

78.

169 3 2 2

THE
 JOURNAL
 OF
 THE LINNEAN SOCIETY.

 ZOOLOGY.

VOL. XI.



LONDON:
 SOLD AT THE SOCIETY'S APARTMENTS, BURLINGTON HOUSE;
 AND BY
 LONGMANS, GREEN, READER, AND DYER,
 AND
 WILLIAMS AND NORGATE.
 1873.

PRINTED BY TAYLOR AND FRANCIS,
RED LION COURT, FLEET STREET.

LIST OF PAPERS.

	Page
ALLIS, THOMAS, F.L.S.	
On the Skeleton of the Apteryx	523
BAIRD, W., M.D., F.R.S., &c.	
Description of some new Species of Annelida and Gephyrea in the collection of the British Museum	94
BURMEISTER, DR. HERMANN, F.M.L.S.	
Observations on a Light-giving Coleopterous Larva	416
CAMBRIDGE, Rev. O. P., M.A.	
On some new Species of European Spiders. (Plates XIV. & XV.)	530
COLLINGWOOD, CUTHBERT, M.A., F.L.S., &c.	
On a new Form of Cephalopodous Ova. (Plate I.)	90
DAY, Surgeon-Major FRANCIS, F.L.S., &c.	
On some new Fishes of India	524
GARNER, ROBERT, F.L.S.	
On the Formation of British Pearls and their possible Improve- ment	426
GULICK, Rev. JOHN T.	
On Diversity of Evolution under one set of External Conditions.	496
KIRBY, W. F., Assistant in the Museum of the Royal Dublin Society.	
On the Geographical Distribution of the Diurnal Lepidoptera as compared with that of the Birds	431
LUBBOCK, Sir JOHN, Bart., F.R.S., F.L.S.	
On the Origin of Insects.	422
M'LACHLAN, ROBERT, F.L.S., Sec. Ent. Soc.	
On new Forms, &c., of Extra-European Trichopterous Insects. (Plates II, III, & IV.)	98
An Attempt towards the Systematic Classification of the Family Ascalaphidæ	219
MÜLLER, ALBERT, F.L.S.	
Note on a Chinese Artichoke-Gall (mentioned and figured in Dr. HANCE's paper "On Silkworm-Oaks") allied to the Eu- ropean Artichoke-Gall of <i>Aphilothrix gemmæ</i> , Linn.	428

	Page
MURIE, JAMES, M.D., F.L.S., &c.	
Notes on the White-beaked Bottlenose, <i>Lagenorhynchus albirostris</i> , Gray. (Plate V.)	141
MURRAY, ANDREW, F.L.S.	
On the Geographical Relations of the Chief Coleopterous Faunæ.	1
ORMEROD, Miss ELEANOR A.	
Observations on the Cutaneous Exudation of the <i>Triton cristatus</i> , or Great Water-Newt.	493
PASCOE, FRANCIS P., F.L.S., late Pres. Ent. Soc.	
Contributions towards a Knowledge of the Curculionidæ.—	
Part II. (Plates VI., VII., VIII., & IX.)	154
Contributions towards a Knowledge of the Curculionidæ.—	
Part III. (Plates X., XI., XII., XIII.)	440
POTTS, THOMAS H., Esq., F.L.S.	
Notes on <i>Keropia crassirostris</i> , Gml. ("Piopio")	505
SAUNDERS, EDWARD, F.L.S.	
Descriptions of Buprestidæ collected in Japan by GEORGE LEWIS, Esq.	509
SMITH, F. Esq.	
A Catalogue of the Aculeate Hymenoptera and Ichneumonidæ of India and the Eastern Archipelago, with Introductory Remarks by A. R. WALLACE. (Communicated by W. W. SAUNDERS, Esq.)	285
TRIMEN, ROLAND, F.L.S., F.Z.S., M.E.S.	
Note on a Paper by ANDREW MURRAY, F.L.S., "On the Geographical Relations of the Chief Coleopterous Faunæ"	276
INDEX	549

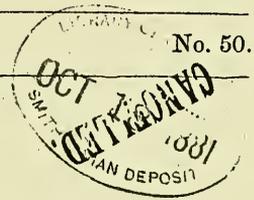
FEBRUARY 16.

Price 2s.

THE JOURNAL
OF
THE LINNEAN SOCIETY.

VOL. XI.

ZOOLOGY.



CONTENTS.

- I. On a new Form of Cephalopodous Ova. By CUTHBERT COLLINGWOOD, M.A., F.L.S., &c. (Plate I.) 90
- II. Description of some new Species of Annelida and Gephyrea in the Collection of the British Museum. By W. BAIRD, M.D., F.R.S., &c. 94
- III. On new Forms, &c., of extra-European Trichopterous Insects. By ROBERT M'LACHLAN, F.L.S. (Plates II., III., & IV.) 98
- IV. Notes on the White-beaked Bottlenose, *Lagenorhynchus albirostris*, Gray. By JAMES MURIE, M.D., F.L.S., &c., late Prosector to the Zoological Society. (Plate V.) 141

LONDON:

SOLD AT THE SOCIETY'S APARTMENTS, BURLINGTON HOUSE;

AND BY

LONGMANS, GREEN, READER, AND DYER,

AND

WILLIAMS AND NORGATE.

1871.

These interesting questions may, it is hoped, yet be elucidated, and the affinities of the animal determined. In the mean time I have thought it best to bring forward the fact for the information of zoologists and physiologists.

DESCRIPTION OF THE PLATE.

A, natural size of ova. B, C, young cuttles under a 2-in. object-glass (24 diam.).
D, an embryo, as seen under a 1-in. glass. E, F, arms ($\frac{1}{4}$ in.), showing the rudimentary acetabula.

Description of some new Species of Annelida and Gephyrea in the Collection of the British Museum. By W. BAIRD, M.D., F.R.S., &c.

[Read April 7, 1870.]

ANNELIDA.

1. *NEPHTHYS MACANDREWII*, Baird.

Body elongate, tapering towards the inferior extremity, which terminates in one rather long seta. The sides containing the dorsal feet strongly ridged across. Proboscis rather short and rounded. Setæ of upper lobe of feet few in number and serrated near the tip; rather shorter and broader than those of ventral lobe, which are numerous and not serrated on the edges. Colour of the dorsal region, in the centre, of a pinkish hue.

Length about 6 inches.

Hab. Coruña, R. M'Andrew and H. Woodward, Esqs.

2. *NEPHTHYS IMPRESSA*, Baird.

Body of a yellowish colour. Dorsal and ventral regions smooth, of a pearly, somewhat iridescent hue. Ventral surface marked with a bluish impressed line in the centre. Head small; antennæ indistinct. Proboscis rather long, cylindrical. Papillæ on the summit of it, round the mouth, rather large and fleshy, disposed in a series of 12 on each side. Feet on upper part of body small and close-set, becoming larger and more separate as they descend. Lamellæ ovate. Setigerous lobe rather large. Superior branchial process involute, large, twisted once and a half round. Setæ of setigerous lobe of three kinds:—one, short, curved at the tip and beautifully and minutely jointed; a second, simple, long, and slightly serrated on the outer edge; and the third, long, compound, the edges of the appendage minutely toothed on the edge, as is also the top of the shaft.

This species resembles very much the *Nephtys longisetosa*,

the chief differences being in the ventral cirrus or branchial process, the more decidedly serrated setæ, and the habitat.

Length about 4 inches.

Hab. Loto, coast of Patagonia, *Dr. Cunningham.*

3. NEPHTHYS LUTREA, *Baird.*

This species is considerably smaller than the preceding, but resembles it in most respects. The setæ of the feet are long; but instead of being serrated on one edge, they are divided across in numerous small joints or articulations.

In length it is only 2 inches.

Hab. Otter islands, coast of Patagonia, *Dr. Cunningham.*

4. CLYMENE GROSSA, *Baird.*

Body of a straw-yellow colour, much wrinkled on the surface, and thick. Head-lobe of considerable size and much wrinkled. Cephalic plate large and crenate on the upper edge; crenations about 12 in number, each crenation again having two slight crenations on the summit. First segment of body without setigerous feet. Three following segments with a fascicle of setæ only. The middle ones with a fascicle of setæ, and a lobe possessing numerous very short setæ on it.

Unfortunately the two Museum specimens are imperfect at the inferior portion.

Hab. Straits of Magellan, *Dr. Cunningham.*

5. CLYMENE INSIGNIS, *Baird.*

Body elongate; thickest in the middle, which exhibits a sort of sheath or tube in which the worm lives. Cephalic lamina very small, entire. Posterior extremity obliquely truncate, with no infundibuliform appendage. Segments of body very indistinct; one or two, of the anterior portion, without setæ; the other segments possess two rami. The anterior half of the body, exhibiting these setæ, is very large, and the setæ are very long and filiform. Posterior portion of body has the fasciculi of setæ small.

Hab. — ? Taken during the Congo Expedition.

6. SIPHONOSTOMA ANTARCTICUM, *Baird.*

Setæ surrounding the head numerous, very short and fine. Branchiæ short, numerous. Head withdrawn. Body covered with an enveloping substance like that of most of the known species. Setæ of the inferior ramus of feet single, crooked or

hooked at the point, and of nearly a black colour. Colour of body varying from a very dark to a light brown, and of a transparent look.

Length of body in longest specimen nearly 3 inches.

Hab. New Zealand, *Dr. A. Sinclair.*

7. *MAGASCOLEX (PERICHÆTA) ANTARCTICA*, *Baird.*

Body consisting of about 180 rings. *Setæ*, surrounding the body, short, black, rather distant. Rings not keeled; larger and more distinct at the anterior extremity, closer at the posterior end, and all smooth.

Length 7 inches.

Hab. New Zealand.

8. *MEGASCOLEX (PERICHÆTA) SANCTÆ-HELENÆ*, *Baird.*

Body consisting of about 86 rings, which are more distinct at the two extremities than in the centre. The 11 or 12 rings at each end, have an acute ridge or keel in the centre; those of the middle portion of the body have the keel flattened. The body of the rings is finely striated. *Setæ* short, of a dark colour at the posterior extremity, rather distant from each other. In the centre of the body and at the anterior extremity they appear (in the specimen from which this description was drawn up) retracted, leaving only a mark where they are situated. The first 7 or 8 rings, at the anterior extremity, are strongly rugose or wrinkled.

Length from 1 inch and 9 lines to 3 inches.

Hab. High ground at St. Helena, *J. C. Melliss, Esq.*

9. *LUMBRICUS JULIFORMIS*, *Baird.*

Body of about 120 rings. Of a nearly black colour with metallic reflections. Rings smooth, narrow, close-set, slightly keeled in the centre. *Setæ* in four double rows, two ventral and two dorsal. Body of about equal size at each extremity. Lower extremity conical, pointed. The 10 or 11 anterior rings are the largest.

Altogether this worm resembles very much in appearance a species of *Julus*.

Length of medium-sized specimen $2\frac{1}{2}$ inches.

Hab. —? Collected during the Antarctic Expedition.

10. *LUMBRICUS GUILDINGI*, *Baird.*

Body consisting of about 160 rings, narrow and close set

together. Setæ in four double rows on the back, each row very much approximated. No setæ on ventral surface. Colour of a pale straw hue. Rings have the surface corrugated; and the anterior ones are each slightly keeled in the centre.

Length 2 inches and 3 lines.

Hab. Island of St. Vincent, West Indies, *Rev. Lansdown Guilding's Collection.*

11. LUMBRICUS RUBRO-FASCIATUS, *Baird.*

Body of a dirty yellow colour, banded across the back with a broad fascia of a red hue. The ventral surface is yellow. The red band extends across the centre of the segments. Anterior and posterior extremities both obtuse.

Length between 2 and 3 inches.

Hab. St. Helena, *J. C. Melliss, Esq.*

GEPHYREA.

1. ASPIDOSIPHON JUKESII, *Baird.*

Body nearly smooth, of a light straw-colour. Anterior shield dark, slightly granular, more slender than the posterior, which is of a lighter hue, and radiately granular. Granules very small.

Length about $\frac{1}{2}$ an inch. Circumference about 3 lines.

Hab. Imbedded in a piece of coral from Lee Sandbanks, dredged in 14 fathoms, *J. B. Jukes, Esq.*

2. ECHIURUS FARCIMEN, *Baird.*

This is a very large species, the middle-sized ones resembling in general appearance a large sausage. The two spines on the anterior portion are large and well developed. The hinder portion exhibits only one row of spines, instead of two as in most of the known species. The skin is leathery and smooth; the two extremities are bluntly pointed. The longest specimen we possess is about 16 inches long, the shortest fully 7 inches in circumference.

Hab. We possess five specimens of this species, all from Punta Arenas, on the coast of Patagonia. Collected by Dr. Cunningham, of the Surveying Expedition to the Straits of Magellan, to whom we are indebted for several species of Annelides above described.

NOTICE.

Henceforward the Zoological and Botanical portions of the Journal will be published separately.

Each volume will consist of Eight numbers, instead of Four.

The price of each separate number, whether Zoological or Botanical, will be 2s. to the public, and 1s. 6d. to Fellows.

Each volume of eight numbers, when subscribed for and paid in advance, will be charged 12s. to the public, and 9s. to Fellows.

ANY Candidate for admission as a Fellow must be proposed on a written Certificate, to be signed by three or more Fellows, from their personal acquaintance with him, or knowledge of his character or writings.

Fellows, on their election, pay an Admission Fee of £6, and are thenceforth liable to an annual Contribution of £3, which may be compounded for at any time by one payment of £30 in lieu of all future contributions.

Fellows residing abroad, and not compounding, are required to provide such security for the payment of their annual Contributions as shall be satisfactory to the Council.

The Fellows are entitled to receive, *gratis*, all Volumes, or Parts of Volumes, of the Transactions and Journal, that may be published after they shall have paid one yearly Contribution; or after their Election, if they shall have made Composition in lieu of Annual Payments: and they may be supplied with any of the Volumes published before their Election, at a reduction of 25 per cent. under the common selling prices.

The set of the first twenty-five vols. of the Transactions, with the Index, will be supplied to Fellows at the price of £30. Any Fellow purchasing, at one time, ten or more volumes, may obtain those from the first to the twentieth at £1 per volume; from the 21st to the 25th at £2 per volume. The price of the Index is 8s. to the public; 6s. to Fellows.

Members are requested to apply at the Apartments of the Society, to Mr. Kippist, Librarian, for such volumes as they may be entitled to, or be desirous to purchase: but no volume can be delivered *gratis* to a Fellow whose yearly Contributions are in arrear, nor can any be delivered unless applied for within five years from the time of publication.—Vol. 27 Part 2 of the Transactions is now ready for delivery.

The Library is open to the Fellows and their friends daily, between the hours of 10 and 4, and on Meeting-days at 7 P.M.

With certain restrictions, Fellows are allowed to borrow Books from the Library.

Communications intended to be made to the Society may be addressed to the President, or to the Secretary, at the Society's Apartments, Burlington House, Piccadilly, London.