31. *Verrucaria nigrescens*, Pers., Nyl. Scand. 271.
32. *Verrucaria fuscella*, Turn., Ach. Nyl. *l. c.* 271.
33. *Verrucaria rupestris*, Schrad., Ach., Nyl. Pyrenoc. 30; Scand. 275 (*Lichen immersus*, Hffm., Pers.; *V. galactina*, Mass., Anz.).

It may be noticed also that *Capnodium* profusely covers the upper portions of the branches of the trees with its thin, black, unequal, areolato-diffract crust, which has every appearance of a crustaceous lichen, but with the texture of the mycelium of *Fumago*, and is always sterile. It may be called *Fumago circumvagans*, and may be regarded as a form or variety of the common *Fumago vagans*.

Parmelia	1
Physcia	7
Lecanora	23
Lecidea	3
Arthonia	1
Verrucaria	5
	40

XXVIII.—*Report on the Annelids dredged off the Shetland Islands by Mr. Gwyn Jeffreys in* 1867. By W. C. M'Intosh, M.D., F.L.S.*

Mr. Gwyn Jeffreys, in his dredging-expedition to the Shetland Islands last year, kindly selected, chiefly with the assistance of Mr. Sturges Dodd and the Rev. A. M. Norman, a large number of Annelids, which he most courteously placed at my disposal; and, as they were properly preserved in vessels and fluid sent for the purpose, their subsequent examination proved very satisfactory.

The majority of the Annelids come from St. Magnus Bay, or, rather, from the deep water (80–100 fathoms) beyond this, not because they so disproportionately abound there (although the muddy sand is eminently favourable for their increase), but probably because the dredging was most frequently carried on in that neighbourhood. The other localities, in the order of the respective collections, are off Balta, North Unst, Bressay Sound, Outer Haaf (Skerries), and (a small shore collection made by Mr. Dodd) at Hillswick.

* Communicated by the Author, having been read at the Meeting of the British Association at Norwich, August 20, 1868.

The Annelids found in the deep water off North Unst form a collection very rich in new or rare forms; for, out of thirteen species, three at least are new to science, and four not hitherto found in Britain. The collection from the Outer Haaf, Skerries, has also several rare forms; out of eight, four are new to Britain and one to science. Out of sixty found in St. Magnus Bay, four are new to science and eighteen to Britain. These figures contain the entire new or rare forms in the individual collections, without reference to their occurrence in others, as will be apparent when I mention that, out of a total of about ninety-two Annelids at present identified, five or six, so far as I can make out, are new to science, and about twenty-two to Britain. As before stated, this is one of the best collections of the kind ever made in Britain, whether we regard the excellent condition of the preparations or the number of new forms. As might be expected, many of the additions to our fauna are Scandinavian in type; but others are not so, at least they do not occur in the valuable catalogue recently published by Dr. A. J. Malmgren, the enterprising naturalist of Helsingfors.

I have described some of the supposed new forms elsewhere, and therefore shall merely name them; others have not yet been noticed. They are as follows:—*Hipponoë Jeffreysii*, n. sp., a small Amphinomacean. *Eunoa* ——, the second species of the genus found in Britain, the first being *E. nodosa*, Sars, also found in the Shetland seas by Mr. Jeffreys, and described by Mr. Lankester as a new form, under the name of *Antinoë zetlandica**; in the present species the scales are quite smooth, often bordered with a dark pigment-belt, and the inferior bristles of the feet have an entire clawed tip. *Sigalion Buskii*, n. sp., a species having the general aspect of *S. boa* rather than that of *S. Mathildæ*, to which the scales are most nearly allied in structure; but the bristles are longer than in either case, and characteristically different. *Notocirrus scoticus*, n. sp., a Lumbrinereian with a dorsal branchial lobule to each foot. *Eumenia Jeffreysii*, n. sp., a form dredged last year in the Hebrides, but too much decomposed to be minutely described: it is allied to *E. crassa*; but there are no traces of branchial filaments. *Praxilla artica* (? Mgrn.), a species that very probably is *P. artica*†, Malmgren; but as that author has only mentioned that it is similar to *P. prætermissa* (differing in the hooks having six teeth), we are left quite in doubt as to his form. *Polycirrus* (?) *tribullata*, n. sp., a species having the snout and tentacles of a *Polycirrus*, but without bristles or hooks in the

* Trans. Linn. Soc. vol. xxv. p. 377, tab. 51. figs. 13, 17, 18, 22, & 23.

† Annulata Polychæta Spetsbergiæ, &c., 1867, p. 100.

anterior region, which, however, is furnished with three circular and somewhat flattened papillæ on each side.

Of the forms new to Britain are:—*Harmothoë longisetis*, Grube[1], which, however, I think, is *H. Malmgreni*, Lankester[2], and thus has been previously got in this country. *Sigalion limicola*, Ehlers[3]. *Nephthys ciliata*, Müll.[4] *Genetyllis lutea*, Mgrn.[5] *Anaitis kosteriensis* (?), Mgrn.[6] *Lumbrinereis fragilis*, Müll.[7], a species which probably includes *L. tricolor* and some others, and therefore has been found previously on British shores. *Onuphis sicula*, Quatref.[8], a curious species (inhabiting a tube composed of shell-fragments, stones, and sand), allied to *O. tubicola*, but differing entirely in the structure of certain of its bristles. *Eone Nordmanni*, Mrgn.[9] *Scoloplos armiger*, Müll.[10] *Naidonereis quadricuspidata* (Fabr.), Œrst.[11] *Trophonia glauca*, Mgrn.[12] *Chætopterus norvegicus*, Sars[13], a species which apparently comprehends *C. insignis*, Baird[14]. *Scolecolepis cirrata*, Sars[15]. *Axiothea catenata*, Mgrn.[16] *Praxilla prætermissa*, Mgrn.[17] *Praxilla gracilis*, Sars[18]. *Clymene ebiensis*, Aud. & Ed.[19] *Ampharete artica*, Mgrn.[20] *Sabellides sexcirrata*, Sars[21]. *Grymæa Bairdi*, Mgrn.[22] *Euchone analis*, Kröyer[23]. *Chone infundibuliformis*, Kröyer[24].

Besides the foregoing, there are several whose examination, partly from their fragmentary state, has not been completed,

[1] Archiv für Naturges. 1863, tom. xxix. p. 37, Taf. 4. fig. 1.
[2] Trans. Linn. Soc. vol. xxv. p. 375, tab. 51. figs. 11, 25, 28.
[3] Die Borstenwürmer &c. p. 120, Taf. 4. figs. 4–7, & Taf. 5.
[4] Zool. Danica, tab. 89. figs. 1–4.
[5] Nordiska Hafs-Annulater, 1865, p. 93, tab. 14. fig. 32.
[6] Annulat. Polychæt. &c. p. 20.
[7] Prodr. Zool. Dan. p. 216; Zool. Danic. i. p. 22, tab. 22. figs. 1–3.
[8] Hist. Nat. des Annelés, i. p. 352.
[9] Nord. Hafs-Annul. p. 409, & Ann. Polychæt. p. 69, tab. 11. f. 64.
[10] Zool. Dan. i. p. 22, tab. 22.
[11] Grönlands Annulat. Dorsibr. p. 200, figs. 106–110.
[12] Annul. Polychæt. p. 82, tab. 13. f. 78.
[13] Beskriv. og Jagttagelser &c. p. 54, pl. 11. fig. 29.
[14] Trans. Linn. Soc. vol. xxiv. p. 477, tab. 49.
[15] Nyt Mag. vi. p. 207 &c. (fide Malmgren).
[16] Nord. Hafs-Ann. p. 190, & Ann. Polych. p. 99, tab. 10. fig. 59.
[17] Nord. Hafs-Ann. p. 191, & Ann. Polych. p. 100, tab. 11. fig. 62.
[18] Fauna litt. Norveg. ii. p. 15, tab. 2. figs. 18–22.
[19] Figured in Règ. An. iii. pl. 22. fig. 4.
[20] Nord. Hafs-Ann. p. 364, tab. xxvi. f. 77.
[21] Fauna litt. Norveg. ii. p. 24.
[22] Nord. H.-Ann. p. 388, tab. 19. f. 69.
[23] Danske vid. Selsk. Forh. p. 17.
[24] *Op. cit.* p. 33.

and which are at any rate in the same category, viz. a *Sigalion*, a *Syllis*, an *Autolytus*, an *Amage*, and a *Polycirrus*.

I may also remark, in passing, with reference to some of the other known forms found in this collection, that the *Halosydna Jeffreysii*, Lankester*, is *H. gelatinosa*, Sars†, as mentioned in Dr. Günther's Zoological Record for 1866, and that I have not yet been able to make out a specific difference between *Leodice norvegica*, Linn., and *Eunice Harassii*, Aud. & Ed.‡

In addition to the Annelids proper, there were some Planarians, Ommatopleans, Borlasians, and a very remarkable form allied to the latter group, with a bifid proboscis—besides a boring *Sipunculus*, lodged in its cavity inside a fragment of shell.

XXIX.—*On the Production of the Sexes in Bees.*

By Félix Plateau, D.Sc.

To the Editors of the Annals and Magazine of Natural History.

Ghent, Sept. 9, 1868.

Gentlemen,

Having been occupied for a long time with investigations upon the parthenogenesis of the Invertebrata, I have read with eagerness the interesting notice by M. von Siebold "On the Law of Development of the Sexes in Insects," in which the learned Professor endeavours to refute the assertions and experiments of M. Landois.

The theories of Dzierzon and of Von Siebold, ingenious as they are, and notwithstanding the numerous facts which are cited in their support, seem nevertheless to be so much in contradiction to our general knowledge of the reproduction in the higher animals, that researches such as those of M. Landois should be received with favour, and we ought to take care not to reject them without having exhausted all possible arguments in connexion with them.

M. von Siebold, indeed, passes over in complete silence some very important observations which seem to me to be entirely in favour of M. Landois. Androgynous or hermaphrodite bees have been remarked long since by a schoolmaster named Lucas; and more recently this monstrosity has been observed by MM. Doenhoff, Menzel, and Engster;

* Trans. Linn. Soc. vol. xxv. p. 377, tab. 51. figs. 12, 19, 26.

† Beskriv. og Jagtt. &c. 1835, p. 63, pl. 9. fig. 25.

‡ Hist. Nat. du Litt. de la France, ii. p. 141, pl. 3. fig. 5, 6, 7, 10, & 11.