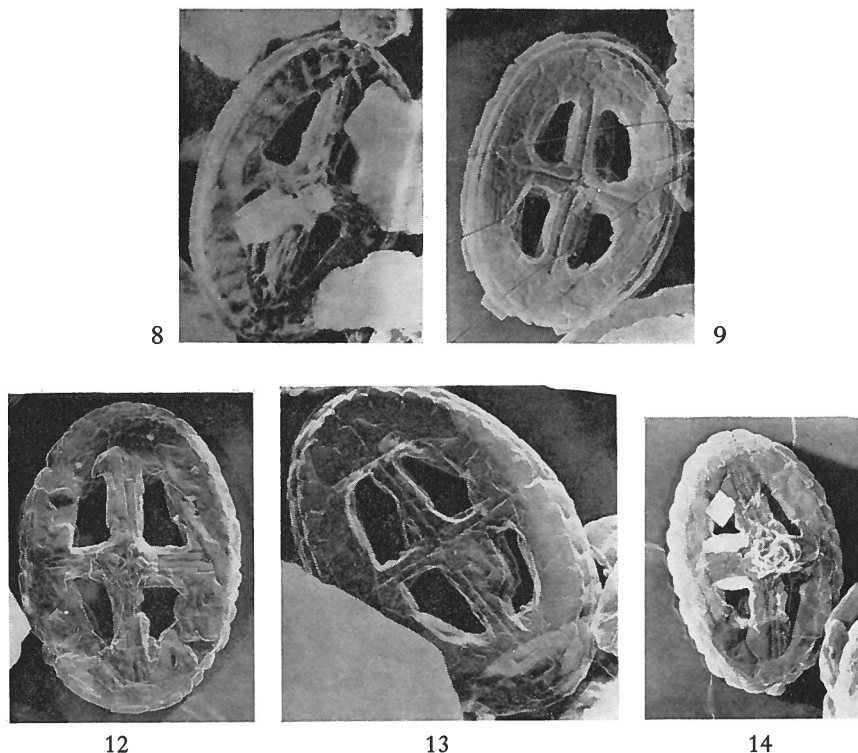


***Acaenolithus galloisii* BLACK, 1973**



Figs. 8, 9, 12-14 — *Acaenolithus galloisii* sp. nov., x 6,900. 8) Distal view. Lower Gault, Bed V, Folkestone (H.605). SM 13398. 9) Proximal view. Lower Gault, Mildenhall (H.962). SM 26317. 12) Distal view. Sutterby Marl, Skegness (H.1035). SM 28860. 13) Proximal view. Sutterby Marl, Skegness (H.1046). SM 29572. 14) Holotype, distal view. Sutterby Marl, Skegness (H.1035). SM 28776.

**Description:**

**Diagnosis:** A species of *Acaenolithus* with completely empty windows, a massive unstriated cross and a roughly-sculptured distal surface.

**Description:** The outline of the coccolith is elliptical. The marginal shield is built up of several thicknesses of flattened granules which do not appear to be arranged in recognizable sheets; about 28 (26-34) granules can be counted at the circumference. On the distal surface the arms of the cross are arched up to support a short spine. Each arm consists of a bundle of narrow, much-elongated crystals, usually parallel-sided, but sometimes tapered or waisted; in some specimens these are flanked by broader elements next to the window. The spine is apparently solid and composed of rhomb-shaped crystals. The height of the coccoliths is about  $0.5 \mu$ , and the spine reaches a height of  $2.1 \mu$  in the only specimens in which it can be measured. The windows are completely open, without any trace of bars or other infilling. On the proximal side, each arm of the cross is marked by a shallow central furrow, flanked by a single row of brick-shaped crystals on each side.

Measurements (in microns):

				d	d'	p	p'	c	c'	n
Holotype:	H.1035	28776	distal view	4.9	3.1	—	—	2.5	1.5	28
	H.605	13398	» »	5.9	3.9	—	—	3.5	2.3	34
	»	13435	» »	4.8	3.5	—	—	2.6	1.4	24
	»	13542	» »	6.1	4.2	—	—	3.5	2.0	40
	H.796	30377	» »	6.1	4.0	—	—	3.3	1.9	36
	H.799	31307	» »	6.3	4.5	—	—	3.5	2.3	40
	H.962	26317	proximal view	5.6	4.0	5.0	3.5	3.0	1.8	34
	H.1035	28860	» »	6.2	4.4	—	—	3.2	2.2	34
	H.1046	29446	» »	5.5	4.0	—	—	3.3	2.0	28
	»	29494	» »	5.2	3.8	—	—	3.7	1.9	—
	»	29520	» »	4.5	3.0	—	—	2.7	1.5	—
	»	29572	» »	7.5	5.2	7.0	4.7	4.4	2.7	26

d, d' = major and minor diameters respectively of the distal shield or distal surface.

p, p' = major and minor diameters of the proximal shield or proximal surface.

c, c' = major and minor diameters of the central area.

n = number of component elements in the distal shield, loxolith-ring or other marginal structure.

**Type level:**

Upper Aptian.

Occurrence: Upper Aptian to Middle Albian. Its main occurrence is in the Sutterby Marl at Skegness (H.1035, H.1046); it is also present, but much less common, in the Lower Gault (Middle Albian) at Folkestone (H.605), Cambridge (H.796, H.799) and Mildenhall (H.962).

**Type locality:**

Sutterby Marl of the Skegness Borehole (Southeastern England).

**Depository:**

Collection of electron micrographs at the Sedgwick Museum, Cambridge.

Holotype: SM 28776; fig. 14; from the Sutterby Marl (Upper Aptian) of the Skegness Borehole (H.1035).

**Author:**

Black M., 1973, p. 57; pl. 21, figs. 8, 9, 12-14.

**Reference:**

British Lower Cretaceous Coccoliths. I. Gault Clay. *Palaeontogr. Soc. Monogr.*: (2), pp. 49-112, pls. 17-33, text-figs. 39-51.