ginia, and even into Alabama." Mr. Pilsbry in his recent Check-List of N. A. Land Shells credits it to the "Eastern United States."

The collection in the National Museum shows that it has a much wider distribution. Upon examining certain shells collected by Dr. Edward Palmer [Mus. No 37282] on the West Coast, several years ago, I found that he had discovered Say's species on the banks of the Yaqui river near Guaymas, on the easterly side of the Gulf of California. The jump was so great, across the continent or a good part of it, that I somewhat doubted my own eyes, and therefore sent specimens to Tryon and Binney to learn their opinions; both of these gentlemen confirmed my determination. Zonites (Hyalina) Binney and Morse credited to "North Eastern U. S.; Canada," by Mr. Pilsbry also makes a great leap to the westward, surpassing that of S. hirsuta, having been detected at Vancouver Island B. C. according to Dr. J. G. Cooper in Proc. Cal. Acad. Sciences, Dec. 31, 1887.

R. E. C. STEARNS.

Washington, D. C., Oct. 26, 1889.

THE SHELL-BEARING MOLLUSCA OF RHODE ISLAND.

BY HORACE F. CARPENTER.

Venericordia borealis Conrad.

Shell rounded, obliquely heart-shaped, thick and strong, inequipartite; beaks prominent; elevated and recurved; surface with twenty ribs radiating from the beaks; three ribs are raised, rounded and broad, with a narrow groove between each rib, crossed by coarse lines of growth and the whole surface covered with a strong rusty brown epidermis; hinge strong; teeth two in each valve; interior white; margin crenulated. Length one inch; height one inch; breadth $\frac{7}{16}$. Inhabits from New Jersey to Labrador; generally in deep water. It is often obtained from the stomachs of fishes. Mr. S. I. Smith found specimens in Gardiner's Bay, Long Island, and one specimen was found at Sandy Hook. I have found a few specimens at Block Island. In Maine it grows to a larger size than those found further south. Woodward quotes it from the Sea of Okhotsk, which if true, shows as wide distribution both in climate and in extent of coast.

Another species, the Cyclocardia novangliæ Morse, is quoted from Connecticut to the Gulf of St. Lawrence, deep water, but has not been found as yet in Rhode Island.

ORDER ASIPHONIDA.

Mantle margins open; no siphons; pallial impressions without sinus. This Order is sub-divided into three Sub-orders. Homomyaria, Heteromyaria and Monomyaria.

SUB-ORDER. HOMOMYARIA.

Both muscular impressions equally distinct.

(To be continued.)

GENERAL NOTES.

Last January a living specimen of Glandina bullata Gould, was received from Green Co., Ala.

After keeping it active for a few days it was put in a box, where it remained dormant until placed in a pan containing damp sod (May 4th); since then it has been out most every day.

My children delight to watch it crawl about and often handle it, letting it crawl over their hands.

Some Patula perspectiva Say, were put in the pan; off of them it made several meals, removing them from the shell by suction or by cutting away the upper part of the whorls, except the last one.

A Helix muralis Müller, was eaten without injury to the shell. A few days ago a Cut-worm was offered to it but was refused; it was then offered a Limax campestris Binney, which was eaten with evident relish, as were two others. They were first taken hold of in the fissure, at the base of the palpiform labial appendages, and the fore part of the foot; the buccal pouch was then protruded and the slug forcibly drawn in. The mouth is round, and I judge it to be about three-sixteenths of an inch in diameter. While in the act of swallowing, the palpiform appendages are drawn back to the sides of the head and have a slight resemblance to ears; enough so, that a boy standing by exclaimed, "see his ears; I did not know it had ears."

Later I tried it to see how many slugs it would eat at one time. Taking it up by the shell its head would be placed on a slug and in that way it picked up and ate six; the seventh it would not take hold of. This meal gorged it so that it could not withdraw wholly within its shell.—A. A. Hinkley, Du Bois, Ill.

PUBLICATIONS RECEIVED.

A Preliminary Catalogue of the Shell-Bearing Marine Mollusks and Brachiopods of the Southeastern Coast of the United



Carpenter, Horace F. 1889. "The shell-bearing Mollusca of Rhode Island (continued)." *The Nautilus* 3, 82–83.

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