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AN AND GILBERT.

regular, vertical, dark cross
e, lateral streak irregular in
sal averaging $1\frac{1}{2}$ in head, the
tly forked with sharp lobes.
(1) D. 14-17-19; (2) D. 13-15-19;
 $1\frac{1}{2}$ -16-19 $\frac{1}{2}$. Anal rays, (1) A.
re of all, 19 $\frac{1}{2}$ -20 $\frac{1}{2}$.

PRELIMINARY REPORT ON THE MOLLUSCAN SPECIES COLLECTED
BY THE UNITED STATES SCIENTIFIC EXPEDITION TO WEST
AFRICA, IN 1889-'90.

BY

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By an act of Congress provision was made to defray the expense of
sending a scientific expedition to the west coast of Africa for the pur-
pose of observing the total eclipse of the sun, occurring on December 22,
1889. In accordance with the recommendations of a board appointed
by the Chief of the Bureau of Navigation to devise plans, etc., the de-
tails of the expedition were arranged. Through the courtesy of Prof.
David P. Todd, of Amherst College, Massachusetts, in charge of the
expedition, arrangements were made whereby Mr. W. Harvey Brown
and Mr. Arthur H. Brown, of the U. S. National Museum, were ap-
pointed acting and assistant naturalists, to accompany the expedition
in the interest of the Museum, for the purpose of making collections of
natural history objects, especially fishes and mammals.

The expedition sailed from New York on October 16, 1889, on the
United States steamer *Pensacola*.

I am indebted to Prof. Todd for the following data as to the points
touched at by the expedition, and the dates of arrival and departure:

Localities.	Arrived.	Departed.
Horta, Fayal, Azores.....	Nov. 2, 1889	Nov. 3, 1889
Porto Grande, St. Vincent, Cape Verde.....	Nov. 10, 1889	Nov. 12, 1889
Free Town, Sierra Leone.....	Nov. 18, 1889	Nov. 20, 1889
Elmina Gold Coast.....	Nov. 26, 1889	Nov. 28, 1889
St. Paul de Loando, Angola.....	Dec. 6, 1889	Jan. 6, 1890

Here the naturalists were in the interior for nearly a month. After
leaving the latter place on the 6th of January, the next point reached
was Cape Town, and the arrivals and departures were as follows:

Localities.	Arrived.	Departed.
Cape Town, South Africa.....	Jan. 17, 1890	Feb. 6, 1890
St. Helena, South Atlantic.....	Feb. 20, 1890	Mar. 10, 1890
Ascension, South Atlantic.....	Mar. 16, 1890	Apr. 8, 1890
Bridgetown, Barbados.....	Apr. 28, 1890	May 10, 1890
Bermuda.....	May 18, 1890	May 19, 1890

At the latter place the naturalists did not land, owing to quarantine restrictions. The expedition arrived home at New York on the 23d of May, 1890.

As far as Cape Town the collections were made conjointly by the acting and assistant naturalists; at Cape Town Mr. Arthur H. Brown was detached from the expedition to go into the interior.

Class PELECYPODA.

Order PRIONODESMACEA.

Suborder OSTRACEA.

Genus OSTREA Linné.

1. *Ostrea mordax* Gould.

One specimen. Ascension Island (Mus. No. 125410).
A single characteristic example.

2. *Ostrea frons* Linné.

Odd valves, beach. Porto Grande (Mus. No. 125318).

Also occurs at various places in east and west Florida, Florida Keys, West Indies, and Barbados.

Suborder PECTINACEA.

Family SPONDYLIDÆ.

Genus SPONDYLUS Linné.

3. *Spondylus gæderopus* Linné.

Three valves, beach. Porto Grande (Mus. No. 125583).

4. *Spondylus imbutus* Reeve.

One example, dredged. Ascension Island (Mus. No. 125411)

A small, fresh specimen of the above was obtained from a depth of 40 fathoms.

Family PECTINIDÆ.

Genus PECTEN Müller.

5. *Pecten miniaceus* Reeve.

Three odd valves. Fayal (Mus. No. 125284).
A very pretty species.

Suborder MYTILACEA.

Family AVICULIDÆ.

Genus PERNA Brugniere.

6. *Perna perna* Linné.

‡ = *P. dentiferus*, var. Krauss.

Three specimens, valves. Ascension Island.
The *dentiferus* of Krauss is probably
it has a somewhat aviculoid shape.

7. *Perna Chemnitzii*

Several specimens, Porto Grande (Mus. No. 125318).
Variable in form, and perhaps con-

Family MYTILIDÆ.

Genus MYTILUS Linné.

8. *Mytilus edulis*

One specimen, Cape Town; (Mus. No. 125411).
A solitary example of small size, but
common and widely distributed for

9. *Mytilus magellanicus*

Several specimens. Cape Town (Mus. No. 125411).
The shells collected at this place
as above, upon comparison with ex-
Zealand and Kerguelen Island, pro-
dividuals measure 39 to 40 millim-
less in length.

10. *Mytilus atrorubens*

Many fresh specimens. Fayal (Mus. No. 125284).
These fine living examples show
ence on the interior surface of the
rine mussels.

11. *Mytilus*

Several examples. Porto Grande (Mus. No. 125318).

Genus LITHOPHAGUS Linné.

12. *Lithophagus lithophilus*

= *L. caudigera* Lamarck.

Two specimens. Porto Grande (Mus. No. 125318).

Genus DREISSEN Linné.

13. *Dreissena*

Numerous examples, living.
Many specimens of the above
to a twig, numbering probably

Green Mountain, Ascension

les, banded and otherwise, widely distributed form that "l the earth." The National n Barbados, Mexico, Brazil and Bombay in India; the islands of Mauritius and s, and from Canton, Hong- o been found at the Sey-

an.
t Müller.
No. 125278); Cape Town

n England, France, Portu- lsewhere, as well as at the eimens exhibited the usual on the island. From the examples.

Müller.
7). Fayal.
above quite solid, and ele-

hannel Isles. Its range ex- ell as to Spain, Algeria, and

poli.
ussac.
sus Draparnaud.

Fayal.
ry Islands, and also in the

(D.E.
narck.
Reeve.

Town, Sierra Leone.

Only one example of the above was an adult. This form, with its fine sculpture, is apparently related to the coarsely sculptured *A. reticulata* Pfr., from Zanzibar and that region, through *A. lactea* Rve., also belonging to the same general locality, and suggesting an intermediate and connecting variety.

47. *Achatina variegata* Roissy.
A. perdit Lamarck.

Several adult examples (Mus. No. 125377). Free Town.

Subgenus LIMICOLARIA Schumacher.

48. *Achatina (Limicolaria) flammea* Bruguiere.
Three specimens (Mus. No. 125383). Free Town.

49. *Achatina (Limicolaria) numidica* Reeve.
Two specimens (Mus. No. 125384). Free Town.

Family SUCCINIDÆ.
Genus SUCCINEA Draparnaud.
50. *Succinea St. Helenæ* Lesson.

Several living examples (Mus. No. 125404). Fayal.
The specimens were found on the leaves of plants near the top of Diana's Peak. The shells are of a beautiful deep amber color, and probably belong to the above species. The other form reported from here, *S. bensoni*, was not in the collection.

Superorder STREPTONEURA.

Order CTENOBRANCHIATA.

Suborder ORTHODONTA.

Superfamily TOXOGLOSSA.

Family TEREBRIDÆ.

Genus TEREBRA Bruguiere.

51. *Terebra strigillata* Linné.
A single specimen (Mus. No. 125389). Porto Grande.

52. *Terebra senegalensis* Lamarck.

One beach shell (Mus. No. 125332). Porto Grande.

53. *Terebra chlorata* Lamarck.

Several beach specimens (Mus. No. 125354). Porto Grande.

54. *Terebra inconstans* Hinds.

A single example, beach (Mus. No. 125322). Porto Grande. A widely distributed form.

Family CONIDÆ.

Genus CONUS Linné.

55. *Conus guinacus* Hwass.

One beach shell, imperfect (Mus. No. 125579). Porto Grande.

Family CANCELLARIIDÆ.

Genus CANCELLARIA Lamarck.

56. *Cancellaria similis* Sowerby.

One specimen, fair condition (Mus. No. 125344). Porto Grande.

Superfamily RHACHIGLOSSA.

Family OLIVIDÆ.

Genus OLIVA Brugniere.

57. *Oliva flammulata* Lamarck.

Two beach shells in fair condition (Mus. No. 125364). Porto Grande.

Genus OLIVANCILLARIA Orbiguy.

58. *Olivancillaria nana* Lamarck.

Several specimens (Mus. No. 125343.) Porto Grande.

Numerous examples of this pretty little shell, generally ornamented with linear, zigzag markings; sometimes not showing these, but unicolored, buff or dark chocolate brown.

Genus AGARONIA Gray.

59. *Agaronia acuminata* Lamarck.

Two beach shells, Porto Grande (Mus. No. 125581).

Family MITRIDÆ.

Genus MITRA Lamarck.

60. *Mitra fusca* Swains.

Several examples, Horta, Fayal (Mus. No. 125279).

Many good fresh specimens were obtained here. In Tryon's Monograph of the *Mitridæ*, he says: "*M. adansonii* Phil., described from Gaboon, in Guinea, West Africa, appears to agree fairly with this species."

61. *Mitra barbadensis* Gmel.

One young perfect specimen heretofore credited to the Flore

62. *Mitra*

One example, Porto Grande graph this is included in the place it in such a position.

Family I

Genus I

Subgen

63. *Leucor*

One beach shell, Porto Grande

Fami

Gen

64. *Pi*

One adult, beach; two (Mus. No. 125580).

Florida Keys, West Indian American side.

Gen

65. *Co*

= *C. Woldemari* Kiener.

One specimen from each Cape Town (Mus. No. 12533)

Family

Genus C

66. *C*

Common, fresh, living.

The *C. rusticoides* of Heude of the Atlantic from Cedar Key, synonym of the above.

67. *C*

variety, *Azorica* Drouët.

Numerous examples. F

Subg

68. *N*

Common; Porto Grande