

253 (proposed as a subgenus of *Cytherea*; type and sole species *Cytherea crassatelloides* Conr.).

Trigomella Conrad, 1849. Journ. A. N. S., Phila., I, 213 (diagnosis of genus).

Pachydesma Conrad, 1854. Proc. Acad. N. S., Phila., vii, p. 31 ("note on the genus *Trigomella* Con. This name being superseded, I propose to substitute that of *Pachydesma*").

Prior to 1843 no description of "*Douglas studorum*" was published—not a line except the name and the locality, "Indian Seas." The specimen figured by Mawe is young, and apparently the color-variant *triseriatis*.

The first description was by Hanley in 1843. Gray merely refers to the plate in Index Testac. Suppl., not even to Mawe's earlier publication.

Query: Should Mawe's figure, which is quite recognizable, but without description and with a false locality and erroneous generic reference, displace Conrad's name, which was from a known locality, was well defined, and was accompanied by a good figure of the typical many-rayed shell?

NEW SOUTHERN UNIOS.

BY BERLIN H. WRIGHT.

Unio singularis, sp. nov.

Shell uniformly and moderately solid, wide, rather inflated and very inequilateral. Surface sulcate, with distant growth lines; epidermis dark olive, rayless, finely wrinkled, and towards the base becoming fuscous; dorsal margin slightly arched, anterior margin abruptly rounded, base straight or subemarginate, posterior margin bluntly rounded or biangulated; beaks not prominent, and surmounted by five or six sharp concentric ridges which gradually merge into the sulcations on the umbos; umbonal ridge bluntly rounded; lateral teeth erect, solid, straight, widely separated from the cardinals and, in the left valve, from each other, single in the right and double (?) in the left valve, the superior division possessing scarcely prominence enough to warrant calling it a tooth; cardinal teeth solid, double in the left and single in the right valves; the single one being deeply serrated on its summit; beak cavities very slight;

anterior cicatrices smooth, well-impressed and distant; posterior cicatrices slightly impressed, smooth and confluent; nacre pale blue, white or coppery. Width, $2\frac{3}{8}$; length, $1\frac{3}{8}$; diameter, $\frac{1}{16}$ inches.

Habitat: Spring Creek, Decatur Co., Ga.
Type lot in National Museum.

Remarks: Affinity, *Unio scammatus* Morel. The roughness of the surface of this singular shell is the one feature that at once arrests attention. We know of no other U. S. species of this class (as to outline) that possesses such a surface. It is not, however, so conspicuously furrowed as its affinity.

AN ATTEMPT TO DEFINE THE NATURAL GROUPS OF STROMBUS.

BY GEO. HALCOTT CHADWICK.

Having recently had the privilege of studying a fine series of the living species of *Strombus*, *Pterocera* and *Terebellum*, the opportunity seemed favorable for a critical examination of the entire group. As I am not aware that any similar attempt has been made to revise the *Strombi*, the results obtained are respectfully submitted to the scientific world. Lacking anatomical data, I have freely used neglected and sometimes indefinable features of the shells as guides to their inter-relationships. Forced to recognize some new groups, I have left the secondary matter of names to those more skilled in nomenclature, but have indicated the probable application of the titles already in use, as to the types of which scarcely any two authors, save Tryon and Fischer, agree.

Of the species and varieties of *Strombus* recognized in Tryon's monograph, I have seen all but *S. integer*, *taurus*, *listeri*, *dilatatus*, *labiosus*, *deformis*, *septimus*, *minimus*, *sibbaldi*, *erythrinus* (true), *pulchellus*, *helli*, *scalpiniformis* and *bulbatus*, although *S. goliath*, *fusiformis* and *terebellatus* were not now before me. All ten of the *Pterocerae* were at hand.

The grouping of the species which seems to me most in accordance with their natural relations, as indicated by shell features and geographical distribution, is as follows:

GROUP A (*Monodactylus*).

Canal lengthened, bent abruptly dorsally; lip with margin straightened, incurled, truncated at both ends, bearing a posterior digitation