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NOTES ON YOUNG UNIONIDE.

BY L. S. FRIERSON.

Recently while searching for young Unionidæ I was rewarded by obtaining a dozen little fellows averaging a quarter of an inch long. One of these, a magnificent little Lampsilis anodontoides Lea, less than one-fourth of an inch in length, exhibiting the glochidial valves, was provided with a byssus four or five inches long, thus confirming my previous observations. Several specimens of L. gracilis Barnes, and one of L. lævissimus Lea, were also taken so provided. The byssus of one of these was fully eight inches in length. Several L. texasensis were also taken, as already recorded by me. Several very small Anodonta imbecilis Say, were captured, but these did not seem to have byssi. Some time after, I was rewarded in an hour's search, by a single specimen of Unio tetralasmus Say, perfect in every respect, and only $\frac{3}{16}$ of an inch in length. It was a jewel, but no sign of its being provided with a byssus could be detected.

Thus these preliminary and very scanty observations seem to limit the possession of a byssus to *Lampsilis* (including in this term the allied genus *Medionidus*).

The byssi of these specimens came out of a narrow slit in the central ridge of the foot, and located about the anterior third of the shell, and all were firmly enough attached to support the weight of the shell in the air, and of course amply strong to suspend the shell while partially supported by the water.

These baby shells revealed some facts about the so-called beak-

sculpturing, which, when further studied, may form a subsequent note for THE NAUTILUS.

NEW VARIETIES OF CREPIDULA RUGOSA NUTT. FOUND ON NATICA AND ON NORRISIA.

BY MRS. M. BURTON WILLIAMSON.

In the July number of THE NAUTILUS, Dr. Wm. H. Dall describes a variety of Crepidula nivea C. B. Adams, from San Pedro, California, and this reminds me of a variety found upon Natica that

has not, to my knowledge, been described.

When I began collecting hells in Son Pedro Bay some years ago, I found a specimen of this variety and it was for years a puzzle to me. Although only a dead, white shell, it would not classify with specimens in any tray of Crepidule. It did not look like an aberrant form, so I was loth to label t as such. It was a white, porcellanous specimen, shaped like some Crepidula rugosa, but much more pellucid-looking, but differed from Crepidula excavata Brod., in being thicker and in not having either the remote apex or the oblique growth of that form. It was also larger in size than any Crepidula excavata I had/seen. Some seven or eight years after finding this dead specimen, two live onds, excepting that the animal had recently been removed, were found in the bay. I immediately recognized the white,/granular form, and these specimens were maculated with chest/fut-colored spots, and as would be expected, these live forms were thinner and more pellucid. I afterward found this puzzling variety in situ on a piece of Nativa, Lunatia Lewisii.

If a specimen varies from the type sufficiently to be detected, dead or alive, it merits a varietal name, and for my own convenience I have labeled it on my cards. For the convenience of other students this white porcellanous shell with its brown spots might be

labeled Crepidula rugosa Nutt. var. naticarum.

There is another variety of Crepidula rugosa Nutt. found on Norrisia norrisii Sby. This Norrisia is a smooth, reddish-brown turban shell, whose habitat appears to be on kelp. The Crepidula found on these shells are of a light magenta-pink in the interior. These slipper shells are usually much flatter than typical C. rugosa,