

TRANSACTIONS

OF

THE AMERICAN PHILOSOPHICAL SOCIETY.

ARTICLE I.

*Description of New Freshwater and Land Shells. By Isaac Lea.
Read December 19, 1834.*

ANODONTA GIGANTEA. Plate I. fig. 1.

Testâ ovatâ, inflatâ, antice latissimâ, postice angulatâ, inæquilaterali; valvulis crassis; natibus prominentibus; margaritâ albâ.

Shell ovate, inflated, broad before, angular behind, inequilateral; valves thick; beaks prominent; nacre pearly white.

Hab. near Port Gibson. T. W. Robeson.
My Cabinet.

Diam. 3·3, Length 4·8, Breadth 7·8 inches.

Shell ovate, inflated, broad before, angular behind, inequilateral; substance of the shell thick; beaks prominent, granulate at tip; epidermis dark brown, smooth; anterior and posterior cicatrices both confluent; dorsal cicatrices near the margin anterior to the beaks; cavity of the shell very deep; cavity of the beaks deep; nacre white and richly pearly.

VI.—A



Anodonta gigantea.

Drawn by J. B. Sowerby.

Philadelphia Museum.

Diam. .4,

Length 1.1 inches.

Remarks.—During Mr Peale's travels in Colombia, he found a single specimen of this beautiful species, and I am indebted to his kindness for the privilege of describing it. In this individual the longitudinal spots are more numerous on the whorl next to the body-whorl, there being none on that part near to the outer lip.

BULIMUS COLOMBIANUS. Plate XXIII. fig. 110.

Testâ elongato-turritâ, perforatâ, nitidâ, albâ, tenui, minutissimè transversim striatâ; apice aurâ; anfractibus septenis; aperturâ subparvâ; labro acuto.

Shell elongately turritid, perforate, shining, white, thin, transversely and minutely striate; apex golden colour; whorls seven; aperture rather small; outer lip acute.

Hab. about one hundred miles up the Magdalena River, Colombia.
T. R. Peale.

Philadelphia Museum.

Diam. .5,

Length 1.2 inches.

Remarks.—The spire is long, and the aperture about one-third the length of the shell. It is nearly milk white, and so thin as to be somewhat translucent.

BULIMUS CORNEUS. Plate XXIII. fig. 111.

Testâ ovato-conicâ, umbilicatâ, corneâ, tenui, pellucidâ; anfractibus septenis; aperturâ parvâ; labro acuto.

Shell ovately conical, umbilicate, horn-colour, thin, pellucid; whorls seven; aperture small; outer lip acute.

Hab. Buenavista, Colombia. T. R. Peale.

My Cabinet.
Philadelphia Museum.

Diam. .3,

Length .7 of an inch.

Remarks.—In form and size this resembles the *B. lactea*, herein described, but may be distinguished at once by its colour, its umbilicus, and the absence of a band. Owing, apparently, to the roughness of the epidermis, its surface is scarcely shining. I owe this shell to the kindness of Mr Peale.

HELIX WARDIANA. Plate XXIII. fig. 82.

Testâ orbiculato-convexâ, umbilicatâ, infernè depressâ, nitidâ, corneâ, diaphanâ; anfractibus senis, longitudinaliter striatis; striis confertis; spirâ obtusâ; labro acuto, intus spissatâ.

Shell orbicularly convex, umbilicate, flattened below, shining, horn-coloured, translucent; whorls six, longitudinally striate; striæ close; spire obtuse; outer lip acute, within thickened.

Hab. near Cincinnati, Ohio. T. G. Lea.

near Chilicothe, Ohio. C. J. Ward, M.D.

My Cabinet.

Cabinet of T. G. Lea.

Cabinet of C. J. Ward, M.D.

Diam. .4,

Length .3 of an inch.

Remarks.—While I had several specimens of this species from my brother, T. G. Lea, holding them somewhat in doubt as to their being distinct from *H. ligera* (Say), I received several fine specimens from Dr Ward, who informed me that "the inhabitant is differently marked from *ligera*." He says, "the base of the foot is *white*, posteriorly acute. Body white, with blackish brown spots over it, and one *large* and two smaller black longitudinal bands extending from the neck to the end of the body."

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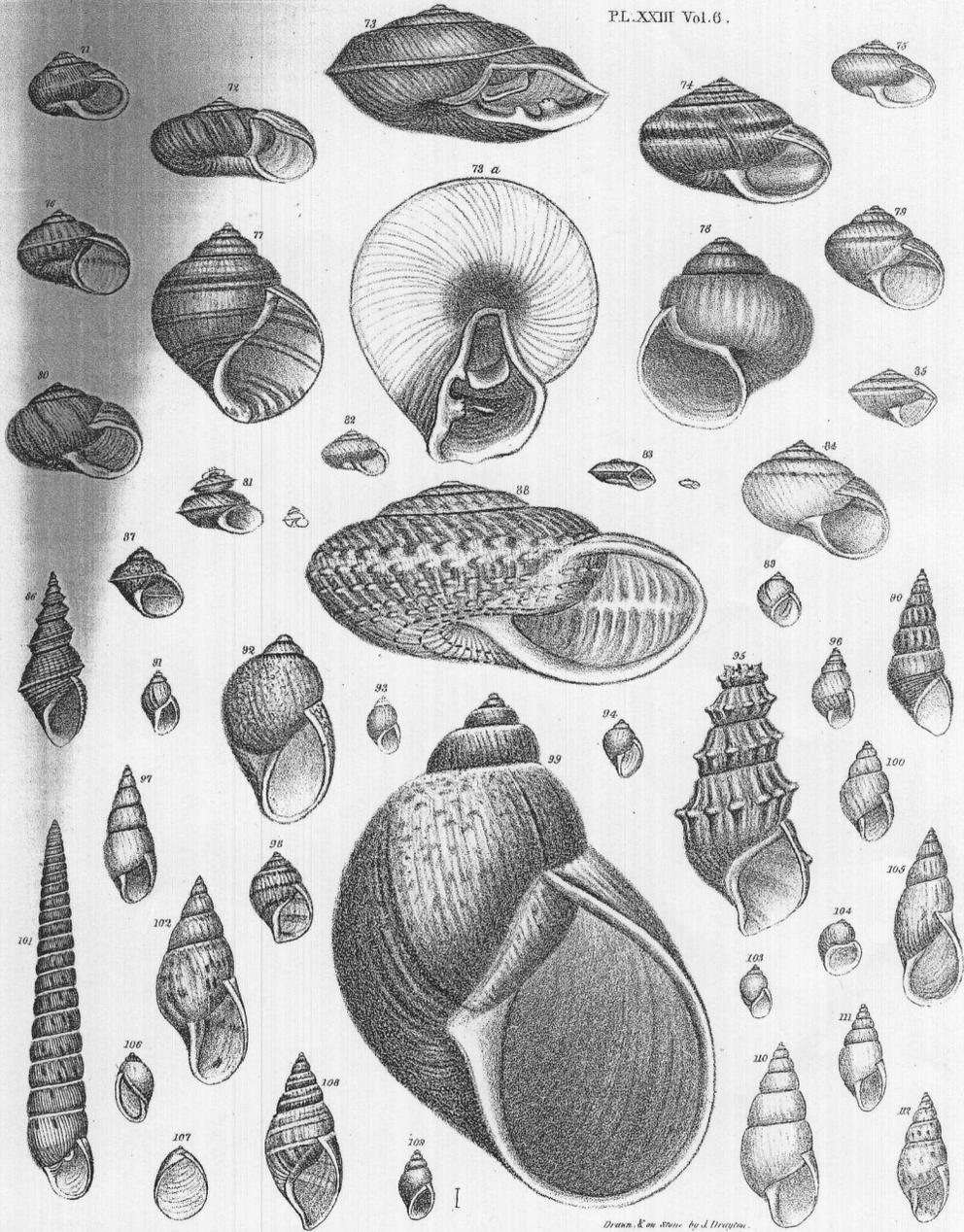
striatâ, supernè
purturâ subro-

and minutely
whorls seven;
a smooth.

. Professor

th .8 inches.

Helix found
semblance to
solitaria, but
of Professor
part than the
of the whorl



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|----------------------|-----------------------|----------------------|---------------------|----------------------|------------------------|---------------------|--------------------|
| 71 <i>Helix</i> | <i>Mitchelliana</i> | 82 <i>Helix</i> | <i>Wardiana</i> | 95 <i>Paludina</i> | <i>virens</i> | 104 <i>Paludina</i> | <i>pallida</i> |
| 72 <i>caracolla</i> | <i>Vancouverensis</i> | 83 <i>Planorbis</i> | <i>lens</i> | 94 <i>Lymnaea</i> | <i>apacina</i> | 105 <i>Bulimus</i> | <i>peilanus</i> |
| 73 <i>Helix</i> | <i>Hyliana</i> | 84 <i>Helix</i> | <i>Nickliniana</i> | 95 <i>Melania</i> | <i>plicata</i> | 106 <i>Physa</i> | <i>aurea</i> |
| 74 " | <i>Mutalliana</i> | 85 " | <i>Oregonensis</i> | 96 <i>Bulimus</i> | <i>parvus</i> | 107 <i>Succinea</i> | <i>aperta</i> |
| 75 " | <i>Colombiana</i> | 86 <i>Melania</i> | <i>Troostiana</i> | 97 " | <i>virgo</i> | 108 <i>Bulimus</i> | <i>decoratus</i> |
| 76 <i>Cyclostoma</i> | <i>Popayanum</i> | 87 <i>Cyclostoma</i> | <i>maculata</i> | 98 <i>Melania</i> | <i>inflata</i> | 109 <i>Paludina</i> | <i>Nickliniana</i> |
| 77 <i>Ampullaria</i> | <i>Pealiana</i> | 88 <i>Helix</i> | <i>magnifica</i> | 99 <i>Bulimus</i> | <i>Gibbous</i> | 110 <i>Bulimus</i> | <i>Colombianus</i> |
| 78 <i>Paludina</i> | <i>sinistrorsa</i> | 89 <i>Paludina</i> | <i>Mutalliana</i> | 100 " | <i>lacteus</i> | 111 " | <i>corneus</i> |
| 79 <i>Helix</i> | <i>Californiensis</i> | 90 <i>Melania</i> | <i>plifera</i> | 101 <i>Megaspira</i> | <i>Ruschenbergiana</i> | 112 " | <i>maculatus</i> |
| 80 " | <i>Townsendiana</i> | 91 <i>Lymnaea</i> | <i>solida</i> | 102 <i>Bulimus</i> | <i>gracilis</i> | | |
| 81 <i>Paludina</i> | <i>hyalina</i> | 92 <i>Bulimus</i> | <i>glaucoformis</i> | 103 <i>Paludina</i> | <i>nuclea</i> | | |

Drawn from nature by J. Drayton.

Luttrell & Co. 1877

. Dirty horn color. A thin horny shell with at rounded and rather deeply umbilicated (*Reeve*). *a* (Cuming coll.); *Campeche* (A. Sallé); and), *Yucatan*.

; RVE., *Conch. Icon.*, pl. 77, f. 562 (Aug., 1849).
i. PFR., *Monogr.*, iii, p. 438.

considered by Pfeiffer, Crosse and Fischer and von *dysoni* characterized by the smaller, more fragile al angle less conspicuous. Alt. 9, diam. 4½ mill. ted by Sallé is figured by Crosse & Fischer (see). I am disposed to think that *ignavus* is as dis- is most of the middle American species of *Lepto-* another.

ies of northwestern South America.

i general features from the forms of Central i S. America.

pirals; pale corneous-brownish or yellowish.
2–32 mill.; whorls 6½–7, *cacticolus, erectus*.
rls 5½; fine epidermal spirals, *buenavistensis*.
striæ.

ss than half the alt.

) mill.; aperture ½ alt.; whorls 6½; pale reddish-
us, *juvenilis*.

. mill.; aperture nearly ½ alt.; whorls 7; rugulose-
; pellucid straw-whitish, *glandiniformis*.

rather solid, white; whorls 7½–8; aperture con-
2½ times in alt., *krebsianus*.

½; ovate, smooth, corneous; whorls 6–7; aper-
of alt., *fontainii*.

7½, aperture 8 mill. long; striatulate, pale cor-
perforation minute; whorls 6, *molecillus*.
ual to or exceeding half the alt.

7, diam. 10, length aperture 10 mill.; globose-
pale grayish-tawny; whorls 4½, *marmatensis*.

½, diam. 7½, aperture 6 mill.; subhyaline; whorls
hyaloideus.

3, diam. 6½, aperture 6 mill.; corneous-whitish,
; whorls 5½, *ucayalensis*.

Bulimulus 1897

B. BUENAVISTENSIS Pilsbry, n. n. Pl. 10, fig. 95.

Shell small, narrowly umbilicated, ovate-conic, thin, light corneous-brown. *Surface lusterless*, to the sight and touch like velvet with excessively short pile; the growth lines inconspicuous, but showing under the lens *very fine raised cuticular spirals* throughout, subregularly and very closely placed. Spire conic, the apex obtuse, the earlier 1½ whorls, very densely, finely granose in zigzag-wrinkled pattern. Whorls 5½, moderately convex, the last with the *appearance* of being subangular in front of aperture, but there is almost no actual angle.

Aperture slightly oblique, elliptical, narrowed above and below, colored like the outside, a trifle less than half the shell's length; peristome thin, acute and unexpanded, outer lip quite regularly arcuate, in profile view its upper fourth seen to be produced forward; columella straight, the columellar margin dilated above.

Alt. 11·4, diam. 6·3; alt. of aperture 5·4 mill.

Buenavista, Colombia (T. R. Peale).

Bulimus corneus LEA, *Trans. Amer. Philos. Soc.*, vi, 1836, p. 66, pl. 23, f. 111 (June, 1838; see *Proc. Amer. Philos. Soc.*, i, 1838, p. 19); *Observations on the Genus Unio, etc.*, ii, p. 66, pl. 23, f. 111 (1838). Not *Bulimus corneus* Desh., 1836, nor of Sowerby, 1833.

Lea's figure and measurements were from a larger specimen ("length 0·7 of an inch") than that preserved in his cabinet, from which my description and figure are drawn.

It is not, as Pfeiffer stated with doubt (*Monogr.*, ii, p. 219), a variety of *B. unicolor*, differing radically from that species in sculpture; and it is equally distinct from other small species of northwestern S. America and Central America, none of which have the characteristic cuticular spirals of Lea's *B. corneus*. Among the Antillean species *B. diaphanus* has more prominent growth-wrinkles; and in *B. houelmontensis* the body-whorl is much more oblong and the sutures deeper.

Type is No. 105078 U. S. Nat. Mus.

B. JUVENILIS (Pfeiffer). *Unfigured*.

Shell perforate, ovate-fusiform, thin, lightly striatulate, hardly shining, pale reddish-corneous. Spire long-conic, the apex rather acute. Whorls 6½, but slightly convex, the last a little shorter than the spire, obsolete subangulate in the middle, the base attenuated; columella somewhat straightened, a little receding. Aperture oblique,

BULIMULIDÆ.

PLATE 10

