# SCIENTIFIC RESULTS OF EXPLORATIONS BY THE U.S. FISH COM-MISSION STEAMER ALBATROSS.

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No. X.—ON CERTAIN MESOZOIC FOSSILS FROM THE ISLANDS OF ST. PAUL'S AND ST. PETER'S, IN THE STRAITS OF MAGELLAN.

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(With Plates II, III.)

The fossils which are noticed in this article were collected by members of the U. S. Fish Commission upon the voyage of the Albatross, 1887-'88, and submitted to me for examination by the Commissioner, Col. Marshall McDonald. They are all in a bad state of preservation, most of them being fragmentary. I have been able to recognize only two species, one of which is an aberrant form of the Cephalopods, belonging either to the genus Ancyloceras or Hamites, apparently to the latter. The other is a bivalve shell, having the general aspect of a Venus, but which possesses some of the distinguishing features of Lucina.

The presence of the Cephalopod just mentioned seems to leave no room for doubt that the strata from which these fossils were obtained are of Mesozoic age, and they are referred to the Cretaceous with little or no hesitation. The shell provisionally referred to *Lucina* seems to have a Tertiary aspect, but assuming that it was found associated with the Hamites, it also referred to the Cretaceous. Following are descriptions and figures of the two species which have been recognized:

## CEPHALOPODA.

Genus Hamites Parkinson.

Hamites elatior Forbes?

[Plate II, Figs. 1 and 2.]

Hamites elatior Forbes, Geology of the Voyage of the Beagle, by Charles Darwin, p. 265.

The original specimens which were described by Forbes were collected by Darwin at "Port Famine, Tierra del Fuego." They are not figured by Forbes, but from his description they seem to be specifically identical with those which were obtained in the Straits of Magellan.

The species is a large one, the largest fragment in the collection having a transverse diameter of not less than 3 inches; but it is a smaller one which is figured on Pl. II. All the fragments in the collection seem to be portions of the living chamber, none of them showing the septa or sutures of the same.

## CONCHIFERA.

Genus Lucina Bruguire.

Lucina? townsendi sp. nov.

[Plate III, Figs. 1 and 2.]

Shell large, much inflated when adult, for a species of *Lucina*; umbones moderately prominent; beaks almost terminal; lunule small but somewhat deep; the postero-dorsal portion of each valve laterally compressed and defined from the body of the shell by a deep, long, narrow groove which meets its fellow at the postero dorsal extremity of the shell. Surface marked by strong lines of growth. In its robust form and the somewhat prominent umbones this shell does not agree with typical forms of Lucina, and furthermore its hinge is not known. Its affinity with the Lucinoids, however, is suggested by the distinct dorso-umbonal grooves, its distinct lunule, its depressed ligament, and its marginal outline. The figures on Plate III are of natural size.

The specific name is given in honor of Mr. Charles H. Townsend, who collected the fossils described in this article.

#### PLATE II.

## Hamites elatior?

Fig. I. Lateral view of a fragment of the living chamber.

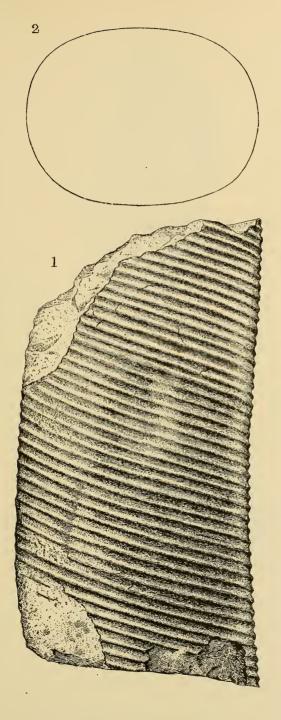
Fig. 2. Outline of transverse section of the same. It is probable that the natural cathine was more nearly circular, as the specimen from which it was drawn has been somewhat compressed.

# PLATE III.

## Lucina? townsendi.

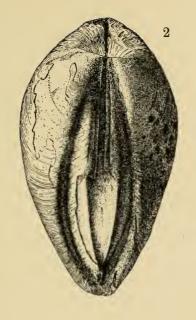
Fig. 1. Lateral view of an adult example.

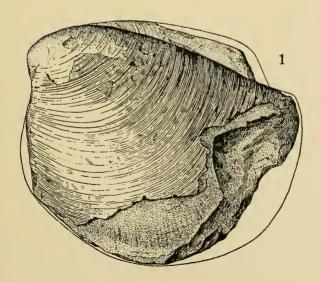
Fig. 2. Dorsal view of the same.



MESOZOIC FOSSILS FROM STRAITS OF MAGELLAN.







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