

# PLATES

## PLATE I

**Fig. 1. Bioclastic grainstone.** Bioclasts of echinoderms, stromatoporoids (Str), and tabulate corals (Tco) are present. Facies type I (bi). Upper part of member A. Negative print of thin section.

**Fig. 2. Bioclastic grainstone.** Mostly constituted of well-sorted echinodermal fragments. Facies type I (bii). Member B, section PSM. Negative print of acetate peel.

**Fig. 3. Detail of a part of Fig. 1.** Note cloudy interior of the echinodermal fragments and the clear syntaxial cement of sparry calcite at the external periphery.

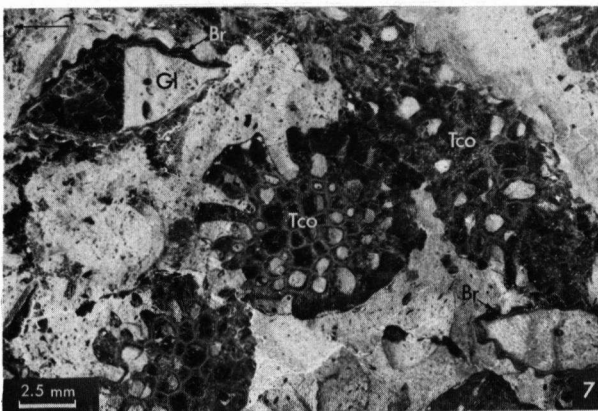
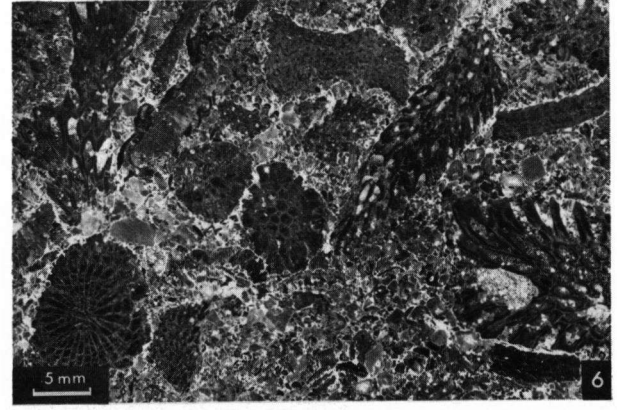
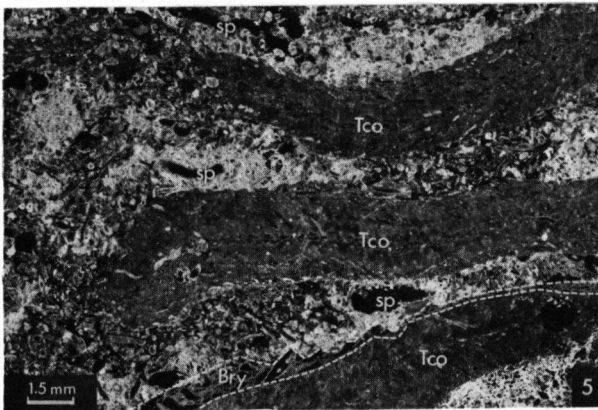
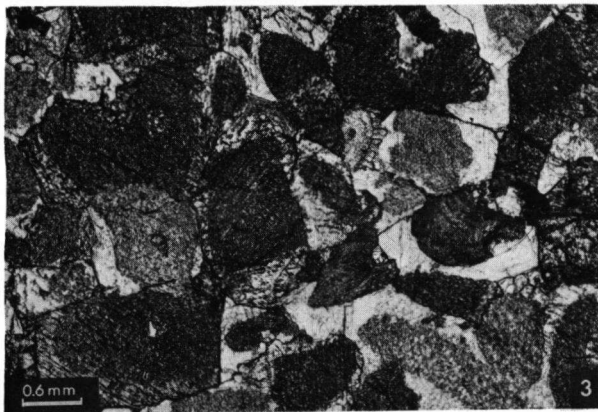
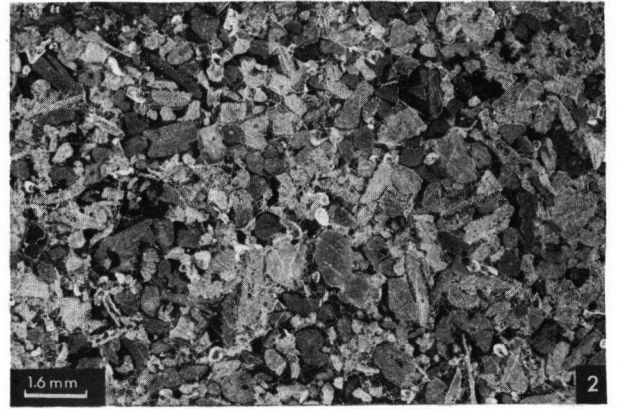
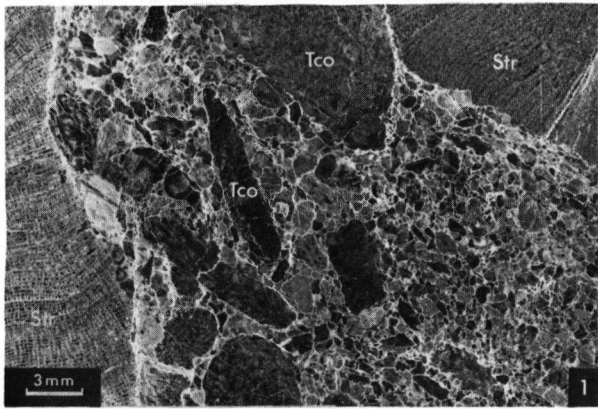
**Fig. 4. Argillaceous bioclastic wackestone/packstone.** Fragments of stem and ossicles of echinoderms and brachiopods randomly distributed on bedding surface. Facies type II. Member B, section PSD. Hand specimen.

**Fig. 5. Slightly argillaceous bioclastic packstone.** Tco-tabulate coral; Bry-Bryozoa (encrusts tabulate coral); Sp-Sparry calcite. Facies type III. Member B, section PSM. Negative print of thin section.

**Fig. 6. Argillaceous bioclastic packstone with tabulate corals, rugose coral, and echinodermal fragments.** Facies type IV. Member B. Negative print of thin section.

**Fig. 7. Argillaceous bioclastic wackestone.** Tco-tabulate coral; Br-brachiopod; GI-geopetal fill. Facies type IV. Member B. Negative print of thin section coloured.

**Fig. 8. Irregular patch of sparry calcite in argillaceous bioclastic wackestone.** Facies type IV. Member B. Thin section coloured.



## PLATE II

Fig. 1. Sparry calcite (Sp) beneath fragments of branching tabulate coral (Tco) in argillaceous wackestone. Facies type IV. Member B. Negative print of thin section. The light-coloured area represents matrix that is originally of a pale red colour.

Fig. 2. Sparry calcite within fragments of branching tabulate corals in a very coarse-grained part of a packstone. Facies type IV. Member B. Negative print of thin section.

Fig. 3. Argillaceous bioclastic packstone. Tco-tabulate coral; Str-stromatoporoid (encrusts tabulate coral *Thamnopora*). Facies type IV. Member B. Negative print of thin section.

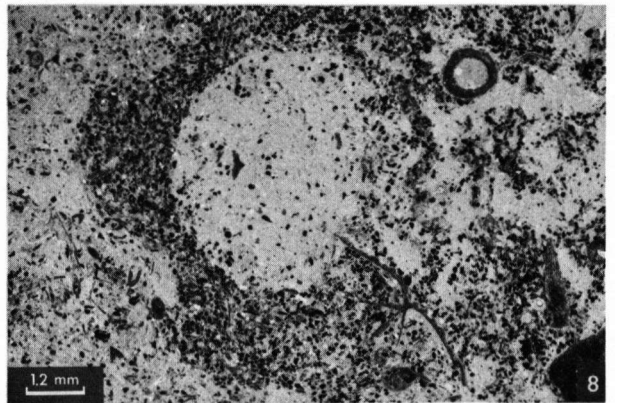
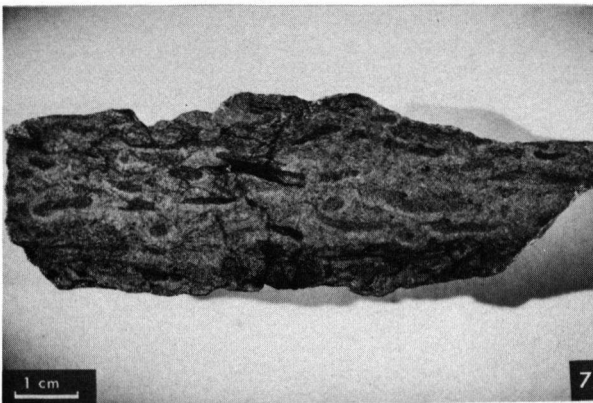
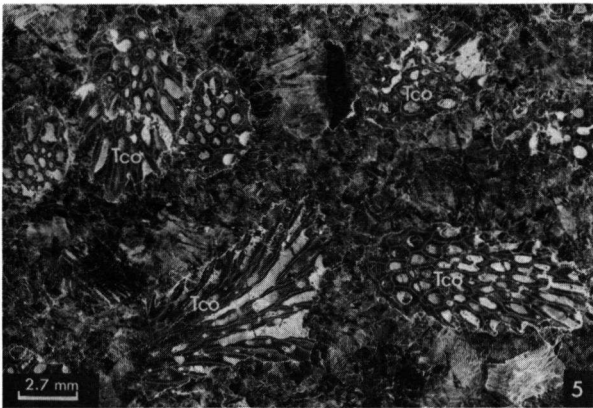
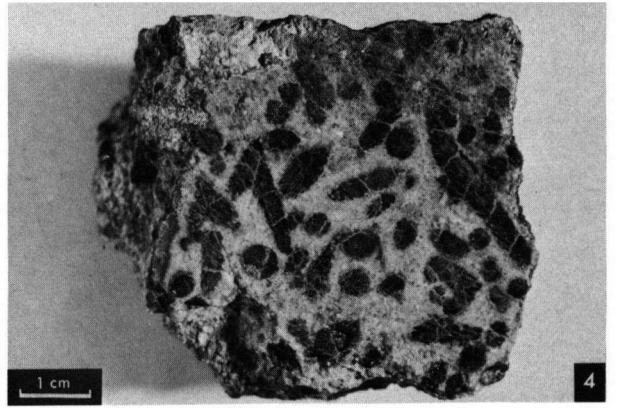
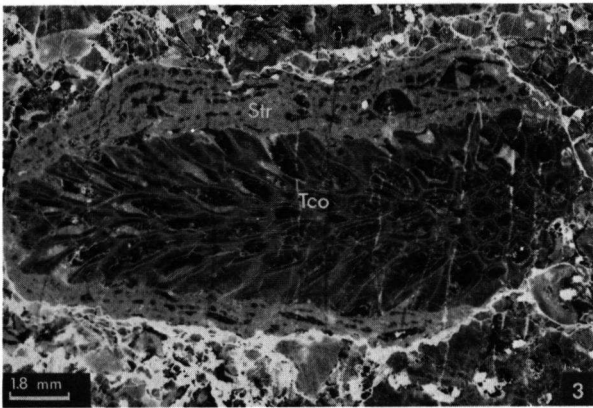
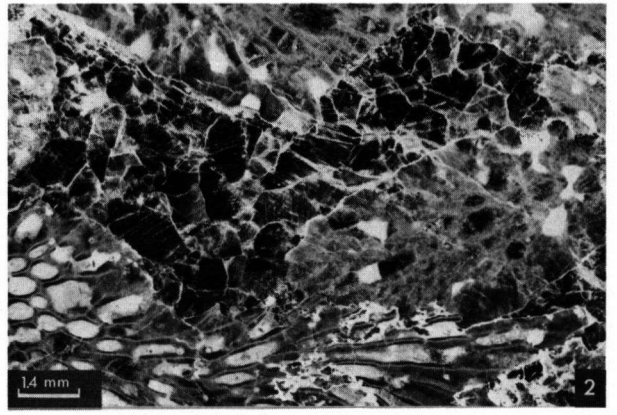
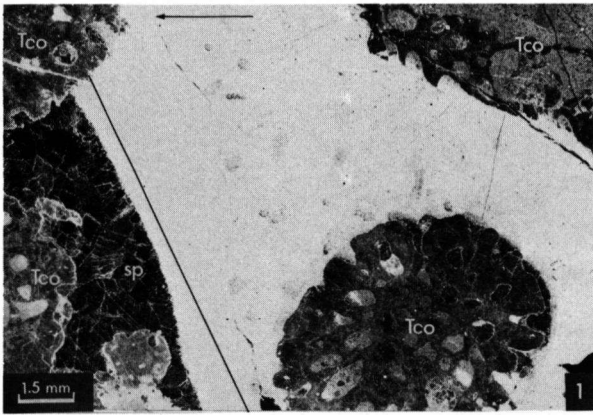
Fig. 4. Calcite-cemented debris of branching tabulate coral (*Thamnopora*). Member B, section PSC. Polished slab.

Fig. 5. Widely elongate blady calcite fills up the interparticle space between the fragments of tabulate corals. Negative print of thin section of Fig. 4.

Fig. 6. Beach rock near Santamarta bay on the leeward shore of Curaçao. The oblong-shaped fragments of *Acropora cervicornis* are lying mainly in one direction, parallel to the shaft of the hammer with their long axes perpendicular to the shoreline. They were deposited from a strong current during heavy storm from south (after Buisonjé, P. H. de & Zonneveld, J. I. S., 1960: Photo 12) (by kind permission of Buisonjé, Geological Institute, University of Amsterdam).

Fig. 7. Bioturbated, calcareous sandy mudstone. Horizontally lineated burrow mottling is apparent from the patchy distribution of argillaceous and dark grey organic material. Facies type V. Member B, section PSM. Polished slab.

Fig. 8. Sandy wackestone. The small dark spots are mostly quartz silt and fine quartz sand. They have formed a 'swirly' concentration. Some bioclasts are floating in the matrix. Facies type V. Member B, section PSN. Negative print of thin section.



**PLATE III**

- a – brachial view
- b – pedicle view
- c – lateral view
- d – anterior view

**Figs. 1–4.** *Cupularostrum sartenaeri* sp. nov.

**Fig. 1.** Holotype, St. P. 6802003, X 3.2.

**Fig. 2.** St. P. 6802004, X 2.5.

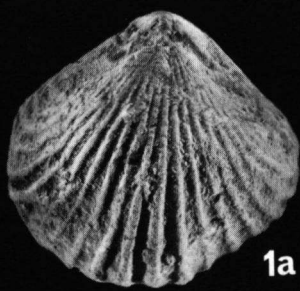
**Fig. 3.** Young specimen, St. P. 6802005, X 5.5.

**Fig. 4.** Transverse serial section (acetate peel) of brachial valve through septalium (from same specimen as shown in Fig. 13), X 40.

**Fig. 5.** '*Cassidirostrum*', sp., St. P. 6802013, Fig. 5a, 5b, X 1.9:

**Fig. 5c, 5d,** X 2.1.

**Fig. 6.** *Kransia* aff. *parallelepiped*a (Bronn, 1837), St. P. 6902017, X 3.5.



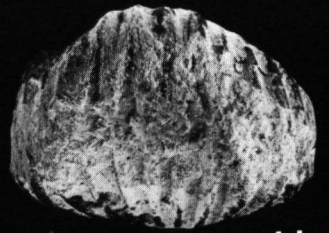
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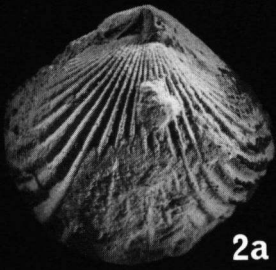
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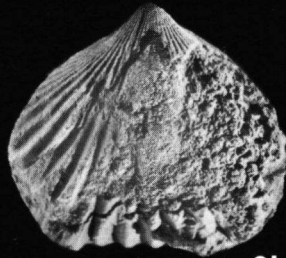
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1d



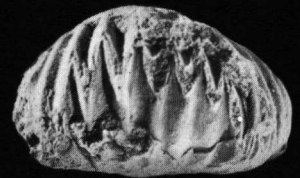
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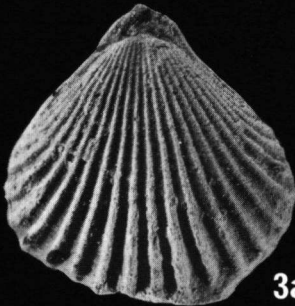
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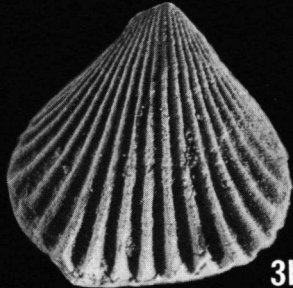
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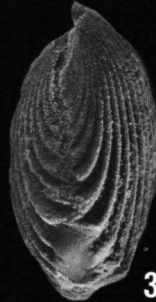
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3a



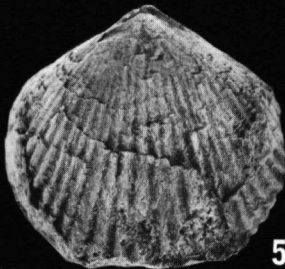
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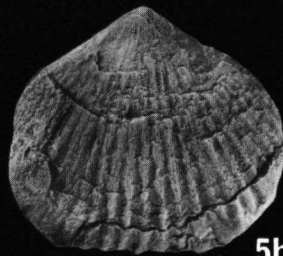
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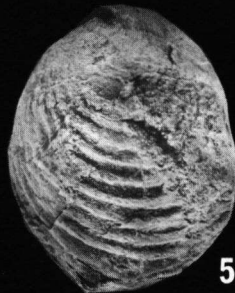
3d



5a



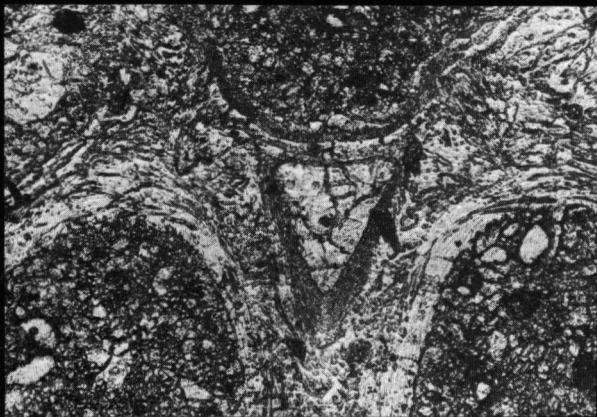
5b



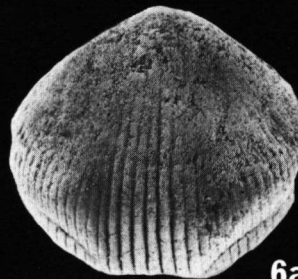
5c



5d



4



6a



6b

**PLATE IV**

- a – brachial view
- b – pedicle view
- c – lateral view
- d – anterior view

**Fig. 1.** *Kransia* aff. *parallelepiped* (Bronn, 1837), St. P. 6802018, X 3.5.

**Fig. 2.** Transverse serial section (acetate peel) through brachial apical complex of *Kransia* aff. *parallelepiped* (from same specimen as shown in Fig. 17), X 40.

**Figs. 3, 4.** *Kransia subcordiformis* (Schnur, 1853).

**Fig. 3.** St. P. 6802027, Fig. 3a, 3b, X 2.3; Fig. 3c, X 2.6; Fig. 3d, X 2.5.

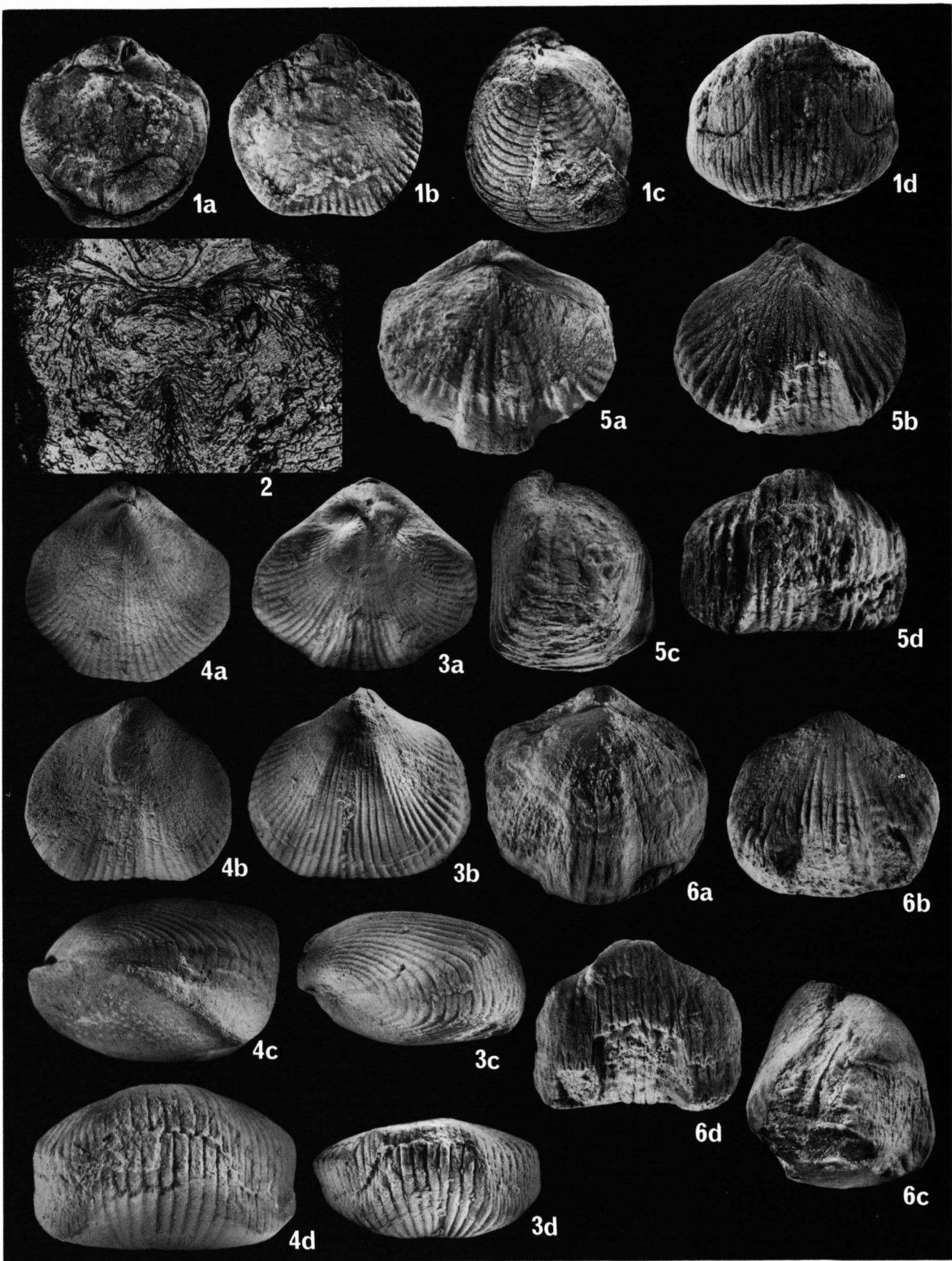
**Fig. 4.** St. P. 6802028, Fig. 4a, 4b, X 3; Fig. 4c, 4d, X 3.6.

**Figs. 5, 6.** *Nalivkinaria* aff. *lacunata* forma *tenuicostata* Rzhonsnitskaya, 1968.

**Fig. 5.** St. P. 6802038, Fig. 5a, 5b, X 2.3; Fig. 5c, X 2.6; Fig. 5d, X 2.2.

**Fig. 6.** St. P. 6802039, Fig. 6a, X 2.1; Fig. 6b, X 1.8; Fig. 6c, X 2; Fig. 6d, X 1.8.





**PLATE V**

- a – brachial view
- b – pedicle view
- c – lateral view
- d – anterior view

**Fig. 1.** *Nalivkinaria* aff. *lacunata* forma *tenuicostata* Rzhonsnitskaya, 1968. St. P. 6802040, Fig. 1a, 1b, X 2.6; Fig. 1c, 1d, X 2.5.

**Fig. 2.** Transverse serial section (acetate peel) through brachial apical complex of *Nalivkinaria* aff. *lacunata* forma *tenuicostata* (from same specimen as shown in Fig. 23), X 30.

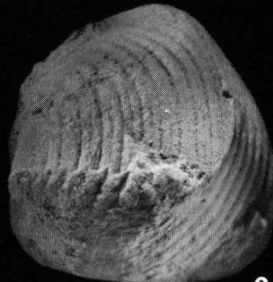
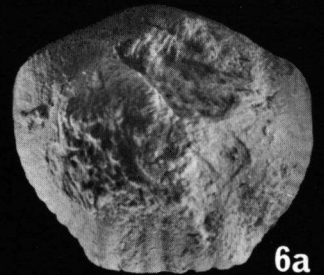
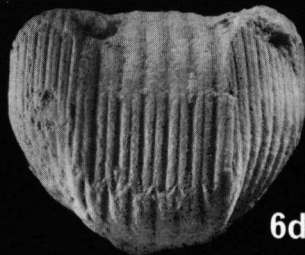
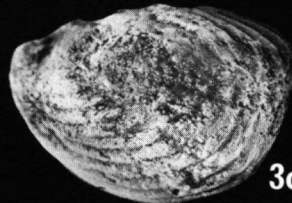
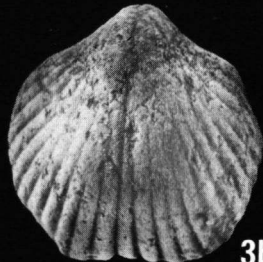
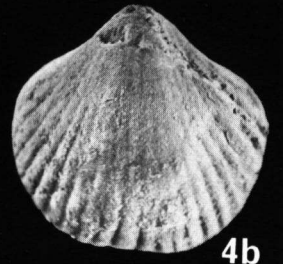
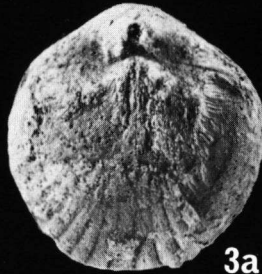
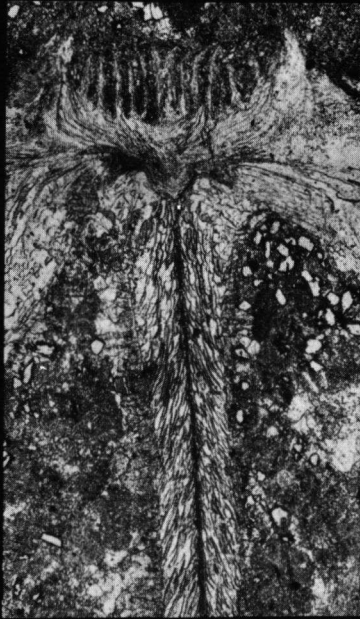
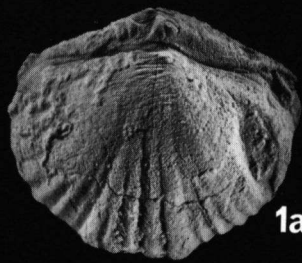
**Figs. 3, 4.** *Beckmannia minor beckmanni* (Schmidt, 1951).

**Fig. 3.** St. P. 6802048, Fig. 3a, 3b, 3c, X 5; Fig. 3d, X 5.3.

**Fig. 4.** St. P. 6802049, Fig. 4a, 4b, X 5.2; Fig. 4c, X 5.5; Fig. 4d, X 5.8.

**Fig. 5.** Transverse serial section (acetate peel) through brachial apical complex of *Beckmannia minor beckmanni* (from same specimen as shown in Fig. 25), X 70.

**Fig. 6.** '*Hebetoechia*' sp., St. P. 6802015, Fig. 6a, 6b, X 3.6; Fig. 6c, X 3.1; Fig. 6d, X 2.7.



**PLATE VI**

- a** – brachial view
- b** – pedicle view
- c** – lateral view
- d** – anterior view
- e** – posterior view

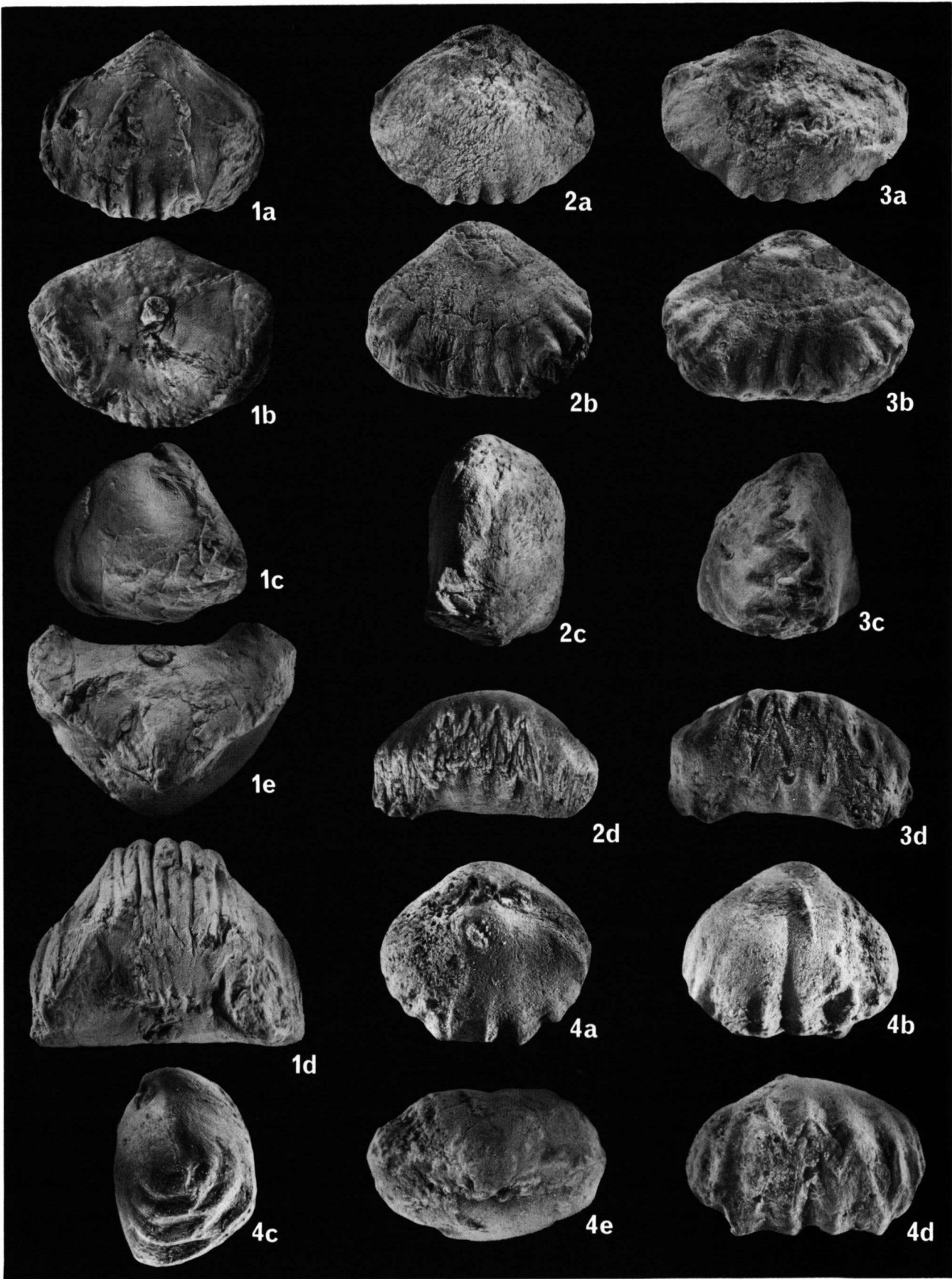
**Fig. 1.** '*Pugnax*' sp., St. P. 6802058, Fig. 1a, 1b, X 1.7; Fig. 1c, X 1.6; Fig. 1d, X 2; Fig. 1e (postero-medial), X 2.

**Figs. 2, 3.** '*Pugnax*' *bernesgae* sp. nov.

**Fig. 2.** Holotype, St. P. 6802060, Fig. 2a, 2b, X 3.7; Fig. 2c, X 4.2; Fig. 2d, X 3.7.

**Fig. 3.** St. P. 6802061, Fig. 3a, 3b, X 4.2; Fig. 3c, X 4.8; Fig. 3d, X 4.1.

**Fig. 4.** *Isopoma hertae* sp. nov., holotype, St. P. 6802064, Fig. 4a, 4b, 4c, X 4.5; Fig. 4d, 4e, X 4.8.



**PLATE VII**

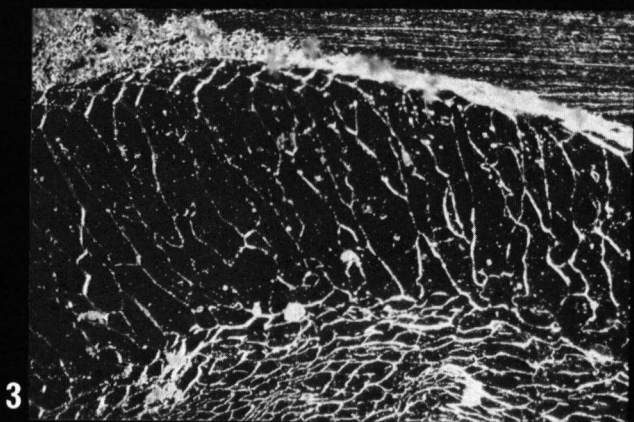
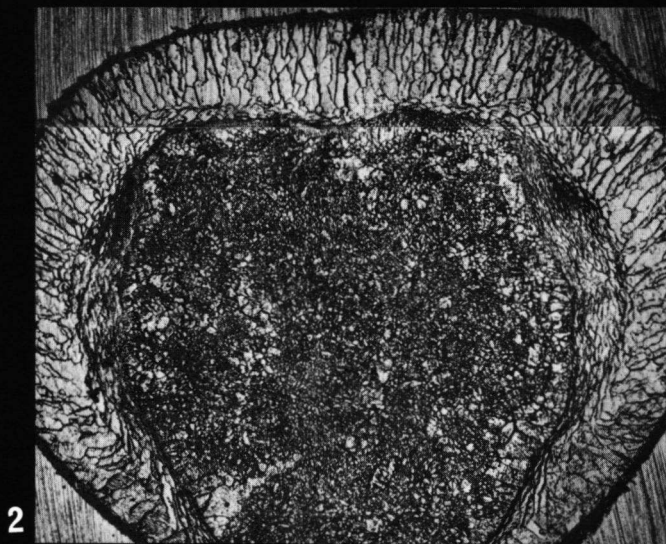
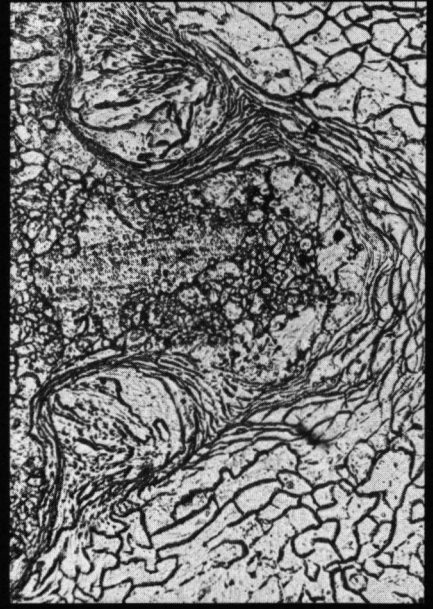
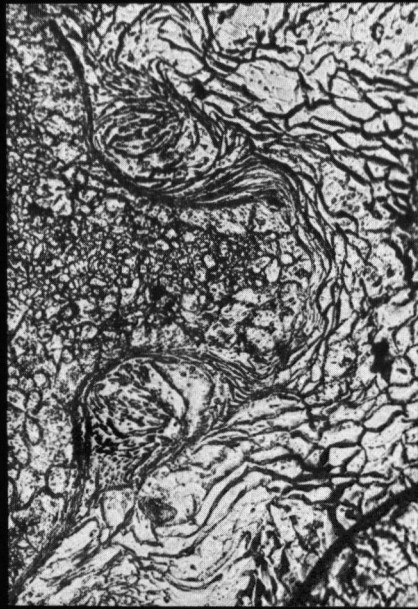
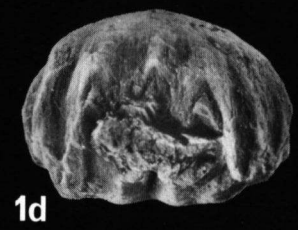
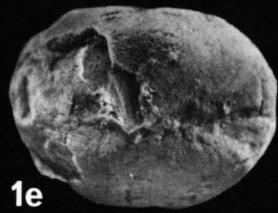
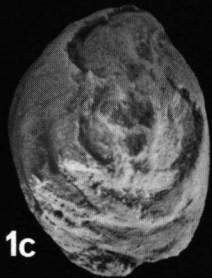
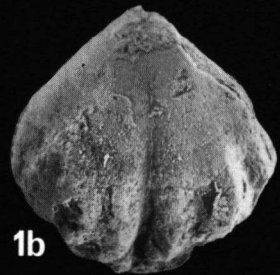
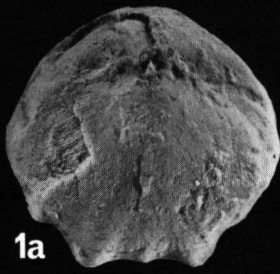
- a – brachial view
- b – pedicle view
- c – lateral view
- d – anterior view
- e – posterior view

Fig. 1. *Isopoma hertae* sp. nov., St. P. 6802065, Fig. 1a, 1b, X 4; Fig. 1c, X 4.5; Fig. 1d, 1e, X 4.1.

Fig. 2. Transverse serial section (acetate peel) through the apical region of the pedicle valve of *Isopoma hertae* (from same specimen as shown in Fig. 30), X 35.

Fig. 3. Detail of a part of the shell of the right side of Fig. 2, X 70.

Figs. 4, 5. Transverse serial sections (acetate peel) through brachial apical complex of *Isopoma hertae*. Fig. 5 is from a section anterior to that shown in Fig. 4, X 50.



**PLATE VIII**

- a - brachial view
- b - pedicle view
- c - lateral view
- d - anterior view
- e - posterior view

**Figs. 1-3. *Sagueresia saguerana* gen. et sp. nov.**

**Fig. 1. Holotype, St. P. 6802072, Fig. 1a, 1b, 1c, X 3.3; Fig. 1d, 1e, X 3.7.**

**Fig. 2. St. P. 6802073, Fig. 2a, 2b, 2c, X 3.5; Fig. 2d, 2e, X 3.7.**

**Fig. 3. St. P. 6802074, Fig. 3a, 3b, X 3.5; Fig. 3c, X 4.3; Fig. 3d, X 4; Fig. 3e, X 4.3.**

**Fig. 4. *Septalaria* sp., St. P. 6802076, Fig. 4a, 4b, X 4.1; Fig. 4c, X 4.5; Fig. 4d, X 4.7.**



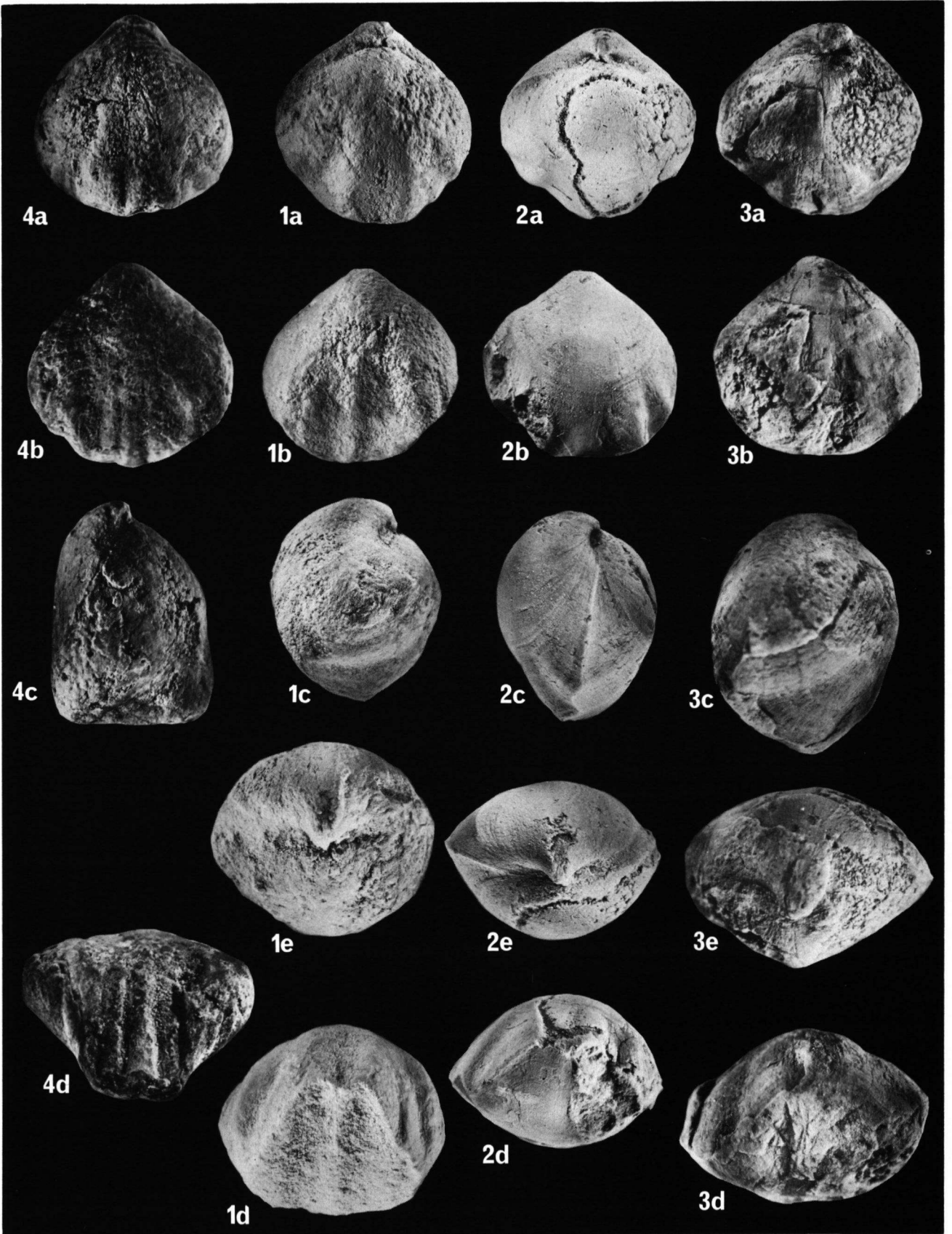


PLATE IX

- a - brachial view
- b - pedicle view
- c - lateral view
- d - anterior view
- e - posterior view

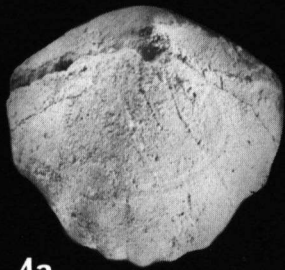
Figs. 1-3. Transverse serial sections (acetate peel) through brachial apical complex of *Sagueresia saguerana* (from same specimen as shown in Fig. 32). Fig. 1 is detail of the very posterior section showing connection of median septum with hinge plate, X 50. Fig. 2 is a section anterior to Fig. 1 showing the detachment of the connection X 20. Fig. 3 is detail of the medial cardinal part of Fig. 2, X 50.

Fig. 4. *Camerophorina leonensis* sp. nov., holotype, St. P. 6802080, Fig. 4a, X 2.1; Fig. 4b, X 2.3; Fig. 4c, 4d, 4e (postero-medial), X 2.2.

Figs. 5, 6. *Schnurella* ? sp.

Fig. 5. St. P. 6802082, Fig. 5a, X 1.8; Fig. 5b, 5c, 5d, X 1.7.

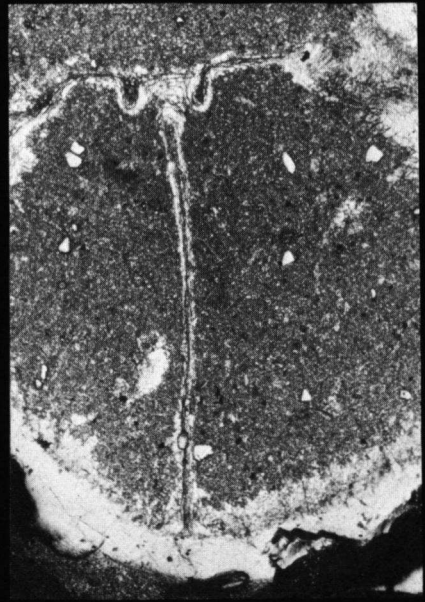
Fig. 6. St. P. 6802083, Fig. 6b, X 1.3.



4a



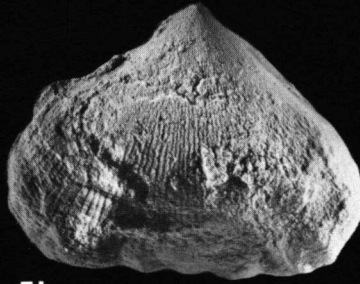
5a



2



4b



5b



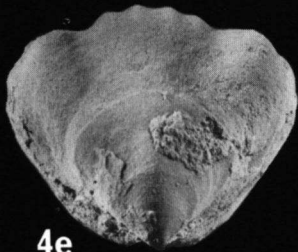
4c



5c



1



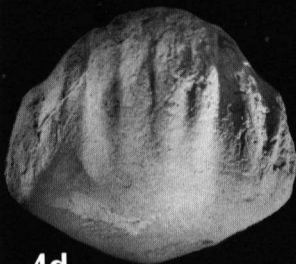
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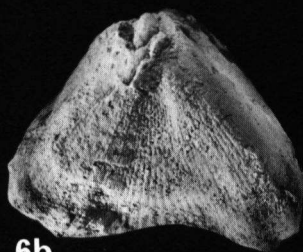
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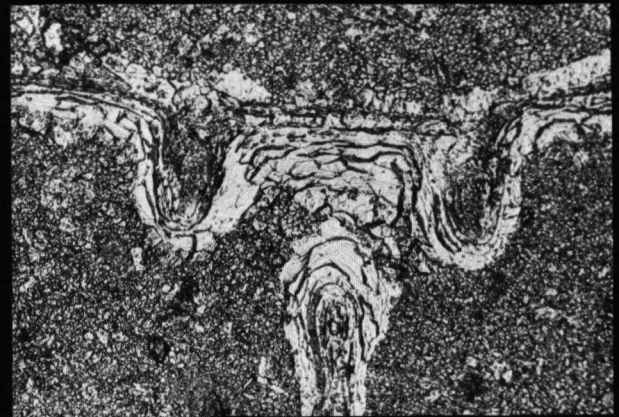
3



4d



6b



**PLATE X**

- a – brachial view
- b – pedicle view
- c – lateral view
- d – anterior view
- e – posterior view

**Figs. 1–5. *Mirantesia mirantana* gen. et sp. nov.**

**Fig. 1. St. P. 6802085, holotype Fig. 1a, 1b, 1c, 1e, X 3.5; Fig. 1d, X 3.2.**

**Fig. 2. St. P. 6802086, Fig. 2a, 2b, 2c, X 4.6; Fig. 2d, X 4.7; Fig. 2e, X 5.**

**Fig. 3. St. P. 6802087, Fig. 3a, 3b, 3c, 3e, X 5; Fig. 3d, X 4.7.**

**Fig. 4. Young specimen, St. P. 6802088, Fig. 4a, 4b, 4d, 4e, X 6; Fig. 4c, X 5.**

**Fig. 5. A part of shell (acetate peel) showing coarse fibres, X 80.**

