

results to science when it is, as it always will be, eventually overthrown."

*Nuculana pustulosa*, Jeffreys.

From 1000 fath.

*Nucula reticulata*, Jeffreys.

From 1000 fath.

*Nucula corbuloides*, Seguenza.

From 1000 fath.

This and the preceding species were both taken in deep water off the west of Ireland by the 'Porcupine' expedition.

*Limopsis cristata*, Jeffreys.

From 1000 fath.

*Lima (Limatula) subovata*, Jeffreys.

From 1000 fath. One valve only.

This species was dredged by the 'Valorous,' 'Porcupine,' and 'Challenger' expeditions at various stations in the Atlantic and the Mediterranean, and according to Jeffreys very fine examples were obtained by the Norwegian and Dutch Arctic Expeditions.

## CRUSTACEA. By R. I. POCOCK.

Although not extensive in numbers this collection is of considerable interest, inasmuch as it adds several forms to the Crustacean fauna of Great Britain.

Of course many of the specimens obtained are referable to species of common occurrence on our coasts, but I am not aware that such forms as *Anamathia Carpenteri*, *Lispognathus Thomsoni*, and *Parapagurus pilosimanus* have ere this gained the right to be included in a list of the fauna of the British area. Two species only are now for the first time characterized. One of these, *Ebalia nux*, has long been known from the Mediterranean under a manuscript name; the other *Eupagurus carneus*, appears to be wholly new.

### DECAPODA.

#### *Anamathia Carpenteri*.

*Amathia Carpenteri*, Norman, in Wyville Thomson's 'Depths of the Sea,' p. 175, fig. 35 (1873).

*Ann. & Mag. N. Hist.* Ser. 6. Vol. iv.

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*Anamathia Carpenteri*, S. I. Smith, Report on Decapoda of Albatross dredgings, Washington, 1886, pp. 21, 22.

Several specimens from depths of 110 and 250 fath.

*Lispognathus Thomsoni*.

*Dorhynchus Thomsoni*, Norman, in Wyville Thomson's 'Depths of the Sea,' p. 174, fig. 34 (1873).

*Lispognathus Thomsoni*, A. M.-Edwards, Comptes Rendus, pp. 878-932 (1881); Miers, Brachyura of 'Challenger,' p. 28, pl. v. fig. 2.

Specimens were obtained at a depth of 250 fath.

*Hyas coarctatus*, Leach.

A specimen from 250 fath.

*Eurynome aspera*, Leach.

Two specimens from 315 fath.

*Ebalia nux*, sp. n.

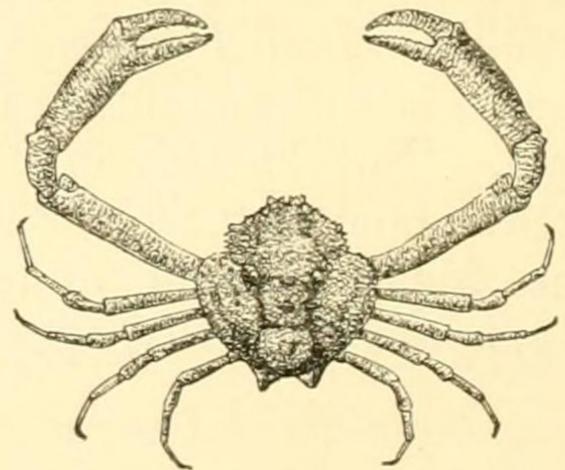
*Ebalia nux*, Norman, MS.

*Carapace* as broad as it is long, entirely covered with rounded tubercles, convex from before backwards and from side to side, the regions well defined; the frontal region horizontal or slightly upturned, with somewhat sharply emarginate anterior edge; posterior gastric region marked with larger tubercles—two anterior and paired, and one or two posterior and median; intestinal region armed with a large tubercle above and with sharply emarginate hinder edge; lateral surface of carapace much more finely granular than the superior surface.

*Chelipedes* long in males, short in females, covered thickly with larger and smaller granules; merus almost cylindrical; propodus thicker at its distal than at its proximal end; dactylus gently curved and slightly inturned, widely separated at the base in the adult males, in contact in the females.

*Legs* granular above and below.

*Abdomen* in the male triangular, with the third and fourth segments fused together, with a median projection on the hinder margin of the terminal segment; in the female covering the whole sternal surface of the cephalothorax, with the



*Ebalia nux*, ♂, nat. size.

third, fourth, and fifth segments fused, the sixth very small and imbedded in an excavation at the base of the external maxillipedes.

♂. Length and width of carapace 11 millim.; length of chelipede 25 millim.

♀. Length and width of carapace 10 millim.; length of chelipede 14.

A number of specimens of this species were dredged by the 'Porcupine' in the Mediterranean. Some of these specimens were presented to the British Museum by the Rev. A. M. Norman and were labelled "*E. nux*, Norm." This name is included in the list of the species composing the Museum Normanianum, and also in the list of the species of *Ebalia* given by Mr. Miers in his Report on the Brachyura of the 'Challenger.' But no description of the species has yet been published. I have consequently taken this opportunity of characterizing it and have selected as types an adult male and female specimen belonging to the series dredged in the Mediterranean. In some of the small specimens of this series the larger tubercles on the gastric region of the cephalothorax are wholly absent.

A single damaged male specimen was obtained by Mr. Green at a depth of 315 fathoms. This specimen differs from all the Mediterranean forms that I have seen in having the legs almost wholly smooth.

*Munida bamffica* (Pennant).

Two specimens from 250 or 315 fath.

Although Prof. G. O. Sars has attempted to show that *M. Rondeletii* is specifically distinct from *M. rugosa*, nevertheless I agree with my friend Mr. A. O. Walker in thinking that the two names must be referred to one and the same species, which, in accordance with the laws of priority, must be termed *M. bamffica*, Pennant.

*Eupagurus bernhardus* (Linn.).

For synonyms and distribution of this and the following two species of *Eupagurus*, see Henderson, "A Synopsis of the British Paguridæ," Proc. Phys. Soc. Edinb. 1886, p. 65.

One specimen from 55 fath.

Common in the North Atlantic.

*Eupagurus pubescens* (Kröyer).

*Eupagurus pubescens* (Kröyer), Henderson, loc. cit. p. 71.

One specimen from 200 fath.

Common in the North Atlantic.

*Eupagurus excavatus* (Herbst).*Eupagurus excavatus* (Herbst), Henderson, loc. cit. p. 70.

Two specimens from 110 fath.

Taken on the west coast of Ireland by the 'Porcupine' expedition, and ranging from Senegambia to the Shetlands.

*Eupagurus carneus*, sp. n.

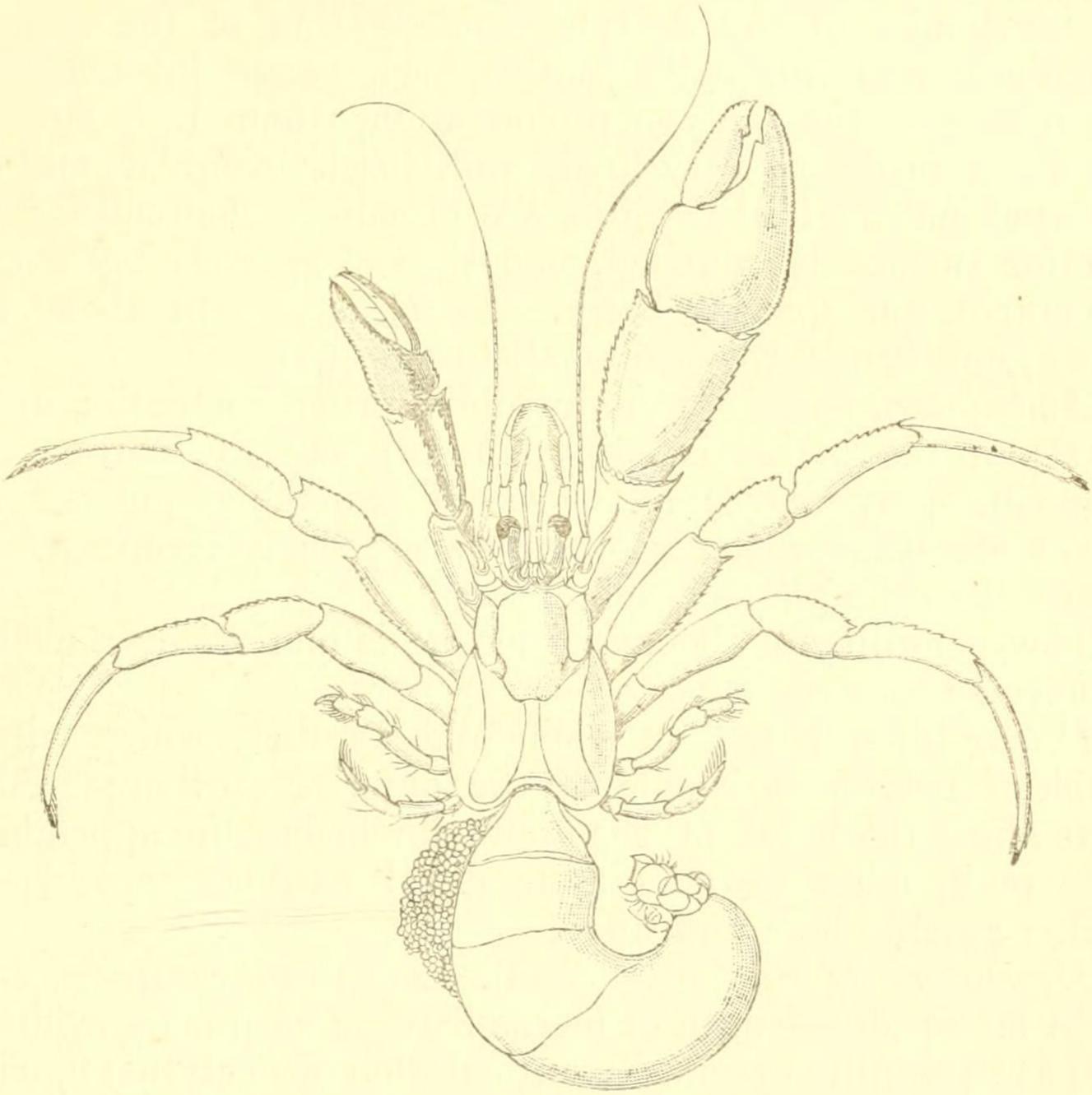
*Carapace* with posterior and lateral portions membranous; anterior portion smooth, slightly convex from before backwards, more so from side to side, the median frontal projection well marked and sharp, the lateral less marked than the median and each tipped with a minute spine.

*Ophthalmopods* stout, with dilated corneæ and small tufts of hairs, projecting slightly beyond the second segment of the antennular and antennal peduncles; the scale small, narrow, and spatulate, being hollowed out above and bearing a small forwardly directed tooth below.

*Antennæ*. Basal segment bearing distally one spine on the upper inner margin, a second slightly longer on the inferior surface and externally, and a third very large one which, superiorly denticulate, extends as far as the distal end of the second segment; acicle slender and outwardly curved, projecting to about the middle of the distal segment of the peduncle; the whole of the peduncle more or less hairy.

*Chelipedes* very unequal in size, the right being much larger than the left. In the right the *merus* is trigonal, with convex internal and external surfaces; the external surface squamate, internal surface almost smooth; the external edge of the lower surface is finely denticulated, and prolonged in front into a spine; the internal edge of the lower surface bears proximally two larger blunt teeth; the anterior edge of the upper surface bears about five separated sharp teeth. The *carpus* is large, being longer than the greatest length of the *merus* by about one third of its own length; the upper surface slightly convex from before backwards and from side to side, proximally a little squamate, but the rest of the surface thickly covered with exceedingly minute close-set granules; the external and internal margins of this surface very well marked; the external margin slightly raised, denticulated in the middle, and gradually converging towards the meral articulation; the internal margin much more strongly marked, dentate throughout its extent, and abruptly converging towards the meral articulation; external surface more coarsely granular than the superior surface, and armed in front with a few small denticles; the inferior surface

internally squamate; internal surface finely granular, with sharply raised and very obscurely denticulated anterior margin. Upper surface of *manus* convex from before backwards and from side to side, much dilated externally, and



*Eupagurus carneus*, ♀, nat. size.

covered with exceedingly minute close-set granules; its inner and outer edge much compressed and denticulated throughout their extent; inferior surface of the hand also covered with minute granules, but these are less close-set than upon the superior surface. Upper surface of *dactylus* also finely granular, its external edge compressed, finely dentate, as is the corresponding edge of the hand, and not evenly convex but distinctly sinuate; inferior surface of *dactylus* smooth, shining, and sparsely punctate, as is the corresponding prolongation of the manus.

*Left chelipede.* *Merus* somewhat resembling that of the right, but more hairy, and without the teeth above in front. *Carpus* with two parallel rows of strong teeth above; its inner surface smooth in parts, and bearing two teeth in

front; its inferior surface squamate; its external surface granular, produced in front below into a bi- or tridentate lobe and above into a single sharp tooth; the upper surface armed between the two series of teeth with a single bifid tooth. *Manus*: upper surface bearing a large denticulated keel, which runs from the middle of the posterior margin to the extremity of the dactylar prolongation of the manus; externally and internally to this keel, except internally on the surface of the dactylar prolongation, where it is smooth, the upper surface is very finely and closely granular, and the external and internal margins are obscurely denticulate; the inferior surface is rounded, smooth, and sparsely but deeply punctured, and sparsely hairy. *Dactylus* smooth above and below, and furnished with small tufts of hairs.

*Ambulatory limbs* externally and internally smooth; in the first pair the merus is spiny beneath, and the carpus and propodus spiny above; in the second pair the carpus is spiny above and the propodus obscurely so; dactyli considerably longer than the propodi, and curved.

The penultimate abdominal tergite is marked by a median transverse constriction.

*Colour* (in spirit). The cephalothorax dirty white, with a patch of red on each side of the anterior portion; reddish tints about the bases of the ophthalmopods; the appendages pale pink, paler towards their distal extremities, and with darker patches here and there.

*Measurements* (in millimetres). Length of carapace  $15\frac{1}{2}$ ; right chelipede—length of merus 9.10, of carpus 14, width of carpus 9; length of manus (to articulation of dactylus) 9, width of manus  $10\frac{1}{2}$ ; length of dactylus 9.

Two female specimens, in shells of *Chrysodomus gracilis* and *Sipho despectus*, at depths of 110 and 315 fath.

#### *Parapagurus pilosimanus.*

*Parapagurus pilosimanus*, S. I. Smith, Trans. Conn. Acad. v. p. 51 (1879); id. Bull. Mus. Comp. Zool. x. p. 20, pl. ii. fig. 4 (1882).

Specimens, associated with *Epizoanthus*, from 315 to 1000 fath.

This species is abundant on the N.-American side of the Atlantic, and was obtained by the 'Albatross' at a depth exceeding 2000 fath. I am not aware that its occurrence within the limits of the so-called British area has been reported before.

*Pandalus annulicornis*, Leach.

Two specimens, at 55 and 250 or 315 fath.

## AMPHIPODA.

? *Metopa Bruzelii* (Goës).

*Metopa Bruzelii*, Boeck, Skand. Arkt. Amph. p. 458, pl. xviii. fig. 2.

Three damaged specimens, which appear to be referable to this Arctic species, were taken in 55 fath. of water.

*Callisoma crenata*.

*Callisoma crenata*, Sp. Bate, Cat. Amph. Brit. Mus. p. 85, pl. xiv. fig. 5 ;  
id. Brit. Sessile-eyed Crust. i. p. 120 ; Boeck, loc. cit. p. 132, pl. vii.  
fig. 1.

One specimen, at a depth of 55 fath.

This specimen has been compared with the type, which is preserved in the collection of the British Museum.

*Amphithopsis latipes*.

*Amphithoe latipes*, Sars, Overs. Norsk.-Arct. Region Krebsdyr, p. 20.  
*Amphithopsis latipes*, Boeck, loc. cit. p. 355, pl. xxii. fig. 4.

Several specimens, 55 fath.

I have compared these specimens with the type of *Calliope Ossiani* (Sp. Bate), and I find that they agree with it in all respects. But, according to Boeck, *Calliope Ossiani* is synonymous with *Amphithopsis latipes*.

*Phronima sedentaria*.

*Cancer sedentarius*, Forskål, Descript. Anim. p. 95.

*Phronima sedentaria*, Latr. Gen. Crust. et Ins. i. p. 56, pl. ii. fig. 2 ; Sp.  
Bate, Brit. Sessile-eyed Crust. ii. p. 23 ; Stebbing, Amphip. 'Chal-  
lenger,' ii. p. 1357, pl. clxii. B.

A single specimen, associated with a *Beroe*, came up in the trawl 80 miles from land.

## PANTOPODA.

*Pycnogonum littorale* (Ström).

For the literature of this species, and remarks on its distribution, see  
'Report on the Pycnogonidea of the Challenger,' by Dr. Hoek, p. 99.

A single specimen, depth ?

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