

proximately 10 mm. long in *V. capitellum* and 14 mm. long in *V. muricatum*. It is rachiglossate, each row of teeth possessing a tricuspid central tooth and bicuspid laterals. The central tooth of *capitellum* (Plate 4, fig. 4) is 126 microns wide by 93 microns high and the central tooth of *muricatum* (Plate 4, fig. 3) is 266 microns wide by 213 high.

The operculum (Plate 4, figs. 5, 6) fills most of the aperture in both species. It is horny, hard, unguiculate, curved, narrow at one end, and rounded at the other. The muscle scar covers  $\frac{1}{3}$  to  $\frac{3}{4}$  the area of the inner side in both species. In *capitellum* it is marked with few widely spaced growth lines. The muscle scar of *muricatum* is marked with numerous closely set growth lines.

Although the shell of *Vasum capitellum* is quite different from that of *muricatum*; the radula and operculum seem quite similar, except in size.

The author wishes to thank K. O. and A. Phares for their generosity in lending their specimens for study. Laura Roark is responsible for the drawing. Dr. R. Tucker Abbott was kind enough to review the manuscript critically.

LITERATURE CITED

Abbott, R. Tucker. 1950. The genera *Xancus* and *Vasum* in the western Atlantic. *Johnsonia*, Vol. 2, No. 28, pp. 201-218.  
 Linné, 1758. *Systema Naturae*, 10th edition, p. 750.

TYPES OF MOLLUSKS DESCRIBED BY F. C. BAKER  
 PART III, CHICAGO ACADEMY OF SCIENCES<sup>1</sup>

BY DOROTHEA S. FRANZEN  
 Illinois Wesleyan University

For a period of approximately twenty years, 1894-1915, Frank C. Baker served the Chicago Academy of Sciences as its curator. Many of the types of the species and subspecies of mollusks which he described during that period of time are deposited in the museum of the Academy. Because there has been no listing of the holotypes and paratypes of that collection, I have prepared the following list. In some instances F. C. Baker designated a type series instead of a holotype and paratypes. From each of such series I have selected a lectotype. Each lectotype is identified by the catalogue number as given in the text of this paper

<sup>1</sup> Expenses incurred in travel necessary to prepare this list have been covered by Grant-in-Aid of the Illinois State Academy of Science.

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mm. long in *V. capitellum* and 14 mm. long in *V. muricatum*. The teeth are rachiglossate, each row of teeth possessing 1 central tooth and bicuspid laterals. The central tooth (Plate 4, fig. 4) is 126 microns wide by 93 microns high. The lateral tooth of *muricatum* (Plate 4, fig. 3) is 266 microns wide by 113 microns high.

(Plate 4, figs. 5, 6) fills most of the aperture and is horny, hard, unguiculate, curved, narrow at the base and rounded at the other. The muscle scar covers  $\frac{1}{3}$  of the inner side in both species. In *capitellum* it shows widely spaced growth lines. The muscle scar is marked with numerous closely set growth lines. The muscle scar of all of *Vasum capitellum* is quite different from that of *V. muricatum*. The radula and operculum seem quite similar.

I wish to thank K. O. and A. Phares for their help in preparing their specimens for study. Laura Roark is responsible for the drawing. Dr. R. Tucker Abbott was kind enough to read the manuscript critically.

#### LITERATURE CITED

Baker, F. C. 1950. The genera *Xancus* and *Vasum* in the family *Johnsonia*, Vol. 2, No. 28, pp. 201-218. *Journal of the Illinois State Academy of Science*, 10th edition, p. 750.

#### MOLLUSKS DESCRIBED BY F. C. BAKER AT THE CHICAGO ACADEMY OF SCIENCES<sup>1</sup>

BY DOROTHEA S. FRANZEN  
Department of Geology,  
Illinois Wesleyan University

Approximately twenty years, 1894-1915, Frank C. Baker was at the Chicago Academy of Sciences as its curator. During that period of time are deposited in the collection of the species and subspecies of mollusks described by Baker. Because there has been no listing of the paratypes of that collection, I have prepared a list of some instances F. C. Baker designated a holotype and paratypes. From each of the collections I selected a lectotype. Each lectotype is identified by a number as given in the text of this paper. The paratypes necessary to prepare this list have been covered by the Illinois State Academy of Science.

and also by its dimensions. The measurements made by F. C. Baker are quoted whenever such are available. Others given are those as made by the author of this paper. The procedure followed in the preparation of this list is the same as of Parts I and II of this series.

*Galba bulimoides cassi* Baker, 1911, Chicago Ac. Sci. Sp. Pub. No. 3: 221-222, pl. 28, figs. 9-11.

Lectotype: 23948a. L., 8.5 mm.; W., 5.25 mm.; L. of ap., 5.0 mm.; W. of ap., 3.0 mm. (Baker, 1911, p. 221). Syntypes: 23948. (6 shells).

Type locality: Rose Canyon, near Pacific Grove, San Diego Co., Calif. (C. L. Cass!).

*Galba doddsi* Baker, 1911, Chicago Ac. Sci. Sp. Pub. No. 3: 203-204, pl. 27, figs. 5-8.

Lectotype: 23937a. L., 9.0 mm.; W., 4.5 mm.; L. of ap., 4.25 mm.; W. of ap., 2.5 mm. (Baker, 1911, p. 203). Syntypes: 23937. (3 shells).

Type locality: Hot Sulphur Springs, Colo. (G. S. Dodds!).

*Galba neopalustris* Baker, 1911, Chicago Ac. Sci. Sp. Pub. No. 3: 376-377, pl. 39, fig. 28.

Type: 24547.

Type locality: Orange, Orange Co., Va. (Bryant Walker!).

*Galba palustris alpenensis* Baker, 1911, Chicago Ac. Sci. Sp. Pub. No. 3: 315-316, pl. 33, figs. 26-33.

Types: 23486. Missing from the collection.

Type locality: Thunder Bay Island near Alpena, Alpena Co., Mich. (W. A. Nason!).

*Galba palustris blatchleyi* Baker, 1911, Chicago Ac. Sci. Sp. Pub. No. 3: 321-322, pl. 33, figs. 34-36.

Lectotype: 23626a. L., 20.0 mm.; W., 8.0 mm.; L. of ap. 8.5 mm.; W. of ap., 4.0 mm. (Baker, 1911, p. 321). Syntypes: 23626. (4 shells).

Type locality: Turkey Lake, Kosciusko Co., Ind. (L. E. Daniels!).

*Limnaea ferrissi* Baker, 1902, Bull. Chicago Acad. Sci. 3 (2): 277, pl. 31, fig. 26.

Type: 3458.

Type locality: Rock Run, Joliet, Ill. (J. H. Ferriss!).

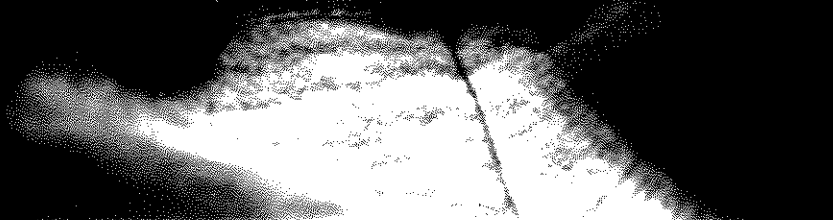
*Limnaea reflexa crystalensis* Baker, 1904, Naut. 18 (1): 11.

Lectotype: 23634a. L., 28.0 mm.; W., 10.0 mm.; L. of ap., 12.0 mm.; W. of ap. 6.0 mm. (Baker, 1904, p. 11) Syntypes: 23634. (8 shells).

Type locality: Crystal Lake, McHenry Co., Ill. (Dr. N. H. Lyon!).

*Limnaea reflexa iowaensis* Baker, 1904, Naut. 18 (1): 10.

Type: 23520.



- Type locality: Muscatine, Iowa. (Received from Bryant Walker).
- Limnaea reflexa jolietensis*, Baker, 1901, Naut. 15 (2): 17-18.  
Lectotype: 23606a. L., 24.0 mm.; W., 8.0 mm.; L. of ap., 9.5 mm.; W. of ap., 5.25 mm. (Baker, 1901, p. 17). Syntypes: 23606. (3 shells).
- Type locality: Rock Run, Joliet, Ill. (J. H. Ferriss!).
- Limnaea woodruffi* Baker, 1901, Bull. Chicago Ac. Sci. 2 (4): 229-230, text fig. p. 229.  
Lectotype: 3425a. L., 11.0 mm.; W., 8.0 mm.; L. of ap., 8.0 mm.; W. of ap., 5.00 mm. (Baker, 1901, p. 229) Syntypes: 3425 (3 shells).
- Type locality: Lake Michigan, Oak St., Chicago, Ill. (F. M. Woodruff!).
- Limnaea dalli* Baker, 1907, Naut. 20 (11): 125-126.  
Lectotype: 23125a. L., 4.5 mm.; W., 2.5 mm.; L. of ap., 2.0 mm.; W. of ap., 1.1 mm. (Baker, 1907, p. 125). Syntypes: 23125. (5 shells).
- Type locality: Marsh, west side Lake James, Steuben Co., Ind.
- Limnaea danielsi* Baker, 1906, Naut. 20 (5): 55-56.  
Lectotype: 23622a. L., 27.5 mm.; W., 11.5 mm.; L. of ap., 12.5 mm.; W. of ap. 6 mm.
- Type locality: Lake Maxinkuckee, Ind. (L. E. Daniels!). Syntype: 23622. (1 shell).
- Limnaea emarginata wisconsinensis* Baker, 1910, Naut. 24 (5): 58-60.  
Lectotype: 24504a. L., 27.0 mm.; W., 19.0 mm.; L. of ap., 18.0 mm.; W. of ap., 14.0 mm. Syntypes: 24504. (18 shells).
- Type locality: East shore Tomahawk Lake, Oneida Co., Wisc.
- Limnaea hendersoni* Baker, 1909, Naut. 22 (12): 140-141.  
Lectotype: 24537a. L., 6.0 mm.; W., 4.5 mm.; L. of ap. 3.9 mm.; W. of ap. 3.6 mm. Syntypes: 24537. (5 shells). (No. 24534 as designated in type description is an error).
- Type locality: West of Fort Collins, Laramie Co., Colo.
- Limnaea hinkleyi* Baker, 1906, Naut. 19 (12): 142-143.  
Lectotype: 23720a. L., 15.25 mm.; W., 9.25 mm.; L. of ap., 10.5 mm.; W. of ap., 3.5 mm. (Baker, 1906, p. 142). Syntypes: 23720. (4 shells).
- Type locality: North Fork Snake River, east Idaho. (A. A. Hinkley!).
- Limnaea jacksonensis* Baker, 1907, Naut. 21 (5): 52-54.  
Lectotype: 23806a. L., 19.0 mm.; W., 10.0 mm.; L. of ap., 10.1 mm.; W. of ap., 5.0 mm. (Baker, 1907, p. 53). Syntypes: 23806. (3 shells).
- Type locality: Jackson Lake, drained by the south fork of the Snake River, Wyo. (H. O. Hinkley and A. A. Hinkley!).

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is, Baker, 1901, Naut. 15 (2): 17-18.  
24.0 mm.; W., 8.0 mm.; L. of ap., 9.5  
(Baker, 1901, p. 17). Syntypes: 23606.

m, Joliet, Ill. (J. H. Ferriss!).  
r, 1901, Bull. Chicago Ac. Sci. 2 (4):

1.0 mm.; W., 8.0 mm.; L. of ap., 8.0  
(Baker, 1901, p. 229) Syntypes: 3425

Michigan, Oak St., Chicago, Ill. (F. M.

7, Naut. 20 (11): 125-126.  
4.5 mm.; W., 2.5 mm.; L. of ap., 2.0  
(Baker, 1907, p. 125). Syntypes: 23125.

est side Lake James, Steuben Co., Ind.  
1906, Naut. 20 (5): 55-56.

7.5 mm.; W., 11.5 mm.; L. of ap., 12.5

xinkuckee, Ind. (L. E. Daniels!). Syn-

onsinensis Baker, 1910, Naut. 24 (5):

7.0 mm.; W., 19.0 mm.; L. of ap., 18.0  
Syntypes: 24504. (18 shells).

Tomahawk Lake, Oneida Co., Wisc.  
r, 1909, Naut. 22 (12): 140-141.

0 mm.; W., 4.5 mm.; L. of ap. 3.9 mm.;  
24537. (5 shells). (No. 24534 as desig-  
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ort Collins, Laramie Co., Colo.

906, Naut. 19 (12): 142-143.  
.25 mm.; W., 9.25 mm.; L. of ap., 10.5  
Baker, 1906, p. 142). Syntypes: 23720.

ork Snake River, east Idaho. (A. A.

r, 1907, Naut. 21 (5): 52-54.

.0 mm.; W., 10.0 mm.; L. of ap., 10.1  
Baker, 1907, p. 53). Syntypes: 23806.

ake, drained by the south fork of the  
Hinkley and A. A. Hinkley!).

*Lymnaea leai* Baker, 1907, Naut. 20 (11): 126-127.

Type: 23653. Missing from the collection.

Type locality: Near San Francisco, Calif. (W. A. Nason!).

*Lymnaea nasoni* Baker, 1906. Trans. Acad. Sci. St. Louis 16: 12,  
pl. 1, figs. 1-4.

Lectotype: 23788a. L., 10.0 mm.; W., 6.75 mm.; L. of ap., 7.0  
mm.; W. of ap., 5.0 mm. (Baker, 1911, p. 397) Syntypes: 23788.  
(2 shells).

Type locality: Thunder Bay Island, near Alpena, Alpena Co.,  
Mich. (W. A. Nason!).

*Lymnaea nashotahensis* Baker, 1909, Naut. 23 (2): 19-21.

Types: 24539. Missing from the collection.

Type locality: Marl beds, Nashotah, Waukeshaw Co., Wisc.  
(F. M. Woodruff!).

*Lymnaea owascoensis* Baker, 1905, Naut. 18 (12): 141.

Lectotype: 23137a. L., 8.5 mm.; W., 3.5 mm.; L. of ap., 3.5 mm.;  
W. of ap., 2.0 mm. (Baker, 1905, p. 141). Syntypes: 23137. (2  
shells).

Type locality: Owasco Lake, N. Y. (Dr. Howard N. Lyon!).

*Lymnaea pseudopinguis* Baker, 1907, Naut. 21 (5): 54-55.

Lectotype: 23800a. L., 14.0 mm.; W., 8.0 mm.; L. of ap., 8.0  
mm.; W. of ap., 4.3 mm. (Baker, 1911, p. 395). Syntypes: 23800.  
(4 shells).

Type locality: Crystal Brook, Long Island, N. Y.

*Lymnaea randolphi* Baker, 1904, Naut. 18 (6): 63.

Type: 23089. Paratypes: 23090. (Designated by Baker as co-  
types).

Type locality: Marsh Lake, near Dyea Valley, Yukon Territory,  
Alaska. (P. B. Randolph!).

*Lymnaea stagnalis* var. *higleyi* Baker, 1905, Naut. 18 (12): 142.

Type: 23050.

Type locality: Michipecon Bay, north shore, Lake Superior.  
(Presented by J. H. Ferriss!).

*Lymnaea stagnalis lillianae* Baker, 1910, Naut. 23 (9): 112-113  
and (10): 125-126.

Lectotype: 24554a. L., 42.0 mm.; W., 22.0 mm.; L. of ap., 26.0  
mm.; W. of ap., 13.0 mm. (Baker, 1910, p. 112). Syntypes: 24554.  
(4 shells).

Type locality: Tomahawk Lake, Oneida Co., Wisc.

*Lymnaea sterkii* Baker, 1905, Naut. 19 (5): 51-52.

Lectotype: 23156. L., 7.75 mm.; W., 3.5 mm.; L. of ap., 3.5  
mm.; W. of ap., 1.75 mm. (Baker, 1905, p. 51). Syntypes: 23155.  
(4 shells).

Type locality: Twelve miles west of Cleveland, Ohio. (Dr.  
Victor Sterki!).

*Murex bituberculatus* Baker, 1891, Proc. Rochester Ac. Sci. 1:  
133-134.

- Type: 20702. (One shell in the collection; it is labelled "Type").  
 Type locality: Australia. (Presented by Geo. H. Laffin).  
*Murex haustellum* Linné var. *longicaudus* Baker, 1892, Proc. Ac. Sci. Philadelphia for 1891:56.
- Type: 20701. (One shell in the collection; it is labelled "Type").  
 Type locality: Red Sea. (Presented by Geo. H. Laffin).  
*Ocenebra jenksii* Baker, 1899, Naut. 3 (7): 80-81.
- Type: 20696. (One shell in the collection; it is labelled "Type").  
 Type locality: Not known. (Presented by Geo. H. Laffin).  
*Ocenebra rubra* Baker, 1891, Proc. Rochester Ac. Sci. 1:134-135, pl. 11, figs. 6, 7.
- Type: 20697. (One shell in the collection; it is labelled "Type").  
 Type locality: Not known. (Presented by Geo. H. Laffin).  
*Ocenebra wardiana* Baker, 1891, Proc. Rochester Ac. of Sci. 1: 134, pl. 11, fig. 5.
- Type: 20698. (One shell in the collection; it is labelled "Type").  
 Type locality: Australia. (Presented by Geo. H. Laffin).  
*Planorbis bicarinatus portagensis* Baker, 1908, Naut. 22 (4-5): 45.  
 Type: Missing from the collection.
- Type locality: Portage Lake, on Fish River, Aroostook Co., Maine. (O. O. Nylander!).  
*Purpurea problematica* Baker, 1891, Proc. Rochester Ac. Sci. 1: 135-136, pl. 11, figs. 2, 3.  
 Lectotype: 20704a. L., 30.0 mm.; W., 17.0 mm.; L. of ap., 20.0 mm.; W. of ap., 8.0 mm. Syntype: 20704.
- Type locality: Seta coast, Japan. (Presented by Geo. H. Laffin).  
*Ricinula (Sistrum) rugosoplicata* Baker, 1892, Proc. Ac. Nat. Sci. Philadelphia for 1891: 58-59.
- Type: 20703. (One shell in the collection; it is labelled "Type").  
 Type locality: Turtle Bay, Lower California. (Presented by Geo. H. Laffin).  
*Sphaerium lilycashense* Baker, 1898, Naut. 12 (6): 65-66.  
 Lectotype: 18105a. L., 14.0 mm.; H., 11.0 mm.; B., 8.5 mm.  
 Syntypes: 10106, 18105. (14 shells).  
 Type locality: Lilycash Creek, Joliet, Ill. (J. H. Handwerk!).

#### NOTES AND NEWS

DATES OF NAUTILUS.—Vol. 71, no. 1, pp. 1-36, pl. 1, was mailed Aug. 16, 1957. No. 2, pp. 37-72, pls. 2-4, Nov. 4, 1957. No. 3, pp.

July, 1958

73-116, pls.  
 April 24, 1

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1899, Naut. 3 (7): 80-81.

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*agensis* Baker, 1908, Naut. 22 (4-5): 45.

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Lake, on Fish River, Aroostook Co.,

aker, 1891, Proc. Rochester Ac. Sci. 1:

2, 3.  
D. 10.0 mm.; W., 17.0 mm.; L. of ap., 20.0  
syntype: 20704.

Japan. (Presented by Geo. H. Laffin).

*blicata* Baker, 1892, Proc. Ac. Nat. Sci.  
1: 58-59.

ell in the collection; it is labelled

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ker, 1898, Naut. 12 (6): 65-66.

D. 4.0 mm.; H., 11.0 mm.; B., 8.5 mm.  
(4 shells).

Creek, Joliet, Ill. (J. H. Handwerk!).

## NEWS AND NEWS

l. 71, no. 1, pp. 1-36, pl. 1, was mailed  
7-72, pls. 2-4, Nov. 4, 1957. No. 3, pp.

73-116, pls. 5-9, Mar. 4, 1958. No. 4, pp. 117-152, i-viii, pls. 10-12,  
April 24, 1958.—H. B. B.

MARY E. (JONES) BALES.—All malacologists will hear with sorrow of the death of Mrs. Blenn R. Bales, after a short illness, on November 14, 1957, in Circleville, Ohio. She was born Aug. 7, 1881, in the same town, and was married to Dr. Bales (1876-1946, Naut. 60:101) on June 6, 1900. They are survived by their daughter, Mrs. B. R. Deming, and son, Blenn D., to whom our deepest sympathies are tendered.—H. B. B., C. B. W. and R. T. A.

A SINISTRAL SHELL OF *CEPAEA HORTENSIS*.—During seven summers of collecting the land snail *Cepaea hortensis* at Cape Ann, Massachusetts, I have handled many hundreds of specimens. I have also examined several dozen shells in private collections which had been obtained from the same locality. Only once did I ever see a left-handed specimen. This was collected on August 12, 1957, on Barberry Shore of East Gloucester. In the same collection there were 309 other specimens. Of these, 194 were all yellow (bandless), 101 had five bands (1-2-3-4-5), 11 were banded but with no. 2 band missing (1-0-3-4-5), and three were banded but with no. 3 band missing (1-2-0-4-5). The sinistral specimen had five bands and measured 13 mm. high by 20 mm. wide. It has been given to the Museum of Comparative Zoölogy at Harvard University.—RALPH W. DEXTER, Department of Biology, Kent State University, Kent, Ohio.

*COLUMELLA EDENTULA* IN CALIFORNIA.—While collecting small insects in the vicinity of Mendocino, Mendocino Co., California, Jaques R. Helfer obtained some small land snails which he submitted for identification. One lot of these contained over 90 specimens of *Columella edentula* (Draparnaud)—a new record of this species for the State. Associated with the *Columella*, which were of all ages, were a few specimens of *Vertigo rowelli* (Newcomb). According to Mr. Helfer, the snails were collected by beating salmonberry bushes (*Rhus spectabilis*); they were not found among other species of bushes, such as thimbleberry, that are prevalent in the area.—ALLYN G. SMITH, Calif. Acad. Sci.

THESKELOMENSOR.—Although smoothish arionoid or limacoid shells present few tangible features, this "genus" (Cf. Solem, this no.) might belong in the Helicarioninae, which do occur in

