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Le jeune était couvert de duvet gris, relevé de taches d'un brun foncé. Malheureusement il a été mangé par le père, et les observations n'ont pu être continuées.

"The egg unfortunately arrived broken. It is white, very sparsely blotched with reddish-brown, a few of the markings taking the form of irregular hair-like lines, and measures 2.24 by 1.62 in. Thienemann, in his 'Fortpflanzungsgeschichte der gesammten Vögel,' has figured what he professes to call a specimen of this egg (tab. lxxii. fig. 14); but, as is well known, the letterpress of that work is incomplete, and no one can say whether the specimen was genuine. In like manner M. des Murs, in his 'Oologie Ornithologique,' has described the egg of this species (p. 368); but, again, evidence as to the authenticity of the specimen is not forthcoming. On the receipt of this egg from M. Milne-Edwards, I at once be-thought me of an egg which had long been known to me as existing in the collection of Mr. H. F. Walter F.Z.S.; and that gentleman has been so kind as to send it to me for exhibition to-night. This specimen is considerably larger than that laid in captivity, and also is more highly coloured. In appearance it at once calls to mind eggs of the *Rallidae*, while the egg from Paris can hardly be said to show such an affinity. It is to be hoped that before long greater success may attend the attempts at inducing this interesting form to breed, either in the Jardin des Plantes or the Gardens of our Society, so that some more distinct conclusion may be drawn, from the evidence thus to be obtained, as to the affinities of *Cariama*."

The following papers were read:—

1. Account of the Zoological Collections made during the Survey of H.M.S. 'Alert' in the Straits of Magellan and on the Coast of Patagonia. Communicated by Dr. ALBERT GÜNTHER, F.R.S., F.Z.S., Keeper of the Zoological Department, British Museum.

[Received November 4, 1880.]

(Plates I.—XI.)

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| <p>I. Mammalia, by OLDFIELD THOMAS, p. 3.</p> <p>II. Birds, by R. B. SHARPE, p. 6.</p> <p>III. Reptiles, Batrachians, and Fishes, by Dr. A. GÜNTHER, p. 18.</p> <p>IV. Mollusca and Molluscoida, by E. A. SMITH, p. 22.</p> <p>V. Polyzoa, by S. O. RIDLEY, p. 44.</p> <p>VI. Crustacea, by E. J. MILERS, p. 61.</p> | <p>VII. Coleoptera, by C. O. WATERHOUSE, p. 80.</p> <p>VIII. Lepidoptera, Orthoptera, and Hemiptera, by A. G. BUTLER, p. 82.</p> <p>IX. Echinodermata, by F. J. BELL, p. 87.</p> <p>X. Cœlenterata and Spongiidæ, by S. O. RIDLEY, p. 101.</p> |
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The collections described in the following series of papers were made by Dr. R. W. COPPINGER, Staff-Surgeon of H.M.S. 'Alert;' during the cruise of that ship on the coasts of the southern ex-

crowded into a "moss"-like tuft as in *P. belgica*. The absolute total length is nearly one third less than that of *P. belgica*; the stolon is of regular diameter. There is no median dilatation of the pedicel. The description of *P. americana*, Leidy (J. Ac. Philad. iii. p. 142) recalls in some particulars the present form, viz. its smooth undilated pedicels, the body with crenated border concentrically striated, and the 12 tentacles; but it is only $\frac{1}{2}$ of a line high, *i. e.* about .7 millim., whereas this is 1.5 millim. without the head; the relative positions of the intestine and stomach in the figure differ from those of our species.

The species described by Studer from Kerguelen Island (Archiv f. Naturg. 1878, p. 124) as "*Pedicellina* an nov. sp? Die Wander der 2 mm. hohen gestielten Becher sind vollkommen glatt" is very likely identical with *P. australis*. A species is also mentioned without name by Joliet (Compt. Rend. 1879, Febr., p. 392), from the island of St. Paul, north-east of Kerguelen Island.

CRUSTACEA.

By EDWARD J. MIERS, F.L.S., F.Z.S.

(Plate VII.)

The Crustacean fauna of the Straits of Magellan and of the adjacent coasts and islands has been more thoroughly investigated than that of many other parts of the South-American continent, as, not to mention various species described by Gu erin-M eneville, Milne-Edwards, White, and other authors, considerable collections were made in these regions by the naturalists of the United-States Exploring Expedition under Commodore Wilkes, U.S.N., and described by Dana in his great work¹. More recently Dr. Cunningham has published an account of the collections made by him during the voyage of H.M.S. 'Nassau,' wherein will be found a list, accompanied by notes, of the Crustacea and Cirripedia, most of which were collected on the southern, south-eastern, and south-western American coasts².

The collection received from Dr. Coppinger contains, as was to be anticipated, many species well known to science, but also several which are apparently undescribed, and others of which the range has not hitherto been ascertained to extend in a southerly direction as far as the Magellan Straits; moreover the localities, depth of water, and the nature of the sea-bottom have in nearly all cases been carefully noted.

The Crustacea of the Magellan Straits are essentially Antarctic in character: many of the species are known to occur at New Zealand, the Auckland and Kerguelen Islands, and, no doubt, range throughout the whole extent of the Southern Ocean; others, however, occur on the Chilean coast or even further north. Although the Crustacea

¹ U.S. Exploring Expedition, xiii., xiv., Crustacea, parts 1, 2 (1852, 1853).

² Trans. Linn. Soc. xxvii. p. 465 (1871).

of Antarctic South America bear a great resemblance to those of the Arctic Seas, and are in many cases congeneric with them, with a few somewhat doubtful exceptions the same species do not occur in the Northern and Southern seas¹.

¹ See, however, Lilljeborg, Nova Acta Soc. Upsaliensis, ser. 3, vi. (1866), "On the *Lysianassa magellanica*, M.-Edwards, &c." I may add that Mr. T. W. Kirk, Transactions New-Zealand Institute, xi. pp. 302-401 (1878), has recently identified several Decapoda and Edriophthalmia occurring in the New-Zealand seas with well-known North-European species; but his identifications seem to me to require confirmation, as it is not stated whether they have been made after comparison with European examples or from the descriptions of authors only. Yet more recently, Mr. G. M. Thomson (Ann. & Mag. Nat. Hist. vi. p. 4, 1880) has described a variety of the Arctic *Eusirus cuspidatus* (which does not differ sufficiently to be distinguished specifically) from Dunedin Harbour, New Zealand.

Besides the Crustacea obtained on the South-American coasts, the following species were dredged by Dr. Copping in the North Atlantic. Amongst them is one apparently new to science, belonging to the very interesting genus *Glaucothoë* of Milne-Edwards, a genus previously unrepresented in the British-Museum collection, and which, although Macruran in its organization, and placed by Milne-Edwards and Dana in the Thalassinidea, presents many affinities with the Paguridea, and is allied to the genus *Pomatocheles* described by me (P. Z. S. 1879, p. 49, pl. iii. fig. 2).

HERBSTIA OVATA.

Micropisa ovata, Stimpson, Pr. Ac. Nat. Sci. Phil. p. 217 (1857); A. M.-Edwards, N. A. Mus. H. N. iv. p. 51, pl. xvi. figs. 1, 2 (1868).

Two males and a female of this pretty little species were collected at St. Vincent (Cape-Verds) on a sandy bottom. When received, although they had been for some time in spirit, they were of a bright rose-colour.

GLAUCOTHOË ROSTRATA, sp. n. (Plate VII. figs. 1-5).

Carapace as in the Paguridæ, with the cervical and other sutures distinctly marked, inflated over the branchial regions, and with a median, triangular, sub-acute rostriform process; posteriorly the carapace is much broader than the first postabdominal segment. The postabdominal segments are smooth; the second to fifth narrowed on the sides, and these segments are each furnished with a pair of simple articulated appendages; the ventral surface of the post-abdomen is closed by a soft and membranaceous skin, as in the Paguridæ. The terminal segment is twice as long as broad, suboblong, rounded and fringed with long plumose hairs at its distal end. The eyes are subcylindrical; the antennules are short, geniculated; and the flagellum is fringed with long hairs on its under surface. The basal scale of the antennæ is obsolete. The outer maxillipedes are short and subpediform. The anterior legs are equal, and terminate in perfectly formed but rather slender chelæ, the palms of which are compressed, the fingers acute at their apices, and slightly denticulated on their inner margins; the second and third legs are slender, and reach considerably beyond the first legs, their terminal joints being styliiform and nearly straight; the fourth and fifth legs are shaped as in the Paguridæ; the penultimate joint of the fourth legs is somewhat dilated and compressed, and armed with a series of acute serrately disposed teeth on its inferior margin; the dactylus is strong, arcuate, and acute. The fifth legs are very slender, and the perfectly-formed didactyle chelæ with which they are terminated very small; the fingers are unarmed, and fringed on their outer surface with fine hairs. The terminal joint of the second to fifth postabdominal appendages is fringed with long, flexible plumose hairs. The rami of the uropoda are similarly ciliated, and unequal in size, the inner and smaller being regularly oval, the outer suboblong and obliquely truncated at its distal end. Length $\frac{1}{2}$ inch.

Systematic List of the Species¹.

DECAPODA.

1. *Eurypodius latreillei*, Guérin. Sandy Point, Puerto Bueno, Trinidad Channel.
- *2. *Inachoides microrhynchus*, M.-Edw. and Lucas. Coquimbo.
3. *Epialtus dentatus*, M.-Edwards. Trinidad Channel.
- *4. ——— *marginatus*, Bell. Talcahuano.
- *5. *Pugettia*, sp. South Atlantic.
6. *Pisoides edwardsii* (Bell). Puerto Rosario, Trinidad Channel.
7. *Cancer plebejus*, Pöppig. Picton Channel, Talcahuano.
- *8. ——— *edwardsii*, Bell. Talcahuano.
9. ———, var. *annulipes*, n. Trinidad Channel.
- *10. *Paravanthus hirtipes*, M.-Edw. and Lucas. Talcahuano.
- *11. *Actæa rufa-punctata* (M.-Edw.). Hotspur Bank, S. Atlantic.
12. *Platyonychus bipustulatus*, M.-Edw. Trinidad Channel.
13. *Peltarion spinulosum*, White. Sandy Point, Cackle Cove, Puerto Bueno.
14. *Gomezia serrata*, Dana. Elizabeth Island, Trinidad Channel, Puerto Rosario.
15. *Acanthocyclus gayi*, M.-Edw. and Lucas. Isthmus Bay.
- *16. *Leptograpsus variegatus* (Fabr.). St.-Ambrose Island, S. Pacific.
- *17. *Chasmognathus granulatus*, Dana. Monte Video, Rat Island.
- *18. *Sesarma angustipes*, Dana, ? Monte Video, Rat Island.
19. *Haliscarcinus planatus* (Fabr.). Elizabeth Island, Cackle Cove, Sandy Point, Trinidad Channel.
- *20. *Pinnixa transversalis*, M.-Edw. and Lucas. Coquimbo.
- *21. *Hepatus chiliensis*, M.-Edw. Coquimbo.
- *22. *Platymera gaudichaudii*, M.-Edw. Coquimbo.
23. *Lithodes antarcticus*, Jacq. and Lucas. Puerto Bueno, Alert Bay, Trinidad Channel, Neesham Cove.
24. *Paralomis verrucosus* (Dana). Puerto Bueno, Trinidad Channel.
25. *Eupagurus comptus*, White. Sandy Point, Cackle Cove, Puerto Bueno, Puerto Rosario, Portland Bay.
26. *Munida gregaria* (Fabr.). Sandy Point, Cackle Cove, Trinidad Channel.
- *27. *Callinassa uncinata*. Talcahuano.
28. *Alpheus scabrodigitus* (Dana). Portland Bay, Borja Bay, Trinidad Channel.
29. ———, sp. Portland Bay.
30. *Pandalus paucidens*. Tom Bay, Trinidad Channel.

The unique example, which is, I believe, a male and adult, was dredged at Madeira, in 15-50 fathoms.

This species is distinguished from *Glaucothoë peronii*, M.-Edwards, by the existence of a distinct rostriform process, the less-pyriform eyes, the equal chelipedes, &c. *G. peronii* probably inhabited the Asiatic seas.

SCYLLARUS ARCTUS.

Cancer arctus, Linn. Syst. Nat. p. 1053 (1766).

Scyllarus arctus, Fabr. Ent. Syst. Suppl. p. 398 (1798); M.-Edwards, Hist. Nat. Cr. ii. p. 282 (1837); White, List Brit. Cr. Brit. Mus. p. 30 (1850); *ubi synonym.*

Cancer ursus minor, Herbst, Nat. Krabben, ii. p. 83, pl. xxx. fig. 2 (1796).

Arctus ursus, Dana, Cr. U.S. Expl. Exp. xiii. p. 516 (1852).

A specimen which I believe to be a very young example of this species was dredged in the same locality as the *Glaucothoë rostrata* (*i. e.* at Madeira, in 15-50 fathoms). The teeth of the median dorsal series are nearly obsolete, and those of the anterior margin of the terminal antennal joint are blunt; otherwise this example resembles the adult *S. arctus*. Length barely $\frac{1}{2}$ inch.

¹ The species collected by Dr. Coppinger only at localities north of Patagonia are distinguished by an asterisk.

STOMATOPODA.

31. *Squilla gracilipes*, n. W. coast of Patagonia.
 *32. *Pseudosquilla lessonii*, M.-Edw. Coquimbo.

ANISOPODA.

33. *Arcturus coppingeri*, n. Trinidad Channel.
 34. *Serolis scythei*, Lütken. Trinidad Channel.

ISOPODA.

35. *Idotea annulata*, Dana. Port Henry.
 36. *Styloniscus magellanicus*, Dana. Trinidad Channel, Tom Bay, Port Henry, Cockle Cove.
 37. *Lironca nova-zealandica*, White (ined.), Miers. Portland Bay.
 38. *Ega punctulata*, n. Wolsey Sound.
 *39. *Corallana acuticauda*, n. Hotspur Bank.
 40. *Sphaeroma gigas*. Sandy Point, Elizabeth Island, Silly Bay.
 41. *Dynamene darwini*, Cunningham. Elizabeth Island, Borja Bay.

CIRRIPEDIA.

42. *Balanus laevis*, Bruguière. Sandy Point.

Descriptions and Notes on Species.

DECAPODA.

EURYPODIUS LATREILLEI.

Eurypodius latreillei, Guérin, Mém. du Muséum, xvi. p. 354, pl. xiv. (1828); Icon. Crust. R. A. ii. pl. xi. fig. 1 (1829-44); M.-Edw. H. N. C. i. p. 284 (1834); Cr. in Cuv. R. A. (ed. 3) pl. xxxiv bis, fig. 1; Nicolet, in Gay's Hist. de Chile, iii. p. 123 (1849); Dana, Cr. in U.S. Expl. Exp. xiii. p. 104, pl. iii. fig. 1 (1852); Cunningham, Trans. Linn. Soc. xxvii. p. 491 (1871).¹

Eurypodius tuberculatus, Eyd. & Souleyet, Voy. Bonite, Zool. Cr. p. 221, pl. i. figs. 7-9 (1841).

Eurypodius audouinii, M.-Ed. & Lucas in d'Orbigny, Voy. Amér. mérid. vi. Cr. p. 3, pl. i. figs. 1-6 (1843); Dana, Cr. l. c. p. 104 (1852); Nicolet, in Gay's Hist. Chile, Zool. iii. p. 123 (1849); Cunningham, Trans. Linn. Soc. xxvii. p. 491 (1871).

Eurypodius septentrionalis, Dana, Amer. J. Sci. & Arts (ser. 2) xi. p. 270 (1851); U.S. Expl. Exp. Cr. i. p. 101, pl. ii. fig. 6 (1852); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 491 (1871).

Eurypodius brevipes, Dana, Amer. J. Sci. & Arts, xi. p. 270 (1851); Cr. Expl. Exp. xiii. 1, p. 193, pl. ii. fig. 7 (1852); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 491 (1871).

I have been obliged to include all the specimens in the Museum collection under the single heading of *E. latreillei*, because I find myself unable to distinguish them by the characters usually employed in descriptions, *i. e.* the comparative length of the penultimate and antepenultimate joints of the ambulatory legs, the density of the pubescence, the denticulations of the inner margins of the fingers, and the tuberculation of the carapace. All of these characters appear to be subject to considerable variation. There may possibly be two or

even more distinct species of this genus; but the series in the British-Museum collection does not suffice to decide this question, by far the greater number of specimens having been obtained at or near the southern extremity of the American continent. Bell (Trans. Zool. Soc. ii. p. 40, 1849) refers examples of *Eurypodius* from Brazil to *E. latreillei*; but I have seen no specimens from this locality.

In the great majority of specimens in the British-Museum collection, the spines of the rostrum are robust, of moderate length, and curve slightly downward; the spines on the branchial regions are small or reduced to tubercles; and the penultimate joints of the ambulatory legs are considerably dilated and longer than the antepenultimate joints. In younger individuals the joints of the legs and rostral spines are slenderer. One adult male from Sandy Point, in the series presented to the British Museum by Dr. Cunningham, differs from all others in the collection in the greater development of the anterior legs, in which the palm is turgid and the dactylus armed with a very strong tubercle on its inner margin. In two examples from Chili (one an adult male), which I at first thought might be regarded as a distinct species, the branchial spines are somewhat more developed, and the antepenultimate joints about equal the penultimate joints in length, these latter being also less dilated than in adult examples from the Straits of Magellan and Falkland Islands. A better series of examples from Chili, however, is needed to prove whether or not these characters are permanent. I have seen no examples in which the antepenultimate joints of the legs greatly exceed the penultimate joints in length.

Dr. Cunningham in his Report (*l. c.* p. 491) retains no fewer than four distinct species—*E. latreillei*, *E. audouinii*, *E. septentrionalis*, and *E. brevipes*.

The series collected by Dr. Coppinger includes:—several adult males and females from Puerto Bueno, obtained at a depth of 4 fathoms, on a muddy bottom; a female and several young from Sandy Point, at 7–10 fathoms; and one young individual obtained in Trinidad Channel, at a depth of 30 fathoms.

INACHOIDES MICRORHYNCHUS.

Inachoides microrhynchus, Eydoux & Souleyet, Voy. Bonite, Zool. Cr. p. 219 (1841); M.-Edw. & Lucas in d'Orbigny's Voy. Amér. mérid. vi. Cr. p. 4, pl. iv. fig. 2 (1843); Gay, Hist. de Chile, Zool. iii. Cr. p. 126 (1849).

Xiphus margaritifère, Eyd. & Soul. Voy. Bonite, Zool. Cr. Atlas, pl. i. fig. 1 (1841).

Two males and a female were brought by Dr. Coppinger from Coquimbo.

Both genus and species have been hitherto unrepresented in the collection of the British Museum. The adult male agrees very well with Milne-Edwards and Lucas's figure; but the depressions separating the regions of the carapace are not very strongly marked, as stated in the description of these authors.

EPIALTUS DENTATUS.

Epialtus dentatus, M.-Edwards, Hist. Nat. Crust. i. p. 345 (1834); Nicolet, in Gay's Hist. de Chile, iii. p. 131 (1849); Cunningham, l. c. p. 491 (1871).

Inachus mitis, Pöppig, Arch. f. Naturg. ii. p. 141 (1836); Gay, Hist. de Chile, iii. p. 125 (1849).

A single small female is in the collection, obtained on the beach in Trinidad Channel. Its occurrence at various widely separated localities on the coast of Chili is noted by Dr. Cunningham.

EPIALTUS MARGINATUS.

Epialtus marginatus, Bell, Proc. Zool. Soc. p. 173 (1835), Trans. Zool. Soc. ii. p. 62, pl. xi. fig. 4, ♀, pl. xiii. ♂ (1841); Smith, Trans. Conn. Ac. ii. p. 33 (1869).

A female and young male are in the collection, from Talcahuano.

PUGETTIA, sp.

A single female example is in the collection, which is distinguished from *P. richii* and *P. gracilis*, Dana, its congeners of the American coast, as follows:—The body is somewhat more elongated and convex on the gastric region; the lateral expansions or lobes of the carapace are but little prominent, forming small, subconical, acute teeth; the spines of the rostrum are slender and but little divergent. The example is a small one; and being of the female sex it would not be desirable to constitute it the type of a new species. If distinct, as is probably the case, it may be named *P. australis*.

It was obtained at a depth of 28 fathoms, on a bottom of black sand, in lat. 36° 47' S., long. 55° 17' W., at the mouth of the Rio de la Plata.

PISOIDES EDWARDSII.

Hyas edwardsii, Bell, Proc. Zool. Soc. p. 171 (1835), Trans. Zool. Soc. ii. p. 49, pl. ix. fig. 5 (1841).

Pisoides tuberculosus, M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. vi. Crust. p. 11, pl. v. fig. 1 (1843); Nicolet, in Gay's Hist. de Chile, iii. p. 134 (1849); A. M.-Edwards, Crust. in Miss. Scientif. Mexique, p. 75, pl. xvi. fig. 5 (1875).

Pisoides edwardsii, Dana, Cr. in U.S. Expl. Exp. xiii. i. p. 87, pl. i. fig. 2 (1852).

Two males were collected:—one at Trinidad Channel, at a depth of 30 fathoms, on a sandy bottom; the other at Port Rosario, at 2–30 fathoms, on a bottom of sand and rock.

This is a very interesting addition to the Museum collection, as both genus and species were hitherto unrepresented in it. It is one of the few Magellan species having a considerable range to the northward, having been obtained from Chili (Valparaiso), the Galapagos, and Panama. Its occurrence in the Straits of Magellan is now, I believe, for the first time recorded.

The examples before me differ from the description of Edwards and Lucas, in the third joint of the legs not being armed with any prominent spines, and in this joint in the ambulatory legs being less dilated and compressed; but this may probably be due to the greater age of Dr. Coppinger's specimens. The carapace is densely pubescent; the chelæ naked, and of a bright rose-colour. Length of largest individual about $1\frac{1}{4}$ inch.

Two Californian species described with doubt as belonging to this genus by Mr. Lockington, Pr. Cal. Ac. Sci. vii. pp. 66, 67 (1876), under the names of *Pisoides? celatus* and *P.? tumidus*, belong, as I learn from a MS. note of the author, to *Microphrys*—the former being identical with *Microphrys platysoma*, as noted by Streets and Kingsley.

CANCER PLEBEJUS.

Cancer plebejus, Pöppig, Arch. f. Naturg. p. 134 (1836); A. M.-Edwards, Nouv. Arch. Mus. Hist. Nat. i. p. 188 (1865).

A young male individual was taken in Picton Channel, at a depth of 6 fathoms, on a bottom of sand. Two females were dredged at Talcahuano.

CANCER EDWARDSII.

Cancer edwardsii, Bell, Trans. Zool. Soc. i. p. 338, pl. xlv. (1835); A. M.-Edw. N. Arch. Mus. H. N. i. p. 123 (1865); Cunningham, l. c. p. 491 (1871).

Platycarcinus edwardsii, Gay, Hist. de Chile, iii. p. 144 (1849).

A young male was taken at Talcahuano, in which the coloration is of the normal type.

CANCER EDWARDSII, VAR. ANNULIPES, n.

A young male was found on the beach in Trinidad Channel. In its convex carapace, and in the form of the teeth of the antero-lateral margins and of the anterior legs, this species agrees well with normal specimens of the Chilean *C. edwardsii*. It differs, however, remarkably in the coloration, which is very well preserved in the specimen (a dried one). The prevailing colour is light yellow, varied with blotches of dark purplish brown; and the joints of the legs are regularly annulated with broad bands of the same colour. Length about 2 inches, breadth 3.

PARAXANTHUS HIRTIPES.

Paraxanthus hirtipes, M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. vi. Crust. p. 18 (1843); Nicolet, in Gay's Hist. de Chile, iii. p. 141 (1849).

A female is in the collection from Talcahuano.

I may take this opportunity of noting that two young specimens received from Mr. Lockington, and labelled by him "*Xanthodes hemphilliuna*," appear to belong to this species. Mr. Lockington has since identified the types of *X. hemphilliana* with *Lophozanthus*

bellus (*Xantho bellus*, Stimpson), to which species also his *X. leucomanus* is to be referred.

ACTÆA RUFOPUNCTATA.

Xantho rufopunctatus, M.-Edwards, Hist. Nat. Crust. i. p. 389 (1834).

Actæa rufopunctata, A. M.-Edwards, N. Arch. Mus. Hist. Nat. i. p. 268, pl. xviii. fig. 1 (1865); Heller, Cr. südl. Europa, p. 70 (1865).

A female of very small size (breadth only 3 lines), but laden with ova, is in the collection, which apparently belongs to this species. *A. rufopunctata*, which was originally described from the Red Sea, has a wide Indo-Pacific distribution. Dr. Coppinger's specimen was dredged at a depth of 35 fathoms, amid coral on the Hotspur Bank, lat. 17° 32' S., long. 35° 45' W. Hence (if the example be correctly determined) it would appear that its range extends into the South Atlantic.

PLATYONYCHUS BIPUSTULATUS.

Platyonychus bipustulatus, M.-Edwards, Hist. Nat. Crust. i. p. 437, pl. xvii. figs. 7-10 (1834); Gay, Hist. de Chile, iii. p. 148 (1849); A. M.-Edw. Arch. Mus. H. N. x. p. 413 (1861); Miers, Zool. Ereb. & Terror, Crust. p. 2, pl. i. fig. 1 (1874); Cat. New-Zeal. Crust. p. 32 (1876), *ubi synonym.*

Platyonychus purpureus, Dana, Cr. U.S. Explor. Exped. xiii. p. 291, pl. xviii. fig. 3 (1852); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 492 (1871).

A female individual was obtained in shallow water in Trinidad Channel. Dr. Cunningham records it from Coquimbo and Luco Bay; and it is widely distributed through the Chilean, Australian, Indian, and Japanese seas.

PELTARION SPINULOSUM.

Atelecyclus spinulosus, White, Ann. & Mag. Nat. Hist. (ser. 1) xii. p. 345 (1843).

Peltarion spinulosum, White, List Crust. Brit. Mus. p. 52 (1847); Dana, U.S. Explor. Exped. xiii. Crust. i. p. 304, pl. xviii. fig. 6 (1852); Cunningham, *l. c.* p. 494 (1871).

Peltarion magellanicus, Jacq. & Lucas, Voy. Pôle Sud, Zool. iii. Crust. p. 83, pl. viii. fig. 1 (1853).

Several specimens of this common inhabitant of the Falkland Islands and Patagonian seas were collected. The localities are:—Sandy Point, 9-10 fathoms, bottom sand, one female; Cockle Cove, on a muddy bottom, one male; Puerto Bueno, 2-7 fathoms, bottom rocky, three females.

GOMEZA SERRATA.

Gomeza serrata, Dana, U.S. Expl. Exp. xiii. Crust. i. p. 305, pl. xviii. fig. 7 (1852).

A male of this species (which is probably rare, as it was not met

with by Dr. Cunningham) was obtained at Elizabeth Island in 6 fathoms, another in Trinidad Channel in 4 fathoms, and two others in Puerto Rosario in 2-30 fathoms. Dana's specimen was obtained by Lieut. Case on the coast of Patagonia at a depth of 50 fathoms, and was only $1\frac{1}{2}$ line in length; the length of the largest individual collected by Dr. Copping is 5 lines. It was previously unrepresented in the British-Museum collection.

ACANTHOCYCLUS GAYI.

Acanthocyclus gayi, M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. vi. Cr. p. 30, pl. xv. fig. 1 (1843); Nicolet in Gay's Hist. Chile, Zool. iii. Cr. p. 176 (1849); Dana, Cr. U.S. Expl. Exp. xiii. p. 295, pl. xviii. fig. 4 (1852); Heller, Reise der Novara, Crust. p. 70 (1865); Cunningham, *l. c.* p. 494 (1871).

? *Plagusetes elatus*, Heller, Verh. zool.-bot. Gesellsch. Wien, xii. p. 522 (1862).

A single male individual is in the collection, obtained on the beach at Isthmus Bay, in the Straits of Magellan. It has long been known as inhabiting the Chilian seas, and was taken by Dr. Cunningham plentifully at Lota.

LEPTOGRAPSUS VARIEGATUS.

Cancer variegatus, Fabr. Ent. Syst. ii. p. 450 (1793).

Grapsus variegatus, Latr. Hist. Crust. et Ins. vi. p. 71 (1803); M.-Edwards, Hist. Nat. Crust. ii. p. 87 (1837); Nicolet in Gay's Hist. de Chile, iii. p. 167 (1849); Miers, Cat. New-Zeal. Crust. p. 36 (1876).

Grapsus personatus, Lam. Hist. Anim. sans Vert. v. p. 249 (1818).

Grapsus strigilatus, White, in Gray's Zool. Miscell. p. 78 (1842).

Grapsus planifrons, Dana, Proc. Ac. Nat. Sci. Phil. p. 249 (1851); U.S. Expl. Exp. xiii. Cr. i. p. 338, pl. xxi. fig. 3 (1852); Cunningham, *l. c.* p. 493 (1871).

Leptograpsus gayi, M.-Edwards, Ann. Sci. Nat. ser. 3, Zool. xx. p. 172 (1853).

Two females were obtained on the shore at the island of St. Ambrose, in the South Pacific. This locality is of interest, as never having been previously visited by the carcinological collector. This species, however, is known to range from the Australian to the Chilian seas.

CHASMOGNATHUS GRANULATUS.

Chasmagnathus granulatus, Dana, Pr. Ac. Nat. Sci. Phil. p. 251 (1851); U.S. Expl. Exp. xiii. Cr. i. p. 364, pl. xxiii. fig. 6 (1852); M.-Edw. Ann. Sci. Nat. sér. 3, Zool. xx. p. 200 (1853).

Helice granulata, Smith, Trans. Conn. Acad. ii. p. 37 (1869).

Three examples (males), in somewhat mutilated condition, were collected at Rat Island, Monte Video. Dana's specimens were from Rio de Janeiro; from which locality are specimens in the British-Museum collection, from the Smithsonian Institution. Professor Smith (*l. c.*) gives Rio Grande as a locality for the species.

SESARMA ANGUSTIPES?

Sesarma angustipes, Dana, U.S. Explor. Exped. xiii. Cr. i. p. 358, pl. xxii. fig. 7 (1852)?; Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 493 (1871); Smith, Trans. Conn. Ac. ii. p. 37 (1869); nec Stimpson, Ann. Lyc. Nat. Hist. New York, vii. p. 66 (1858).

To this species I refer, with considerable hesitation, a male example collected at Rat Island, Monte Video, with *Chasmognathus granulatus*. It is certainly not identical with specimens received from the Smithsonian Institution, from Florida and the Tortugas, under the name of *S. angustipes* (probably so named by Dr. Stimpson); but it appears to agree more nearly in the distinctly granulated carapace and hand and mobile finger of the anterior legs with Dana's description than do these specimens. In these latter the hand and fingers are nearly smooth, and the carapace is more convex toward the antero-lateral angles. If the Floridan species be not the true *S. angustipes*, Dana, it may be designated *S. stimpsonii*.

Dana gives merely South America as the habitat of *S. angustipes*. Prof. S. I. Smith has pointed out that there can be little doubt that Dana's specimens were collected at Rio de Janeiro; a specimen from this locality is also referred to this species by Dr. Cunningham, which I have examined and find to be identical with the Monte-Videan example. They come nearer to *S. cinerea*, Bosc (of which the Museum also possesses specimens from the Smithsonian Institution, from Carolina), being only distinguished by the more convex and distinctly granulated carapace and strongly granulated hands.

HALICARCINUS PLANATUS.

Cancer planatus, Fabr. Ent. Syst. ii. p. 446 (1793).

Halicarcinus planatus, White, Ann. & Mag. Nat. Hist. xviii. p. 178, pl. ii. fig. 1 (1846); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 492 (1871); Miers, Phil. Trans. clxviii. p. 201 (1879), *ubi synon.*

This widely spread inhabitant of the Antarctic region is very common in the Straits of Magellan, where its occurrence at many localities was noted by Dr. Cunningham. Dr. Coppinger's specimens were from Elizabeth Island, 6 fathoms, on a sandy bottom (two females); Sandy Point, 9-10 fathoms (one female); Cockle Cove, 2-32 fathoms, on a muddy bottom (one female); Trinidad Channel, 4 fathoms, on a bottom of fine sand (one male and one young).

PINNIXA TRANSVERSALIS.

Pinnotheres transversalis, M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. Cr. p. 23, pl. x. fig. 3 (1843); Gay, Hist. de Chile, Zool. iii. Cr. p. 156 (1849); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 492 (1871)?

Pinnixa transversalis, M.-Edw. Ann. Sci. Nat. sér. 3, Zool. p. 220 (1853).

A male of rather small size is in the collection from Coquimbo. This example agrees exactly with the description of M.-Edw. and Lucas in possessing small and tomentose chelipedes, a transverse

raised line on the posterior part of the carapace, and in the greatly dilated semicircular terminal joint of the postabdomen. Larger specimens from Sandy Point, named *P. transversalis* by Dr. Cunningham, differ in the obsolescence of the transverse raised line on the carapace, the considerably dilated chelipedes with denticulate dactyli, and the smaller, more transverse terminal joints of the postabdomen, and seem to be more nearly allied to *P. faba*.

The differences may be due to age, or may be of specific value.

HEPATUS CHILENSIS.

Hepatus chilensis, M.-Edw. Hist. Nat. Crust. ii. p. 117 (1837).

Hepatus chilensis, M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. vi. part i. Cr. p. 28, pl. xiv. fig. 1 (1843); Nicolet, in Gay's Hist. de Chile, Zool. iii. Cr. p. 174 (1849); Dana, U.S. Expl. Exp. xiii. Cr. i. p. 395, pl. xxv. fig. 3 (1852); Kinahan, Journ. Roy. Dublin Soc. i. p. 345 (1858); Heller, Reise der Novara, Cr. p. 70 (1865); Cunningham, *l. c.* p. 493 (1871); Miers, Proc. Zool. Soc. p. 656 (1877).

Four males were collected at Coquimbo, at a depth of 4 fathoms, on a sandy bottom. The coloration in all is of the normal type.

PLATYMERA GAUDICHAUDI.

Platymera gaudichaudii, M.-Edw. Hist. Nat. Cr. ii. p. 108 (1837); M.-Edw. & Lucas, in d'Orbigny's Voy. Amér. mérid. Cr. p. 28, pl. xiii. fig. 1 (1843); Gay, Hist. de Chile, Zool. iii. Cr. p. 172 (1849).

A young male was obtained at Coquimbo, length about 5 lines, breadth (exclusive of lateral spines) about 7 lines. This example differs from an adult male from Chili in the British-Museum collection, in the form of the carapace, which in the young male is much narrower in proportion to its length.

LITHODES ANTARCTICUS.

Lithodes antarcticus, Jacq. & Lucas, Voy. Pôle Sud, Zool. iii. Cr. p. 90, pl. vii. fig. 1 and pl. viii. fig. 9 (1855); Nicolet, in Gay's Hist. Chile, Zool. iii. Cr. p. 182 (1849)¹; Dana, Cr. U.S. Expl. Exp. xiii. p. 427, pl. xxvi. fig. 15 (1852); Cunningham, *l. c.* p. 494 (1871).

Two male examples of rather small size were collected—one from Puerto Bueno in 4 fathoms, and the other from Neesham Cove, Trinidad Channel, in shallow water; another and larger individual is from Alert Bay, on the west coast of Patagonia. Dana records this species from Fuegia, and Gay from Chiloe.

PARALOMIS VERRUCOSUS.

Lithodes verrucosus, Dana, U.S. Expl. Exp. xiii. Cr. i. p. 428, pl. xvi. fig. 16 (1852); Cunningham, *l. c.* p. 494 (1871).

Paralomis verrucosus, Stimpson, Proc. Ac. Nat. Sci. Phil. p. 231 (1858).

Four male individuals were collected at Puerto Bueno, at a depth

¹ The figure in the Atlas of the 'Voyage au Pôle Sud' was published before the description in Gay's work.

of 4 fathoms, amid rock and kelp, and another at Trinidad Channel. Dana records it from Fuegia; and Dr. Cunningham met with it in great numbers at the Tyssen Islands, Falkland Sound, and in the eastern portion of the Straits of Magellan.

The rostrum terminates in a spine, behind and above which are two smaller spines.

In the *Paralomis granulosus* (*Lithodes granulosus*, Jacq. & Lucas) the rostrum is described as very short, obliquely truncated, distinctly curved downwards towards the base, and surmounted by three spiniform tuberculated teeth; in other respects it closely resembles this species, and, like it, inhabits the Straits of Magellan. Has the rostrum been broken off in the specimen described?

In a very young example from the Antarctic seas, in the British-Museum collection, the granulated and wart-like turbercles of the carapace are closely crowded together, so that none of the smooth under surface is visible, and the spines of the legs are much smaller.

EUPAGURUS COMPTUS.

Pagurus comptus, White, Proc. Zool. Soc. p. 122 (1847); id. Ann. & Mag. Nat. Hist. (ser. 2) i. p. 224 (1848).

Eupagurus comptus, Stimpson, Proc. Ac. Nat. Sci. Phil. p. 237 (1858); Miers, Zool. Erebus & Terr., Cr. p. 3, pl. ii. figs. 5, 5 a (1874).

Pagurus forceps, Cunningham, l. c. p. 495 (1871), nec Edwards.

To this species I refer nine specimens collected by Dr. Coppinger at Sandy Point in 7-10 fathoms, inhabiting shells of the genera *Euthria*, *Natica*, and *Trophon*; also a specimen collected at Cockle Cove, on a muddy bottom, depth 2-32 fathoms; one from Puerto Bueno, at 4 fathoms; four obtained at Portland Bay on a hard sandy bottom, depth 10 fathoms; and a young specimen obtained at Port Rosario in 2-30 fathoms. These are the same species as the individuals collected by Dr. Cunningham at Possession Bay and Port Otway, in the Museum collection, and referred by him to *P. forceps*. *E. forceps*, however, appears to be distinguished by the much shorter, broader, larger hand, and the much shorter and less slender fingers of the left anterior leg. White's typical specimen of *E. comptus* was collected at the Falkland Islands.

Two varieties occur of this species. The typical form is readily distinguished by the form of the hand of the right anterior leg, which (with the fingers closed) is of an ovate shape, narrower distally, finely granulated externally, with a prominent granulated ridge on the upper surface of the palm, and the ridges on its outer surface very indistinct; the arm has a granulo-spinulose line on its upper margin; the smaller hand is somewhat trigonous, with the fingers scarcely longer than the palm; and the second and third legs are annulated with red. To it belong, besides White's typical specimen, the one collected by Dr. Coppinger at Puerto Bueno and one of those obtained by Dr. Cunningham at Possession Bay. In the other, and apparently commoner variety, the larger hand is shorter, of a much more oblong-ovate form, the granulous ridges on the outer surface of the palm

are more distinct, and its lower margin is distinctly granulated. This variety may be designated *Eupagurus comptus*, var. *latimanus*.

MUNIDA GREGARIA.

Galathea gregaria, Fabr. Ent. Syst. ii. p. 473 (1793).

Grimothea gregaria, Leach, Dict. Sci. Nat. xviii. p. 50 (1820); M.-Edw. Hist. Nat. Crust. ii. p. 277 (1837); id. in Cuv. R. A. (ed. 3), Atlas, pl. xlvi. fig. 2; Dana, Cr. U.S. Expl. Exp. p. 483, pl. xxxi. fig. 1 (1852); Cunningham, Trans. Linn. Soc. Zool. xxvii. p. 496 (1871).

Munida subrugosa, Dana, l. c. p. 479, pl. xxx. fig. 7 (1852); Miers, Zool. Erebus and Terror, Cr. p. 3, pl. iii. fig. 2 (1874); id. Cat. New-Zeal. Crust. p. 68 (1876).

Galathea subrugosa, Cunningham, l. c. p. 495 (1871).

In the 'Catalogue of New-Zealand Crustacea,' I adduced certain reasons for believing that the *Munida subrugosa* of White and of Dr. Cunningham is nothing but the mature state of the long-known and exceedingly common Patagonian species *Grimothea gregaria*, Fabricius. There is considerable variation between younger and older individuals in the length of the external maxillipedes, spines of the antero-lateral angles of the carapace, and of the anterior legs. In the typical specimens of *M. subrugosa* from the Auckland Islands the rostrum is relatively longer and the antero-lateral marginal spines somewhat less numerous (7-8) than in the Patagonian form; but the Museum has received adult specimens from New Zealand which agree in all respects with examples from the Magellan Straits. I was formerly inclined to think that the specimens referred by Dana to *M. subrugosa* belonged to a distinct species; but the larger series of specimens now before me would seem to show that I was wrong in that conclusion.

The examples collected by Dr. Coppinger are from Sandy Point (seven females and one male), depth 7-10 fathoms, bottom sand and dead acorn-shells; Cockle Cove, 2-32 fathoms, bottom mud (male, female, and young); Trinidad Channel, 4 fathoms (four males), bottom sandy (in this locality it was seen in great shoals).

The males are generally of smaller size than the females.

CALLIANASSA UNCINATA.

Callianassa uncinata, M.-Edwards, Hist. Nat. Crust. ii. p. 310, pl. xxv. bis, fig. 1 (1837); Gay, Hist. de Chile, iii. p. 208 (1849); A. M.-Edw. Ann. Sci. Nat. (ser. 4) xiv. p. 301, pl. xvi. fig. 1 (1860); id. N. Archiv. Mus. Hist. Nat. vi. p. 83 (1870); Cunningham, l. c. p. 494 (1871).

A single specimen, obtained at Talcahuano.

ALPHEUS (BETÆUS) SCABRODIGITUS.

Betæus scabrodigitus, Dana, Cr. U.S. Explor. Exped. xiii. p. 560, pl. xxv. fig. 12 (1852); Cunningham, l. c. p. 496 (1871).

A male which I refer to this species was collected at Portland Bay at a depth of 10 fathoms; another male and a female, plentifully

laden with ova in an advanced stage, in Trinidad Channel; and an adult male and female at Borja Bay, in 14 fathoms.

In these specimens the larger hand is somewhat slenderer and the fingers less incurved than in Dana's figure; and it is worthy of note that the hand is nearly as much developed and the tubercles of the fingers are as large in the female as in the examples I believe to be males.

The specimens referred to *A. scabrodigitus* by Dr. Cunningham differ even more markedly from Dana's figure in the much longer, slenderer hand and the entire absence of tubercles on the inner margins of the fingers, and, it is very possible, may belong to a distinct species; they are, moreover, of much larger size.

ALPHEUS, sp.

A specimen of an *Alpheus* was obtained at Portland Bay, at a depth of 10 fathoms, on a bottom of hard sand, which I will not regard as the type of a distinct species, on account of its small size.

It appears to belong to the same section of the genus and to be nearly allied to *A. euchirus*, Dana. Like it, the orbits are spinuliferous, and the upper and lower margins of the larger hand are notched; the smaller hand is also notched on its upper and lower margins, and the dactylus is flattened, ovate, and clothed with long hairs; there is a spine at the distal end of the third (but not the second) joint of the third and fourth pairs of legs.

PANDALUS PAUCIDENS, sp. n. (Plate VII. figs. 6, 7.)

Carapace with a prominent antennal and a very small pterygostomial spine. Rostrum slender, slightly longer than the antennal scale, about $\frac{2}{3}$ -toothed; four of the dorsal teeth are on the carapace in a median series; the distal end of the rostrum is directed upward, and is without teeth on its upper margin. Antennules considerably longer than the rostrum. The postabdomen is strongly geniculated beyond the third segment, which is unarmed on its dorsal surface. The terminal segment in one specimen is broader, and its apex is imperfect; in the other it is very narrow and elongated, reaching nearly to the end of the slender and narrow uropoda, and is tipped with four cilia at its extremity. The outer maxillipedes (in the larger individual) are robust, and reach (when thrown forward) slightly beyond the antennal scale; their terminal joints are slightly hairy. The styliform terminal joints of the first legs are very slender and acute. The rami of the uropoda are margined with long ciliae, and are rounded at their distal ends; the outer ramus is rather the broader, with the sides parallel, the inner has the sides slightly convergent to the apex. Length of larger specimen to end of rostrum rather more than $1\frac{1}{2}$ inch.

Two individuals, apparently males, were collected:—one at Tom Bay, on a bottom of rock, kelp, and mud; the other in Trinidad Channel, in 30 fathoms, on a sandy bottom.

This species is principally distinguished by the small number of teeth arming the margins of the rostrum. In the *P. pubescentulus*,

Dana, from the Straits of Da Fuca, Oregon, the rostrum is $\frac{17}{7}$ -toothed, and in the *P. danae* of Stimpson from Puget Sound, California, $\frac{12}{6}$ 3-toothed; in *Pandalus franciscorum*, Kingsley, also a Californian species, $\frac{10-11}{7-9}$ 2-3-toothed, and in *P. gurneyi*, Stimpson, $\frac{8-9}{9}$ -toothed. In most of the species of the genus the teeth are much more numerous. In one species, however, the *P. leptorhynchus* of Stimpson (the only one, so far as I am aware, besides *P. paucidens*, described from the Southern hemisphere) the rostrum is only $\frac{1}{2}$ -toothed; its habitat is Port Jackson, in Australia.

STOMATOPODA.

SQUILLA GRACILIPES, sp. n. (Plate VII. fig. 8.)

I designate by the above name a specimen (young male) from the west coast of Patagonia, which is allied in nearly all its characters to *Squilla armata*, but is distinguished by the more numerous spines of the dactyli of the raptorial limbs (which are ten in number), the obsolescence of the median and submedian and faint definition of the lateral carinæ of the first to sixth postabdominal segments, and the form of the terminal segment, which is as long as broad, smooth on its upper surface, with the median carina less distinctly marked, and with about 26 denticles between the submedian marginal spines and about 18 on each side between these and the first lateral spines. The outer spine of the distal prolongation of the base of the uropoda is relatively much shorter than in *S. armata*. Length $3\frac{1}{2}$ inches.

PSEUDOSQUILLA LESSONII.

Squilla cerisii, Guérin, Voy. Coquille, Crust. p. 40, pl. iv. fig. 1 (1830), *S. lessonii* on plate.

Squilla spinifrons, Owen, Proc. Zool. Soc. p. 6 (1832).

Squilla lessonii, M.-Edwards, Hist. Nat. Cr. ii. p. 527 (1837); White, List Crust. Brit. Mus. p. 84 (1847).

Squilla monoceros, M.-Edwards, Hist. Nat. Crust. ii. p. 526 (1837); Gay, Hist. Chile, Zool. iii. Cr. p. 224 (1849).

Pseudosquilla lessonii, Dana, Cr. U.S. Expl. Exp. xiii. i. p. 622 (1852); Miers, Ann. & Mag. Nat. Hist. (ser. 5) v. p. 113 (1880).

Pseudosquilla marmorata, Lockington, Pr. Cal. Ac. Sci. p. 33 (1877).

A male and female were collected at Coquimbo.

ANISOPODA.

ARCTURUS COPPINGERI, sp. n. (Plate VII. fig. 9.)

The body is robust, and broadest at the fourth thoracic segment, and is everywhere covered with close-set granules. Head with the anterior margin deeply excavated. The median portion of each of the thoracic segments is elevated, and forms a transverse ridge extending to the lateral margins of the segment; the ridge so formed is narrowest in the middle, but at the lateral margins covers nearly the

whole surface of the segments. The first and the second postabdominal segments are similarly ridged, but firmly united together; the terminal portion (formed of the coalescent remaining segments) is ovoid, more closely and distinctly granulated than the rest of the body, and terminates in two acute spines. The eyes are placed in the lateral margins of the head. Antennules very small. Antennæ a little longer than the body, with the last two joints of the peduncle about equal; flagellum short, 9-jointed, the first joint as long as the three following. The inferior margins of the last three joints of the first to fourth pairs of legs (which increase successively in length) are clothed with long close hairs. The dactyli of the fifth to seventh legs are strong and slightly arcuated. The operculiform posterior pair of postabdominal appendages are granulated on their outer surface. Length 1 inch (exclusive of antennæ).

A single female was obtained, at a depth of 30 fathoms, in Trinidad Channel, on a sandy bottom.

This beautiful species is at once distinguished by the strongly granulated body and the spines of the last postabdominal segment.

On account of the extreme brevity of the fourth segment of the body, it would be placed in the subgenus *Leachia* were the character valid even as a specific distinction; but the Rev. T. R. R. Stebbing (Ann. & Mag. Nat. Hist. ser. 4, xv. p. 187, 1875) has pointed out that in the case of *Arcturus lineatus* this segment, which is elongated in the adult, is shorter in the young individual; there can be no doubt therefore that *Arcturus* and *Leachia* must be united.

SEROLIS SCYTHEI.

Serolis scythei, Lütken, Naturhist. Vidensk. Medelelser, p. 98, pl. i. a. figs. 12, 13 (1858); Grube, Arch. f. Naturg. xli. pp. 209, 220, pl. v. fig. 1. pl. vi. fig. 1 (1875).

Two males were obtained in Trinidad Channel, Straits of Magellan, at 30 fathoms; and an adult female with ova, together with eight smaller individuals, in 4 fathoms, at the same locality.

It is very nearly allied to *S. paradoxa*, Fabr. (*S. fabricii*, Leach), which I have regarded as identical with *S. orbignyana*, M.-Edwards, and which is very common at the Magellan Straits and Falklands—but appears to be constantly distinguished by the much greater length of the coxæ, which in the second postabdominal segment reach nearly to the end of the terminal segment.

ISOPODA.

IDOTEA ANNULATA ?

?*Idotea annulata*, Dana, Crust. U.S. Explor. Exped. xiv. p. 701, pl. xlvi. fig. 3 (1853); Cunningham, l. c. p. 499 (1871).

To this species I refer, with some hesitation, four specimens collected at Port Henry. They are of a uniform chestnut-brown colour; the anterior margin of the head is straight or very slightly excavated; the eyes are rather prominent, and situated on the sides

of the head; the flagellum of the antennæ is 7-jointed, the last two joints being little smaller than the preceding, and the terminal segment regularly rounded at its distal end. Dana's specimens were obtained in the Antarctic seas south of Australia.

Idotea argentea, Dana, which is apparently distinguished by its colour and the form of the last two joints of the antennæ, is nevertheless very nearly allied to this species.

STYLONISCUS MAGELLANICUS.

Styloniscus magellanicus, Dana, U.S. Expl. Exp. xiv. Cr. ii. p. 736, pl. xlvi. fig. 7 (1852).

One example of this curious little land Isopod was obtained on shore at Trinidad Channel, one at Port Henry, one from Cockle Cove, and one from the midden-heap of a Fuegian hut in Tom Bay.

LIRONECA NOVÆ-ZEALANDIÆ.

Lironeca novæ-zealandiæ, White, List Cr. Brit. Mus. p. 106 (1847) descript. nulla; Miers, Ann. & Mag. Nat. Hist. (ser. 4) xvii. p. 227 1876; id. Cat. New.-Zeal. Crust. p. 106, pl. iii. fig. 2 (1876).

A female specimen was found attached to the mouth of a fish in Portland Bay, Straits of Magellan. Hence it is probable that this species, like so many of the New-Zealand fauna, ranges throughout the Antarctic region.

L. novæ-zealandiæ is nearly allied to *L. lata*, Dana, from the Sandwich Islands, but is distinguished by its less prominent head, which is more deeply encased in the first segment of the body, and by the shorter rami of the uropoda, which are nearly equal in size to one another, and more acute than in *L. lata*.

ÆGA PUNCTULATA, sp. n. (Plate VII. figs. 10-12.)

Body convex, closely punctulated; posterior margins of the segments of the thorax and of the postabdomen clothed with scattered hairs. Head transverse; the coxal joints or so-called epimera of the second to sixth thoracic legs with the postero-lateral angles acute, but not prolonged backward, and with the margins slightly hairy. Postabdominal segments (the terminal excepted) very short; terminal segment somewhat hairy, smooth and unarmed, narrowing posteriorly, and rounded at its distal extremity. Eyes (when viewed from above) oblong, and extending along the lateral margins of the head, but not along the anterior margin. Antennules short, reaching to the postero-lateral angles of the head, with the first and second joints considerably dilated. Antennæ short, scarcely reaching to the postero-lateral angles of the first thoracic segment; flagellum 18-20-jointed. Penultimate joint of the first three pairs of thoracic limbs without any process; dactyli strongly curved and acute. Rami of the uropoda unequal; the inner largest at its distal end and truncated, the outer narrow-ovate and rounded. Length about 1 inch 2 lines.

A single specimen was found attached to the fins of a mullet-like fish in Wolsey Sound, in the Straits of Magellan.

This species externally somewhat resembles *Pterelas magnificus*, Dana, but is destitute of the hatchet-like process on the penultimate joint of the first three pairs of legs.

Ega belliceps, Stimpson, a Californian species, is distinguished by its more pointed head, and by having only five distinguishable postabdominal segments; it is somewhat insufficiently characterized. *Ega novæ-zealandiæ*, Dana, is very briefly characterized, but is distinguished by the much longer antennæ, which in *Ega punctulata* are not longer than the breadth of the head. The two American species described by Lockington as *Ega harfordi* and *Ega alaskensis* do not, I believe, belong to this genus; the former is probably a species of *Cirolana*.

CORALLANA ACUTICAUDA, sp. n. (Plate VII. fig. 13.)

Body convex, segments punctulated; the last two thoracic segments and the postabdomen hairy. Head transverse; produced anteriorly into a small median rostriform lobe that projects between the bases of the antennules. Segments of the body subequal and rounded, and not produced at the postero-lateral angles; first segment with its antero-lateral angles rounded and somewhat produced anteriorly beneath the lateral margins of the head. Five segments of the postabdomen are exposed (but scarcely distinguishable, on account of the pubescence with which they are covered); the third segment is produced on each side into a truncated and emarginate postero-lateral lobe; the terminal segment is rather small, triangular, covered above with short, dense, close pubescence, but with a smooth, naked, longitudinal median line. Eyes large, black, distinctly faceted, and situate on the sides of the head. Antennules contiguous at base, their basal joints considerably enlarged posteriorly (but not anteriorly produced beyond the plane of the head), inserted into semicircular cavities in the anterior margin of the head; the following joint slender; flagellum short, not reaching to the posterior margin of the head. Antennæ not in contact at their bases (which are concealed beneath the enlarged basal joints of the antennules), with the first three joints short, the fourth and fifth subequal, longer and slender; flagellum reaching to the posterior margin of the third segment of the body. The coxæ of the second and third legs are small and rounded posteriorly, those of the following legs larger, with the postero-lateral angles acute. The rami of the uropoda spring from a broad base (which is produced at its distal and internal angle into a strong acute lobe); the outer ramus is slender and acute, the inner broad but narrowing to an acute apex; both are ciliated on the margins. Length 7 lines.

The single example (a female) was dredged amid coral in 35 fathoms, on the Hotspur Bank (S. Atlantic) in lat. 17° 32' S., long. 35° 45' W.

This species is distinguished from the various oriental forms enumerated by Schiödte and Meinert, Nat. Tidsskr. 3 R. pp. 286, 299

(1879), by the form of the terminal segment, which is acute at its distal end, and the greatly dilated basal joints of the antennules; the outer ramus of the uropoda is not larger than the inner; the frontal interantennular process is obsolete.

SPHÆROMA GIGAS.

Sphæroma gigas, Leach, Dict. Sci. Nat. xii. p. 346 (1818); M.-Edwards, Hist. Nat. Cr. iii. p. 205 (1840); Miers, Cat. New-Zeal. Crust. p. 110 (1876).

Several specimens, all of small size, of this species, which is very common in the Straits of Magellan and at the Falkland Islands, and also occurs at the Auckland Islands and New Zealand, were collected by Dr. Coppinger at Elizabeth Island (6 fms.) Sandy Point (9-10 fms.) on a sandy bottom, and an adult male at Silly Bay.

DYNAMENE DARWINII.

Cymodocea darwinii, Cunningham, l. c. p. 499, pl. lix. fig. 1 (1871).

Two examples were obtained by Dr. Coppinger at Elizabeth Island (6 fathoms), on a sandy bottom. It appears to be rare, as Dr. Cunningham met with it only on the north coast of Eastern Fuegia and in very small numbers. An adult example collected by Dr. Cunningham, and preserved in the Museum collection, is a male. The larger of the two obtained by Dr. Coppinger at Elizabeth Island is apparently a female, and is of a bright rose-colour. In a small example from Borja Bay (14 fathoms) the tubercle on the dorsal surface of the terminal segment is less developed and the lateral lobes of the fifth thoracic segment scarcely thickened.

CIRRIPEIDIA.

BALANUS LÆVIS.

Balanus lævis, Bruguière, Encycl. Méth. pl. clxiv. fig. 1 (1789); Darwin, Monog. Cirripectida, Balanidæ, p. 227, pl. iv. fig. 2 (1854), *ubi synonym.*

Several clusters of this species, which is very common and abundant in the Magellan Straits, were collected at Sandy Point, at a depth of 7 fathoms, adhering to shells &c. All are of the typical variety. Its range, according to Darwin, extends northward to Chili, Peru, and California¹.

¹ Besides the species enumerated above, there are in the collection four small specimens of a species of Amphipoda, allied in many of its characters to *Orchomene*, obtained at Elizabeth Island in 6 fathoms, and four specimens of a *Caligus* (not the *C. chæmichthys*, Cunningham) taken from a sea-water fish at Puerto Bueno, in rather bad condition, which I do not venture to describe; also, among the surface-dredgings made at various localities in the North and South Atlantic, larval stages of several species of Decapoda and Stomatopoda and a few species of oceanic Copepoda.

VII. COLEOPTERA.

By CHAS. O. WATERHOUSE.

CARABIDÆ.

1. CARABUS SUTURALIS, Fabr. Syst. El. i. p. 238.

Four specimens from Neesham Cove, Cockle Cove, Elizabeth Island, and Swallow Bay.

2. BRACHYCELIA CONCOLOR, sp. n.

Cyaneo-nigra, subtus nigra, laevis, nitida; antennis pedibusque piceo-nigris; elytris striatis, striis fere laevibus. Long. $8\frac{3}{4}$ mill., lat. 4 mill.

Very close to *B. virescens*, G. R. Waterh., but smaller, darker in colour, and with the antennæ and legs nearly black. Thorax nearly of the same form, transverse, gently arcuate at the sides, but with the posterior angles very slightly turned outwards and slightly acute. The elytra are a little more ovate; *i. e.* the broadest part is rather further from the apex than in *B. virescens*; each elytron has nine striæ, the five dorsal ones moderately strongly impressed and extending nearly to the apex, with no proper punctuation, the interstices slightly convex, especially the fifth; the sixth and seventh striæ are less distinct, and the eighth is only visible posteriorly; the ninth is very distinct and has a series of distinct punctures. The prosternum has a well-marked lanceolate impression between the coxæ, very similar to that in *B. virescens*. The median impressed line on the thorax is shorter than in the specimens of *B. virescens*, rather broader in front, and terminating rather abruptly some way from the anterior margin. The anterior and intermediate tarsi are dilated in the same way as in *B. virescens*.

A single male example taken at Puerto Bueno.

3. CASCELLIUS GRAVESII, Curtis, Trans. Linn. Soc. xviii. p. 183, pl. 15. f. B.

Cascellius nitidus, G. R. Waterh. Ann. & Mag. N. Hist. vi. 1841, p. 255.

A careful examination of the type specimens of *Cascellius gravesii*, Curtis, and *C. nitidus*, Waterh., has convinced me that they are varieties of the same species. The striæ of the elytra vary very much, being sometimes almost effaced, and sometimes broken up into well-marked elongate impressions. It was this last form which my father considered the true *C. gravesii*, and from which he separated *C. nitidus* as distinct. The type specimen of *C. gravesii*, however, has the striæ lightly impressed. The series of specimens in the British Museum show the intermediate forms.

Dr. Coppinger took a single specimen at Puerto Bueno¹.

¹ It may be well to note here that *Cascellius kingii*, Curtis, *l. c.* p. 183, pl. xv. f. A (omitted from Gemminger and v. Harold's Catalogue of Coleoptera), is the same as *Feronia (Creobius) eydouxii*, Guérin, Mag. Zool. 1838, p. 4, t. 225. f. 2. Hope's paper was read on May 1st, 1838.

4. ANTARCTIA GLAUCA, Blanch. Voy. Pôle Sud, iv. p. 39, t. 3. f. 4.

Three specimens which, from description, appear to be referable to this species. They were taken at Sandy Point on January 8th, 1879.

DYTISCIDÆ.

5. RHANTUS DARWINII, Babington, Trans. Ent. Soc. iii. 1841, p. 8.

A single female example which I refer with some doubt to this species. It is a trifle more parallel than the type specimen; and the thorax is rather more dull. It was taken at Isthmus Bay.

6. RHANTUS MIXTUS, sp. n.

Ater; clypeo capiteque antice piceo-flavis; thorace piceo-flavo, margine antico punctato, basi medio nigra; elytris politis, piceo-nigris, crebre seriatim piceo-flavo guttatis; antennis, palpis, pedibus prosternoque piceis. Long. $5\frac{1}{3}$ lin.

♂. Very close to *R. varius*, Fabr. (Ent. Syst. i. p. 195), but larger, darker in colour than that species usually is, and a little less regularly elliptical. Head finely coriaceous, with an impressed line within each eye. Thorax shining, a little wrinkled at the sides, with an imperfect impressed median line; the middle portion of the anterior margin is distinctly punctured, and this part is also blackish; the base is narrowly margined with black, the black is more suffused in the middle; the posterior angles are a trifle greater than a right angle. Elytra very shining, nearly black, with closely placed lines of small yellowish spots as in *R. varius*, but not so conspicuous; the margins are yellow; the extreme apex (which is obliquely truncate) is margined with black; there is a line of rather close distinct punctures not far from the suture; and there is a second very irregular line of similar punctures extending from within the shoulder to near the apex. The whole of the underside is black, except the front part of the prosternum and the sternal process. The apical segment of the abdomen is densely longitudinally strigose, the striæ reach the base of the segment in the middle but not at the sides. The legs are pitchy, the posterior tarsi being darker; the intermediate femora and tibiæ are closely and rather roughly punctured, more closely and more distinctly than in *R. varius*.

Four male examples, marked "Tom Bay, April 22, 1879."

LUCANIDÆ.

7. SCLEROSTOMUS FEMORALIS, Guérin, Rev. Zool. 1839, p. 303.

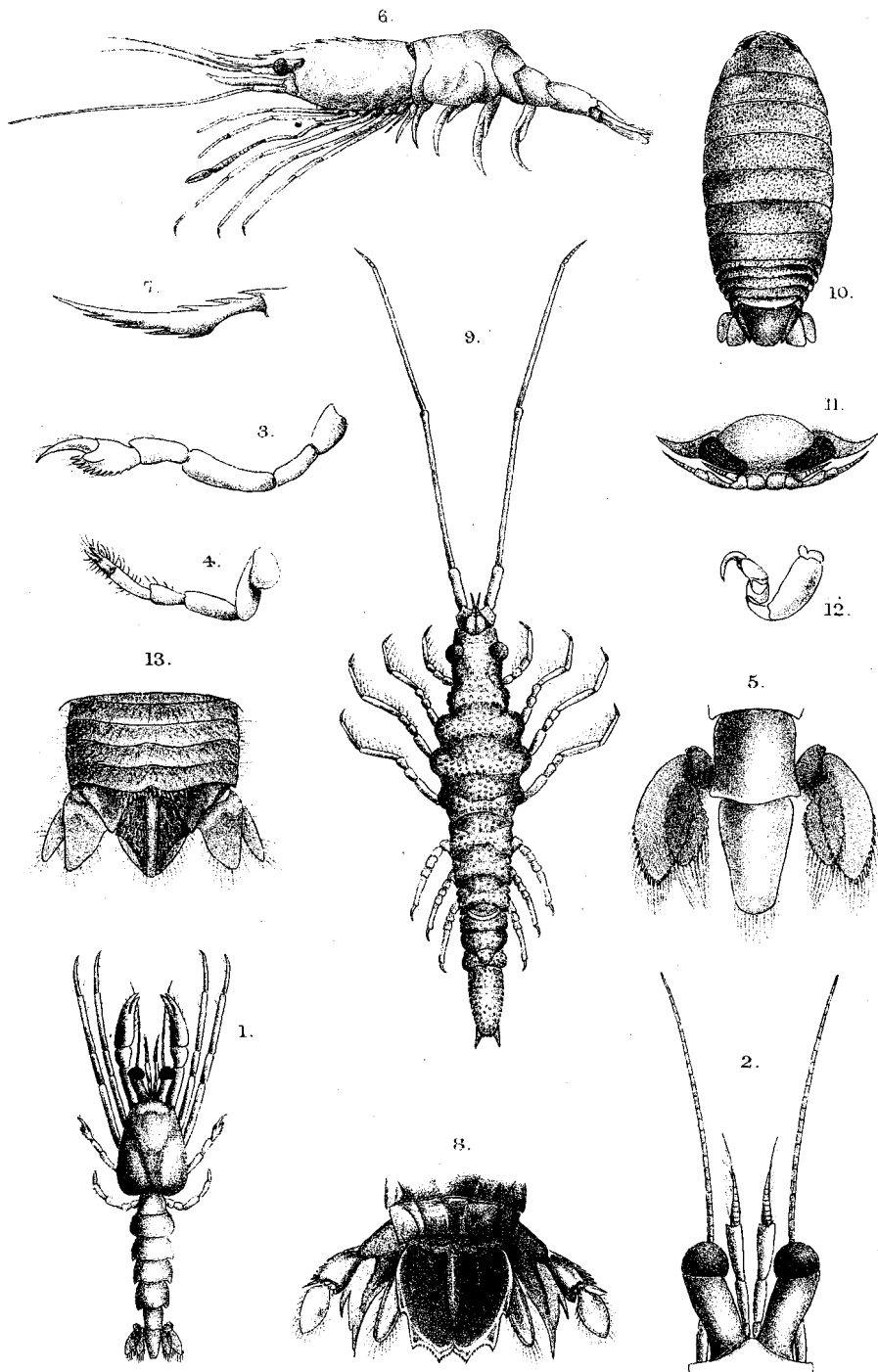
A single male example taken at Sandy Point.

MELOLONTHIDÆ.

8. SERICOIDES GLACIALIS, Fabr. Syst. Ent. p. 35.

Sericoides reichei, Guérin, Rev. Zool. 1839, p. 301.

An imperfect specimen found at Skyring Water. It agrees well



A. Hammond del.

Mintern Bros. imp.