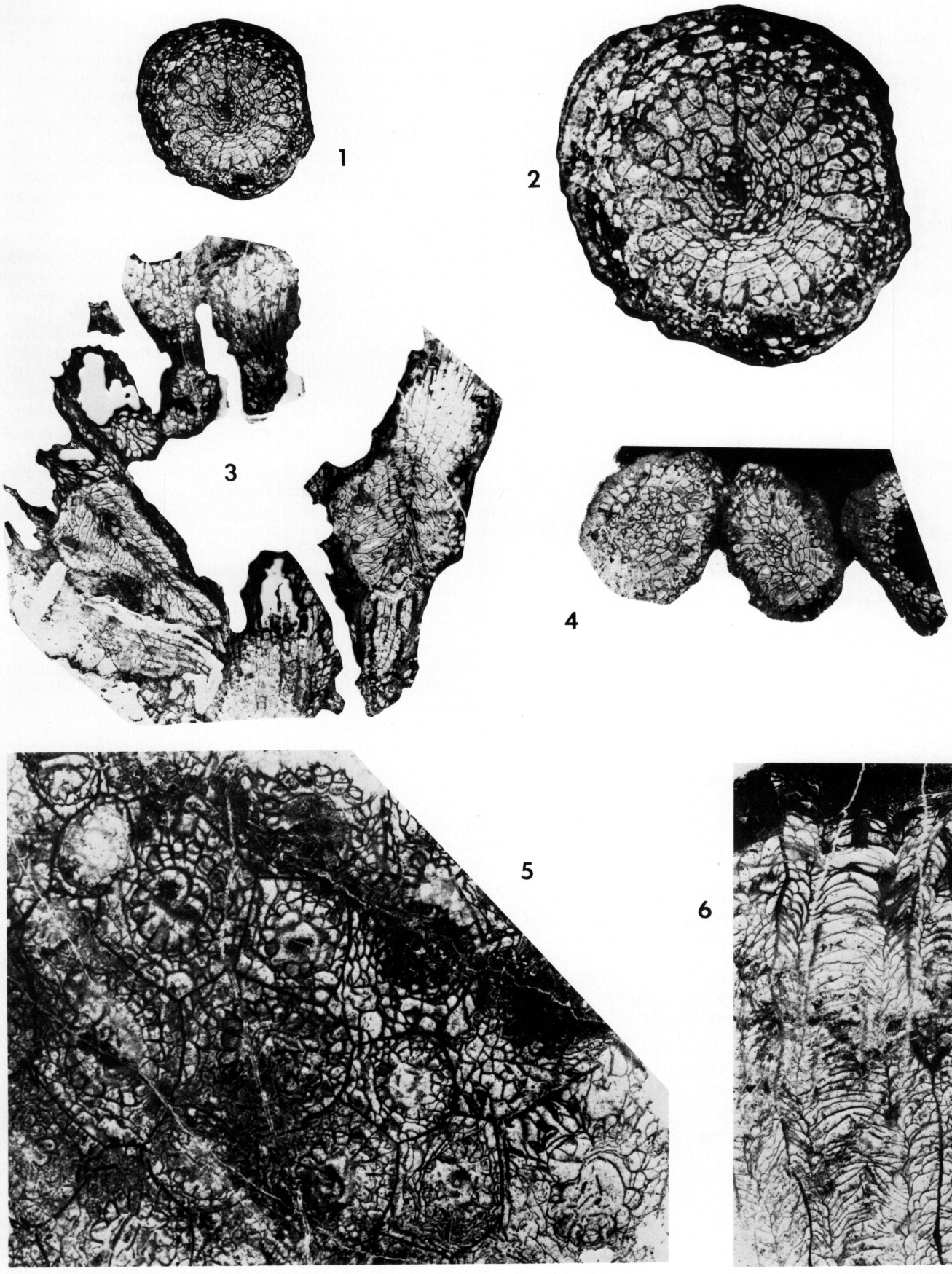
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Family LITHOSTROTIONIDAE d'Orbigny, 1852
Subfamily DIPHYPHYLLININAE Dybowski, 1873
Genus DIPHYPHYLLUM Lonsdale, 1845
DIPHYPHYLLUM CONNORSENSIS (Easton, 1960)
Figure 5.9–5.10

Lithostrotion [*Diphyphyllum*] *connorsensis* EASTON, 1960, p. 579, text-figs. 11–14.

Diphyphyllum connorsensis (Easton). WILSON AND LANGENHEIM, 1962, p. 504, Pl. 86, figs. 3, 4.

Documentation.—LACMIP hypotype 8388. Three thin sections and 16 polished sections from one corallum from LACMIP loc. 1258 were studied.

Discussion.—This distinctive species previously has been reported (Easton, 1960; Wilson and Langenheim, 1962) only from White Pine County in east-central Nevada. Easton (1960, 1963) recorded the holotype from the base of the Arcturus Formation and the other specimens of the type series from the Riepe Spring Limestone and Riepetown Sandstone, as well as the Arcturus Formation. In the Egan Range, Wilson and Langenheim (1962) found this species only in the Riepe Spring Limestone, below the unit containing numerous cerioid corals including *Thysanophyllum princeps,* making it the lowest Permian colonial coral in the area. Its occurrence in the Lee Canyon section also is stratigraphically below that of *Thysanophyllum princeps.*

Subfamily THYSANOPHYLLINAE Hill, 1981
Genus THYSANOPHYLLUM Nicholson and Thompson, 1876
THYSANOPHYLLUM PRINCEPS (Easton, 1960)
Figure 6.5–6.6

Lithostrotion [*Thysanophyllum*] *princeps* EASTON, 1960, p. 576, text-figs. 5, 6.

Thysanophyllum princeps (Easton). WILSON AND LANGENHEIM, 1962, p. 514, Pl. 89, figs. 1, 2; WILSON, 1963, fig. 1.

Documentation.—LACMIP hypotype 8389. Three thin sections and eleven polished sections from one corallum from LACMIP loc. 1262 were studied.

Discussion.—This species previously has been reported (Easton, 1960; Wilson and Langenheim, 1962) only from east-central Nevada and west-central Utah in Lower Permian rocks. Easton (1960) reported it in several formations but later (Easton, 1963) modified some of the assignments so that the holotype was reported from the Riepe Spring Limestone and other specimens from that formation and the basal beds of the Arcturus Formation. Wilson and Langenheim (1962) found the species confined to the uppermost Riepe Spring Limestone in the Egan Range of east-central Nevada. The Spring Mountains occurrence also seems limited to a single stratigraphic position.

Stevens (1977) cited the genus as being present in east-central California and later (Stevens, 1982) discussed its significance to plate tectonic reconstructions. A species determination for the east-central California occurrence was not given.

Family Incertae sedis
Genus MCCLOUDIUS Wilson, 1982
MCCLOUDIUS PARVUS n. sp.
Figure 6.1–6.4

Diagnosis.—A species of *Mccloudius* characterized by the combination of small corallite diameters and few septa.

External description.—Corallum phaceloid, hemispheroidal, maximum observed diameter 4.5 cm; corallites to 11 cm diameter, touching to 0.5 cm apart; epitheca with prominent transverse wrinkles; calyx to 0.5 cm deep, with steep walls and central axial boss of conical shape to 0.2 cm tall, 0.1 cm wide at base.

Transverse section description.—Corallites circular to subcircular, diameters 6.5–11.0 mm; septa of two orders, 18–20 each, thin throughout or slightly dilate in tabularium; major septa 2–3 mm long, protruding 1–2 mm into tabularium, except some cardinal septa about 0.5 mm shorter, some counter septa attached to medial plate; minor septa generally entering tabularium as nubs or short spines in parts of all corallites; dissepimentarium to 5 mm wide, variable, regular in smaller corallites, becoming mostly lonsdaleoid in outer part of larger corallites; regular part of dissepimentarium with concentric, herringbone, and pseudoherringbone dissepiments; lonsdaleoid part of dissepimentarium may occupy one-half perimeter of corallite, containing 5–6 ranks of large, cystose, axially convex dissepiments; axial structure clisiophylloid, relatively large, 2–4 mm diameter, filling most of tabularium, consisting of medial plate (sinuous in some), crossed by 4–8 septal lamellae, connected by wide zone of axial lamellae that may touch septal ends; corallite wall 0.2–0.3 mm wide.

Longitudinal section description.—Dissepimentarium of 3–5 ranks of dissepiments, steeply inclined, generally small, globose; tabellae of two ranks, axial and periaxial; axial tabellae of 1–3 ranks, elongate, steeply dipping inward and upward to medial plate; periaxial tabellae of 1–2 ranks, steeply dipping inward and upward to axial tabellae; medial plate continuous, straight to sinuous.

Collections.—Holotype, LACMIP 8390, paratypes, LACMIP 8391–8393. Three thin sections and 13 polished sections from four coralla from LACMIP loc. 1274 were studied.

Discussion.—The peripheral ring of lonsdaleoid dissepiments clearly identifies this coral as a species of *Mccloudius.* Curiously, without the partly lonsdaleoid dissepimentarium, it would fit nicely into *Heritschioides,* near *H. buttensis* Stevens, 1967, as grouped by Wilson (1982, fig. 1). Some species of *Heritschioides* have a few lonsdaleoid dissepiments but none as many as *Mccloudius.*

Mccloudius fluvius Wilson, 1982, the type species, is the only other species referred to the genus. *Mccloudius parvus,* however, it nearly half the size in corallite diameters and has far fewer septa than *M. fluvius.*

Etymology.—The specific name is *parvus,* Latin, meaning small.

Subclass TABULATA
Milne-Edwards and Haime, 1850
Order AULOPORIDA Sokolov, 1947
Superfamily SYRINGOPORICAE de Fromentel, 1861
Family SYRINGOPORIDAE de Fromentel, 1861
Genus SYRINGOPORA Goldfuss, 1826
SYRINGOPORA MCCUTCHEONAE
Wilson and Langenheim, 1962
Figure 7.1–7.2

Syringopora mccutcheonae WILSON AND LANGENHEIM, 1962, p. 515, Pl. 89, fig. 11–13; LANGENHEIM AND LANGENHEIM, 1965, p. 236; WILSON, 1982, p. 83, figs. 48a, b.

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FIGURE 7—*1, 2, Syringopora mccutcheonae* Wilson and Langenheim, hypotype, LACMIP 8394. *1,* transverse section; *2,* longitudinal section. *3–5, Syringopora multattenuata* McChesney. *3,* transverse section, hypotype, LACMIP 8395; *4,* longitudinal section, hypotype, LACMIP 8396; *5,* longitudinal section, hypotype, LACMIP 8395. All figures ×3.