on the part of the Melongena, is the
m between the open valves of the
g. The valves, of course, are immo-
f the assailant, which is round and
color a leather shoe-string.
he oyster appears to have the best
; and if it could maintain its exist-
cles, the Melongena would, in time,
grasp.
escribed is probably continued for a
austed with the strain in the contrac-
o open its shells.
h the Melongena has been patiently
its beak is immediately thrust further

when the beak of the Melongena
of the oyster; and then the process

struggle for life other Melongenas
st, and insert their beaks between the
await their opportunity for engorge-

oyster in Little Sarasota Bay, in
genas were dangling, suspended by
ld in the closed shells of their victim.
at the same place, between the shells
s of 22 Melongenas.
lestroy the oyster by enveloping it
smothering it. In the same manner
oyster by enveloping it in its foot.
attack and destroy large specimens
wd on and around the operculum of
d for the admission of water for res-
longenas are ruthlessly inserted be-
same method of attack is pursued as

illfully the Melongenas can arrange
eatest number may occupy the space

ena corona devouring a shrimp, and

The only mollusk, seen to destroy the Melongena, was a *Fasciolaria gigantea* which enclosed it in its folds.

On one occasion a dead king-crab was found, lying on its back, in which many *Fasciolaria tulipa* were crowded and eating it.

An abundant food for the *Fasciolaria distans* is the *Vermetus, (Petaloconchus) nigricans*, into the tubes of which the former inserts its beak.

A WORD ABOUT SPHÆRIA.

BY EDWARD W. ROPER.

Among thousands of Sphæria examined during the past year several unique forms have been found. For example, a robust, rounded shell less than one-fourth inch long, with prominent beaks, from near Tallahassee, Florida. This is quite distinct from any species yet seen from the Gulf states. Again a very dark brown shell from southern Ohio, of the group of *S. occidentale*, but thicker and with more prominent beaks. From an unknown locality came a single specimen resembling a small *S. transversum* but with a less angular outline. Lastly from Minnesota and other neighboring states, may be mentioned a thin, orbicular, gray or light olive shell with calyculate beaks, often regarded as *S. truncatum*, but probably different from the New England shell described by Linsley. These forms have mostly come from single localities in very small numbers, and in view of the great variation among species in this genus, it would be unsafe to consider them new on such slight evidence. The writer would like correspondence with collectors having unique and doubtful Sphæria in their possession.

THE MUSSELS SCARS OF UNIOS.

BY CHAS. T. SIMPSON.

In some comments on my recent paper on the classification and distribution of the *Naiades* in THE NAUTILUS for June, 1896, I notice the statement that in having a series of muscle scars in the middle of the disk *Margaritana margaritifera, monodonta*, etc. differ

from any Unios; and this seems to be the character on which the writer would separate *Margaritana* generically from *Unio*.

In the former species these little muscle scars or points of attachment of the mantle are sometimes a set of round, deep punctures in the nacre, but more often they consist of slightly indented dashes, which radiate from the umbonal cavity. They vary in number from a very few to 50 or more, *and are often entirely wanting*. In some examples these scars are more or less aggregated into a sort of longitudinal row along the middle of the disk, looking like a strongly developed pallial line.

In *Margaritana monodonta* they appear usually as deep punctures, and vary from many to none and the same thing is true of *Unio hembeli*. I have not found them in *U. decumbens* or *U. laosensis*.

In 1830 Isaac Lea described *Unio trapezoides* in the Transactions of the American Philosophical Society, Volume IV, page 69, and called attention to the fact that this species possessed a strongly developed muscle scar near the center of the disk, which he then named the ventral cicatrix. It is present (sometimes double) and well developed in most specimens, feeble in others, or it may be found in one valve and wanting in the other, or absent altogether. The same is true of most of the species of the plicate group of Unios, which are all nearly related; *N. multiplicatus, undulatus, perplicatus*, etc., but I have never found these scars in the nearly allied *U. sloatianus* Lea, of Georgia, which is so close to *U. trapezoides* that Call has placed it in the synonymy of that species.[1] In *U. trapezoides* there may be one or two anterior pedal scars and they are often widely separated.

A wonderful degree of variation is also found in the number and position of the dorsal scars of many species of Unios, and in the degree of development of the scars in the pallial line. In Mr. B. H. Wright's new *Unio,—U. bursa pastoris*, from Tennessee, the pallial line is generally composed of deep, strongly marked scars, to which the mantle is attached; in *Unio ventricosus* it is often so faint as to be scarcely discernable. I know of no character more variable and wholly unreliable as a means of classification in the *Unionidæ* than that of the muscle scars and my studies lead me to believe that it is seldom a mark of even specific value.

[1] Tr. Acad. Sci. St. Louis, VII, No. 1, p. 54.

DESCRIPTION OF TWO NEW SPECIES OF A FROM THE HAWAIIAN ISLAN

BY D. D. BALDWIN.

Partulina Hayseldeni n. sp.

Shell sinistral, minutely perforated, rather s apex subacute; surface shining, marked with striæ, and under a lens exhibiting very close, spiral lines; embryonic whorls faintly cross-lin of a uniform reddish-brown; sometimes the col portion of the whorl shades into white on the a some examples a white line revolves below the slightly convex, narrowly margined above, t angulated at the periphery, the angle becomin wards the aperture; suture distinctly impressed above by the continuation of the peripheral keel. subovate, white within with a pinkish tinge; pe obtuse, thickened within, the basal and columel reflexed; columella terminating in a strong, fle

Length 17½; diam. 10 mm.

Habitat, Island of Lanai.

Animal when extended in motion longer than slate color with a brown band encircling the oute and below almost white with a yellowish ting tinged with slate.

This species is allied to *P. semicarinata* Newc. another district of the same island. The latte colored, more conical, and invariably dextral she the two species are somewhat similar, but suff warrant the separation.

We take pleasure in dedicating this handsome H. Hayselden, the young naturalist who discove following species.

Amastra aurostoma n. sp.

Shell dextral, imperforate, solid, elongately ov apex subacute; surface lusterless, striated with s coarse growth striæ; the embryonic whorls finely, Color light brown, apex dark chestnut; the low with a black, fugacious epidermis which is gener last whorl and more sparsely distributed on