THE WEST AMERICAN MOLLUSKS OF THE GENUS CINGULA.

By PAUL BARTSCH,

Assistant Curator, Division of Mollusks, United States National Museum.

Of the genus Cingula we now know six species on the West Coast of America, three of which are new. The first record was made by Doctor Krause in a paper on the Molluska of Bering Sea,¹ when he described Cingula robusta (Dall MS.) Krause. The following year Doctor Dall redescribed Cingula robusta and named the two extremes of this form C. r. martyni and C. r. scipio, suggesting martyni for the specific name, if the information he had received that robusta was preoccupied should prove true.² In the same paper, page 307, he described Onoba aleutica Dall, which I now refer to the present genus.

Of the three species now added, two—C. alaskana and C. katherinæ—come from Alaska, while the third—C. montereyensis—the southernmost member of the genus, comes from Monterey, California.

The four species described by Prof. C. B. Adams ³ as Cingula paupercula, Cingula (?) inconspicua, Cingula (?) terebellum, and Cingula (?) turrita, are all Pyramidellidæ and were referred to their proper places by Doctor Dall and the writer in Bulletin 68, United States National Museum.

CINGULA MARTYNI Dall.

Plate 41, figure 5.

Cingula robusta martyni Dall, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 306, pl. 3, fig. 9.—Cingula robusta (Dall MS.) Krause, Arch. f. Naturg., 1885, p. 270, pl. 17, fig. 1, a-b, not Cingula robusta H. C. Lea, Proc. Bost. Soc. Nat. Hist., 1844, p. 204.

Shell elongate-ovate, light chestnut brown. Nuclear whorls scarcely differentiated from the succeeding turns, smooth. Post-nuclear whorls well rounded, smooth excepting fine, incremental lines. Suture well constricted. Periphery and base of the last whorl

¹ Arch. f. Naturg., vol. 51, 1885, p. 270, pl. 17, fig. 1.

² See synonymy of Cingula martyni.

³ Ann. Lyc. Nat. Hist. N. Y., 1852, pp. 405-6.

inflated, well rounded, the latter narrowly umbilicated, smooth excepting fine, incremental lines. Aperture very large, broadly oval, almost circular; outer lip decidedly expanded, thin; columella strongly curved and very slightly reflected; parietal wall covered with a thick callus which renders the peritreme complete.

The type (Cat. No. 213527, U.S.N.M.) has a little more than five whorls and measures: length 5 mm., diameter 3.2 mm. In some specimens of this species faint, spiral lines are apparent.

$Specimens\ examined.$

Cata- logue No.	Locality.	Number of speci- mens.
61337 213535 213533 160977 213534 161047 161070 161075 161099 161104 1 206036 213527 213529 213530 213532 213532 213532	Plover Bay, East Siberiado North end Nunivak Island, Alaska St. Paul, Pribiloff Islands, Alaska Bering Island, Alaska (6 to 10 fathoms). Kyska Harbor, Aleutians, Alaska do do Kyska Harbor, Aleutians, Alaska (beach, low water). Kyska Harbor, Aleutians, Alaska do do. Kyska Harbor, Aleutians, Alaska (10 fathoms, sandy mud) Kyska Harbor, Aleutians, Alaska (6 to 8 fathoms, sand). Constantine Harbor, Amchitka Island, Aleutians, Alaska Nazan Bay, Atka Island, Alaska	28 48 1 151 151 1 1 8 40 18 15 1,332 26 2 40 2,662

11 = type.

CINGULA MARTYNI SCIPIO Dall.

Plate 41, figure 6.

Cingula robusta scipio Dall, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 306, pl. 4, fig. 10.

Shell similar to *martyni* but more slender, with the spiral sculpture usually more pronounced.

The type (Cat. No. 213536, U.S.N.M.) has a little more than five post-nuclear whorls and measures: Length, 4 mm.; diameter, 2.2 mm.

Specimens examined.

Cata- logne No.	Locality.	Number of speci- mens.
56400	St. Georges Island, Alaska.	1
1 213536	Kyska Harbor, Aleutians, Alaska.	5
213537	Chika Islands, Akutan Pass, Alaska (low water).	14
213538	Unalaska, Alaska.	4
213539	East side Simeonoff Island, Shumagins, Alaska.	93
83230	West side Middleton Island, Alaska (10 to 12 fathoms, gravel).	1

11=type.

CINGULA ALASKANA, new species.

Plate 41, figure 4.

Shell subglobose, light brown. Nuclear turns one and one-quarter, well rounded, smooth excepting fine, incremental lines. Post-nuclear

whorls inflated, well rounded, marked by strong, incised, equal, and equally spaced, spiral grooves, which are about two-thirds as wide as the spaces that separate them; about 10 of these grooves occur between the sutures on the second, and 13 on the penultimate whorl. Suture well impressed. Periphery of the last whorl strongly inflated. Base rather short, inflated, well rounded, very narrowly umbilicated, marked like the spire with spiral grooves. In addition to the spiral sculpture the post-nuclear whorls are marked by rather strong, incremental lines, which extend over the entire surface of the post-nuclear spire. Aperture large, oval, slightly angulated at the posterior angle; outer lip thin, showing the external markings within; columella curved, slightly reflected; parietal wall glazed with a thick callus, which completes the peritreme; operculum horny, pauci-spiral.

The type (Cat. No. 160995, U.S.N.M.) has two and one-half post-nuclear whorls and measures: Length 2.6 mm, diameter 2 mm. It was collected by Doctor Dall at Amelitka Island, Alaska.

CINGULA ALEUTICA Dall.

Plate 41, figure 2.

Onoba aleutica Dall, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 307, pl. 3, fig. 11.

Shell elongate-ovate, light yellow. Nuclear whorls scarcely differentiated from the succeeding turns. Post-nuclear whorls strongly rounded, appressed at the summit, marked by very fine, incremental lines only. Suture strongly constricted. Periphery of the last whorl and the moderately long base well rounded, the latter narrowly umbilicated, marked like the spire. Aperture large, oval, slightly expanded at the edge; posterior angle decidedly obtuse; peritreme complete, dark brown at the edge; outer lip thin; columella oblique, strongly curved; parietal wall covered with a thick callus, which is appressed to the succeeding whorl, completing the peritreme.

The type (Cat. No. 213525, U.S.N.M.) has five and one-half post-nuclear whorls and measures: Length 3.2 mm., diameter 1.7 mm.

Specimens examined.

Cata- logue No.	Locality.	Number of speci- mens.
1 213525 151618 160981 161089 160871 180354 204022 203702 213526	Unalaska, Alaska. St. Pauls Island, Alaska. St. Paul, Pribiloff Islands, Alaska (6 to 9 fathoms) Constantine Harbor, Amchitka Island, Aleutians, Alaska Popoff Strait, Shumagins, Alaska (6 fathoms). Cooks Inlet, near Soldovia, Alaska. Windfall Harbor, Admiralty Island, Alaska. do. Kyska Harbor, Aleutians, Alaska (beach, low water)	1 5 1 1

¹ Figured type.

CINGULA KATHERINÆ, new species.

Plate 41, figure 3.

Shell subglobose, dark brown. Nuclear whorls about one and onequarter, well rounded, smooth. Post-nuclear whorls strongly, roundedly shouldered at the summit, well rounded on the sides, marked by fine, incremental lines only. Suture strongly constricted. Periphery of the last whorl inflated. Base moderately long, well rounded, narrowly umbilicated, smooth excepting incremental lines. large, oblique, broadly oval; outer lip thin; columella curved and slightly reflected; parietal wall covered with a thick callus which renders the peritreme complete.

The type (Cat. No. 206103, U.S.N.M.) was collected by Mrs. Kate Stephens, for whom it is named, at Windfall Harbor, Admiralty Islands, Alaska. It has three post-nuclear whorls, and measures:

Length 2.7 mm., diameter 2 mm.

CINGULA MONTEREYENSIS, new species.

Plate 41, figure 1.

Shell elongate-conic, light brown. Nuclear whorls one and onehalf, well rounded, smooth. Post-nuclear whorls appressed at the summit, moderately rounded, marked by fine, incremental lines only. Suture only slightly constricted. Periphery of the last whorl somewhat inflated, well rounded, with a very narrow umbilical chink, smooth excepting fine, incremental lines. Aperture broadly oval, somewhat effuse anteriorly; posterior angle obtuse; outer lip thin; columella curved; parietal wall glazed with a moderately strong callus, which joins the posterior angle of the aperture with the insertion of the columella.

The type (Cat. No. 127547, U.S.N.M.) and four specimens come from Monterey, California. The type has five and a half post-nuclear whorls, and measures: Length 4 mm., diameter 2.1 mm.

EXPLANATION OF PLATE 41.

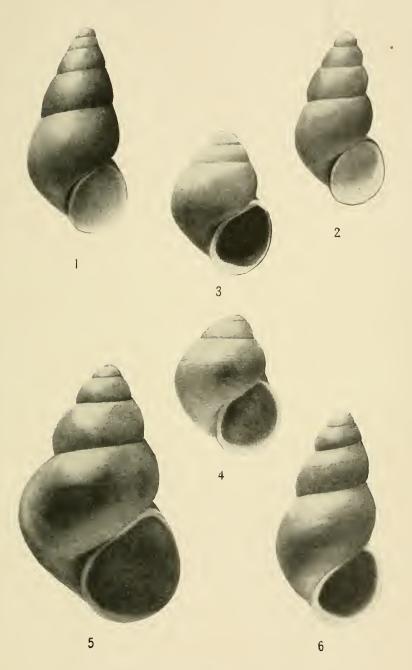
Fig. 1.—Cingula montereyensis Bartsch. Type. Long. 4 mm.; p. 488.

2.—Cingula aleutica Dall. Type. Long. 3.2 mm.; p. 487.

3.—Cingula katherinæ Bartsch. Type. Long. 2.7 mm.; p. 488. 4.—Cingula alaskana Bartsch. Type. Long. 2.6 mm.; p. 486.

5.—Cingula martyni Dall. Type. Long. 5 mm.; p. 485.

6.—Cingula martyni scipio Dall. Type. Long. 4 mm.; p. 486.



WEST AMERICAN MOLLUSKS OF THE GENUS CINGULA FOR EXPLANATION OF PLATE SEE PAGE 488