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SCIENTIFIC RESULTS OF EXPLORATIONS BY THE U. S. FISH
COMMISSION STEAMER ALBATROSS.

VII.—PRELIMINARY REPORT ON THE COL-
LECTION OF MOLLUSCA AND BRACH-
IOPODA OBTAINED IN 1887-'88.

— BY

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plates V-XIV.

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Family MURICIDÆ.

Subfamily MURICINÆ.

Genus **MUREX** Linné.**Murex** (*Chicoreus*) *Leeanus* sp. nov.

Plate VII, Fig. 1.

Shell strong, stout, pale yellowish brown, with three varices to each whorl, and a faint intervarical node between each pair of varices; the varices toward the apex fall slightly short of completing a whole whorl, so that they are slightly spirally arranged; the deficit on the whole shell of six and a half whorls (excluding the nucleus) is about one-quarter of a turn, so that the great varical spines on the spire are not directly over one another; nucleus minute (lost in the specimen); first whorl or two with eight or ten small spiny or scaly nodes; at the third whorl the spines begin to take on the characteristic trialate arrangement; spiral sculpture of rather fine, rounded threads, almost uniformly distributed, slightly coarser in front of the periphery and on the varices, and in front of the suture for a short distance nearly obsolete; the interspaces are narrow grooves, with very rarely an intercalary thread; there are also fine microscopic spiral striæ; this spiral sculpture, with the qualifications noted, covers the whole shell; transverse sculpture of intervarical nodes obsolete or obscure on the last whorl, growing stronger and sharper toward the apex; apart from the varices the only other sculpture, in a transverse sense, is due to irregularities of growth or faint incremental lines; the varices on the last whorl are slightly elevated, rounded ridges, extending from the suture to the end of the canal; behind the periphery the whorl is flattened; at the periphery or shoulder of the whorl each varix is extended in a strong, stout, single hollow spine, rounded behind, deeply narrowly grooved in front, curving slightly upward and more strongly backward toward its distal end; the aperture is ovate, rounded behind, a little pointed in front, with a thin, raised edge, white or waxen internally and without denticulations; the canal is closed, long, stout, obliquely truncate in front, showing two older termini at the left beside the one in actual use. Maximum longitude of shell, 70; maximum latitude, including spines, 63; latitude of aperture, 13.5; longitude of aperture, 20^{mm}.

HAB.—Station 2838, off Cerros Island, Lower California, in 44 fathoms, mud.

The only species with which this fine *Murex* need be compared is *M. centrifugus* Hinds, a member of the same faunal region, which also was collected near Cape St. Lucas, in 12 to 51 fathoms. The specimens of *M. centrifugus* hitherto collected have not exceeded 35^{mm} in total length. The most obvious difference between the young of *M. Leeanus* and *M. centrifugus* of the same size is seen in the varical processes. In *M. Leeanus* a section of these processes at any age is oval, with a

deep groove on the anterior side which is widest internally, since the lips of the groove fold over one another in most cases, so that the processes contain a permanent subtubular gutter. In *M. centrifugus* the varical spines are triangular in section, the anterior margins do not approach one another, and a shallow median sulcus on the front of the spine is the only representative of the groove of *M. Leeanus*. Below the main spine on each varix in *M. centrifugus* are three smaller flat spines; on *M. Leeanus* the varix is rounded and without spines. The intervacular node in *M. Leeanus* is obsolete or obscure and rounded; in *M. centrifugus* it is much more prominent in proportion and forms an oblique rather narrow rib with a kind of elbow at the periphery. The most prominent character of *M. Leeanus* is the rounded, root-like, sleek varical spine.

It is named in honor of Prof. Leslie A. Lee, of Bowdoin College, in charge of the scientific work of the *Albatross* party during the voyage.

The specimen was a female. The foot is auriculate and double edged in front, short, rounded behind, with nearly smooth sides. The eyes are small, the basal two-thirds of the tentacles behind the eyes is stout and thick, the distal part beyond the eyes much more slender.

The dentition is typically muricoid, the radula small and narrow, the central tooth very wide, very short, and with three inconspicuous denticles on its cusp. The soft parts hardly differ externally from those of *Murex brandaris* L.

Subgenus PTERONOTUS Swainson.

Pteronotus phaneus Dall.

Plate XI, Fig. 1.

Pteronotus phaneus Dall, Bull. Mus. Comp Zoöl., xviii, p. 201, June, 1889.

Shell ashy white, elongated, thin, six-whorled. Nucleus translucent, smooth, polished, of about one and a half whorls; whorls slightly convex, appressed to the suture behind them, connected by three continuous fin-like varices which in descending the spire make about half a revolution around it; these varices on the upper whorls were extended backward into a little wing-like point with dentate edges; on the last whorl the lines of growth indicate that the thin margin was rounded parallel with the whorl. Transverse sculpture of fine growth lines, and on the last two whorls at the periphery three short little narrow pinched-up riblets between the varices; spiral sculpture of fine rather faint striae and wider undulations, hardly visible except on the varices; of these there are nine or ten on the last varix. Aperture elongate-oval, internally white, thickened, smooth; canal rather long, open, bent back. Maximum longitude of shell, 17; of last whorl, 13.5; of aperture, 5; maximum latitude of aperture, 3; of shell, 8^{mm}.

HAB.—U. S. Fish Commission Station 2662, off St. Augustine, Florida, in 434 fathoms, sand; temperature 43° 7 F.; also at Station 2668, in 294 fathoms.

EXPLANATION OF PLATES.

When an asterisk is attached to a figure it indicates that the species was obtained in the Pacific Ocean. All those without an asterisk are Atlantic species. The figures following the name indicate the longest dimension of the actual shell represented as figured, in millimeters.

PLATE V.

- Fig. 1. *Chrysodomus (Sipho) Rushii* Dall, 11.0; p. 323.
 2. *Nassa scissurata* Dall, 12.0; p. 326.
 3. *Conomitra intermedia* Dall, 15.5; p. 316.
 4.* *Columbella permodesta* Dall, 14.0; p. 327.
 5. *Mesorhytis costatus* Dall, 14.0; p. 317.
 6.* *Chrysodomus griseus* Dall, 32.0; p. 322.
 7.* *Pleurotoma? exulans* Dall, 32.0; p. 302.
 8.* *Calliotectum vernicosum* Dall, 48.0; p. 304.
 9. *Terebra benthalis* var. *nodata* Dall, 18.5; p. 299.
 10.* *Chrysodomus amiantus* Dall, 76.0; p. 321.
 11. *Mangilia antonia* Dall, 18.0; p. 304.

PLATE VI.

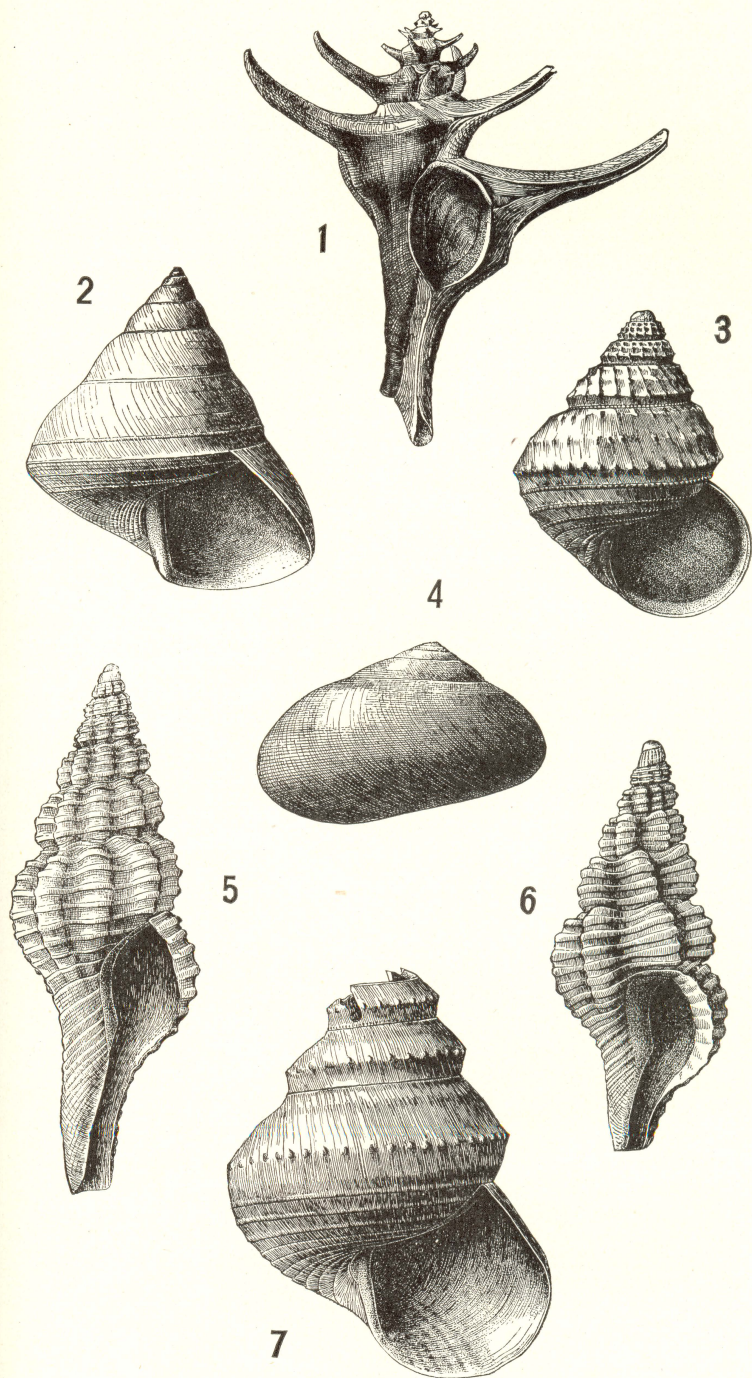
- Fig. 1.* *Leucosyrinx Goodei* Dall, 80.0; p. 300.
 2.* *Pleurotomella cingulata* Dall, 73.0; p. 306.
 3.* *Leucosyrinx persimilis* Dall, 80.0; p. 301.
 4.* *Pleurotomella (Gymnobela) agonia* Dall, 16.0; p. 301.
 5.* *Pleurotomella argeta* Dall, 43.0; p. 307.
 6. *Fusus ceramidus* Dall, 46.5; p. 318.
 7.* *Chrysodomus aphelus* Dall, 30.0; p. 323.
 8. *Nassarina columbellata* Dall, 12.2; p. 325.
 9.* *Buccinum viridum* Dall, 46.0; p. 320.

PLATE VII.

- Fig. 1.* *Murex (Chicoreus) Leeanus* Dall, 70.0; p. 329.
 2.* *Calliostoma platinum* Dall, 32.0; p. 343.
 3.* *Turricula Bairdii* Dall, 50.0; p. 346.
 4.* *Gaza Rathbuni* Dall, alt. 24.0; p. 342.
 5. *Fusus apynotus* Dall, 24.0; p. 318.
 6. *Fusus alcimus* Dall, 15.0; p. 319.
 7.* *Turricula Macdonaldi* Dall, 75.0; p. 348.

PLATE VIII.

- Fig. 1.* *Verticordia perplicata* Dall, 33.0; p. 278.
 2. *Pecten glyptus* Verrill, right valve, 60.0; p. 248.
 3. The same, interior, showing radii.
 4. *Poromya cymata* Dall, 9.0; p. 289.
 5. *Cuspidaria monosteira* Dall, 5.0; p. 281.
 6. *Poromya microdonta* Dall, alt. 11.5; p. 290.
 7.* *Lyonsiella radiata* Dall, 13.0; p. 276.
 8.* *Poromya (Dermatomya) mactroides* Dall, 18.0; p. 291.
 9.* *Cryptodon barbarensis* Dall, 17.0; p. 261.



GASTROPODS.

(Explanation of plate on pages 359.)