## MONOGRAPH

OF

## VITRINELLA,

A NEW GENUS OF NEW SPECIES OF TUIBINLDE,

By C. B. ADAMS, A. M. EELKOW OF THE AMERICAN ACADEMY OF ARTS AR゙D SCIENCES, CORRESP. MEMB. OF THE NAT, IHST. SOC. OF NURMBEIG, OF THE ACAD. NAT. SC. OF PHILADELPHIA, OF XHE BOST. SOC. N4T. HIST, OF TRE LYCEUM OF NAT. IIST. IN NEW YOLIS CITT, OF THE ENTOM. SOC. OF PENNSILYANIA, HON. MEMD. OE the Jamaica society, \&c. \&c. \&c.

AMHERST, MASSACHUSETIS:


FEBRUARY, 1850.

## VITRINEITA ADAMS.

Testâ turbiniformi, minimâ, vitreâ ; aperturâ maximâ, orbiculari, subtus valde indentatâ, vel umbilicatâ.

Shell turbiniform, vitreous, minute, with a large orbicular aperture, either umbilicated or with the umbilical region deeply and widely indented.

The form of the aperture would place these shells in Turbo or Margarita. The want of an umbilicus excludes three of the species from the latter. The operculum is unknown ; but as it is extremely improbable that thin vitreous almost transparent shells should have solid calcareous opercula, we may assume it to be horny, which will exclude the species from Turbo, regarding this genus as best characterized by the operculum. The most widely umbilicated species approximates in form to Skenea, and might be mistaken for a depressed umbilicated spocies of Helix. In texture, the nearest approach among the kindred genera is in Margarita arctica Leach. From all the Turbinide known to us, they are however well distinguished by their vitreous texture and rapid enlargement of the whorls, which last character produces a large aperture. The variation
in respect of an umbilicus is parallel with the similar variation in Turbo. They are not the young of any larger species, for the first one or one and one-half whorls are distinguished from the following whorls by nuclear peculiarities, as want of sculpture, ©c. We are acquainted with the young of all the larger species which inhabit the same localities, and none of them resomble these shells.

Most of the specimens were obtained from a pint of sand, which contained 110 species of shells, and which was taken from a surface of three or four square yards of sand beach in a little cove near Port Royal, Jamaica, on the outside of the peninsula. A few were found on the inside of the peninsula. Of $V$. mesrastoma and $I$. interrupta we obtained several specimens: of the other species,-one to four of each. Probably all the species are rare.

TABLE OF MEASUREMENTS.

|  | $\left\lvert\, \begin{gathered} \dot{~} \\ = \\ \vdots \\ 0 \\ 0 \\ 0 \end{gathered}\right.$ | $\begin{aligned} & \text { 志 } \\ & 3 \\ & -4 . \end{aligned}$ |  |  | $\begin{aligned} & \overrightarrow{y y y y y y y y} \\ & \text { gु } \\ & H \end{aligned}$ |  |  |  | $\left\lvert\,\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V. hyalina. | $95^{\circ}$ | . 02 | . 05 | .065 | . 055 | . 508 | 1.27 | 1.65 | [1.397 |
| V. interrupta. | $100{ }^{\circ}$ | . 015 | . 035 | . 045 | .03s | . 381 | . 889 | 2.142 | . 965 |
| V. megastoma. | $130^{\circ}$ | . 01 | . 098 | . 06 | . 045 | 254 | . 838 | 1.524 | 1.142 |
| V. tinctia. | $135^{\circ}$ | . 015 | . 035 | . 055 | . 045 | . 381 | . 889 | $1.39 \%$ | 1.142 |
| V. helicoidea. | $150^{\circ}$ | 1.01 | . 03 | . 075 |  | 254 | . 762 | 1.906 | 1.524 |
| inch. millimetres. |  |  |  |  |  |  |  |  |  |

## Vitzinella hyalina. Adams.

Y. t. globosâ, allâ, subtransparente, laevi, nitidâ: apice obtusâ : spirâ convexâ, clevatà: anfractibus quatuor, perconvexis, suturâ impressâ, anf. ultimo magno, regulariter rotundato, subtus valde indentato.

Globose :
white, subtransparent:
smooth and shining :
apex obtuse :
spire with the outlines very convex:
whorls four, rery convex, with a well impressed suture; last whorl rather large and regularly rounded:
aperture slightly modified by the penult whorl:
umbilical region well indented.
Mean divergence about $95^{\circ}$; length of spire .02 inch; total length .05 inch: greatest breadth .065 inch; least breadth .055 inch.

## Tierinella interrupten Adams.

V. t. globozâ, subconicâ, allh, subtransparente: sulcis elevatis tribus suprà, et sulcis minoribus quinque vel sex subte, spinalibus insculptâ ; striis transversis candidis subdistantibus a salcis interruptis ornatâ: apice perobtusá: spirầ eleratâ, convexâ: anfractibus quathor, conrexiz, suturâ liand valite impressấ; anf. ulimo magno, reg. ulariter rotundato, sulotus latè et profundè indentato

Depressed globose conic:
white, subtransparent in the last whorl:
with three rather large more or less elevatc i spiral grooves above, and five or sir of less size beneath; with somewhat distant opaque white transverse strim, which arc interrupted by the spiral grooves:
apex very obtūse:
spire with very conver outlines:
whorls four, quite convex, with a moderately impressed suture; last whorl rather large, rapidly increasing. well rounded :
aperture scarcely modified by the penult wheri:
umbilical region widely and deeply indented.
Mean divergence about $100^{\circ}$; length of spire . 015 inch; intal length . 035 inch ; greatest breadth .045 inclr; least breadth . 038 inch.

## Titrinella megastoma sulams.

V. t. depressâ, transrersè oratâ, albâ, translucente, laevi, nitidâ : apice obtusâ: spirà convexâ anfractibus tribus, subconvexis, suturí conspicuà ; anf. ultimo prope aperturam maximo, regulariter rotundato.

Much depressed, transversely ovate:
white, translucent:
smooth and shining :
aper very obtuse:
spire convex, but little elevated:
whorls a little more than three, moderately convex, with a distinct suture; last whorl very large, rapidly increasing in the last part, well rounded :
aperture scarcely modified by the last whorl:
umbilical region very widely and deeply indented.
Mean divergence about $130^{\circ}$; length of spire . 01 inch; total length .033 inch; greatest breadth .06 inch, least breadth .045 inch.

## Vitrinella tincta. Adams.

V. t. subdiscoideâ: albâ, anfractum ultimum rubro tinctâ, striis plurimis et carinis duobus parvis cinctâ : apice obtusâi spirấ convexâ : anfractibus tribus, valde accrescentibus, suturâ impressâa : umbilico profundo.

Globose discoidal:
white, translucent, with stains of reddish purple on the last whorl:
with numerous spiral strix, and two small distant revolving carine on cither side of the periphery of the last whorl:
apex obtuse :
spire convex, but little elevated:
whorls three, rapidly increasing from the first, with a well impressed suture; !ast whorl somewhat concave beneath the lower carina:
aperture scarcely modified by the last whorl:
umbilicus deep, not very wide.
Mean divergence about $135^{\circ}$; length of spire .015 inch; total length .035 inch; greatest breadth .055 inch; least breadth 045 inch.

## Titrinella helicoidea. Adams.

V. t. discoideầ, albâ, opacâ vel translucente, lincâ suturalî impressâ, et striis transversis inequalibus insculptâ : apice perobtusâ : spirâ consexâ, vix elcvatâ : anfractibus quatuor, subconvexis, valde accrescentibus; suturâ vix impressâ : labio subcrasso: umbilico magno, profundo, carinâ spirali instructo.

## Discoidal:

white, opaque and translucent in transverse alternating lines: with a single impressed spiral line near the summit of the whorls, and very fine irregular transverse striæ :
apex very obtuse:
spire slightly and convexly clevated:
whorls four, moderately convex, rapidly increasing, with a lightly impressed suture; last whorl regularly rounded, a little compressed beneath.
aperture not modified by the last whorl:
labium with a rather thick deposit :
umbilicus large and deep, with a spiral carina, exhibiting all the whorls.

Nean divergence about $150^{\circ}$; length of spire .01 inch; total length .03 inch; greatest breadth .075 inch; last breadth .06 inch.
"Contributions to Conchology" are issued by the subscriber, at irregula intervals of time, in numbers of 16 or 2019 . each.

They are devoted chiefly to a description of new species of the shells of Ja. maica, preliminary to a monograph of the shells of that island : bat any additions to conchology or malacology come within their plan.

Copies will hereafter be furnished only to subseribers, at one dollar for five numbers, or in return for books, pamphlets, or specimens presented to the Zoological department in Amherst Collere, or to public institutions which have once acknowledged the receipt of a cony.

The The shells, which were collected in my last expedition to Jamaica, belong to the Zoological Museum of Amherst College. The Trustees of the College have directed the sale of a part of the duplicates. Suites, either of all or of one or more genera of the land and fresh-water shells, will be furnished at 30 cents per species: or selections may be made at a fixed price for each species, and the remainder returned. The marine shells will be fumislecl at 25 cents per species, without distinction except in favor of priority of application. A catalogue of all the marine species will soon be published.

25 cents per species will also be paid for any number of authentically named shells, which are not in the Zool. Mus of this college.

The species of Jamaica shells may also be hat on exchange, provided that a list of the species, which can be furnished by any correspondent, shall be first communicated to the subscriber for selection of desiderata, for which only will a return be made. Pareels sent without regard to this rule will be considered as donations to the Museum, and may be sent, if through New York City, to care of J. H. Redfield, Esq., 82 Courtland Strect, New York. If not through New York, they may come by express, via Northampton, Mass.
C. B. ADAMS, AMerest, Mass.
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