smooth, and separated by a well impressed suture. Aperture sub-circular, continuous; apex blunt. Size: 2.7 mm.

high, 1.4 mm. wide.

This species resembles *Paludestrina protea* in general shape, but differs in being much smaller, in the rimate umbilicus, and in lacking the revolving ridges and longitudinal folds.

VALVATA HUMERALIS CALIFORNICA Pilsbry. Pl. 5, fig. 15.

This was a comparatively common form during the Pliocene time. We have found this to be widely distributed in our collections of the Pliocene Mollusca in the Great Basin Area. This species was found as molds in the lower deposits of Collinston and perfect specimens were taken from the fine sands and unconsolidated strata from the same locality.

# AGES AND SHELL MEASUREMENTS OF TWO LARGE SPECIMENS OF MEGALONAIAS GIGANTEA (BARNES)

BY THOMAS K. CHAMBERLAIN, U. S. Bureau of Fisheries Laboratories, University of Missouri, Columbia, Mo.

During the past year the writer has had the opportunity to study two very large specimens of the Washboard, *Megalonaias gigantea* (Barnes). One of these mussels was collected by Lionel Goldfrank in the Ohio River, near Metropolis, Illinois, in 1902. The right valve of this specimen measured 218×138 mm. (8.58×5.43 inches) and weighed 688.5 grams (1.52 pounds). The thickness of the shell at the palial line was 20 mm. (0.79 inch). Similar measurements for the left valve could not be made, as button blanks had been cut from this valve and its posterior margin broken, but judging by the right valve the combined weight of the two valves must have exceeded 1350 grams, approximately 3 pounds.

The left valve of another specimen of the same species collected by T. K. C. in the spring of 1932 from the East Fork of White River, at Bono, Indiana, measured  $209\times146$  mm. (8.23 $\times5.75$  inches) and was 16 mm. thick at the

palial line. The left valve weighed 565 grams, and the right valve 540 grams, giving a total weight of 1105 grams or approximately 2.5 pounds for the two valves.

Applying the annual ring method as described by Chamberlain (1932) the age of the Metropolis mussel at the time of its death was found to have been 54 years and the age of the Bono shell 36 years.

The measurements of these two specimens of *Megalonaias* gigantea compare very favorably with those of other large specimens of this species as listed in the existing literature. Simpson, p. 875 (1914), describes a specimen of this species measuring 210×113 mm. from the Little Miami River near Cincinnati, Ohio, and states that Lea's specimen was 8 inches long and weighed 2 pounds 9.5 ounces; Strode, p. 115 (1896), mentions another measuring 8.5 inches in length from the Spoon River, Illinois; and Marshall, p. 25 (1922), reports a specimen from Eagle Creek, Kentucky, measuring 216 mm. in length, the left valve of which weighed 723 grams. It is also evident that the age of the Washboard mussel may exceed 50 years.

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## A NEW STAGNICOLA FROM MONTANA

#### BY FRANK C. BAKER AND JUNIUS HENDERSON

STAGNICOLA ELRODI, new species.—Shell large, fusiform, rather thin, light to dark horn color; surface shining with well marked growth lines crossed by incised spiral lines; whorls 6½, well rounded with deep sutures; nuclear whorl



Chamberlain, Thomas K. 1933. "Ages and shell measurements of two large specimens of Megalonaias gigantea (Barnes)." *The Nautilus* 47, 29–30.

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