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A NEW SPECIES OF FORAMINIFERA OF THE GENUS DISCORBIS DREDGED OFF THE COAST OF CALIFORNIA

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In conducting the geological work in connection with Contract No. N9 onr 94400 of the Office of Naval Research, by the Academy some very interesting lots of Foraminifera were collected and preserved, Dr. G D. Hanna, who was in charge of much of the field work, made a dredge haul off Shelter Cove, Mendocino County, California, which contained the original lot of a species of *Discorbis* which is believed to be undescribed.

Discorbis laquei Church, new species Plate 20, figures 1, 5, and 8

Test trochoid; keel rounded, eroded; spire low, conical; dorsal side convex, ventral side concave, chambers numerous, flattened dorsally, slightly inflated on the ventral side; dorsal surface uneven, malleate, a few of the later chambers papillate; ventral surface smooth except for etched area at points of contact with shell; chambers increase regularly in size, the initial two or three being obscured by an incipient boss formed by the crowding of the limbate sutures: all other chambers are visible from the dorsal side. from the ventral side only those of the last formed whorl of nine chambers are visible; sutures limbate on the dorsal side but variably headed, interrupted or welt-like, deeply incised on the ventral side; the umbilical area partially filled with a deposit of clear shell material disposed as blobs and nodes but not closing the central area; aperture a low arched opening at the base of the last formed chamber extending toward the umbilicus. Greater

diameter of holotype, 4.4 mm.; lesser diameter, 3.9 mm.; two paratypes measure 5.6 and 4.6 mm. respectively.

Holotype, No. 9517, and paratypes, Nos. 9518, 9519, Calif. Acad. Sci. Dept. Paleo. Type Coll., from California Fish and Game vessel N. B. Scofield dredge haul 50-B-18 (Loc. 33, 178 (Calif. Acad. Sci.)), in the Pacific Ocean ten miles southeast of Shelter Cove, Mendocino County, California, in 85-92 fathoms, October 12, 1950; G. D. Hanna, collector.

Eight specimens were found at this locality, all attached to the outer surfaces of living brachiopods (Laqueus californianus Koch) which in turn reasonably clear of mud and sand. At each place of attachment some of the shell substance had been dissolved or eroded away leaving a pit a little larger were attached to detached pebbles. The bottom at this place seemed to be than the test of the foraminifer. Hertlein and Grant have noted that Fenton observed pits on the shells of specimens belonging to the genus Laqueus and attributed them to the attachment of other individual brachiopods. While it is true that individuals of Laqueus are often attached to each other in this manner, Dr. Hanna, who has dredged a great many, states that he has not seen a pit formed under such circumstances.

Mr. Delbert Goodwin who was also attached to the same research project, collected an additional lot of six specimens from a rock dredged in 128 fathoms at Fish and Game motorship N. B. Scofield Sta. 51-B-7 (Loc. 33, 246 Calif. Acad. Sci.), February 17, 1951, off Santa Barbara County, California, with Anacapa Island bearing 152° True, eight miles distant. These specimens are slightly smaller than those of the original lot. Four of these are here designated as paratypes Nos. 9520, 9521, 9522, 9523, Calif. Acad. Sci. Pept. Paleo. Type Coll.

A search of the literature failed to disclose any species of *Discorbis* which could be compared readily to the present one. There is a living form, however, which in size and general appearance does approximate it. This is the species referred to by Cushman and Gray (1946, p. 38, pl. 7, figs. 1a, b, c.) as *Eponides repandus* (Fichtel and Moll). In its younger stages this has the defining characters of *Eponides* but older specimens develop extra shell material in the umbilical area with attendant coarse pores and irregular openings which tend to obscure the generic features. In this latter stage *Eponides repandus* is similar to the present species. It is much flatter, however, and the apertural area is simpler and more nearly a plate-like covering. The deeply eroded character of the umbilical area of the new species and its more conical test sets it apart.

LITERATURE CITED

CUSHMAN, J. A., and H. B. GRAY

1946. A foraminiferal fauna from the Pliocene of Timms Point, California. Cushman Lab. Foram. Res. Spec. Pub. No. 19, pp. 1-46, pls. 1-8, December 10, 1946.

