-
1837. Ebalia, M. Edwards, Hist. Nat. Crust., vol. ㄹ, pl. 128.
1837. ,, M. Edwards, Règne anim. Cuvier, explic. pl. 24.)

In the plate just mentioned Milne Edwards well exhibits the difference between the third maxillipeds of Ebalia and Philyra. But he calls one species Ebalia brayerii, Leach, thus misspelling E.bryerii, the name which Leach wrongfully substituted for the species called by Montagu Cancer tumefactus. There is an obvious confusion in the numbering of Montagu's figures. This, however, in no way justified Leach in supposing that Montagu had
confused his new species with Cancer tuberosus, Pennant, since Montagu is careful to explain why this confusion could not arise. The other species which Milne Edwards has usefully dealt with in the Atlas of the 'Règne animal' has likewise experienced some mystification in its specific name. Milue Edwards gives it as Philyra globulosa, Leach. Now if Herbst can be trusted Fabricius in the 'Syst. Ent.,' 1775, described a species as Cancer globus. At any rate he gives this name in the 'Species Insectorum,' vol. 1, p. 497, 1781. But in 'Ent. Syst.', 1793, he changes the name to Cancer globosus, and wrongfully claims Herbst as having agreed in the change. In the 'Suppl. Ent. Syst.,' 1798 , the name is further changed to Leucosia globosa, which Milne Edwards in 1837 erroneously quotes as Leucosic globulosa and proceeds to assign Philyra globulosa to Leach in place of Philyra globose for which he was in fact responsible, whereas the correct name is Philyra globus (Fabricins). From this the following new species, though similar in general aspect, is generically separated by the third maxillipeds. The specific name is a Latin word signifying a ball of thread. In its own genus the species makes some approach to Ebalia diadumena, Alcock, 1876, but is distinguished from it by much greater size, deeper emargination of the front, median tooth of the hind margin of the carapace, fingers of the chelipeds as long as the palms.
Alcock, relying in part on de Man's researches, divides Cancer globus into two species, naming the female Philyra globosa, the male Philyra globulosa.

## Ebalia glamus, 11.sp.

## Plate CXII.

The specimens to which I give this name deserve it, more especially in the female sex, which roll about in an aggravating mamer after they have shed their limbs, as they thoughtlessly do. Besides the difficulty which this instability causes in dissection of the delicate mouth-organs, it has an indirect effect in exhibiting the surface of this miniature globe so differently according to the angle of observation, that figures of two views might be supposed to represent two distinct species. The carapace of the female figured measured 8.5 mm . at the broadest part, with a median length about the same. 'I'he carapace of the male measured 6 mm . in breadth and the same in length. The
difference in globosity of the two sexes is chiefly due to the great breadth and convexity of the female pleon with its multitude of small eggs, while the male pleon is narrow and not inflated. In each sex the ventral surface of the body has a strip of tubercles on either side of the tightly folded pleon. In the female the segments 3 to 6 are consolidated, in the male only 3 to 5 . In both the telson is very small, that of the female partially immersed in the preceding segment, in the male not so, but fringed with setules, and having ventrally at the base an opaque white crescent-shaped process, of which the attachment could not be determined as between the preceding segment and the telson.

The front of the carapace is emarginate. Then comes a deep depression between two eminences just behind the orbits. The carapace then widens, with a large tubercle near each margin, and further back has a median pair, to the rear of which in the actual middle is a very large tubercle flanked by less considerable prominences, and followed by another large tubercle midway between it and the hind margin. This forms a very obtuse angle marked by a small tooth, with similar teeth at each extremity. Most of the surface is diversified with granules, which are displayed according to the magnification employed or the particular incidence of the light.

The triangular fourth joint of the third maxillipeds is not very much shorter than the preceding joint, and the exopod, though broad, is not extravagantly widened. The fingers of the chelipeds are as long as the palms, and have minutely interlocking teeth towards the extremities of their confronting margins. The delicate long-fingered ambulatory limbs were present only on the male example.

Locality. Natal waters, Umhloti River, N.N.W. $1 \frac{1}{2}$ miles: depth 27 fathoms. A 503.

Gen. NURSIA, Leach, 1817.
(See these Ammals, vol. 17, p. 246, 1920, and add-
1915. Nursia, Balss, Decapoden rot. Meeres, vol. 31, pt. 2. p. 17.)

Nursia postulans, n. sp.
Plate CXIII.
Among several examples or varieties of the form already described as Nursia scandens, one specimen seems to clam specific distinction by the characters of the carapace and pleon. The front is slightly emarginate, the hind margin strongly bilohed, behind a large blunt
median tubercle. A little behind the centre of the carapace is a nearly straight transverse row of three tubercles, and in advance of these a pair. The margins are diversified by a concavity behind the orbits, followed by aln oblique dine, beyond which the carapace rather abruptly widens with a broad curve gradually sloping to the posterior lobes; the margin almost throughout finely gramular or clenticulate. The pleon has a narrowly triangular telson, fully twice as long as the small sixth segment, which has a roughened surface; the three preceding segments consolidated, but widening successively forward in a conspicuous manner. The character of the male appendage is shown in the figures. That which appears remarkable in this species and in Nursia scundens is that the vibratory lamina of the second maxilla is quite devoid of the customary fringe of setæ (notably developed in Eumiersia ensifer, S. I. Smith, see ‘Bull. Mus. Comp. Zoül.,' vol. 10, No. 1, p. 78, pl. 13, fig. 4, 1882, and in Microprosthema crassimanus, Richters, see Balss, 'Dec. rot. Meeres,' p. 34, fig. 27, 1915). Like the first and second maxillipeds this maxilla is remarkably delicate, and the specific name is an appeal for further light on these organs in other members of the family. Characters of the carapace make me doubtful as to whether I am justified in allotting the species here described to the genus Nursia.

Locality. Cape Natal, W. by N. 3 N. 11 miles; depth 184 fathoms. A 502 .

# BRACHYURA ANOMALA. 

## Family DROMIIDAE.

Gen. EUDROMIA, Henderson.
(See these Annals, vol. 17, p. 253 ; 1920.)

Eudromia hendersoni, n. sp.

## Plate CXIV.

The new species, named after Prof. J. R. Henderson, who instituted the genus, is distinguished from the type species, $E$. frontalis, by the character of the front, by the absence of the "prominent blunt spine" from the lateral borders, by the comparative robustness of the chelipeds with differing details, and by differences in the small fourth
and fifth peraeopods, so far as can be judged from the figures in the "Challenger" report. In our specimen the two lobes of the wellproduced front are contiguous instead of presenting a deep concavity, nor is there anything corresponding to the lobe on either side "directed almost vertically upwards." The pleon of the female is devoid of the overlapping lateral processes found in E. frontalis. On the other hand, there are many points of agreement with that species: the produced front, making the length of the carapace greater than the breadth, the sulci of the female mecting in a tubercle between the bases of the chelipeds, the scarcely projecting eyes (of which the figure shows the peculiar shape and feeble cornea), the large first antennae, and the character of the nearly similar second and third peraeopods contrasted with the dwarf-fingered two following pairs. The carapace shows strong depressions postero-laterally for the reception of the hinder peraeopods. Its greatest breadth is 12 mm ., with median length 13 mm .

Locality. Seal Island, N.W. $\frac{1}{2}$ W. 7 miles; depth 19 fathoms. A 813 .

## MACRURA.

## Tribe PENAEIDEA.

Family PENAEIDAE.

Gen. PENAEUS, J. C. Fabricius.

Penaeus longicornis (Olivier).
Plate CXV.
1825. Palaemon longicornis, Olivier, Encyl. Méth., vol. 10, p. 662 [M. Edwards].
1837. Penaeus indicus, M. Edwards, Hist. Nat. Crust., vol. 2, p. 415.

This species has been alrearly discussed in the "Annals of the Durban Museum,' vol. 1, pt. 5, p. 443, under the heading of $P$. indicus var. longirostris, de Man. It now seems to me that de Man's longirostris is the original P.indicus, as shown by the resemblance to Olivier's longicornis which Milne Edwards specifies. As in that case the varietal nume must be dropped, the acceptance
of Olivier's specific name will not be umreasonable. It anticipates indicus by several years.

The male specimen of which the petasma is figured has six ventral spines on the rostrum ; the total length of the specimen is a little under 4 in., the carapace with rostrum measuring 50 mm ., the sharply carinate sixth pleon segment 15 mm . and the sulcate telson 14 mm . The somewhat larger female specimen, from which all the other figures are drawn to a uniform scale of magnification, has only five ventral spines on the rostrum. The greater prolongation of the rostrum in young as compared with older specimens may be correlated with some requisite of defence which ceases with increasing size and strength.
Locality. Cape Point, N.E. by E. 36 miles; depth 650 fathoms, green mud. A 209.

The species is also recorded from "Ungeni River," 207, and from "Umgeni Lagoon," Durban, taken by T. L. Ruston. AG 1087.

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## EXPLANATION OF PıATES.

## Plate XIII. (Crustacea, Plate CVIII.) <br> Eurynome elegans, n. sp.

n.s. Lines indicating natural size of carapace figured above (breadth a little exaggerated) with ambulatory limbs on the right.
Pl., oc., a.i., plp. Pleon of the female and one of the pleopods, eye and second antemna seen from the ventral surface, and of uniform magnification. The remaining figures on a higher scale
m., m., mxp. 2, mxp. 3, prp. 4, prp. 5. The two mandibles, second and third maxillipeds, fourth and fifth peraeopods.

Plate XIV. (Crustacea, Plate CIX.)
Maxillothrix actaeiformis, n. g. et sp.
n.s. $\delta$. Lines indicating natural size of adjoining carapace; a male.

Pl. ठ, Pl. ¢, plp. ठ. Pleon of male, with male appendage of a smaller specimen. Pleon of female, like that of the male somewhat flattened.
oc., a.s., a.i. Eye, first and second antennae, from the larger male.
m., mx. 2, mxp. 2, mxp. 3. Mandible, second maxilla, second and third maxillipeds, from larger male.
prp. l, prp. 4. First peraeopod (left cheliped), terminal portion of fourth peraeopod, both from larger male.

## Plate XV. (Crustacea, Plate CX.) Eucrate affinis, Haswell.

n.s. $\uparrow$, n.s. $\delta$. Lines indicating natural size of carapace of the female and male specimens, of which parts are figured, all referring to the female except the pleon of the male.
car. Part of the carapace, with one of the peraeopods.
Pl. q. Pleon of female in dorsal view.
prp. 1, prp. 1, prp. 5. Hand and finger of smaller cheliped, and the larger below, and part of the fifth peraeopod. All the foregroing figures to a uniform scale; the mouth-organs more highly magnified.
m., mx. 2, mxp. 1, 2, 3. A mandible, second maxilla, first, second and third maxillipeds, the second very incomplete.
Pl. ठ. Pleon of male, more highly magnified than that of the female.

Plate XVI. (Crustacea, Plate CXI.)
Pachygrapsus polyodous, n. sp.
n.s. Dorsal view of carapace with one peraeopod attached, of the natural size.
prp. prp. x. The smaller cheliped and a detached ambulatory lianb of the natural size. The other figures are magnified to a uniform scale.
car. Part of carapace, showing half of interorbital front, eye, and antero-lateral teeth.
T. The telson, with part of preceding segment.
a.s., m., m. First antenna ; the mandibles, figure on left showing the inner or upper side, that on right the outer or lower side of the other mandible.
mx .2 , mxp. 3, prp. 1. Second maxilla and third maxilliped; fingers of larger cheliped on left, on right fourth joint and fingers of the other cheliped.
prp., x. Terminal part of detached limb much enlarged.

## Plate XVII. (Crustacea, Plate CXII.)

Ebalia glomus, n. sp.
n.s. $\uparrow$, n.s. $\delta$. Lines indicating natural size of carapace, female above.
Pl. $\ddagger, \mathrm{Pl}$. ठ. Pleon of female in dorsal aspect, of male in ventral view.
prp. 1 \&, prp. 1 万. Chelipeds of female and male. All the above figures to a uniform scale.
mxp. 3 q, plp. $\delta$. Third maxilliped of female, pleopod of male to higher scale.

Plate XVIIIa. (Crustacea, Plate CXIIIa.).
Nursia postulans, n. sp.
n.s. Lines indicating natural size of carapace.
car., prp. 3, prp. 4. Dorsal view of carapace, with third and fourth peraeopods.
Pl. Pleon more highly magnified, with male appendages below, one of them still more enlarged, showing shape when flattened.
m., m., mx. 2, mxp. 1, 2, 3. The two mandibles, second maxilla, and the three maxillipeds all uniform in scale with the more enlarged male appenclage.

# Plate XVIIIb. (Crustacea, Plate CXIIIb.) <br> Nursia scandens, Stebbing. 

n.s. Lines indicating natural size of carapace.

Pl. Pleon of female.
mx. 1, mx. 2. First and second maxillae, more highly magnified.
prp. 1. Left cheliped, uniform in scale with the pleon.

## Plate NIX. (Crustacea, Plate CXIV.) <br> Eudromia hendersoni, 1. sp.

n.s. Lines indicating natural size of the female carapace.
car. Carapace with projecting chelipeds and fifth peraeopod in position.
Pl. Dorsal view of pleon detached and flattened.
oc., a.s. Eye and first antemna, magnified in uniformity with the mouth organs.
m., mx. 1, mx. 2, mxp. 1, 2, 3. Mandible, first maxilla, second maxilla (incomplete), the three maxilliperls (lobes of the second detached).
prp. 1, prep. 5. A cheliped and fifth peraeopod.

## Plate XX. (Crustacea, Plate CXV.) <br> Penaeus longicornis (Olivier).

r. Rostrum with part of carapace magnified.
T. Telson in dorsal view.
oc., a.s. Eye and first antenna.
m., mxp. 2, mxp. 3. Mandible, second and third maxillipeds.
prp. 3. Third peraeopod.
th. Thelycum of female.
pet. Petasma of male in lateral view and flattened out.

,

a.s
.s. $-14!2$

n.s. $0^{\circ}$


$\int_{0}^{\cos }$




Del. T.R.R.Stebbing.
Adlard \& Son \& West Newman Ltd. lith.




# Crustacea Plate CXIII. 

 Plate XVIII.Ann.S.Afr.Mus.Vol.XVIII.





[^0]:    * In his 'Catal. Indian Decapod Const.,' 1901, pl. A, Alcock shows two long terminal setæ on the second maxillæ of his Homola andamanicus, but does not notice them in the text. In 1882 S . I. Smith had called attention to the remarkable length of the setæ in question in a species of Eumiersia (Nematocarcinus). Bate, 'Challenger Macrura,' p. 769,1888 , notes this as a character of his genus Campylonotus.

