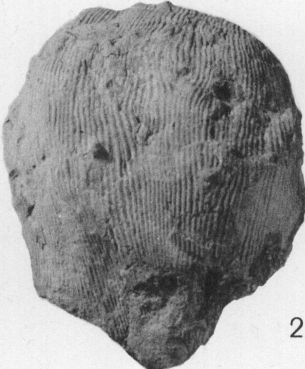
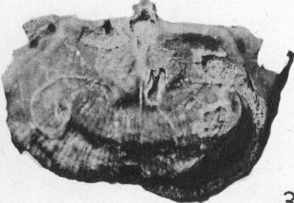


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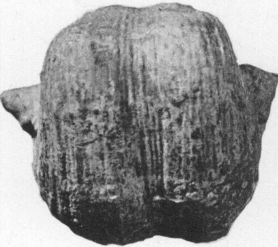
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4



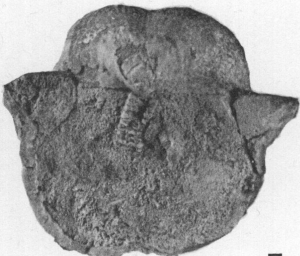
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9



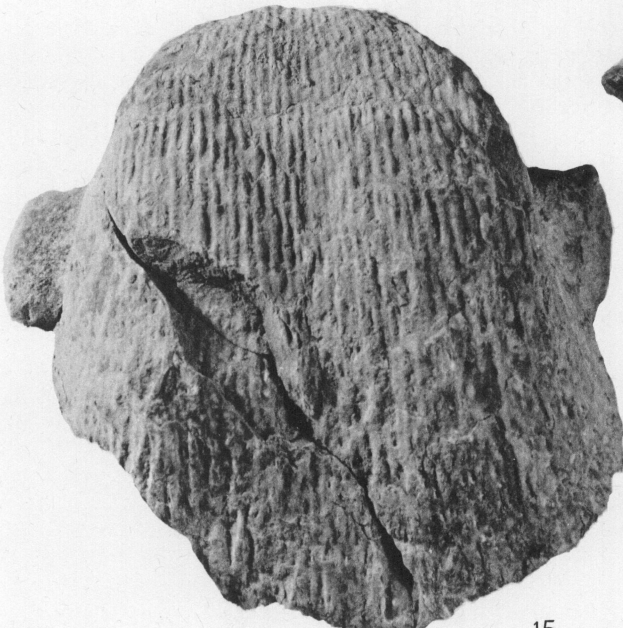
6



7



10



15



8



11



13



12



14

Tabulae may be present. When they are present, they are remote and often incomplete.

Locality.—311 (figured specimen). 361.

Family SYRINGOPORIDAE Milne-Edwards
& Haime

Genus SYRINGOPORA Goldfuss, 1826

SYRINGOPORA sp.

Pl. 125, fig. 7

This common genus is widespread in Paleozoic rocks of North America and occurs generally throughout the Ely Limestone. The Ely specimens are assigned to no species because the writer believes that a great deal of work must be done with *Syringopora* before this genus can be of any notable stratigraphic value.

Locality.—312

Subclass TETRACORALLA

Family CYATHOPSIDAE Dybowski

Genus CANINIA Michelin in Gervais, 1840

CANINIA TORQUIA (Owen, 1852)

Text-figs. 4-6

Cyathophyllum torquium Owen, 1852, tab. 4, fig. 2.

Caninia torquia (Owen), Easton, 1944, pl. 22, figs. 2-7.

Description.—Simple, cylindrical corallum with deep, straight-walled calyx. Floor of the calyx is flat without a boss. In transverse section of one large specimen 42 mm. in diameter, 48 major septa are present. These septa are undilated and extend slightly more than half of the distance to the center of the corallite. Minor septa are short, being about one-fourth as long as the major septa. Dissepimentarium extends a little less than half the distance to the center of the corallum. Dissepiments occur in twelve to fourteen ranges, the first six or so being concentric and the innermost ones being arranged in a herringbone pattern.

In longitudinal section, tabulae are closely spaced, about ten in ten millimeters, flattened to gently depressed in the middle, and reflexed distally.

Discussion.—This *Caninia* is slightly larger than the typical *C. torquia* and has a wider dissepimentarium.

? CANINIA sp. A

A few small corals that represent a transition from *Triplophyllites* to *Caninia* occur in

the Ely Limestone. These corals are small ceratoid forms that strongly resemble *Triplophyllites*, yet they have a narrow dissepimentarium that persists into the upper regions of the corallum. These corals occur irregularly and their taxonomic position is uncertain.

Family LOPHOPHYLLIDIIDAE Moore &
Jeffords

LOPHOPHYLLIDIUM aff. *L. PROLIFERUM*.

(McChesney, 1860)

Text-fig. 7

Two well preserved specimens of *Lophophyllum* show marked affinities with *L. proliferum*. One specimen is 46 mm. long and 18 mm. in diameter at the calyx. This specimen has the following septal formula: K 9 A 4 C 4 A 8, thus 29 major septa. Both specimens are exceptionally large for the genus; however, the septal configuration resembles that of *L. proliferum*.

Locality.—309.

Class SCYPHOZOA

Order CONULARIIDA Miller & Gurley

Family CONULARIIDAE Walcott

CONULARIID

Pl. 128, fig. 27

One specimen preserved as an external mold is referred to this group. The specimen is fragmental and was collected from the base of the Ely Limestone.

Locality.—313.

Phylum BRYOZOA

Order CYCLOSTOMATA

Family FENESTELLIDAE King

Genus ARCHIMEDES Owen, 1838

ARCHIMEDES sp.

Pl. 128, fig. 30

Description.—Axis contains ten volutions in a distance of 7.5 cm. Shaft is 2.9 mm. in diameter at the base of the flange and 5.5 mm. at the top. The surface of the shaft is finely striate. Volution height averages 7.5 mm.

Fronds are not attached to the spire of the specimen in this collection, although the spire rests in a hash of fenestellid debris. Fenestrules are elongate and bluntly rounded at either end. Width of fenestrules is 3.5 mm. and the length-width ratio is three to one. Branches are narrow and closely spaced,

averaging 3.7 mm. in width. Dissepiments are 1 mm. in width, smooth and set below the surface of the frond. Apertures are rounded and alternately spaced on either side of a strongly pronounced carina at a distance of about 0.3 mm.

Discussion.—This species of *Archimedes* occurs with the fusulinid, *Fusulinella devexa* of Middle Pennsylvanian age. It differs from other species reported in post-Mississippian rocks primarily in the greater length of the volutions of this *Archimedes*.

Locality.—318.

Family RHABDOMESIDAE Vine
Genus RHOMBOPORA Meek, 1872

RHOMBOPORA LEPIDODENDROIDES Meek,
1872

Rhombopora lepidodendroides Meek, 1872, p. 141,
pl. 7, figs. 2a-f.

Description.—Branches are small averaging 2.5 mm. in diameter. Apertures are elongate oval, 0.3 mm. in length and 0.15 mm. in width. Megacanthopores are prominent and well developed, being about half the diameter of the apertures. Micropores are present but are difficult to distinguish on weathered surfaces.

Discussion.—This *Rhombopora* is somewhat larger than typical representatives of the species. However, its wide range throughout the Ely Group limits its stratigraphic value.

Phylum BRACHIOPODA
Class INARTICULATA

Family DISCINIDAE

Genus ORBICULOIDEA d'Orbigny, 1847

ORBICULOIDEA CAPULIFORMIS

(McChesney, 1860)

Pl. 125, figs. 8,9

Discina capuliformis McChesney, 1860, p. 72.

Description.—Shell is subcircular in outline. Flattened pedicle valve has an elongated foramen which is bounded on either side by low, rounded ridges. Apex is low and posterior. Growth lines appear distinctly flat and are wider at the apex than at the margins of the valve. In a shell 2.1 cm. in diameter there are 31 growth lines in a distance of 1 cm. These lines appear occasionally to bifurcate and may result from irregular growth.

Brachial valve is an eccentric cone, the

markings of which are like those of the pedicle valve. The apex stands 1.2 cm. high in a shell 2.2 cm. long. The largest shell in this collection is a ventral valve which measures 3.1 cm. in length and 2.8 cm. in width.

Locality.—313.

Class ARTICULATA
Order PROTREMIDA-TELOTREMIDA
Suborder ORTHINA

Superfamily ORTHICAE

Family RHIPIDOMELLIDAE

Genus RHIPIDOMELLA Oehlert, 1890

RHIPIDOMELLA ELYENSIS, n. sp.

Pl. 125, figs. 11-16

Description.—Shell is small, subovate in outline, about as wide as it is long. Greatest width is just anterior to the middle of the shell. Shell subequally biconvex, brachial valve more or less evenly convex, anterior half of the pedicle valve is almost flat, becoming gibbous in the umbonal region. Surface of both valves is marked by numerous, hollow lirae, the openings of which produce a punctate surface. Lirae increase by intercalation. Along the line of commissure 70 to 110 lirations may be counted on mature specimens, the average being about four per millimeter.

Cardinal area of both valves is quite small, that of the pedicle valve being incurved, whereas that of the brachial valve is almost in a plane with the line of commissure. The hinge line is about one-fourth the width of the shell. Dimensions of an average specimen are as follows: length 11 mm., width 11 mm., thickness 4.8 mm. Sizes range from juvenile forms of 3 mm. in length to adult specimens 13 mm. in length.

Internally the pedicle valve bears large, flabellate diductor muscle scars that surround an elevated platform which in turn bears the slender adductor scars. Stout dental lamellae diverge and continue onto the floor of the valve where they form a slight ridge around the diductor scars. This ridge is more pronounced along the anterior of the scar than along the lateral margins.

Muscle patterns of the brachial valve are small and indistinct. The cardinal process is small and does not extend onto the floor of the valve as in some species. Crural processes are stout and diverging.

Discussion.—*Rhipidomella elyensis* differs from *R. carbonaria* (Swallow) in that *R. elyensis* is larger, less gibbous and has finer and more closely spaced lirations. It differs from *Rhipidomella nevadensis* (Meek) in that it is smaller than *R. nevadensis* and somewhat less gibbous.

Locality.—309.

Superfamily DALMANELLICAE
Family SCHIZOPHORIIDAE
Genus SCHIZOPHORIA King, 1850

Discussion.—The diagnosis of *Schizophoria* and *Rhipidomella* differ only slightly, the characteristic difference being internal. *Schizophoria* has a median septum and dental lamellae that extend onto the floor of the shell, whereas *Rhipidomella* has no median septum and the dental lamellae surround the muscle scars as elevated ridges.

SCHIZOPHORIA RESUPINOIDES (Cox, 1857)
Pl. 125, figs. 17–19

Schizophoria resupinoides Cox, 1857, p. 570, pl. IX, figs. 1–1b.

Description.—Shell is subquadrate in outline, width about one-fourth greater than length. Valves subequally biconvex, the brachial valve being more gibbous than the pedicle. Hinge-line short, about one-third the width of the shell. Line of commissure is distinctly resupinate. Pedicle valve bears a broad, shallow sulcus. The surface of both valves is liriate.

On the interior of the pedicle valve two thin, dental lamellae bound a narrow muscle field and extend slightly more than one-third the distance to the anterior edge of the valve. A narrow median septum stands well above the floor of the valve and bisects the muscle field.

Crural lamellae extend from the beak of the brachial valve about one-third the distance to the anterior. These lamellae are shorter and more widely divergent than those of the pedicle valve. A low median ridge stands above the floor of the valve but does not extend from the beak.

The single specimen in this collection measures 3.1 cm. in width, 2.6 cm. length and 1.7 cm. in thickness.

Locality.—311.

Suborder TEREBRATULINA
Superfamily TEREBRATULICAE
Family DIELASMATIDAE
Genus DIELASMA King, 1859
DIELASMA BOVIDENS (Morton, 1836)
Pl. 127, fig. 15

Terebratula bovidens Morton, 1836, p. 150.

Discussion.—Two specimens from the lower Ely are assigned to this widely distributed species on the basis of external form only. These large terebratulids appear to fit the concept of *D. bovidens* in shape, but the genus is based on internal features which were not observed in the specimens at hand.

Locality.—313.

Family TEREBRATULIDAE
Genus CRANAENA Hall & Clark, 1893
CRANAENA MINUTA, n. sp.
Pl. 127, figs. 16–21

Description.—Shell is typically terebratuliform, biconvex and elongate with greatest width anterior to mid-region of the shell. Anterior commissure is rectimarginate to uniplicate, beak incurved, pedicle foramen rounded.

Brachial interior is characterized by a perforate, free hinge plate. The posterior end of the plate is bluntly mucronate, and the plate is wider than long—transversely ovoid. The lateral portions are rounded, and there is a slight reentrant along the lateral margin of the plate. The perforation is elongate to oval and is in the center of the plate. At the perforation, the plate is deeply concave.

Crura originate near the anterior end of the perforation, dividing the plate into three distinct regions. At the anterior margin of the plate, two curural processes extend toward the pedicle valve for a short distance. The brachidium is elongate, showing a *Dielasma*-like loop and extends approximately half the distance of the valve.

Pedicle interior is marked by stout dental lamellae which extend to the floor of the valve but not out onto the floor. These lamellae may be adjacent and fused to the sides of the shell so as to form ridges along the side of the shell, or they may be directed more nearly towards the center of the valve, thus leaving a space between the lamina and the shell wall. In neither valve is there a

median septum. A typical specimen is 8 mm. long, 4.5 mm. wide and 3.0 mm. thick. A gerontic form is 7.5 mm. long, 5.5 mm. wide and 5.5 mm. thick.

Discussion.—*Cranaena* in this collection are somewhat smaller than typical members of the genus. It is assumed that these shells are mature, however, for there are specimens that show gerontic characteristics such as crowding of growth lines along the anterior margin and increased gibbosity of the valves.

Cranaena is usually considered to be a Mississippian genus with a range of Middle Devonian to Mississippian. The perforate hinge plate in these Pennsylvanian specimens places them unmistakably in that genus. *Cranaena minuta* is distinguished from all earlier species by its much smaller size and the length of the brachidium which in earlier species does not reach the middle of the valve.

Locality.—309.

Family CENTRONELLIDAE

Genus RHYNCHOPORA King, 1865

RHYNCHOPORA MAGNICOSTA Mather, 1915

Pl. 127, figs. 12-14

Rhynchopora magnicosta Mather, 1915, p. 176, pl. X, figs. 11-11c.

Description.—Shells are subpentagonal; posterolateral margins are almost straight; anterolateral margins are broadly rounded. The anterior is truncate. Greatest width is at about the anterior third of the shell. The width is somewhat greater than the length.

Pedicle valve is gently convex in the umbonal region, becoming flat toward the mid-section. The lateral portions of the anterior third of this valve are somewhat higher than the mid-portion. It is this elevation of the sides rather than an actual depression of the middle that forms the sulcus. At the anterior margin, the valve is sharply geniculate at 90° or more, forming a tongue which protrudes into the dorsal fold. In the pedicle sulcus there are four coarse, flattened plications in the space of 8 mm. and six on each of the lateral slopes.

The brachial valve has three plications in the space of 5 mm. on the fold. Each of the lateral slopes bears six or seven plications. The length of one specimen from the

Ely Limestone is 13 mm., the width 14 mm. and the thickness is 9.5 mm. The surfaces of both valves are coarsely punctate.

Locality.—313.

Suborder RHYNCHONELLINA

Superfamily RHYNCHONELLICAE

Family CAMAROTOECHIIDAE

Genus WELLERELLA Dunbar & Condra,

1932

WELLERELLA sp.

Pl. 125, figs. 21-24

Discussion.—Several small shells resembling *Wellerella* are present in the collections from the Ely Limestone. These are exceedingly small, few in number and quite variable in form. The shells average 5.2 mm. in width, 5.0 mm. in length and 3.1 mm. in thickness. All have plicate anterior commissures. It is impossible to determine from evidence at hand whether these forms are juvenile or whether they represent small, mature individuals.

Locality.—309.

Suborder STROPHOMENINA

Superfamily STROPHOMENICAE

Family STROPHOMENIDAE

Genus DERBYIA Waagen, 1884 (emend.

Girty, 1908)

DERBYIA aff. *D. HAESITANS* Dunbar &

Condra, 1932

Pl. 125, figs. 26-27

Description.—Shell is large, hinge-line straight, greatest width at or near the hinge line. Cardinal extremities are somewhat rounded, although earlier growth stages appear to be quite rounded. Interarea forms an angle of about 100 degrees with the line of commissure and has an apical angle of 160 degrees. The perideltidal area is faintly visible on some specimens and appears to form an angle of about 90 degrees. A deltidal plate covers the delthyrium which has an apical angle of 40 degrees.

The pedicle valve is almost flat, but some specimens exhibit a ventral curvature along the anterior margin, producing a somewhat concave valve. The beak is very low and inconspicuous. Lirae are high, sharp ridges separated by somewhat wider, flattened striae, and they increase by intercalation. Thus, every third or fourth lira is stronger

than the intervening ones. In a mature specimen there are about 20 lirations per centimeter.

The brachial valve is uniformly convex longitudinally. Transversely the umbonal slopes taper off rather sharply, forming a faint ear-like platform. The umbo is thus rather gibbous. Concentric growth lines interrupt the lirae at irregular intervals across the pedicle valve and are more prominent than those on the brachial valve.

Internally the pedicle valve bears a high median septum which extends from the apex of the delthyrium approximately one-third the length of the shell. The highest point of the septum is just anterior to the delthyrium. From this point it tapers off slowly. Dimensions of a typical specimen are as follows: length 5.4 cm., width 8.1 cm., thickness 2.3 cm.

Discussion.—This species of *Derbyia* is closely allied to *D. haesitans* Dunbar and Condra particularly in shape and outline. However, it may be distinguished from the latter by the nature of its surface ornamentation. The surface of *D. haesitans* is marked by rounded, radial lirae which are separated by narrower striae, whereas the lirae of this *Derbyia* are narrow and ridge-like and are separated by wider, flattened areas.

Locality.—309.

Family CHONETIDAE

Genus CHONETINA Krotow 1888

CHONETINA FLEMINGI (Norwood & Pratten, 1854)

Pl. 125, fig. 25

Chonetes flemingi Norwood & Pratten, 1854, p. 26, pl. 2, fig. 5a-e.

One pedicle valve of a *Chonetina* is present in the collections of the Ely fauna. The valve is radially striate with a narrow, deeply incised sinus.

Locality.—328.

Superfamily PRODUCTICAE

Family PRODUCTIDAE

Genus DIAPHRAGMUS Girty, 1911

DIAPHRAGMUS cf. *D. fasciculatus*

McChesney, 1860)

Pl. 127, figs. 9-11

Productus fasciculatus McChesney, 1860.

Discussion.—Two specimens are referred to *Diaphragmus* on the basis of the wide diaphragm and to *D. fasciculatus* on the

basis of the length-width ratio of the visceral disc. In *D. fasciculatus* the visceral disc is about one and one-third times wider than it is long. *Diaphragmus* is usually thought of as a Mississippian genus. However, it also occurs in Pennsylvanian rocks in Nevada.

Locality.—311, 323.

Genus DICTYOCLOSTUS Muir-Wood, 1930

DICTYOCLOSTUS AMERICANUS Dunbar &

Condra, 1932

Pl. 127, fig. 15

Dictyoclostus americanus Dunbar & Condra, 1932, p. 218, pl. 34, figs. 3-6.

Description.—Shell is subquadrate, length about equal to width. Hinge-line straight, slightly less than the greatest width. Pedicle valve convex regularly across posterior half of the shell. A vague median sulcus is evident from the middle of the visceral disc to the anterior margin of the trail. On the trail, the sulcus is broad and shallow. Fine costae cover the surface, the posterior two-thirds of which is marked by concentric rugae whose strength is equal to that of the costae. The resulting reticulations appear as uniform squares. The ears are of moderate size and are not sharply delineated from the umbonal slopes. Reticulations extend over the ears. Minute spines are distributed irregularly over the surface, although they are coarser on the ears and slopes.

Locality.—327.

Genus ANTIQUATONIA Miloradovich, 1945

Diagnosis.—Semireticulate productids characterized by a pre-aural ridge on either side of the umbo of the pedicle valve. This ridge is the external expression of a vertical partition which separates the visceral cavity from ears. Spines along this ridge are arranged in a single row and increase in size toward the lateral slopes.

Discussion.—Girty (1935, p. 7) pointed out and described the ridge and row of spines between the ears and umbones of some productids he had described earlier, mentioning specifically *Productus hermosanus* and *P. coloradensis*. At the time, Girty apparently did not consider these features of generic value, for the status of the two mentioned species remained unchanged. Miloradovich (1945, p. 496), sepa-

rated the genus *Antiquatonia* from the genus *Dictyoclostus* on the basis of the pre-aural crests described by Girty. The crests and spines are well displayed on several of the Ely *Antiquatonia*.

ANTIQUATONIA HERMOSANA (Girty, 1903)
Pl. 126, figs. 5-8

Productus semireticulatus var. *hermosanus* Girty, 1903, p. 358, pl. II, figs. 1-4.

Description.—Shell is subquadrate in outline. Pedicle valve is gibbous and geniculate. A sulcus begins anterior to the beak as a broad, gentle depression and continues towards the front increasing only slightly in depth. The sulcus is most pronounced on the anterior slope, becoming obsolescent both at the beak and along the anterior margin. Costae are small and rounded on the visceral disc and are uniformly crossed by concentric rugae at intervals about twice the distance of the costae, thus producing more or less rectangular reticulations. On the visceral disc costae increased by bifurcation.

On the anterior slope, the costae increase greatly in strength and in some cases coalesce. The ears are moderately large, and are bluntly rounded to somewhat mucronate. Beginning just anterior to the beak and above the aurications, there is a single row of spines along a raised costation, the curvature of which parallels that of the visceral portion of the pedicle valve. The posterior spines are small and rather close together, but spines are coarser and more widely separated towards the anterior. Spines elsewhere about the shell are coarse and irregularly spaced. The spines do not appear to affect the pattern of the surface markings. A typical specimen is 35 mm. in length, 40 mm. in width, and 21 mm. in thickness.

This species is common in the Ely Limestone, particularly in the lower part of the sequence.

Locality.—314.

ANTIQUATONIA ELYENSIS, n. sp.
Pl. 126, figs. 12-14; pl. 127, figs. 8-11

Description.—Shell is subquadrate longitudoinally. Beak is small; hinge-line is straight. Pedicle valve is gibbous, convex,

geniculate. A median sulcus begins on the visceral disc as a vague, shallow depression and continues down the anterior slope where it is more deeply sinuate in some specimens than in others. Low rounded costae are crossed by concentric rugae on the visceral disc; on the slopes, the costae increase by intercalation. Eight to ten costae occur in the space of 1 cm., and their width is about equal to the space separating them. The surface is marked by numerous slender spines distributed more or less regularly over the surface. A single row of pre-aural spines runs from the beak along the antero-lateral margin. There is a ridge parallel to this row of spines as in *Antiquatonia hermosana*.

The brachial valve is moderately concave, being almost flat across the visceral disc, and in some shells there is a slight fold corresponding to the sulcus of the pedicle valve. The visceral disc is reticulate and without visible spines. A typical specimen is 20 mm. in length, 25 mm. in width, and 13 mm. in thickness.

Internally, the brachial valve shows a strong cardinal process from which two short ridges protrude laterally. There is no median septum.

Discussion.—*Antiquatonia elyensis* differs from *Antiquatonia hermosana* (Girty) in that the former is much smaller than *A. hermosana*; from *A. morrowensis* (Mather) in that *A. elyensis* is costate whereas *A. morrowensis* is lirate.

Locality.—314, 309.

Subfamily MARGINIFERINAE
LISSOMARGINIFERA, n. gen.

Diagnosis.—Faintly ornamented Marginiferinae characterized by a pair of spines on each ear, an outer coarse spine directed posteriorly in line with the lateral margin of the ear, and a very short slender inner spine half of the distance from the beak to the tip of the ear. Otherwise, the surface is commonly devoid of ornamentation. Faint rugae may be seen on the visceral discs of some specimens, and discernible striae are also occasionally present, but they are not characteristic. The surface is marked by only a few coarse spines, usually with one on either umbonal slope and four to six scattered irregularly about the mesial por-

tion of the pedicle trail. The brachial valve is without spines.

The cardinal process is rather short and stout, with three lobes projecting posteriorly, the central lobe being the longer. Muscle scars of the brachial valve are elevated, flabellate platforms separated by a low median ridge which arises just anterior to the base of the cardinal process and continues forward half the distance of the visceral disc. Anterior and lateral to the muscle scars are reniform brachial impressions. Along the anterior margin of the visceral disc there are six to eight small spines which would seem to ally the genus to *Marginifera*. At the posterolateral margins of the disc, there are wrinkles that correspond to those of the ventral valve and may result in facilitated articulation.

The pedicle interior is typically smooth with only faint diductor scars. Adductor scars are on a prominent platform that is raised well above the floor of the valve. This platform extends about halfway across the valve and is bluntly rounded at the anterior end. The posterior end of the ad-

ductor muscle platform tapers narrowly and does not reach to the hinge-line of the shell.

Genotype.—*Lissomarginifera nuda* n. sp.

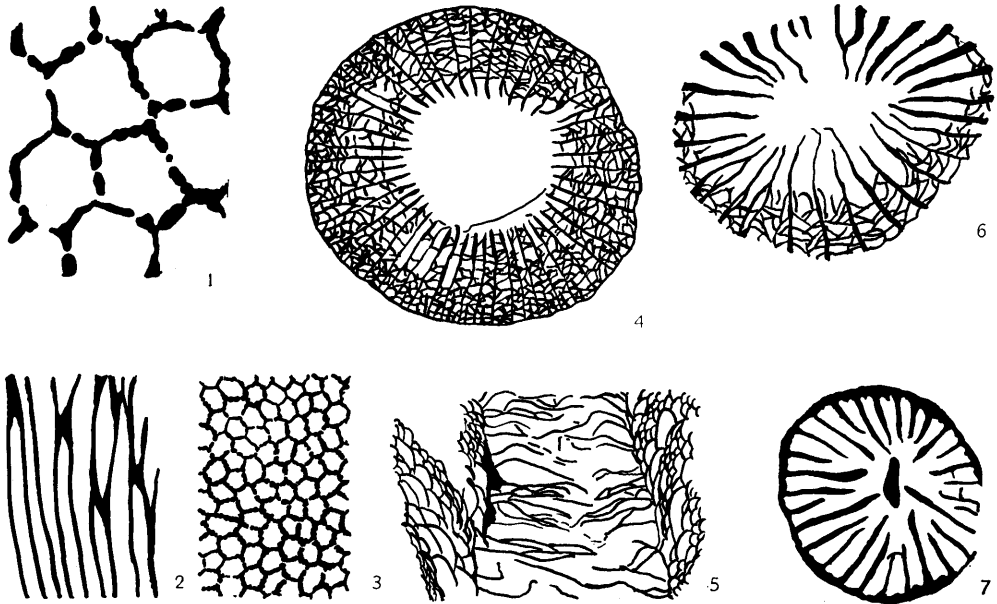
Discussion.—This genus closely resembles *Marginifera* Waagen, particularly in the marginal flange of the brachial valve that characterizes both shells. However, this genus differs from *Marginifera* in its disposition of spines and its typically smooth surface.

LISSOMARGINIFERA NUDA, n. sp.
Pl. 127, figs. 1-7

Description.—Shell is evenly rounded in outline anterior to the hinge-line. Greatest width is at the hinge-line, and the shell is wider than it is long. Ears are distinct from the umbonal slope and are angular to almost mucronate. The pedicle valve is strongly convex, and the curvature is geniculate. The surface of both valves is typically devoid of prominent ornamentation, although faint striae and rugae are present. Some specimens with the spines still intact exhibit a completely smooth surface, and the

EXPLANATION OF PLATE 127

- FIGS. 1-7—*Lissomarginifera nuda*, n. sp. 1-5, pedicle exterior showing distribution of spines over the surface, brachial exterior showing spines along the hinge-line, anterior, and side view of genoholotype, USC 5055, $\times 1$; 6, brachial interior, USC 5057, $\times 1$; 7, pedicle exterior showing faint costae, USC 5056, $\times 1$.
- 11—*Antiquatonia elyensis*, n. sp. Brachial view of a partial valve, pedicle exterior, hinge-line, side view, USC 5054, $\times 1$.
- 12-14—*Rynchopora magnicosta* Mather. Lateral view, brachial exterior, pedicle exterior, USC 5059, $\times 1$.
- 15—*Dielasma bovidens* (Morton). Pedicle exterior, USC 5060, $\times 1$.
- 16-21—*Cranaena minuta*, n. sp. 16-19, pedicle exterior, brachial exterior, side view, anterior view of holotype, USC 5061, $\times 3$; 20, interior view of hinge-line showing perforated hinge-plate, USC 5063, $\times 3$; 21, lateral view of a gerontic specimen showing crowded growth lines, USC 5062, $\times 3$.
- 22-29—*Punctospirifer campestris* (White). 22-25, 28, brachial exterior, pedicle exterior, anterior, side view, hinge-line, USC 5065, $\times 1$; 26, brachial interior, USC, 5067 $\times 1$; 27, pedicle interior of a distorted specimen, USC 5066, $\times 1$; 29, pedicle exterior of a gerontic specimen, USC 5068, $\times 1$.
- 30—*Punctospirifer transversus* (McChesney). Anterior of a specimen with the ears broken, USC 5069, $\times 1$.
- 31-33—*Composita argentea* (Shepard). Anterior, brachial exterior, pedicle exterior, USC 5070, $\times 1$.
- 34-35—*Crurithyris planoconvexa* (Shumard). Lateral view, pedicle exterior, USC 5071, $\times 3$.
- 36-37—*Cleiothyridina orbicularis* (McChesney). Brachial exterior, pedicle exterior of an exfoliated specimen, USC, 5072, $\times 1$.
- 38-41—*Hustedtia miseri* subsp. *gibbosa*, n. subsp. Pedicle exterior, brachial exterior, side view, hinge-line of the holotype, USC 5073, $\times 1$.
- 42-45—*Hustedtia rotunda*, n. sp. Hinge-line, side view, brachial exterior, pedicle exterior of the holotype, USC, 5075, $\times 1$.



TEXT-FIGS. 1-3—*Chaetetes favosus* Moore & Jeffords. 1, transverse section, USC, 5018, $\times 45$; 2, longitudinal section, USC 5019, $\times 15$; 3, transverse section, USC 5018, $\times 15$.
 4-6—*Caninia torquua* (Owen). 4, transverse section of a large specimen, USC 5020, $\times 1\frac{1}{2}$; 5, longitudinal section. Tabulae in this specimen are broken, USC 5022, $\times 1\frac{1}{2}$; 6, transverse section of an immature specimen in which the theca is eroded away, USC 5021, $\times 2\frac{1}{2}$.
 7—*Lophophyllidium* sp. Transverse section, USC 5023, $\times 1\frac{1}{2}$.

Description.—Massive, rounded to sub-cylindrical colonies are composed of fine, prismatic corallites. Tubes are nearly straight although they curve from the center of the colony so as to intersect the surface of the colony at right angles.

In transverse section the corallites appear

generally uniform in both size and shape. The walls of the corallites appear spongy and have irregular edges. The porous appearance results from wall structure rather than the presence of mural pores. Pseudosepta are present but rare. Corallites average 0.3 mm. in diameter.

EXPLANATION OF PLATE 126

All figures $\times 1$

- FIGS. 1,3,4—*Linoproductus prattenianus* (Norwood & Pratten). 1, pedicle exterior, USC 5044; 3, brachial interior, showing muscle scars, USC 5046; 4, cardinal process, USC 5047.
 2—*Linoproductus magnispinus* Dunbar & Condra. Pedicle exterior, USC 5045.
 5-8—*Antiquatonia hermosana* (Girty). Pedicle exterior, side view, brachial exterior, view of the hinge-line, USC 5048.
 9-11—*Diaphragmus* cf. *D. fasciculatus* (McChesney). 9, pedicle exterior, USC 5049; 10, brachial interior showing diaphragm, USC 5051; 11, pedicle exterior of a smaller specimen, USC 5050.
 12-14—*Antiquatonia elyensis*, n. sp. Anterior, side view, hinge-line of holotype, USC 5052.
 15—*Dictyoclostus americanus* Dunbar & Condra. Pedicle exterior of a very large specimen, USC 5103.