23·3; diastema 14·2; palatal foramina 9·2; length of upper molar series 7·8.

Hab. W. Coast of South Andaman Island, north of Iké Bay.

Type. Adult female. B.M. no. 6. 4. 13. 2. Collected February 1904, and presented by C. G. Rogers, Esq.

In spite of the number of rats recently described by Mr. G. S. Miller * from the Andaman group, this fine species does not appear to have been previously obtained. Its very unusual mammary formula, 1—3=8, is alone shared, in the whole of the Muridæ, by *Mus bagobus*, Mearns, from the Philippines, and *Mus pulliventer*, Miller, from the Nicobars, of which latter it may be the Andaman representative, but from which it differs by its markedly larger size and distinctly bicolor tail.

XXXI.—*On some British Polyzoa.* By Canon A. M. Norman, M.A., D.C.L., LL.D., F.R.S., F.L.S.

[Plate IX.]

Micropora impressa (Moll). (Pl. IX. figs. 1–3.)

1803. *Eschara impressa*, Moll, *Eschara*, p. 51, pl. ii. fig. 9.
1841. *Eschara andegavensis*, Michelin, Icon. Zoophyt. p. 329 (nec auct. plur.).
1848. *Cellepora gracilis*, Reuss, Foss. Polyp. des Wiener Tertiärbeckens, p. 93, pl. xi. fig. 12 (nec Von Münster).
1854. *Membranipora calpensis*, Busk, Brit. Mus. Cat. p. 60, pl. civ. figs. 5, 6.
1867. *Membranipora bifoveolata*, Heller, Bryozoen des adriatischen Meeres, p. 19, pl. ii. fig. 1.
1871. *Membranipora calpensis*, Manzoni, "Supp. alla Fauna Bryoz. Medit.," Sitz. k. Akad. d. Wissensch. vol. lxiii. p. 3, pl. i. figs. 2, 3.
1879. *Micropora impressa*, Waters, Ann. & Mag. Nat. Hist. ser. 5, vol. iii. p. 123.

I have recently found among material put by for further examination a little box which contained three small pieces of the above Polyzoon, and labelled Guernsey. I cannot recall to mind whether I procured these specimens myself at Guernsey in 1865 or whether they were given to me.

Other specimens are in my collection from Naples, where I found it in 1887 to be abundant, and from the Adriatic, given to me by my late friend Professor Heller under his name "*Membranipora bifoveolata*."

* Pr. U.S. Nat. Mus. xxiv. p. 753 (synopsis of species) (1902).

Genus Terebripora, d'Orbigny.

This interesting genus, the exact position of which cannot be determined until the animal shall have been examined, but which is presumed to be a burrowing Polyzoon, was instituted by d'Orbigny in 1841 * to include two species, *Terebripora ramosa* and *T. irregularis*, which he had found in shells of *Calyptræa*, *Crepidula*, and *Pecten* off the South-American coast.

In 1865 Paul Fischer published an excellent paper on the family †, in which he enumerates all the species both recent and fossil presumed to be referable to his "Famille des Térébriporides." In this paper eight recent and fourteen fossil species are recorded. Two of the recent species had been found in European seas—one, *Terebripora Orbigniana*, Fischer, burrowing in shells of *Ostrea edulis* at Arcachon, and in *Conus mediterraneus* and *Triton nodifer* in the Mediterranean; the other, *Spathipora sertum*, Fischer, found at La Rochelle, Arcachon, and the Mediterranean in shells of *Lutraria elliptica*, *Cardium norvegicum*, *Pectunculus glycimeris*, and *Triton nodifer*. In 1880 M. J. Jullien ‡ added another recent species, *T. Fischeri*, which was found in a shell of *Buccinum* from Cape Verd Islands.

Terebripora ditrupæ, sp. n. (Pl. IX. figs. 4–7.)

Terebripora has a mode of growth analogous to that of *Hippothoa divaricata*, but instead of running over the surface of shells &c. as in the latter species, the whole polyzoary is buried in its substance, except that the orifices of the zoœcia open through the surface. The thread-like connecting fibres or stolons in all species hitherto described appear to be quite simple, but in *T. ditrupæ* they consist of lines interrupted on one side by small lateral projecting processes (fig. 5). The zoœcia are not in the same plane as the connecting fibre, but at right angles to it, in such a manner that they are also perpendicular to the surface (fig. 6). Owing to this position of the zoœcia their lower portion is too deeply seated to be seen with the microscope; the oral opening has a somewhat

* d'Orbigny (A.), 'Voyage dans l'Amérique méridionale,' vol. vi. p. 23, pl. x.

† Fischer (P.), "Étude sur les Bryozoaires perforant de la Famille des Térébriporides," Nouv. Arch. du Muséum, vol. ii. pp. 293–313, pl. xi.

‡ Jullien (J.), "Desc. nouv. Espèce de Bryozoaire perforant du genre *Terebripora*, d'Orbigny," Bull. Soc. Zool. de France, 1880, pp. 1–4 and woodcut (separate copy).

irregular margin, but would appear to have a lip-like projection (fig. 7).

The calcareous shells of the Annelidan genus *Ditrupa* are dredged in extraordinary profusion on some parts of the "Haaf" off Shetland. I had saved a large box full of specimens of these, selected on account of encrusting growths on them, mostly of Polyzoa. On examining the contents of this box, which contained at least two thousand *Ditrupæ*, I discovered in one specimen the *Terebripora* which I have here described.

Schizoporella Alderi (Busk).

This species is subject to some variation in its mode of growth and in the absence or presence of lateral avicularia. It has been several times described. The original illustrations of Busk are very good. The following will give the synonymy of the species :—

Var. a.—Chain-like growth ; without avicularia.

1856. *Alysidota Alderi*, Busk, Quart. Journ. Micr. Sci. vol. iv. p. 311, pl. ix. figs. 6, 7.
1869. *Alysidota Alderi*, Norman, "Last Report Dredging Shetland," Brit. Assoc. Rep. for 1868, p. 306.

Var. b.—Chain-like growth ; with avicularia. (Chiefly arctic, rare Shetland.)

1867. *Mollia vulgaris*, forma *ansata* (partim), Smitt, "Kritisk Förteck. &c.," Œfvers. K. Vet.-Akad. Förhand. p. 15, pl. xxv. fig. 81.
1880. *Schizoporella Alderi*, Hincks, Hist. Brit. Marine Polyzoa, p. 243, pl. xxxvi. figs. 9, 9 *a*.

Var. c.—Clustered growth ; without avicularia. (Shetland, &c.)

1860. *Lepralia Barleei*, Busk, Quart. Journ. Micr. Sci. vol. vii. p. 143, pl. xxvi. figs. 1, 2.
1867. *Mollia vulgaris*, forma *ansata* (partim), Smitt, *l. c.* figs. 79, 82.
1880. *Schizoporella Alderi*, Hincks, *l. c.* fig. 10.

Var. d.—Clustered growth ; with avicularia. (Arctic.)

1867. *Mollia vulgaris*, var. *ansata* (partim), Smitt, *l. c.* fig. 80.
1900. *Schizoporella Elmwoodiæ*, Waters, "Bryozoa from Franz Josef Land," Journ. Linn. Soc., Zool. vol. xxviii. p. 66, pl. ix. figs. 1 & 13.
1905. *Schizoporella Stormi*, Nordgaard, Hydrog. and Biol. Invest., Invert. Norweg. Fiords, p. 166, pl. v. figs. 1, 2.
1906. *Schizoporella Elmwoodiæ*, Kluge, Ergänz. u. die 'Olga' Exped. gesamm. Bryozoen, p. 40.
1906. *Schizoporella Stormi*, Nordgaard, Bryozoa from Second 'Fram' Exped. 1898–1902, p. 17, pl. i. figs. 10, 11.

The following examples are in my collection:—

Var. a. *Alderi*.—Shetland (types *Barlee*); Shetland and Bergen Fiord (*A. M. N.*).

Var. b.—Shetland (with Barlee's types).

Var. c. *Barleei*.—Shetland (types *Barlee*); Shetland and Bergen Fiord (*A. M. N.*); 'Porcupine,' 1869; Spitsbergen (*Smitt*, as "*Mollia vulgaris*, forma *ansata*").

Var. d. *Elwoodiæ*.—Grey Hook, Spitsbergen, 90 fath. (*Smitt*, as *Mollia vulgaris*, var. *ansata*); Hammerfest (*Nordgaard*, cotypes of *Schizoporella Stormi*).

Escharina Dutertrei (Audouin). (Pl. IX. figs. 8–12.)

Mastigophora Dutertrei, Hincks, Hist. Brit. Marine Polyzoa, p. 279, pl. xxxvii. figs. 1, 2.

Hincks describes two forms of this species, to which I would call a little more attention. The Shetland form, which is abundant there in 80–170 fathoms (figs. 8, 9), has the zoœcia tumid, the surface somewhat roughly granulated, with a tendency in the granulations to arrange themselves in radiating lines; six mouth-spines are developed; the vibracula are of moderate length; the incision of the lip has the angles generally rounded off. In one of the 'Porcupine' dredgings of 1869 the Shetland form just noticed occurred in abundance, but with these were also two specimens which had a very different aspect. The zoœcia were much longer (fig. 10 as compared with fig. 8, both drawn with the same magnifying-power) and much more flattened; the vibracula were very long, but there were no mouth-spines, while the incision of the lip had the angles sharply defined. In the Antrim variety described by Hincks the zoœcia are not so large, but they are nearer this second variety, since they are similarly flattened and have the oral opening of similar form (see fig. 12). I have an allied form from Madeira, which is probably that which has been more than once recorded as *L. Dutertrei*. It is smaller, much more tumid, and the vibracula arise from elevated shoulders. It may be a distinct species.

Phylactella pygmæa (Norman).

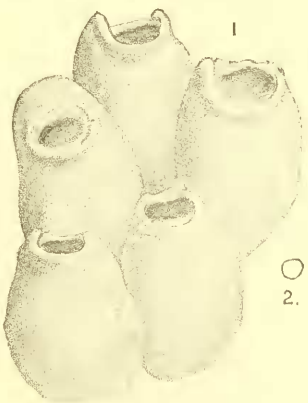
1869. *Celleporella pygmæa*, Norman, "Last Report Dredging Shetland," Brit. Assoc. Report for 1868, p. 308.

1880. *Celleporella pygmæa*, Hincks, Hist. Brit. Marine Polyzoa, p. 415.

As has been already recorded by Hincks, this minute

Polyzoon has been dredged by me in 80–170 fathoms off Shetland and also in deep water in Bergen Fiord. The late Mr. C. Peach also sent me a specimen taken by him off Wick, and it was also procured by the 'Porcupine' Expedition of 1869.

As the species has not been figured, it is illustrated here in the annexed woodcut. I have nothing to add to the description which has already been given. I have provisionally placed the species in the genus *Phylactella*, as, perhaps, it comes nearer to *P. collaris* than to any other form; but it has little in common with the type of that genus, *P. labrosa*. The small size of the zoœcia may be judged by fig. 2, which represents the outline of a zoarium which will contain forty to fifty zoœcia.



1. *Phylactella pygmæa* (Norman). 2. Size of a zoarium.

Cellepora surcularis (Packard).

1856. *Cellepora cervicornis*, Busk, Ann. & Mag. Nat. Hist. ser. 2, vol. xviii. p. 32; and 1858. Mon. Fossil Polyzoa of the Crag, p. 57; and 1880. Journ. Linn. Soc., Zool. vol. xvi. p. 238, pl. xiii. figs. 6–8 (nec *Cellepora cervicornis*, Johnston).

1863. *Celleporaria surcularis*, Packard, "List of Animals dredged near Caribou Island," Canadian Naturalist, vol. viii. p. 410; and 1867. "Obs. Glacial Phenomena of Labrador and Maine," Mem. Boston Soc. Nat. Hist. vol. i. p. 274.

1867. *Cellepora incrassata*, Smitt, "Krit. Förteck. &c.," Œfvers. K. Vet.-Akad. Förhand. p. 33, pl. xxviii. figs. 212–216 (nec *Cellepora incrassata*, Lamk.).

1886. *Cellepora cervicornis*, Lorenz, Bryozoën von Jan Mayen, p. 13, fig. 12.

A young specimen of this species encrusting stone and

embracing an upright growing *Serpula* was dredged by the 'Porcupine' in 1869. The station was not preserved, but a box contained a large number of stones the numerous species encrusting which were, with the one exception of this *Cellepora*, identical with the deep-sea fauna of Polyzoa with which I am so familiar in the Shetland seas; and there can be little doubt but that the species was taken within the British area. The species along with it were *Amphiblestrum trifolium*, *Escharina Dutertrei*, *Ramphonotus minax*, *Megapora ringens*, *Anarthropora monodon*; "*Schizoporella*" *ansata*, *Alderi*, and *sinuosa*; *Porella bella*; *Escharella abyssicola*, *laqueata*, and *microstoma*; *Hemicyclopora polita*, &c.

EXPLANATION OF PLATE IX.

Fig. 1. *Micropora impressa*, Moll: a living zoœcium.
Fig. 2. Ditto: a dead zoœcium.
Fig. 3. Ditto: operculum.
Fig. 4. Shell of *Ditrupa arietina* (Müller).
Fig. 5. Segment of this shell magnified, to show the perforations of *Terebripora ditrupæ*.
Fig. 6. *Terebripora ditrupæ*, sp. n.: upper portion of a zoœcium.
Fig. 7. Ditto: oral aperture of zoœcium.
Fig. 8. *Escharina Dutertrei*, Audouin, the deep-water Shetland form.
Fig. 9. Ditto, its operculum.
Fig. 10. Ditto: variety taken in company with the last.
Fig. 11. Ditto: ditto, its opercula.
Fig. 12. Ditto: oral opening of a specimen from the Antrim coast.

XXXII.—*Three new Spanish Insectivores.*

By Angel Cabrera.

Among a number of Spanish small mammals lately arrived for my private collection there are a few apparently new forms of Insectivores that I now propose to describe. Some of them are also represented in the Natural Science Museum of Madrid.

Talpa cæca occidentalis, subsp. n.

Characters. A small form of *T. cæca*, with a flatter, but not lower, skull, and very hairy tail and feet. Width of fore foot considerably greater than its length without nails.

Colour. Brownish black, the hairs being dark silvery grey with deep brown tips. Middle of under surface without the last colour, the general hue becoming dark silver-grey. Hairs of the tail very long, black; those of the feet very