

NEW AMMONITES FROM THE ALBIAN OF NORTHERN CALIFORNIA

MICHAEL A. MURPHY AND PETER U. RODDA
University of California, Riverside

ABSTRACT—Two species of ammonites, which are relatively abundant and are zonal indices, are described in order that the names may be used in stratigraphic discussions of the Albian rocks of Northern California.

Family DESMOCERATIDAE
Genus DESMOCERAS Zittel, 1884
Subgenus PSEUDOUHLIGELLA
Matsumoto, 1942

DESMOCERAS (PSEUDOUHLIGELLA)

VETUS, n. sp.

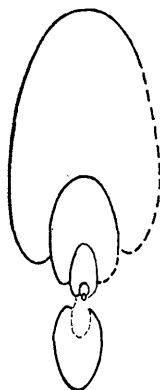
Pl. 20, fig. 3; text-figs. 1,2

Desmophyllites sp., MURPHY, 1956, p. 2115, fig. 6.

Shell medium size, compressed, involution about 80 percent; ornamentation of biconvex growth lines and very slight peripheral ridges that reflect the constrictions of the

internal mold, shell smooth between but with a slight development of ribs on the periphery in some specimens; biconcave constrictions frequent (8 or 9 per whorl); suture slightly retracted with 7 auxiliary lobes in the suspensive lobe; umbilical wall low, rounded, turned under at the umbilical seam; umbilical wall merges imperceptibly with the flank.

Holotype.—The holotype, specimen number 31000 in the U.C.L.A. Invertebrate Paleontology Catalogue, was found at U.C.L.A. locality 3103 (see Murphy, 1956, fig. 5) on Huling Creek. The locality is in a small gully cut along the dip slope of a thick-bedded graywacke which forms a narrows in the stream bed at this point. The fossils at this locality occur in dense limestone nodules which are colored orange on the weathered surfaces. Dimensions of the holotype: at 55 mm. diameter, height of whorl 27 mm.,



TEXT-FIG. 1—Outline drawing of cross section of *Desmoceras* (*Pseudouhligella*) *vetus*, n. sp., made with the aid of a vertical opaque projector. Natural size.



TEXT-FIG. 2—Suture line of *Desmoceras* (*Pseudouhligella*) *vetus*, n. sp., made with the aid of a camera lucida. Twice natural size.

EXPLANATION OF PLATE 20

FIGS. 1,3,4—*Cleoniceras susukii*, n. sp. 1,3, lateral and ventral views of the paratype, a small specimen, illustrating the development of the ribs; natural size. 4, lateral view of the holotype showing the funnel-shaped umbilicus and almost complete lack of ornamentation on the mature specimens; about $\frac{3}{4}$ natural size.

2—*Desmoceras* (*Pseudouhligella*) *vetus*, n. sp. Lateral view of the holotype. Most of the outer shell is gone showing the biconvex pattern of the constrictions.

width of whorl 21 mm., diameter of umbilicus 10 mm.

Remarks.—This species differs from other California species (mostly undescribed) in having a much wider umbilicus. The Japanese species *D. (P.) japonicum* Yabe has a high umbilical wall and a definitely angular umbilical edge. *D. (P.) vetus*, n. sp., differs from *D. (P.) ezoanum* Matsumoto in having frequent constrictions and a wider umbilicus.

This species occurs in the lower part of the *hulenana* zone of Murphy (1956, fig. 25, p. 2115) and occurs with *Beudanticeras haydeni* (Gabb) and *Mortoniceras* sp.

The trivial name is from the Latin *vetus*, old.

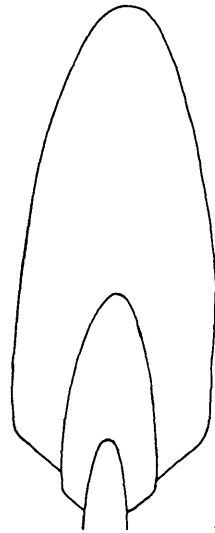
Family HOPLITIDAE

Genus CLEONICERAS Parona &
Bonarelli, 1896

CLEONICERAS SUSUKII, n. sp.

Pl. 20, figs. 1,3,4; text-figs. 3,4

Shell medium to large, compressed, 89 to 90 percent involute; ornamentation of prominent falcoid growth lines and broad low ribs that are present on the peripheral half of the flank but do not cross the venter and are virtually indistinguishable on the inner half of the flank, the body whorl on large specimens is almost smooth; umbilical edge angulate, wrinkled by bulla-like swellings in the younger stages of growth; umbilical wall sloping, overlaps the umbilical wall of the previous whorl in later stages making umbilicus conical or funnel-shaped; venter acutely rounded in youthful stages, more broadly rounded in adult; suture with ventral lobe wide, shallow, first lateral saddle with three major branches, lateral lobe wide,



TEXT-FIG. 4—Outline drawing of cross section of a small specimen of *Cleoniceras susukii*, n. sp. Natural size.

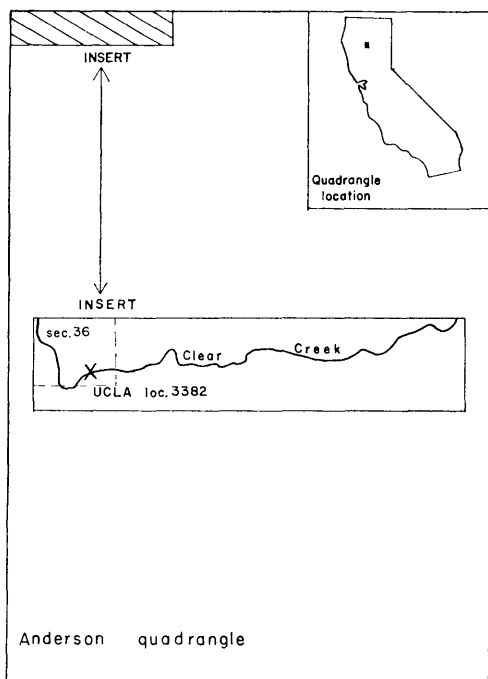
asymmetrically bifid with its ventral auxiliary undercutting the first lateral saddle and much smaller than the dorsal auxiliary.

Type specimens.—The holotype and paratype, specimen numbers 31001 and 31002, respectively, in the U.C.L.A. Invertebrate Paleontology Catalogue, were collected at U.C.L.A. locality 3382 on Clear Creek (see figure 5). Dimensions of the holotype: at 197 mm. diameter, height of whorl 110 mm., width of whorl about 43 mm., umbilicus 37 mm. diameter at the umbilical edge.

Remarks.—*Cleoniceras susukii*, n. sp., closely resembles d'Orbigny's figures (1842, pl. 84, figs. 1,2) of the genotype, *C. cleon* (d'Orbigny), except that the conch is much



TEXT-FIG. 3—Suture line of *Cleoniceras susukii*, n. sp., made with the aid of a vertical opaque projector. Natural size.



TEXT-FIG. 5—Index map showing the type locality for *Cleoniceras susuki*, n. sp.

larger and the suture much more complexly frilled (probably because of the larger size). Also the ribs of *C. susukii*, n. sp., are not so distinct on the inner half of the flank as in d'Orbigny's figure. Spath's *Cleoniceras* aff. *C. cleon* (d'Orbigny) (1925, p. 91, pl. 5, fig. 8) has vertical umbilical wall, *C. susukii* n. sp. has a sloping umbilical wall as shown in text figure 4.

This species occurs in the *packardi* zone of Murphy (1956, fig. 5, p. 2115) and occurs with *Oxytropidoceras packardi* Anderson, *Puzosia aldersona* Anderson and *Douvilleria restitutum* Anderson.

This species is named for Mr. Takeo Susuki, Museum Paleontologist at the University of California, Los Angeles.

REFERENCES

- MURPHY, M. A., 1956, Lower Cretaceous stratigraphic units of northern California: Bull. Am. Assoc. Petroleum Geologists, v. 40, no. 9, p. 2098-2119.
- D'ORBIGNY, Z., 1840-1842, Paleontologie française. Terrains crétacés. Volume I. Cephalopodes. Paris.
- SPATH, L. F., 1925, A monograph of the Ammonoidea of the Gault: Palaeontographical Soc., London.

MANUSCRIPT RECEIVED JULY 16, 1958.