# PROCEEDINGS

A CALD A RY.

OF THE

# Boston Society of Natural History.

VOL. IV.

1851 TO 1854.

BOSTON:
PRINTED FOR THE SOCIETY.

this specimen must have been nearly five and a half feet, and the breadth of the shoulders considerably over two feet; the hands extend a little below the knees; the abdomen, judging from the iliac fossæ, must be nearly two feet wide; the lower extremities are strongly bowed.

This is one of the most complete skeletons in this country; there is an entire one at the Jardin des Plantes, Paris, but of a smaller specimen. A more detailed description, with accurate measurements, will be given in the next number of the Society's Journal.

On motion of Dr. Cabot, seconded by Dr. Kneeland, it was

Voted, That the thanks of the Society be presented to the American Board of Commissioners for Foreign Missions for their valuable donation.

The Secretary presented, in behalf of Mr. Charles Girard, descriptions of two new genera and two new species of Planaria; also an account of a new species of Spatangidæ from the Atlantic coast of the United States.

During the winter of 1849, while studying the fauna of Boston Harbor, I met with several specimens of a minute species of a slug-shaped naked mollusk, which I referred at once in my notes to the natural order of Planaria, but belonging to a genus unknown to me. Anxious to ascertain whether the same generic form had not been seen and described by European naturalists, I abstained from giving it a name until I should have access to a paper of Oth. Fabricius on the Danish Planariæ, published in 1826. Having satisfied myself that the Pl. limacina of that naturalist is generically allied to the species I had from Boston Harbor, and finding that no generic name has been provided for either, I beg leave to offer it to the Society as a genus, proposing for it the name of

#### NIOBE Girard.

Body limaciform, smooth, convex above, flat below. There is a distinct foot as in the land and sea slugs, separated from the upper part of the body by a marginal groove or furrow. Head proportionally large and separated from the body by a

contracted neck; provided with a single pair of eyes on its posterior or occipital region, if we may apply to mollusks the terms used in describing Vertebrata. Snout slightly notched. The body of the animal swollen and contracted, terminating posteriorly in a pointed tail.

For the Danish species I shall retain the specific denomination under which it has been made known, and call it henceforth N. limacina, the color of which is of a uniform greenish brown, paler beneath.

The species from Boston Harbor is less than a line in length; its body and head are not quite as much separated as in N. limacina. It has a pale, reddish hue, with transverse bands of white, which have suggested the specific name of N. zonata.

In the third volume of the Proceedings of the Society, p. 264, I have described, under the name of Vortex Warrenii, a species of marine Planaria, which, after mature reëxamination, I am satisfied constitutes a new genus, which I propose to call

## FOVIA Girard.

Body elongated, sides linear. Anterior extremity subtruncated, posterior one rounded. The organization of this genus I shall illustrate in my monograph of these animals. I have already alluded (p. 363, Vol. III. of the Proceedings) to its peculiar mode of generation, which consists in bringing forth living young. The species I shall continue to designate under the name of F. Warrenii. It occurs abundantly on Chelsea Beach, Mass.

Vortex candida, described at the same time, has been redescribed since by Dr. Leidy,\* under the name of Bdelloura parasitica. The genus Bdelloura I adopt, but the species must retain its prior name and be called B. candida Girard.

Among the freshwater Planaria, which I have seen in the vicinity of Washington, there is an undescribed species which ranges within the limits of the States of Pennsylvania, Maryland, and Virginia, and belongs to my genus *Dugesia*. I propose to call it

Dugesia Foremanii Girard. It is the largest species hitherto

<sup>\*</sup> Proc. Acad. Nat. Sc. Philad. v. pp. 242, 289.

known to me of this genus, it being more than half an inch long, with a width of from two to three lines. The general form, when the animal is creeping, is oblong or oval. Body flattened, as usual. Anterior region obtusely triangular, much less acute than in D. gonocephaloides; posterior region likewise less acuminated than in the latter. The transparent cephalic spaces nearly circular. Color above generally of a deep and uniform black; sometimes, however, brownish black, but never maculated. Under surface of body always lighter, although of the same general hue as the upper one. Found in great abundance in November last in the small rivulets emptying into Tiber Creek. A few specimens were also obtained at Four Miles Run, between Alexandria and Washington.

This species is dedicated to Dr. E. Foreman, formerly of Baltimore and now a resident of the city of Washington. I am happy to have the opportunity thus afforded me of associating his name with a department of Natural History in which he is well known for his indefatigable zeal in collecting, and his disinterestedness in meeting the wishes of his friends.

The discovery of a living species of the genus Amphidetus on the American shores of the Atlantic must be regarded as an interesting fact in the history of our radiated fauna. This discovery might have been expected from the circumstance of the existence of a representative of that genus during the myocene period of the tertiary epoch in the southern part of our country.

The living species occurs under the same latitude, having been found by Lieut. J. D. Kürtz, at Folly Island, S. C. and by myself at Cape Fear, N. C.

Four recent species of Amphidetus are already known, three of which are common to the basin of the Mediterranean, the British Channel, and the North Sea, on the Coasts of England and Sweden; and a fourth, which has hitherto been found only in the Ægean Sea.

Four fossil species are likewise enumerated as having been found in the tertiary strata; one in Italy, two in France, and another just alluded to, in South Carolina. Perhaps a fifth species, from Maestricht, might prove distinct after a thorough comparison of its structure with that of the other species.

According to the data now on record, respecting the past history of the genus Amphidetus, the latter made its first appearance on the European continent, as early as the eocene period of the tertiary era. The living American species, the object of the present communication, I propose to call

## AMPHIDETUS KÜRTZII Girard.

It is one of the largest species of the genus, the specimens in my possession measuring more than two inches and a half in length, being nearly as broad as long across the middle of the anterior half of the body. Its most remarkable feature consists in the great development of the ambulacral star, which, at the same time, is very much depressed. The ambulacra are situated each in a broadly open groove, the anterior and odd one deeper than the others, its groove extending to the inferior surface. Interambulacral spaces above convex and having a swollen appearance. Posterior ambulacra conical and tapering backwards for more than half of their greatest width. The anterior ambulacra have nearly the same width throughout their whole extent, being narrower, however, than the former at their base. They are slightly bent backwards along the sides, although their general direction is forwards. The odd ambulacrum is composed of exceedingly minute pores, which are, however, very conspicuous on account of their being very close to each other, and arranged in a double row. The series are parallel and nearly equidistant, but connected near the summit of the ideal axis of the animal by a gentle hemispherical curve in immediate advance of the four openings for the organs of generation, which are likewise very conspicuous.

The narrow and smooth tape-shaped zone which surrounds this ambulacrum, constitutes an elongated pentagon, the posterior angle of which is acute and reaches the summit of the posterior and odd interambulacral space. Its sides are parallel, whilst it is irregularly rounded anteriorly. The area between the series of pores and the triangular region behind the ambulacrum, is densely covered with minute tubercles. The so-called smooth zone itself is covered with still smaller tubercles, which escape detection by magnifying glasses of one and even two diameters.