

THE ANNALS
AND
MAGAZINE OF NATURAL HISTORY,

INCLUDING
ZOOLOGY, BOTANY, AND GEOLOGY.

(BEING A CONTINUATION OF THE 'ANNALS' COMBINED WITH LOUDON AND
CHARLESWORTH'S 'MAGAZINE OF NATURAL HISTORY.')

CONDUCTED BY
CHARLES C. BABINGTON, Esq., M.A., F.R.S., F.L.S., F.G.S.,
JOHN EDWARD GRAY, Ph.D., F.R.S., F.L.S., F.Z.S. &c.,
WILLIAM S. DALLAS, F.L.S.,
AND
WILLIAM FRANCIS, Ph.D., F.L.S.

~~~~~  
VOL. XV.—FOURTH SERIES.  
~~~~~

LONDON:
PRINTED AND PUBLISHED BY TAYLOR AND FRANCIS.
SOLD BY LONGMANS, GREEN, READER, AND DYER; SIMPKIN, MARSHALL,
AND CO.; KENT AND CO.; WHITTAKER AND CO.: BAILLIÈRE, PARIS:
MACLACHLAN AND STEWART, EDINBURGH:
HODGES, FOSTER, AND CO., DUBLIN: AND ASHER, BERLIN.
1875.

genus established by Malmgren for some Syllidians from Spitzbergen. I have since been able to examine several individuals of the species, and I have constantly recognized the existence of a lamellar first ventral cirrus, which acquires a great development and contrasts with the homologous organs of the following segments. The hooks of the composite setæ are all very long and of a peculiar form. I am now able to appreciate better these differential characters, as I have before me other specimens of *Eusyllis* very distinct from the former, and which cannot be separated from *Eusyllis monilicornis*, Malmg.; these come from the deep coralligenous regions.

These Annelides attain a length of 10 millims., and possess 50 setigerous segments. The cephalic lobe is deeply set in the buccal ring, which advances above it, forming a small dorsal gibbosity. We observe two pairs of principal eye-spots, and a supplementary pair of small eyes placed at the base of the outer antennæ. All the appendages are irregularly articulated; the first dorsal cirrus attains a considerable length, and is often rolled up in the manner of the organs of *Autolytus*. The two palpi are greatly developed, and soldered together at their base. The pedal mamillæ are all very prominent, and bear pinniform ventral cirri. The ventral cirrus of the first segment, however, is always smaller than those of the following segments, whilst we find a contrary arrangement in *Eusyllis lamelligera*. The trunk occupies the first five zoonites; the denticles with which its aperture is armed seem to be much larger than those of *Eusyllis lamelligera*. The proventriculus is succeeded by a colourless region furnished with T-shaped glands; and the intestine presents no very deep constrictions.

All these characters agree with Malmgren's figures and description. Each foot is supported by a strong hooked acicula. The composite setæ bear rather short bidentate hooks, identical with those of *Eusyllis monilicornis* from Spitzbergen; but in the midst of them I find a slender recurved stem, terminated by two little points. This organ exists in all the feet; it is quite independent of the dorsal filiform setæ which appear at the time of sexual maturity.

From these observations it appears that the genus *Eusyllis* is represented on the shores of the Mediterranean by two very distinct forms. One is perhaps peculiar to the Mediterranean; it has not yet been indicated in any other sea. The other, on the contrary, belongs to a type which is diffused even into the Arctic regions. It is evident that it only requires careful investigation to increase the number of species common to the Mediterranean and the ocean. I have ascertained that the *Hermellæ* of the shores of Provence do not differ from those of the English Channel and of the Scandinavian coasts; and the *Psamathe cirrata* of Saint-Vaast exists in the coralligenous gravels of Montredon. We cannot, therefore, overlook the bonds which unite the Mediterranean and oceanic faunas, although the autonomy of these faunas is nevertheless indisputable.—*Comptes Rendus*, February 22, 1875, p. 498.

THE ANNALS

AND

MAGAZINE OF NATURAL HISTORY.

[FOURTH SERIES.]

No. 89. MAY 1875.

XXXVIII.—On the Articular Bone and supposed Vomerine Teeth of *Ctenodus obliquus*; and on *Palæoniscus Hancocki*, n. sp., from the Low Main, Newsham, Northumberland. By THOMAS ATTHEY.

[Plate XIX.]

Ctenodus obliquus.

In a communication made by my late friend Mr. Albany Hancock and myself to the 'Annals and Magazine of Natural History,' ser. 4. vol. vii. p. 190, we pointed out the close relationship that exists between the mandible of *Ctenodus* and that of the recent *Ceratodus*, and showed that the upper outer border of the dental plate of *Ctenodus* is unsupported. At the date of that communication the articular bone of *Ctenodus* had not been identified as such.

For a good many years I had occasionally obtained from the black stone overlying the Low-Main seam of coal at Newsham, near Blyth, Northumberland, an angular bone associated with the cranial bones of *Ctenodus*, but could not make out to what precise part of the head it might belong, until about three years ago, when Sir Philip Egerton kindly sent me for examination two palatal teeth and a mandible of the recent fish *Ceratodus Forsteri*, brought from Queensland, Australia. A glance at the specimens showed that the bone respecting which I was in doubt was the articular bone of 'Ann. & Mag. N. Hist. Ser. 4. Vol. xv. 22

Cerambycidae.

LEPTURINÆ.

Sagridola quinquemaculata, sp. nov.

S. nigra, elytris obscure fuscis; fronte, thorace lineis tribus, scutello, elytris maculis quatuor flavis. Long. $6\frac{1}{2}$ lin.

Head black, with a broad longitudinal line in the middle and a narrow line on each side of it bright yellow; eyes prominent. Thorax scarcely longer than broad, slightly narrowed in front and constricted behind the middle, velvety black, with a broad sutural line and a broad stripe on each side bright yellow. Scutellum yellow. Elytra scarcely twice the length of the head and thorax taken together, broad at the base, much attenuated towards the apex, which is truncate, flat, the margins towards the apex slightly reflexed; shoulders at the sides somewhat thickly and strongly punctured; their colour is fuscous, with a large ovate spot in the middle of each, and the apex yellow. Antennæ slender. Legs and underside of the body pitchy black, with pale yellow markings on the epimera, parapleura, and the sides of the abdominal segment.

Hab. Madagascar. B.M.

LII.—*A List of the Gasteropoda collected in Japanese Seas by Commander H. C. St. John, R.N.* By EDGAR A. SMITH, F.Z.S., Zoological Department, British Museum.

ALL the specimens which represent the species included in the following list were liberally presented to the National Collection by Mr. J. Gwyn Jeffreys. Certain species dredged at the same time, and stated by Mr. Jeffreys (*Journal Linn. Soc., Zoology*, vol. xii. pp. 100–107) to be identical with, or but varieties of, European forms, will not now be enumerated, as they have not as yet come under my observation. Before commencing the list, I would add that the shells have been most admirably collected by Commander St. John, to whom the greatest praise and thanks are due. The care bestowed in preserving the exact localities, the depth at which they were dredged, at times even the temperature of the water, and also the nature of the sea-bottom, indicates a vast amount of labour and energy, which it would be well if more frequently imitated, as such information always greatly adds to the interest of the subject, and facilitates and adds security to the determination of species. In a future communication I propose to give a list of the Conchifera.

GASTEROPODA.

1. *Terebra Adamsii*, Smith, Ann. & Mag. Nat. Hist. 1873, xi. p. 264.

Hab. Matoza Harbour, 6 fathoms, sand, long. $136^{\circ} 55'$ E., lat. $34^{\circ} 23'$ N.

2. *Terebra japonica*, Smith, l. c. p. 265.

Hab. Matoza Harbour, 6 fathoms, sand; and Goza Harbour, lat. $34^{\circ} 18'$ N., long. $136^{\circ} 45'$ E., 6 fathoms, sandy mud.

3. *Terebra evoluta*, Deshayes; Conchol. Icon. xii. f. 55.

Hab. Matoza Harbour, 6 fathoms, sand.

The figure above referred to represents an unusually large example, the average dimensions being but two thirds that size.

4. *Terebra albozonata**, sp. nov.

Hab. Matoza Harbour, 6 fathoms, sand.

This species is of a pale brown colour, with a narrow white zone above the suture, and also one around the periphery; it is furnished with numerous oblique ribs, which are cut across by a fine infrasutural furrow.

5. *Terebra melanacme*, sp. nov.

Hab. Cape Sima, 18 fathoms, sand and broken shells.

A smooth species, of a pale brown colour, with a white infrasutural zone dotted with chestnut, a plain white band round the periphery, and the apex stained with purplish black.

6. *Terebra (Myurella) bathyrhapse*, sp. nov.

Hab. Gulf of Yedo, 6 to 25 fathoms, bottom soft mud and sand.

This is a strongly sculptured species, with longitudinal ribs nodose at their extremities; the suture is well defined, and the general colour is a dusky brown.

7. *Terebra (Myurella) polygyrata*, Deshayes; Conchol. Icon. xii. sp. 146.

Hab. Goza Harbour, 6 fathoms, bottom sandy mud.

* Full descriptions of the new species of Terebridae mentioned in this paper will be given elsewhere.