

# REPORT

OF THE

THIRTY-SIXTH MEETING

OF THE



# BRITISH ASSOCIATION

FOR THE

## ADVANCEMENT OF SCIENCE;

HELD AT

NOTTINGHAM IN AUGUST 1866.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1867.

posterior side extremely short and sloping downwards, without any of the angularity which characterizes *M. bidentata*; in front gently curved; on the anterior side considerably expanding and rounded; on the back rising towards the anterior end: *beaks* small, calyciform, blunt and prominent, incurved, but not having any indentation below them; they are placed close to the posterior side, which is the shortest and not one-sixth the size of the anterior side: *hinge-line* rectangular, occupying about one-third of the circumference: *cartilage* as in *M. bidentata*: *hinge-plate* narrow and strong, thicker in the middle, not excavated so deeply as in the last-named species, and scarcely at all in the right valve: *teeth*, in the right valve short, triangular, slightly inclining inwards, not widely separated; in the left valve long, erect, laminar, and parallel with the hinge-line; the anterior teeth are the largest in both valves: *inside* iridescent and polished, very finely marked (more distinctly on the anterior side) with slight lines which radiate from the beaks: *scars* irregularly oblong, conspicuous. L. 0.075. B. 0.1.

HABITAT. Muddy ground in the Minch, off the north-west coast of Ross-shire, in 50–60 fathoms. I there found only a single dead specimen; but twenty years ago I dredged another in Skye, which I deferred noticing until quite satisfied of its differing from *M. bidentata*. [Since this Report was presented, Mr. Dawson has found two more specimens in some of the dredged sand which I had sent him.] Among the shells procured by Professor Lilljeborg in Bohuslän, on the south coast of Sweden, I observed two or three specimens of the present species, one of which he kindly gave me.

This shell is smaller than *M. bidentata*; it may also be distinguished from that species by its narrower shape, being convex instead of compressed, having a glossy surface, and by the posterior side being extremely small, with almost a perpendicular truncation. That side in *M. bidentata* is invariably squarish, and more or less angulated. The teeth in the right valve of *M. tumidula* are much smaller, and less widely separated by the cartilage-pit; they are triangular instead of leaf-like, and slightly incline inwards instead of being erect.

*M. truncata* of Searles Wood, from the Coralline Crag, is a comparatively large, squarish, and flattened shell, and has long cardinal teeth.

---

*Report of the Committee appointed for the purpose of Exploring the Coasts of the Hebrides by means of the Dredge.—Part II. On the Crustacea, Echinodermata, Polyzoa, Actinozoa, and Hydrozoa. By the Rev. ALFRED MERLE NORMAN, M.A.*

Mr. JEFFREYS having, in his Report upon the Mollusca, already given to the Association an account of the district investigated by the Committee, and of the scope of their dredging-operations, it is unnecessary that I should add more on that subject; and I shall therefore proceed at once to lay before you a brief summary of the results of the dredging with respect to the Crustacea, Echinodermata, Polyzoa, and Cœlenterata.

Although the Hebridean seas had been frequently dredged by the naturalists who were well acquainted with the Mollusca, they had been scarcely at all examined by any one conversant with the other branches of the marine invertebrate fauna; and the result of the recent investigations has thus been most important. This will be at once evident when it is stated that, in addi-

tion to the knowledge which has been gained in the extension of the range of many rare and local species, not less than *seventy-two* species are in the present Report for the first time announced as members of the British fauna. These additions to our lists include 63 species of Crustacea [Macroura 1, Stomapoda 2, Amphipoda 8, Isopoda 1, Cladocera 1, Ostracoda 37, Copepoda 13], 6 of Polyzoa, 1 of Actinozoa, and 2 of Hydrozoa\*.

The Crustacea obtained number two hundred and twelve species. Among them were two well-known southern forms, *Xantho florida* and *Xantho rivulosa*, which we little expected to find so far north; the latter, however, has been met with by Prof. Lovén in Sweden, though neither had previously been found on any part of the Scotch coast. They occurred in company between tidemarks at Tobermory, and *X. rivulosa* was also found at Oban. Another southern species, *Crangon sculptus*, which had not before been found north of Arran in Ireland, was dredged in the Minch; and with it was associated *Crangon serratus*, Norman, described by me at the British Association Meeting in 1861, from two specimens procured on the Haaf off Shetland. This species had not again been taken in our seas until the present time; but it has been redescribed by Professor Sars, from the Norwegian coast, under the name of *Crangon echinulatus* †. An *Hippolyte*, also dredged in the Minch, appears to be an undescribed species. It approaches to *H. turgida* of Kröyer ‡, but differs in many particulars, and especially in the telson, which has no less than nine pairs of lateral spines, and terminates in thirteen spines, of which the nine central are subequal in length and ciliated on both margins. *Doryphorus Gordoni* (Bate), which has hitherto been regarded as very rare, occurred in abundance. Of the Cumacea there were found two species, recently added to our fauna, *Diastylis bispinosa*, Say (= *D. bicornis*, Bate), and *Endorella (Endora) emarginata*, Kröyer, together with two new forms, one a *Diastylis* allied to *D. biplicata*, G. O. Sars, the other a new *Iphithoe*, which has a crest of from 13 to 20 spines on the dorsal line of the carapace.

Several Norwegian Amphipoda, including some genera of great interest, were for the first time met with in our seas, namely, *Ampelisca carinata*, Bruzelius, *A. macrocephala*, Lilljeborg, and *A. tenuicornis*, Lilljeborg, *Eriopis elongata*, Bruzelius, and *Mæra Lovéni*, Bruzelius. There were also found an undescribed *Anonyx*, and two forms which it is impossible to assign to any genera which have been hitherto established; for these I propose the names *Euonyx chelatus* and *Microprotopus maculatus*. The genus *Euonyx* is allied to *Anonyx*, but is distinguished by having the first pair of gnathopods furnished with distinct chelæ, and the second pair more strongly formed than the first, with a well-developed subchelate hand. This is a parasitic species living on *Echinus esculentus*. *Microprotopus* is allied to *Microdeuteropus*, but has the first gnathopod feeble, the second largely developed in the male, and subchelate, and the last uropods single-branched.

Three parasitic Isopoda were taken—*Gyge Hippolytes*, Kröyer, *Phryxus*

\* If to these we add *Montacuta tumidula*, n. sp., described in Mr. Jeffreys's Report, and the Foraminifera enumerated by Mr. H. B. Brady as occurring for the first time in our seas, viz. *Lagena Jeffreysii*, H. B. Brady, n. sp., *L. Lyellii*, Sequenza, *L. pulchella*, H. B. Brady, n. sp., *L. gracillima*, Sequenza, *L. crenata*, Parker and Jones, *Polytrema* —, sp., *Hauerina compressa*, D'Orb., *Trochammia squamata*, Parker and Jones, *T. gordialis*, Parker and Jones, *Valvulina conica*, D'Orb., *Cristallaria cultrata*, Montfort, and *Margulinina raphanus*, L., we have a sum total of eighty-five species added to the British Fauna in this expedition.

† Sars, Vid. Selsk. Forh. i. Christiania, 1861, p. 186.

‡ Monographisk. Frems. Slægten Hippolytes Nordiske Arter, 1842, p. 100.

*abdominalis*, Kröyer, and *Pleurocrypta Galatheæ*, Hesse: the first was found under the carapace of *Doryphorus Gordoni*; the second under the abdomen of *Hippolyte securifrons*, Norman, and *H. pusiola*, Kröyer; and the *Pleurocrypta* was buried under the carapace of *Galathea intermedia*, Kröyer (= *G. dispersa*, Bate).

Ostracoda were obtained in extraordinary abundance, and included no less than sixty-five species. This number will, perhaps, be the more appreciated if I refer to the fact that the total number of forms of this order of the Crustacea described in 'Baird's History of British Entomostraca' only amounts to nineteen. Mr. G. S. Brady, who is engaged in preparing a monograph of these bivalve Crustacea, will present a separate report on the species met with; but I may here mention that thirty-seven are either wholly new to science, or, what is still more interesting, species previously known as Tertiary and post-Tertiary Fossils, and now for the first time met with in a recent state, or such as have been described by Norwegian naturalists from the Scandinavian seas.

A number of Copepoda recently described by Claus, were also met with. These include many genera which were previously unrecognized in our fauna:—the genus *Dactylopus*, represented by *tisboides*, *Stræmii*, *tenuicornis*, *cinctus*, and *brevicornis*; *Thalestris*, embracing *mysis*, *Helgolandica*, *harpacticoides*, and *longimana*; *Longipedia coronata* (a very curious and interesting form), *Eupelte gracilis*, *Cleta serrata*, and *Porcellidium fimbriatum* and *dentatum*. At Tobermory was discovered *Dyspontius striatus*, Thorell, a very remarkable genus with an enormously developed proboscis, which is almost equal in length to the rest of the animal.

A small freshwater loch near Stornoway contained, among other species, *Drepanothrix hamata*, G. O. Sars, a genus allied to *Macrothrix*, which may be at once distinguished from all allies by the presence of a largely developed spine in the middle of the dorsal margin of the carapace. It is now first announced as British, but has been previously taken by myself in Darden Loch, Northumberland, and by Mr. G. S. Brady in St. Mary's Loch, Selkirkshire.

The Echinoderms number thirty-four species. In addition to the common *Antedon rosaceus*, Linck, *Antedon Celticus* of Barrett was procured in deep water, both in the Minch and in Sleat Sound. This very fine species was previously only known to us from the two type specimens dredged by Messrs. MacAndrew and Barrett ten years ago in the Sound of Skye, and described in the 'Annals of Natural History'\*. It is the largest member of the genus found in our seas, and is distinguished at a glance from *rosaceus*, *Milleri*, and *Sarsii* by the great length of the slender dorsal filaments, and also by the vertical position which the arms assume. In this peculiarity it resembles *Antedon Eschrichtii*, but differs from the other English species, in which the arms are always carried horizontally, or nearly so, and are incapable of being brought into contact with each other throughout their entire length. Only a few specimens were met with in Sleat Sound, and these were associated with *A. rosaceus*. In the Minch *A. Celticus* occurred gregariously, living in about sixty fathoms, in company with another rare British Echinoderm, *Holothuria intestinalis*, Ascanius. The only previously known British example of this species was procured many years ago by Professor Forbes

\* *Comatula Woodwardii*, Barrett (Ann. Nat. Hist. 2nd series, vol. xix. p. 33, pl. 7. fig. 1), *Comatula Celtica*, Barrett (Ann. Nat. Hist. 2nd series, vol. xx. p. 44), *Antedon Celticus*, Norman (Ann. Nat. Hist. 3rd series, vol. xv. p. 104).

† Trans. Roy. Soc. Edinb. vol. xx. p. 309, pl. 9. fig. 1.

near the same spot; and as his figure and description† were scarcely sufficient for positive identification, the rediscovery of this Holothurian is important. As among the rarer of the other Echinodermata which were obtained may be mentioned *Psolus phantapus*, *Thyone fusus*, and *raphanus*, *Thyonidium commune* young (?), and *hyalinum*, *Cucumaria lactea*, *fusiformis*, and *Hyndmanni*, *Brissopsis lyrifera*, *Asterias hispida*, *Porania pulvillus*, *Ophiura affinis*, and *Amphiura Ballii*, *filiformis*, and *Chiajii*.

The Polyzoa include sixty-six species. In the Appendix will be found descriptions of many new forms:—a *Scrupocellaria* differing from *S. scruposa* in having larger cells, which do not bear any spines, in the proportionately larger vibracular capsules, and in the form of the mandible of the avicularium, which is blunter and shorter; a *Lepralia*, allied to the incrusting *Lepralia*-like state of *Eschara Landsborovii*; another remarkable on account of its much elevated collar-like peristome; a new *Eschara*, and an *Alecto* allied to *A. dilatans*. There is also an undescribed *Aleyonidium*: but the species of this genus are very difficult; and not having examined the present form in a living state, I have not attempted to define it. One or two small fragments of *Brettia pellucida*, Dyster, give a second locality for this Polyzoan, at a considerable distance from Tenby, where the type was found. Several rare northern Polyzoa, which had not previously occurred to the south of Shetland, are now traced southwards to the Minch—*Caberea Ellisii*, Fleming, *Lepralia polita*, Norman, *Lepralia laqueata*, Norman, *Idmonea Atlantica*, Forbes, *Hornera borealis*, Busk, &c.; and on the other hand we were greatly surprised by the well-known *Eschara foliacea* turning up in this northern locality, since it is an essentially southern species, which has not previously, I believe, been noticed to the north of Cape Clear.

Turning to the Actinozoa, the neighbourhood of Skye is the well-known habitat of *Pavonaria quadrangularis*, although the only place which produced it during the recent dredging was Loch Alsh. The rediscovery of *Rhizoxenia agglomerata*, Forbes\*—although a mere fragment was obtained—is well worthy of special mention; but perhaps the most interesting of all the results of the expedition is the occurrence of a second species of *Pennatula* in our seas, which will be described by Mr. Alder under the name of *Pennatula mollis*.

The Hydrozoa are not numerous, amounting to only thirty-two species. *Sertularia alata*, Hincks, and *Calicella fastigiata*, Alder, had up to the present time been regarded as peculiar to Shetland; the little *Sertularia fusiformis*, Hincks, and the pretty *Plumularia tubulifera*, Hincks, not known previously on the Scotch coast, have now their range considerably extended northwards; and in the Appendix there are characters of two *Halecia*, new to science, one of which, *Halecium geniculatum*, is remarkable on account of its flexuous hydrosoma, which is bent alternately right and left between the hydrothecæ, and on account of the great length of the simple tubular hydrothecæ; the other, *Halecium sessile*, may be distinguished by its very small and perfectly sessile hydrothecæ, and by the very large non-retractile polypites.

The Sponges have not as yet been determined. It is, however, worthy of mention that three species peculiarly characteristic of the Haaf of the Shetland seas were living in the Minch, enjoying the companionship of many other of their northern friends. These species were *Tethea cranium*, Müller, *Isodictya infundibuliformis*, Linn., and *Phakellia ventilabrum*, Linn.

Appended will be found a catalogue of all the species found, descriptions

\* *Sarcodictyon agglomerata*, Forbes, Trans. Roy. Soc. Edin. vol. xx. p. 309, pl. 9. fig. 3.

of such as are new to science, and a list of all those which are now for the first time recorded as living in our seas, with references to the several authors by whom they have been described.

*Crustacea.*

- Stenorhynchus longirostris*, *Fabr.*  
*Inachus Dorsettensis*, *Penn.*  
 — *leptochira*, *Leach.*  
*Hyas coarctata*, *Leach.*  
*Eurynome aspera*, *Penn.*  
*Xantho florida*, *Leach.*  
 — *rivulosa*, *Risso.*  
*Cancer pagurus*, *Linn.*  
*Carcinus mænas*, *Linn.*  
*Portunus puber*, *Linn.*  
 — *depurator*, *Linn.*  
 — *holsatus*, *Fabr.*  
 — *pusillus*, *Leach.*  
*Ebalia tuberosa*, *Penn.*  
 — *Cranchii*, *Leach.*  
*Atelecyclus septemdentatus*, *Mont.*  
*Pagurus Bernhardus*, *Linn.*  
 — *Prideauxii*, *Leach.*  
 — *pubescens*, *Kröyer.*  
 — *lævis*, *Thomp.*  
*Porcellana platycheles*, *Penn.*  
 — *longicornis*, *Linn.*  
*Galathea squamifera*, *Leach.*  
 — *intermedia*, *Kröyer.*  
 — *Andrewsii*, *Kin.*  
*Munida Bamffia*, *Penn.*  
*Crangon vulgaris*, *Linn.*  
 — *Allmani*, *Kin.*  
 — *sculptus*, *Bell.*  
 — *nanus*, *Kröyer.*  
 — *serratus*, *Norman*  
 (= *echinulatus*, *Sars*).  
 — *spinosus*, *Leach.*  
*Hippolyte varians*, *Leach.*  
 — *pusiola*, *Kröyer.*  
 — *securifrons*, *Norman.*  
 — *cultellata*, *Norman*, n. sp.  
 — *pandaliformis*, *Bell.*  
*Pandalus annulicornis*, *Leach.*  
 — *brevirostris*, *Rathke.*  
*Doryphorus Gordoni*, *Bate.*  
*Mysis flexuosa*, *Müller.*  
 — *vulgaris*, *Thomp.*  
*Diastylis bispinosa*, *Say*  
 (= *D. bicornis*, *Bate*).  
 — *lamellata*, *Norman*, n. sp.  
*Eudorella* \* *emarginata*, *Kröyer*  
 (= *Cyrianassa ciliata*, *Norman*, ♂).  
*Iphithoë serrata*, *Norman*, n. sp.  
*Talitrus locusta*, *Linn.*  
*Orchestia littorea*, *Mont.*  
*Montagua marina*, *Bate.*  
*Lysianassa Costæ*, *M.-Edw.*  
 — *Audouiniana*, *Bate.*  
*Anonyx Holbölli*, *Kröyer*  
 (= *A. denticulatus*, *Bate*).  
*Anonyx gulosus*, *Kröyer*  
 (= *A. Holbölli*, *Bate*).  
 — *longipes*, *Bate.*  
 — *melanophthalmus*, *Norman*, n. sp.  
*Euonyx chelatus*, *Norman*, nov. gen. et sp.  
*Callisoma crenata*, *Bate.*  
*Nicippe tumida*, *Bruz.*  
*Ampelisca æquicornis*, *Bruz.*  
 — *carinata*, *Bruz.*  
 — *tenuicornis*, *Lillj.*  
 — *macrocephala*, *Lillj.*  
*Haploops tubicola*, *Lillj.*  
*Monoculodes carinatus*, *Bate.*  
*Ediceros parvimanus*, *Bate & West.*  
*Phoxus plumosus*, *Holböll.*  
 — *Holbölli*, *Kröyer.*  
*Urothoë marina*, *Bate.*  
 — *elegans*, *Bate.*  
*Acanthonotus Owenii*, *Bate.*  
*Dexamine spinosa*, *Mont.*  
 — *tenuicornis*, *Rathke.*  
 — *Vedlomensis*, *Bate & West.*  
*Atylus bispinosus*, *Bate.*  
*Calliope Fingalli*, *Bate & West.*  
*Eusirus Helvetii*, *Bate.*  
*Leucothoë articulosa*, *Mont.*  
*Aora gracilis*, *Bate.*  
*Microdeuteropus anomalus*, *Rathke*, ♂ & ♀.  
 — *Websterii*, *Bate.*  
 — *versiculatus*, *Bate*, ♂ & ♀.  
*Microtopus maculatus*, *Norman*, nov.  
 gen. et sp.  
*Protomedeia Whitei*, *Bate.*  
*Melita proxima*, *Bate.*  
*Mæra Loveni*, *Bruz.*  
*Eriopis elongata*, *Bruz.*  
*Eurystheus erythrophthalmus*, *Lillj.*  
*Gammarus marinus*, *Leach.*  
 — *locusta*, *Linn.*  
*Megamæra longimana*, *Leach* } ♂ & ♀.  
 — *Othonis*, *M.-Edw.*  
*Amphithoë rubricata*, *Mont.*  
 — *littorina*, *Bate.*  
*Cerapus difformis*, *M.-Edw.*  
*Arcturus longicornis*, *Sow.*  
*Gyge Hippolytes*, *Kröyer.*  
*Phryxus abdominalis*, *Kröyer.*  
*Pleurocrypta Galatheæ*, *Hesse.*  
*Jæra albifrons*, *Leach.*  
*Oniscoda maculosa*, *Leach.*  
*Idotea tricuspida*, *Desm.*  
 — *emarginata*, *Fabr.*  
*Sphæroma Prideauxiana*, *Leach.*  
*Cymodocea* (?) *truncata*, *Leach.*  
*Cirolana cylindræa*, *Mont.*  
*Nebalia bipes*, *Fabr.*

\* The name *Eudorella* is here proposed as a substitute for *Eudora* of *Bate*, the latter name having long been employed by *Péron* and *Lesueur* for a genus of *Hydrozoa*.

- Paracypris polita, *Sars*.  
 Pontocypris mytiloides, *Norman*  
 (= *P. serrulata*, *G. O. Sars*).  
 — acupunctata, *Brady*, n. sp.  
 — trigonella, *Sars*.  
 Bairdia obtusata, *Sars*.  
 — complanata, *Brady*, n. sp.  
 — inflata, *Norman*.  
 Cythere viridis, *Müller*.  
 — convexa, *Baird*.  
 — albomaculata, *Baird*.  
 — lutea, *Müller*.  
 — badia, *Norman*.  
 — tenera, *Brady*, n. sp.  
 — villosa, *Sars*.  
 — concinna, *Jones*.  
 — angulata, *Sars*.  
 — limicola, *Norman*.  
 — Fimmarchica, *Sars*.  
 — cuneiformis, *Brady*.  
 — quadridentata, *Baird*.  
 — emaciata, *Brady*, n. sp.  
 — tuberculata, *Sars*.  
 — Dunelmensis, *Norman*.  
 — antiquata, *Baird*.  
 — Jonesii, *Baird*.  
 Cytheridea punctillata, *Brady*.  
 — papillosa, *Bosquet*.  
 — dentata, *Sars*.  
 — ? subflavescens, *Brady*, n. sp.  
 — elongata, *Brady*  
 (= *C. angustata*, *Baird*).  
 Cytheropsis declivis, *Norman*.  
 Ilyobates prætexta, *Sars*.  
 Loxoconcha tamarindus, *Jones*  
 (= *C. lævata*, *Norman*).  
 — impressa, *Baird*.  
 — guttata, *Norman*.  
 Xestoleberis aurantia, *Baird*.  
 — depressa, *Sars*.  
 Cytherura gibba, *Müller*.  
 — nigrescens, *Baird*.  
 — acuticostata, *Sars*.  
 — angulata, *Brady*, n. sp.  
 — producta, *Brady*, n. sp.  
 — undata, *Sars*.  
 — cellulosa, *Norman*.  
 — clathrata, *Sars*.  
 Cytheropteron nodosum, *Brady*, n. sp.  
 — punctatum, *Brady*, n. sp.  
 — ? multiforum, *Norman*.  
 Bathocythere simplex, *Norman*.  
 — constricta (?), *Sars*.  
 Pseudocythere caudata, *Sars*.  
 Sclerochilus contortus, *Norman*.  
 Paradoxostoma variabile, *Baird*.  
 — abbreviatum, *Sars*.  
 — ensiforme, *Brady*, n. sp.  
 — flexuosum, *Brady*, n. sp.  
 — Normani, *Brady*, n. sp.  
 — Hybernicum, *Brady*, n. sp.  
 — pulchellum, *Sars*.  
 Bradycinetus McAndrei, *Baird*.  
 — teres, *Norman*.  
 Cylindroleberis Mariæ, *Baird*.  
 Philomedes interpunctus, *Baird*  
 (= *P. longicornis*, *Lilljeborg*).  
 Polycope orbicularis, *Sars*.  
 Cytherella Scotica, *Brady*, n. sp.  
 Thalestris mysis, *Claus*.  
 — Helgolandica, *Claus*.  
 — harpactoides, *Claus*.  
 — longimana, *Claus*.  
 Dactylopus tisboides, *Claus*.  
 — Strœmii, *Baird*.  
 — tenuicornis, *Claus*.  
 — cinctus, *Claus*.  
 — brevicornis, *Claus*.  
 Harpacticus chelifer, *Müller*.  
 Longipedia coronata, *Claus*.  
 Eupelte gracilis, *Claus*.  
 Westwoodilla nobilis, *Baird*.  
 Cleta serrata, *Claus*.  
 Tisbe furcata, *Baird*.  
 Porcellidium fimbriatum, *Claus*  
 — dentatum, *Claus*.  
 Alteutha bopyroides, *Claus*.  
 Dias longiremis, *Lillj*.  
 Cetochilus septentrionalis, *Goodsir*.  
 Anomalocera Patersonii, *Templeton*.  
 Dyspontius striatus, *Thorell*.  
 Balanus porcatus, *Da Costa*.  
 Verruca Strœmia, *Müller*.  
 Sacculina carcini, *Thomp*.  
 Pycnogonum littorale, *Ström*.

#### Freshwater Species.

- Daphnella brachyura, *Lièvin*.  
 Daphnia longispina, *Müller*.  
 Drepanothrix hamata, *G. O. Sars*.  
 Polyphemus pediculus, *Linn*.  
 Eurycercus lamellatus, *Müller*.  
 Chydorus sphæricus, *Müller*.  
 — globosus, *Baird*.  
 Camptocercus macrourus, *Müller*.  
 Acroperus harpa, *Baird*.  
 Alona quadrangularis, *Müller*.  
 Alonella elongata, *G. O. Sars*.  
 Peracantha truncata, *Müller*.  
 Cypris ovum, *Jurine*  
 (= *C. minuta*, *Baird*).  
 Diaptomus Westwoodii, *Lubbock*.  
 Cyclops serrulatus, *Fischer*.

#### Echinodermata.

- Holothuria intestinalis, *Ascanius*.  
 Psolus phantapus, *Linn*.  
 Thyone fusus, *Müller*.  
 — raphanus, *Dub. & Kor*.  
 Thyonidium commune, *Forbes & Goods*. (?)  
 Thyonidium hyalinum, *Forbes*.  
 Cucumaria lactea, *Forbes & Goodsir*.  
 — fusiformis, *Forbes & Goodsir*  
 (= *C. elongata*, *Dub. & Kor*).  
 — Hyndmanni, *Thomp*.

Echinocardium ovatum, *Leske*.  
 Brissopsis lyrifera, *Forbes*.  
 Echinocyamus pusillus, *Müller*.  
 Echinus esculentus, *Linn*.  
 — Flemingii, *Ball*.  
 — miliaris, *Leske*.  
 Asterias rubens, *Linn*.  
 — hispida, *Penn*.  
 Stichaster roseus, *Müller*.  
 Cribrella sanguinolenta, *Müller*.  
 Solaster papposus, *Linn*.  
 Palmipes placenta, *Penn*.  
 Porania pulvillus, *Müller*.

Astropecten irregularis, *Penn*.  
 Ophiura lacertosa, *Penn*.  
 — albida, *Forbes*.  
 — affinis, *Lütken*  
 (= *O. Normani*, *Hodge*).  
 Ophiopholis aculeata, *Müller*.  
 Ophiocoma nigra, *Müller*.  
 Amphiuira Ballii, *Thomp*.  
 — elegans, *Leach*.  
 — filiformis, *Müller*.  
 — Chiajii, *Forbes*.  
 Antedon rosaceus, *Linck*.  
 — Celticus, *Barrett*.

## Polyzoa.

Brettia pellucida, *Dyster*.  
 Salicornaria farciminoidea, *Johnst*.  
 Scrupocellaria scrupea, *Busk*.  
 — scruposa, *Linn*.  
 — inermis, *Norman*, n. sp.  
 Hippothoa catenularia, *Johnst*.  
 — divaricata, *Lamx*.  
 Ætea recta, *Hincks*.  
 Gemellaria loriculata, *Linn*.  
 Caberea Ellisii, *Fleming*.  
 Bugula avicularia, *Pallas*.  
 — Murrayana, *Bean*.  
 Flustra foliacea, *Linn*.  
 Flustrella hispida, *Fabr*.  
 Membranipora membranacea, *Linn*.  
 — pilosa, *Pall*.  
 — coriacea, *Esper*.  
 — imbellis, *Hincks*.  
 — Pouilletii, *Aud*.  
 — Flemingii, *Busk*.  
 — lineata, *Linn*.  
 Lepralia crystallina, *Norman*, n. sp.  
 — auriculata, *Hass*.  
 — concinna, *Busk*.  
 — trispinosa, *Johnst*.  
 — coccinea, *Abildg*.  
 — linearis, *Hass*.  
 — ciliata, *Pall*.  
 — Hyndmanni, *Johnst*.  
 — variolosa, *Johnst*.  
 — laqueata, *Norman*.  
 — nitida, *Fabr*.  
 — Peachii, *Johnst*.

Lepralia ventricosa, *Hass*.  
 — polita, *Norman*.  
 — innominata, *Couch*.  
 — punctata, *Hass*.  
 — Pallasiana, *Moll*.  
 — simplex, *Johnst*.  
 — Malusii, *Aud*.  
 — hyalina, *Linn*.  
 — ansata, *Johnst*.  
 — unicornis, *Johnst*.  
 — collaris, *Norman*, n. sp.  
 Cellepora pumicosa, *Linn*.  
 — ramulosa, *Linn*.  
 — dichotoma, *Hincks*.  
 — cervicornis, *Fleming*.  
 — Hassallii, *Johnst*.  
 Palmicellaria elegans, *Alder*.  
 Eschara foliacea, *Ellis & Sol*.  
 — Skenei, *Ellis & Sol*.  
 — quincuncialis, *Norman*, n. sp.  
 Retipora Beaniana, *King*.  
 Patinella patina, *Linn*.  
 Heteroporella hispida, *Fleming*.  
 Diastopora obelia, *Fleming*.  
 Tubulipora serpens, *Linn*.  
 Idmonea Atlantica, *Forbes*.  
 Hornera borealis, *Busk*.  
 Alecto granulata, *M.-Edw*.  
 — major, *Johnst*.  
 — compacta, *Norman*, n. sp.  
 Crisia eburnea, *Linn*.  
 Alcyonidium —, n. sp.  
 Arachnidia hippothooides, *Hincks*.

## Actinozoa.

Adamsia palliata, *Forbes*.  
 Actinia mesembryanthemum, *Ellis*.  
 Tealia crassicornis, *Müll*.  
 Caryophyllea Smithii, *Fleming*.  
 Pennatula mollis, *Alder*, n. sp.

Virgularia mirabilis, *Linn*.  
 Pavonaria quadrangularia, *Pall*.  
 Alcyonium digitatum, *Linn*.  
 Rhizoxenia catenata, *Forbes*.  
 — agglomerata, *Forbes*.

## Hydrozoa.

Hydractinia echinata, *Fleming*.  
 Eudendrium — ?  
 Perigonimus (sessilis, *Wright*?) .  
 Tubularia indivisa, *Linn*.  
 Campanularia Johnstoni, *Alder*.  
 — Hincksii, *Alder*.  
 — verticillata, *Linn*.

Obelia geniculata, *Linn*.  
 Calicella fastigiata, *Alder*.  
 Lafoëa dumosa, *Linn*.  
 Reticularia serpens, *Hass*.  
 Coppinia arcta, *Dalyell*.  
 Halecium geniculatum, *Norman*, n. sp.  
 — sessile, *Norman*, n. sp.



Sertularia polyzonias, *Linn.*  
 — tenella, *Alder.*  
 — alata, *Hincks.*  
 — pinaster, *Ell. & Sol.* } ♂ & ♀.  
 — Margareta, *Hass.*  
 — fallax, *Johnst.*  
 — abietina, *Linn.*  
 — filicula, *Ell. & Sol.*  
 — operculata, *Linn.*

Sertularia argentea, *Ell. & Sol.*  
 — fusiformis, *Hincks.*  
 Antennularia antennina, *Linn.*  
 Plumularia falcata, *Linn.*  
 — tubulifera, *Hincks.*  
 — myriophyllum, *Linn.*  
 — pinnata, *Linn.*  
 — setacea, *Ellis.*  
 — frutescens, *Ell. & Sol.*

#### CLASS CRUSTACEA.

##### *Hippolyte cultellata*, Norman, n. sp.

Carapace gibbous, anteriorly keeled and toothed. Rostrum about equal to the carapace in length, not twice as long as the eye, and shorter than the antennal scale, nearly horizontal, cultellate, above with five nearly equal-sized teeth, posterior to which are two others on the carapace; below with four teeth, all anterior to the fifth tooth of the upper margin. Front margin of carapace with three pairs of spines; the first large, above the eye; the second below the eye; the third small, at the infero-anteal angle. Third abdominal segment somewhat gibbous, but not dorsally produced; fourth with a small spine on the lateral margin; fifth with the infero-posteal angle produced into a conspicuous spine. Second gnathopods reaching the end of the antennal scale. First pereopods reaching the middle of the last joint of second gnathopods; second pereopods with seven-jointed wrist, left as long as right, longer than second gnathopods. Telson furnished with nine pairs of lateral spines, and terminated in thirteen spines, of which the outermost pair but one are the longest, and the nine spines between this pair are subequal in length, and ciliated on both margins. Colour pink, beautifully spotted with crimson. Length, exclusive of antennæ, rather more than an inch and a half. One specimen dredged in the Minch.

##### *Diastylis lamellata*, Norman, n. sp.

*Female.*—Cephalothorax very large, deep and wide in the gravid female, viewed laterally almost subglobular, with the dorsal margin boldly arched; viewed dorsally, remarkably wide, ovate, greatest breadth in the centre. Carapace having a short, blunt, horizontal rostrum; sculptured with three oblique raised lamellæ, the hindmost just at the border of the carapace, and continued round the dorsal margin, the two others are equal distances apart, not continued across the back; on either side of the central dorsal line is a series of what appear in spirit-preserved specimens to be lucid spots; possibly, however, they may be coloured markings in the living animal. The second and third cephalothoracic segments raised into dorsal lamellæ of corresponding character to those of the carapace; the anterior dorsal margin, sixth segment, and the posterior margin of the preceding one denticulately serrate. Superior antennæ having the three joints of the peduncle subequal in length, the internal and longer filament shorter than the last joint of the peduncle. The first pereopods have the basal joint narrow and much bent, its inferior margin fringed with plumose setæ and furnished with a row of spines; penultimate joint very long and slender, equalling in length the three preceding articulations and as long as the basal joint; terminal joint half the length of the penultimate; palp two-thirds as long as the basal joint, not furnished with any spines. Second pereopods having the superior margin of the basal joint furnished with spines, the last and the antepenultimate joints subequal, and more than twice as long as the penultimate; palp reaching beyond the third

joint, its basal portion not spined. Telson twice as long as the preceding segment, suddenly contracted near the base, the last part narrow and linear, having four pair of lateral and two much larger terminal spines. Peduncle of uropods narrow and slender, as long as the telson, and about one-sixth longer than the rami, furnished with about eight spines on the inner margin; interior ramus slightly longer than exterior, having nine spines on the inner margin (6 on first, 2 on second, and 1 on third joint), and a long terminal spine; exterior ramus terminating in three setæ, of which the central is the longest (the interior not quite terminal), and having four spines, and one other seta on the outer margin, but none on the inner.

Length 3 lines. Dredged in Sleat Sound, and also off Tynemouth, Northumberland. Nearly allied to *Diastylis biplicata*, G. O. Sars, but apparently distinct.

*Iphithoë serrata*, Norman, n. sp.

Animal greatly elongated and very slender. Cephalothorax shallow and much compressed, dorsally keeled throughout, equal in length to six abdominal segments, and twice and a half as long as deep; rostrum long, slightly bent upwards, apex obliquely truncate, crenated and ciliated; latero-anterior margin with only two or three minute spines; a deep sinus on the lower portion of the front margin; dorsal line with a crest of spines (13-20), which sometimes extend almost to the posterior margin of the carapace, sometimes are obsolete on the hinder portion; the spines gradually increase in size forwards, and the two or three anterior spines are more widely separated from each other than the rest. Superior antennæ shorter than the rostrum, having the last joint of the peduncle longer than either of the preceding, and four times as long as the very short two-jointed internal filament; external filament very minute, one-jointed. Second gnathopods having the lower margin of the basal joint denticulate, and its lobe reaching to the middle of the third joint; lobe of third joint smaller than is usual in the genus, but bearing several long plumose setæ, the most distal the longest. First pereopods having both margins of basal joint denticulated; extended beyond the rostrum, which reaches the middle of the penultimate joint; last and antepenultimate joints subequal, and about one-third shorter than the penultimate. Second pereopods five-jointed, having a large spine at the termination of the second and third joints; last joint as long as the two preceding. Telson semicircular, terminating in spine-like points and two setæ. Uropods strongly formed; peduncle of moderate length (not twice as long as last abdominal segment), furnished with 12-14 long slender spines on the inner margin; rami shorter than the peduncle, and subequal; interior with basal joint swollen, having five spines on the middle margin, the distal one very large; second joint having twelve spines on the inner margin and apex, and three setæ on the outer margin; all the spines of the rami are ciliated, and the two terminal spines are developed to such a length that they are intermediate in form between spines and setæ; outer ramus flattened, having about twelve plumose setæ on the inner margin and round the apex. Length about five lines.

Female specimens dredged in Sleat Sound.

*Anonyx melanophthalmus*, Norman, n. sp.

Eye black. Superior antennæ having the first joint of the peduncle nearly as long as the two succeeding joints taken together, filament with nine articulations; appendage five-jointed, the first very long, equalling the first long joint of the filament. Inferior antennæ having last two joints of peduncle

furnished with tufts of hair on the upperside; filament short, equal in length to last two joints of peduncle, seven-jointed. First gnathopods short; wrist excessively short, forming a little projecting hair-tipped lobe on the posterior margin, and much shorter than preceding joint (meros); hand oblong, as long as the wrist and meros taken together, with only two fine setæ on the anterior, and a few spine-like setæ on the posterior margin, slightly narrowed towards the palm, which is not at all oblique; nail very large, having one or two fine setæ on the upper margin. Second gnathopods with wrist and meros subequal, and each longer than the hand, meros having posterior and wrist anterior margin covered with fine down-like setæ; pad of wrist finely scaled; hand much narrower than the wrist, having both margins beset with fine downy setæ; terminal brush of hair not dense; nail well developed, and infero-posteal angle of hand produced so as to form with the nail a little chela. Last pereopods not having any of the joints below the basis posteriorly produced. Branches of last uropods slightly longer than the peduncle, outer terminating in three spines and having two or three small spines on the margin; inner terminating in a single spine, and having only one very fine seta on each margin. Telson having a wide but shallow cleft, which does not extend more than one-third of its length; each portion is terminated by a single spine, and there are also two pairs of spines on the upper surface. Posterior angles of abdominal segments rounded and not serrate. Fourth abdominal segment with a dorsal sinus.

Dredged in Sleet Sound.

*Euonyx*, Norman, nov. gen.

Differing from *Anonyx* in having the first gnathopods chelate, and the second stronger than the first, subchelate, nail large and strong. Posterior uropods two-branched. Telson cleft.

*Euonyx chelatus*, Norman, n. sp.

Superior antennæ bent directly downwards; first joint of peduncle very large, concave above (thus giving the front of the head, the antennæ being bent downwards, an emarginate appearance); second and third joints very short, and much narrower than the first; filament ten-jointed; appendage six-jointed, reaching to the end of the third joint of the filament. Inferior antennæ having the last two joints of the peduncle subequal, not furnished with any spines or hairs; filament twenty-jointed, not twice as long as the peduncle. First gnathopods having hand and wrist about equal to each other, long, narrow, parallel-sided, nearly naked, having only very few setæ; inferior distal angle of hand greatly produced, so as to form in conjunction with the nail a slender horizontal chelate claw; nail large, strong, furnished with two or three bristles on the upper margin near the point. Second gnathopods more strongly developed than the first, having the wrist furnished with tufts of hair on the posterior margin; hand shorter than wrist, having several rows of long setæ on anterior, and two similar rows on the posterior margin; palm oblique, well-defined, concave; nail large, strongly curved, simple. Pereopods very stout and strong, having the basis largely developed and extending downwards to the middle of the meros; posterior margin of meros also largely developed outwards and downwards into a process which, in the posterior, extends beyond the carpus; the whole of the anterior side of the legs is beset with numerous strong spines; the nail is large, very strong, and has a cilium on the inner side near the extremity. Rami of last uropods flattened and nearly twice as long as peduncle, margins plain; inner ramus

one-jointed, outer terminated in a flattened spine. Telson divided almost to the base, but the two portions are in contact with each other to the apex, margins smooth. Fourth abdominal segment has a deep sinus on the anterior portion of the dorsal margin, and behind this a large hump-like elevation. Animal pure white. Dredged parasitic on *Echinus esculentus*, L., in Sleat Sound.

*Microprotopus*, Norman, nov. gen.

Antennæ with secondary appendage. First gnathopods subchelate. Second gnathopods larger than first, subchelate, greatly developed in ♂, much smaller in ♀. Uropods terminating in simple spines, those of last pair with a single ramus. Telson tubular.

*Microprotopus maculatus*, Norman, n. sp.

*Male*.—Eye small, round, crimson, situated on a lobe between the bases of the two pairs of antennæ. Antennæ subequal, superior having peduncle reaching a little beyond the penultimate joint of the peduncle of the inferior antennæ; basal joint stouter than, but equal in length to, the second; third joint shorter and more slender than the preceding; appendage minute, two-jointed, not so long as first joint of filament, which consists of nine or ten articulations, and is of about equal length with the peduncle. Inferior antennæ stronger than the superior, and, as well as the superior, furnished with scattered hairs, but no spines. Mandible with a three-jointed palp. First gnathopods having the hand of equal length to the wrist, but broader, widening from the base to the extremity, palm oblique, concave; nail well developed, simple, extending rather beyond the palm. Second gnathopods having the wrist very short, hand greatly developed, as long as, or even longer than the whole of the rest of the leg, oblong, palm whole length of hand, slightly concave, with a tooth-like process (wanting in the young) at the base, and two large teeth on the distal third; finger large, strong, curved, fully as long as the hand; the inner margin under a high power of the microscope is seen to be finely crenated, or, rather, rasped like a file. Uropods furnished with a few simple spines; the penultimate pair extending beyond the last, which have only one branch; this branch is rather longer than the peduncle, and is furnished with two or three spines on the inner margin, and terminates in two spines and a cilium. Telson tubular; apex truncate, slightly emarginate, and having one or two hairs at the angles.

In the female the first gnathopods are of nearly the same form as those of the male, but the hand is rather narrower: the second gnathopods are wholly different; the wrist and two preceding joints are very short, the former, however, is the more developed, and assumes a caliculate form at its termination from its having a projecting seta-tipped lobe both in front and behind; hand subquadrate, narrower than the wrist, with a row of long scattered setæ down the centre; palm slightly oblique, concave, with a few fine fringing setæ, and a single spine at the angle; nail as long as the palm, strong. Colour yellowish, more or less covered with umber-brown spots; these spots are seen under the microscope to be dendritic; they often form bands across the segments, or at times so coalesce as to make the whole animal appear of a brown colour. Length two lines. Found at Tobermory in Mull, among Laminariæ.

Class POLYZOA.

*Scrupocellaria inermis*, Norman, n. sp.

Cells regularly ovate, wholly unspined, and not furnished with any operculum or suboral avicularia; mandible of lateral avicularia very short and

blunt; ovicell globular, smooth, inclining inwards; vibracular capsules of moderate size, erect, bilobed; vibracula long, arising from between the lobes of the capsules. Height half an inch. Dredged in deep water in the Minch, also at Shetland. Differs from *S. scruposa* in having the cells larger, not furnished with spines, and in the vibracular capsules, which are proportionately large, and the mandible of the avicularia being shorter and blunter.

*Eschara quincuncialis*, Norman, n. sp.

Polyzoary white, smooth, polished, cylindrical. Cells distant, in linear series, regularly arranged in quincunx, swollen, mammiform. Apertures keyhole-shaped, rounded above, with a small sinus below, immediately beneath which a small inconspicuous avicularium is sometimes present. Ovicell small, with 1-4 round perforations.

The specimen described is apparently a fragment, and is not more than a quarter of an inch long. It is, however, manifestly distinct from all the *Escharæ* with which we were previously acquainted. Dredged in deep water in the Minch.

*Lepralia collaris*, Norman, n. sp.

Cells small, crowded, linearly arranged, not in quincunx, granular, not punctured round the margin; mouth arch-formed, rounded above, truncate below; peristome greatly elevated into a frill-like plate which surrounds the sides and lower margin of the mouth, within which there is no denticle; ovicell globular, of moderate size, punctate.

In small patches on old shells and stones from the Minch, coast of Antrim, Guernsey, and Shetland. It will be evident from the foregoing list of localities that this species is widely distributed on our coasts. It has been hitherto mistaken (by Mr. Busk, Mr. Alder, and myself) for *L. eximia*, Hincks, in common with which species it has the peculiar collar-formed peristome; but having recently had an opportunity of examining Mr. Hincks's typical and only known specimen of *L. eximia*, I found it to be a wholly different form from that which is now described.

*Lepralia crystallina*, Norman, n. sp.

Cells short, obovate, of moderate size, and moderately tumid, not regularly arranged, nor separated from each other by raised lines, nor areolated at the margin; white, crystalline, punctate, punctures round, few, equally distributed on all parts of the cell; mouth triangular, lateral walls much raised, margined above with five spines (rarely present), a small avicularium at the lower angle of the mouth, with short rounded mandible directed downwards; a bifid tooth-like process within the mouth; ovicell globular, crystalline, punctate.

On shell and stone in very small patches. The Minch and Shetland in deep water. Nearly allied to *L. Landsborovii*, as compared with which the cells are smaller, shorter, more convex, less regularly disposed, not separated from each other by distinct raised lines, more regularly punctate than is usual in *L. Landsborovii*, in which the punctures are often absent from the centre of the cell; the mouth also is more angular.

*Alecto compacta*, Norman, n. sp.

Polyzoary narrow at the base, thence rapidly widening and irregularly ramifying, branches wide and short, their terminations rounded; remarkably flat, and closely appressed to the shell. Cells very small, irregularly scattered and separated from each other, shortly tubular, scarcely raised above the

level of the polyzoary, all inclining towards distal extremity of branches, though bending slightly towards the side of the polyzoary to which they are nearest. Colour white. On stone and shell. The Minch and Shetland in deep water.

*A. compacta* approaches more nearly to *A. dilatans* than to the other described species, but is much smaller and more delicate in all its parts, and depressed flat to the surface instead of being raised in a swollen cushion-like manner. *A. dilatans* is usually tinged with violet, while *A. compacta* is always white, and approaches in many respects to a *Diastopora*.

#### Class HYDROZOA.

##### *Halecium geniculatum*, Norman, n. sp.

Hydrosoma slender, branching, the branches (in type specimen) all in the same plane; branchlets flexuous, bending alternately right and left between the hydrothecæ (as in *Laomedea geniculata*); one hydrotheca to each internode; the internode terminating immediately above the hydrotheca and marked by a single stricture, or more rarely two. Hydrothecæ diverging at about an angle of  $45^\circ$  from the cœnosarc, much elongated, simply tubular, fully two-thirds as long as the internodes of the cœnosarc, and 3–6 times as long as their own diameter; a constriction near the base, at the point where the more strongly developed chitine of the base of the hydrotheca is exchanged for a membrane of more delicate structure. Height an inch and a half. Dredged in deep water in the Minch.

##### *Halecium sessile*, Norman, n. sp.

Hydrosoma slender, irregularly branching, branches not in the same plane; branchlets having alternate hydrothecæ, and a single constriction above each hydrotheca. Hydrothecæ very short and perfectly sessile, not rising at all separately from the hydrosoma, of the lateral projections of which they are mere openings, without being raised into any tube. Polypites large, not retractile, very narrow at the base, where they rise from the hydrotheca, thence gradually widening to near the summit, where they suddenly swell into a wide campanulate mouth surrounded by long and slender filiform tentacles; the polypites rise above the hydrotheca to a height (exclusive of tentacles) which is not less than five times its diameter, and far overtop the level of the succeeding hydrotheca. Height probably an inch and a half, though the fragments obtained are not more than half that length. Dredged in deep water in the Minch.

The following is a list of the species which are now for the first time recorded as members of the British Fauna.

Hippolyte cultellata, Norman, n. sp.	Mæra Lovéni, Bruz.*
Diastylis lamellata, Norman, n. sp.	Eriopis elongata, Bruz.*
Iphithoë serrata, Norman, n. sp.	Pleurocrypta Galatheæ, Hesse? †
Anonyx melanophthalmus, Norman, n. sp.	Paracypris polita, Sars §.
Euonyx chelatus, Norman, nov. gen. et sp.	Pontocypris acupunctata, Brady, n. sp.
Ampelisca carinata, Bruz.*	— trigonella, Sars §.
— tenuicornis, Lillj. †	Bairdia obtusata, Sars §.
— macrocephala, Lillj. †	— complanata, Brady, n. sp.
Microprotopus maculatus, Norman, nov. gen. et sp.	Cythere viridis, Müller   .
	— tenera, Brady, n. sp.

\* Bidrag till kännedomen om Skandinaviens Amphipoda Gammaridea, 1859.

† Öfvers. af Kongl. Vetensk. Akad. Förhandl., 1855, pp. 123, 137.

‡ Annales des Sciences Naturelles, Cinquième Série, tom. iii. (1865) p. 226, pl. 4.

§ "Oversigt af Norges Marine Ostracoder," Vid.-Selsk. Forhand. 1865.

|| Entomostraca, p. 64, tab. vii. figs. 1, 2 (and of Sars, but not of Lilljeborg).

- Cythere villosa*, Sars\*.  
 — *concinna*, Jones †.  
 — *angulata*, Sars\*.  
 — *Finmarchica*, Sars\*.  
 — *cuneiformis*, Brady, n. sp.  
 — *emaciata*, Brady, n. sp.  
 — *tuberculata*, Sars\*.  
*Cytheridia punctillata*, Brady ‡.  
 — *dentata*, Sars\*.  
 — ? *subflavescens*, Brady, n. sp.  
*Ilyobates prætexta*, Sars\*.  
*Xestoleberis depressa*, Sars\*.  
*Cytherura gibba*, Müller §.  
 — *acuticostata*, Sars\*.  
 — *angulata*, Brady, n. sp.  
 — *producta*, Brady, n. sp.  
 — *undata*, Sars\*.  
 — *clathrata*, Sars\*.  
*Cytheropteron nodosum*, Brady, n. sp.  
 — *punctatum*, Brady, n. sp.  
*Bathocythere constricta* (?) Sars\*.  
*Pseudocythere caudata*, Sars\*.  
*Paradoxostoma abbreviatum*, Sars\*.  
 — *ensiforme*, Brady, n. sp.  
 — *flexuosum*, Brady, n. sp.  
 — *Normani*, Brady, n. sp.  
 — *Hybernicum*, Brady, n. sp.  
 — *pulchellum*, Sars\*.  
*Polycope orbicularis*, Sars\*.  
*Cytherella Scotica*, Brady, n. sp.  
*Thalestris mysis*, Claus ||.  
 — *Helgolandica*, Claus ||.  
 — *harpacticoides*, Claus ||.  
*Dactylopus tisboides*, Claus ||.  
 — *tenuicornis*, Claus ||.  
 — *cinctus*, Claus ¶.  
 — *brevicornis*, Claus ¶.  
*Longipedia coronata*, Claus ||.  
*Eupelte gracilis*, Claus ||.  
*Cleta serrata*, Claus ||.  
*Porcellidium fimbriatum*, Claus ||.  
 — *dentatum*, Claus \*\*.  
*Dyspontius striatus*, Thorell ††.  
*Drepanothrix hamata*, G. O. Sars ††.  


---

*Scrupocellaria inermis*, Norman, n. sp.  
*Lepralia crystallina*, Norman, n. sp.  
 — *collaris*, Norman, n. sp.  
*Eschara quincuncialis*, Norman, n. sp.  
*Alecto compacta*, Norman, n. sp.  
*Aleyonidium* —, n. sp.  


---

*Pennatula mollis*, Alder, n. sp.  


---

*Halecium geniculatum*, Norman, n. sp.  
 — *sessile*, Norman, n. sp.

P.S.—It will be observed that the list of Ostracoda given in the foregoing Report differs from that of Mr. G. S. Brady. This arises from the fact that the Reporter has had an opportunity of revising the lists at a much later period (May 10, 1867), when further time had allowed a more complete examination to be made of the material collected. The present lists, in the drawing up of which he has been assisted by Mr. Brady, have thus been rendered more full and more correct.

*Notices of some Invertebrata, in connexion with the Report of Mr. Gwyn Jeffreys on Dredging among the Hebrides. By JOSHUA ALDER.*

A SERPULA lately dredged by Mr. Jeffreys in the Hebrides, on the fragment of an old shell, possesses some interest in a physiological point of view, on account of the peculiar character of its shell. It is slender and strongly carinated through the greater part of its length, not unlike the common *Serpula triquetra*, but rather more slender. Near the mouth, however, there is an oblong bulbous swelling of the same substance as the shell, but rather less compact and more brittle; this terminates in a double arch in front. On

\* "Oversigt af Norges Marine Ostracoder," Vid.-Selsk. Forhand. 1865.

† Entomostraca of the Tertiary Formation, p. 29, pl. 4. fig. 7.

‡ Annals and Mag. Nat. Hist. 3rd series, vol. xvi. (1865), pl. 9. fig. 9-11.

§ Entomostraca, p. 24, pl. 7. fig. 10-12.

|| Die frei lebenden Copepoden, 1863.

¶ Die Copepoden-Fauna von Nizza, 1866.

\*\* Beiträge zur Kenntniss der Entomostraken, 1 Heft, Marburg, 1860, p. 8, tab. ii. figs. 19-22.

†† Bidrag till kännedomen om Krustaceer som lefva i arter af släktat Ascidia, S. 1859.

‡‡ Om de i omegnen af Christiania forekommende Cladoceren, 1861, p. 14, and Andet Bidrag, 1862, p. 51.