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Plate I

- Fig. 1 *Coccolithus tritus* n. sp. Holotype A 604 225 [A 810], 15000 \times , distal view, Red Bluff Fm., 4' above base, Alabama.
- Fig. 2 *Coccolithus crater* n. sp. Holotype A 809 004 [A 808], 15000 \times , distal view, Marianna Ls., 9' above base, Alabama.
- Fig. 3 *Coccolithus primalis* n. sp. Holotype J 506 377 [A 809], 15000 \times , distal view, JOIDES Hole 5, 374' below top, Blake Plateau, W Atlantic.
- Fig. 4 *Ericsonia bireticulata* n. sp. Paratype JS 1847 026 [A 812], 15000 \times , proximal view, Ciperó Fm., Trinidad.
- Fig. 5 *Ericsonia bireticulata* n. sp. Holotype JS 147 301 [A 811], 15000 \times , distal view, Ciperó Fm., Trinidad.
- Fig. 6 *Ericsonia fenestrata* (DEFLANDRE & FERT) STRADNER. Hypotype JS 1847 624 [A 813], 15000 \times , distal view, Ciperó Fm., Trinidad.

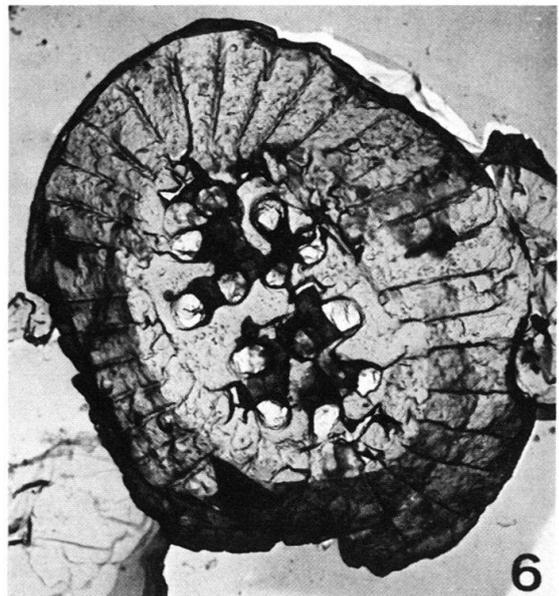
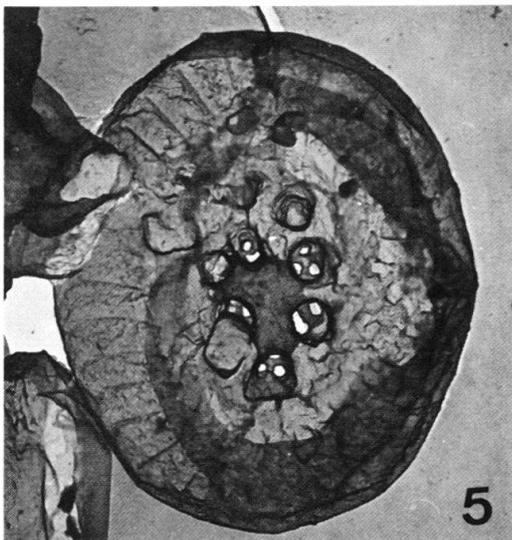
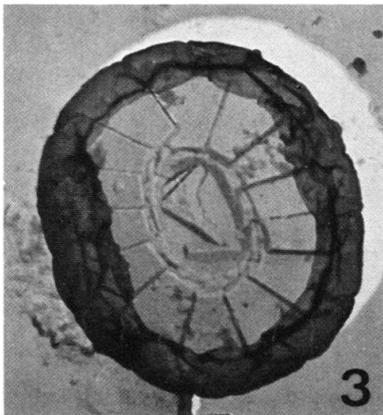
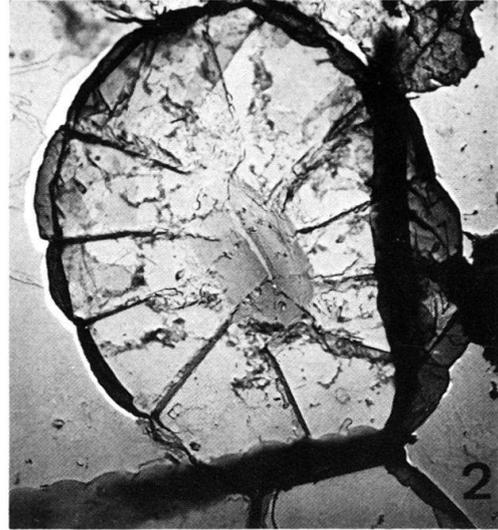
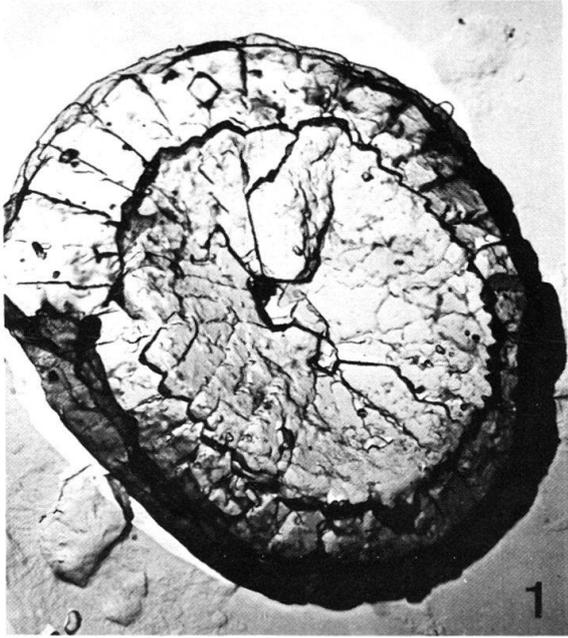


Plate II

- Fig. 1 *Ericsonia pauciperforata* n. sp. Holotype A 608 157 [A 814], 15000 ×, distal view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 2 *Ericsonia quadriperforata* n. sp. Holotype J 515 234 [A 815], 15000 ×, distal view, JOIDES Hole 5, 589'11" below top, Blake Plateau, W Atlantic.
- Fig. 3 *Ericsonia subdisticha* (ROTH & HAY) ROTH. Hypotype J 515 374 [A 816], 15000 ×, distal view, JOIDES Hole 5, 589'11" below top, Blake Plateau, W Atlantic.
- Fig. 4 *Ericsonia subdisticha* (ROTH & HAY) ROTH. Hypotype N1 247 [A 817], 15000 ×, proximal view, Latdorf Clay, Well Hankensbüttel Süd 32, 267–276 m, Northern Germany.
- Fig. 5 *Cruciplacolithus flavius* n. sp. Paratype J 503 229 [A 819], 15000 ×, proximal view, JOIDES Hole 5, 484' below top, Blake Plateau, W Atlantic.
- Fig. 6 *Cruciplacolithus flavius* n. sp. Holotype J 504 107 [A 818], 15000 ×, distal view, JOIDES Hole 5, 445' below top, Blake Plateau, W Atlantic.

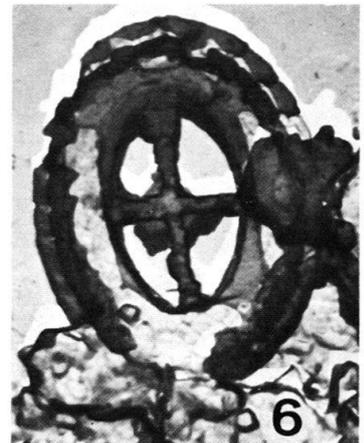
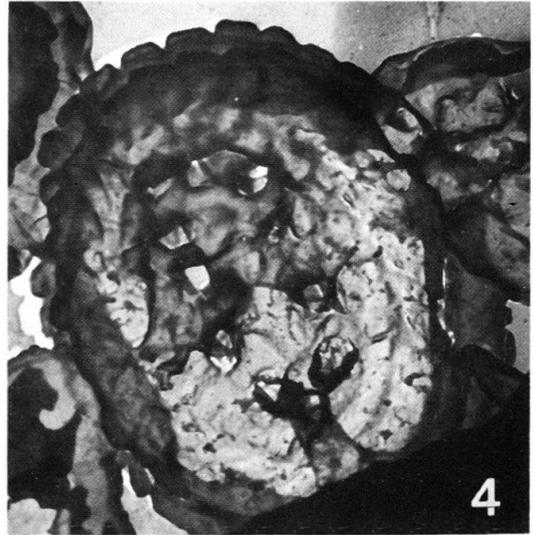
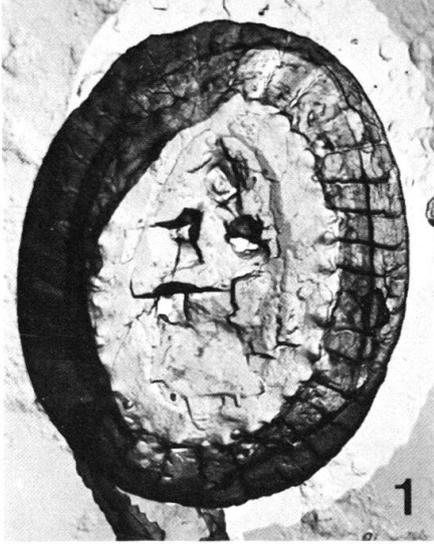


Plate III

- Fig. 1 *Cruciplacolithus quader* n. sp. Holotype J 504 101 [A 820], 15000 \times , distal view, JOIDES Hole 5, 445' below top, Blake Plateau, W Atlantic.
- Fig. 2 *Sollasites tardus* n. sp. Paratype J 510 471 [A 822], 15000 \times , proximal view, JOIDES Hole 5, 248' below top, Blake Plateau, W Atlantic.
- Fig. 3 *Sollasites tardus* n. sp. Holotype J 505 427 [A 821], 15000 \times , distal view, JOIDES Hole 5, 410' below top, Blake Plateau, W Atlantic.
- Fig. 4 *Reticulofenestra alabamensis* n. sp. Holotype A 600 360 [A 823], 15000 \times distal view, Red Bluff Fm., base, Alabama.
- Fig. 5 *Reticulofenestra alabamensis* n. sp. Paratype A 600 257 [A 824], 15000 \times , proximal view, Red Bluff Fm., base, Alabama.
- Fig. 6 *Reticulofenestra bisecta* (HAY, MOHLER & WADE) n. comb. Hypotype J6-397-12-7 [A 825], 5200 \times , proximal view. (In the upper and lower left *Sphenolithus pre-distentus* BRAMLETTE & WILCOXON.) JOIDES Hole 6, 397' below top, Blake Plateau, W Atlantic.

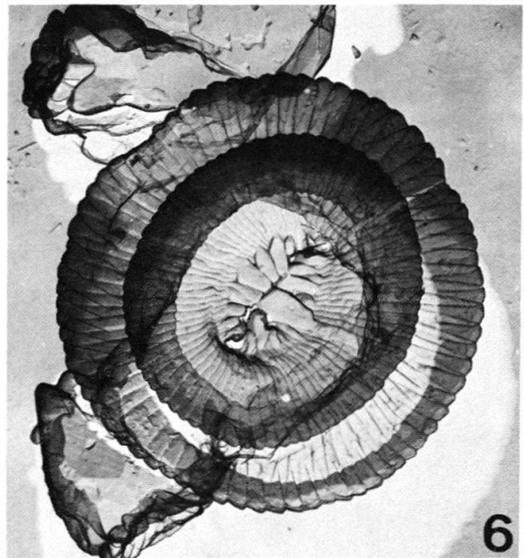
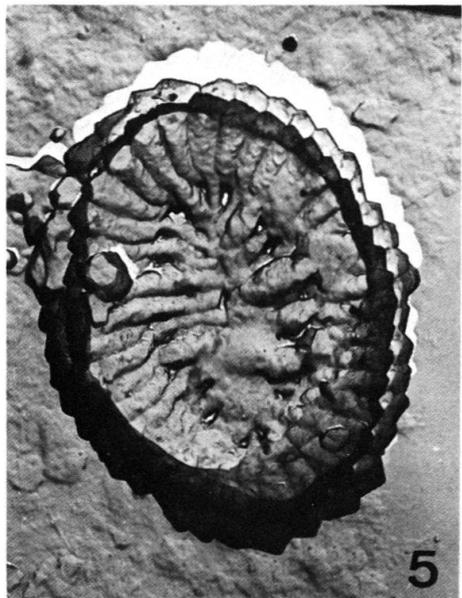
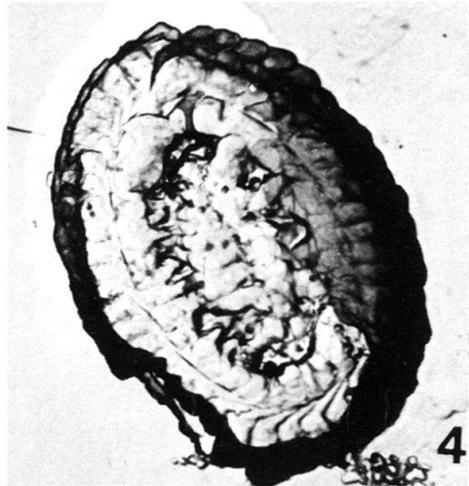


Plate IV

- Fig. 1 *Reticulofenestra gabriellae* n. sp. Holotype A 613 110 [A 827], 15000 ×, broken coccosphere, Red Bluff Fm., 13' above base, Alabama.
- Fig. 2 *Reticulofenestra danica* (BLACK) n. comb. Hypotype J 512 389 [A 826], 10000 ×, distal view JOIDES Hole 5, 730' below top, Blake Plateau, W Atlantic.
- Fig. 3 *Reticulofenestra hesslandii* (HAQ) n. comb. Hypotype A 600 470 [A 830], 15000 ×, proximal view, Red Bluff Fm., base, Alabama.
- Fig. 4 *Reticulofenestra hesslandii* (HAQ) n. comb. Hypotype A 815 110 [A 823], 10000 ×, coccosphere, Marianna Ls., 15' above base, Alabama.
- Fig. 5 *Reticulofenestra hesslandii* (HAQ) n. comb. Hypotype A 600 406 [A 829], 10000 ×, (A) specimen in the lower left, distal view, (B) specimen in the upper right, proximal view, Red Bluff Fm., base, Alabama.

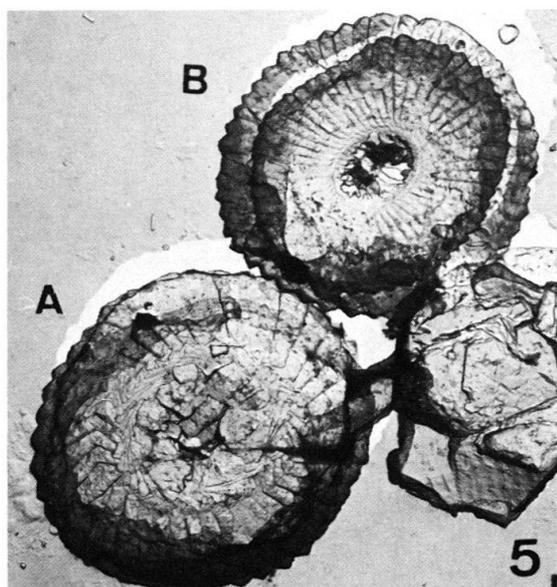
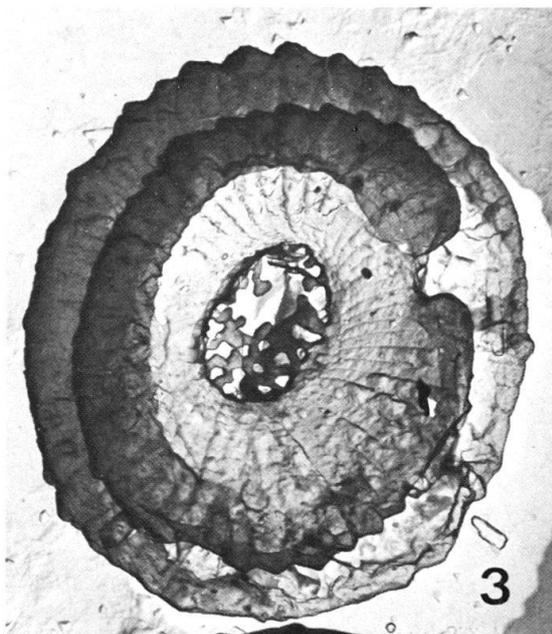
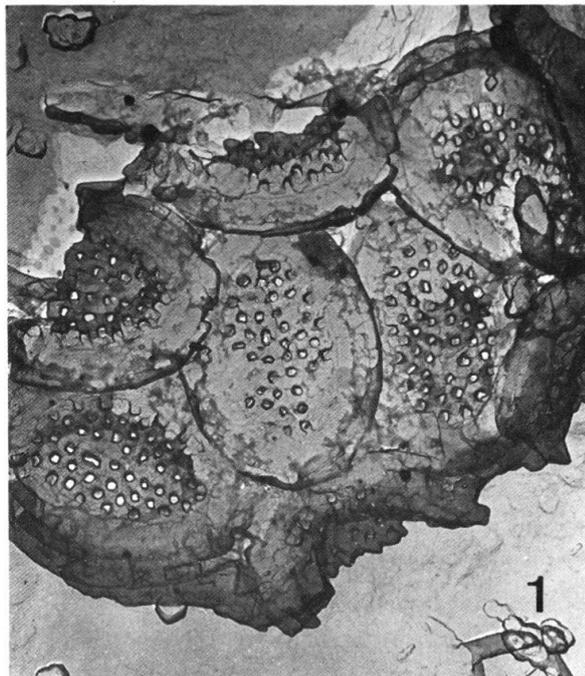


Plate V

- Fig. 1 *Reticulofenestra pectinata* n. sp. Holotype A 613 664 [A 835], 15000 \times , distal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 2 *Reticulofenestra inclinata* n. sp. Holotype J 503 480 [A 831], 15000 \times , JOIDES Hole 5, 484' below top, Blake Plateau, W Atlantic.
- Fig. 3 *Reticulofenestra minuta* n. sp. Holotype A 610 130 [A 833], 15000 \times , distal view, Red Bluff Fm., 10' from base, Alabama.
- Fig. 4 *Reticulofenestra minuta* n. sp. Paratype J 504 136 [A 834], 15000 \times , proximal view JOIDES Hole 5, 445' below top, Blake Plateau, W Atlantic.
- Fig. 5 *Reticulofenestra laevis* ROTH & HAY. Hypotype A 100 280 [A 832], 15000 \times , distal view, Byram Fm., unnamed Clay Mb., Alabama.
- Fig. 6 *Cyclococcolithus floridanus* (ROTH & HAY) n. comb. Hypotype J3-397-12-11 [A 840], 10000 \times , distal view, JOIDES Hole 3, 397' below top, Blake Plateau, W Atlantic.

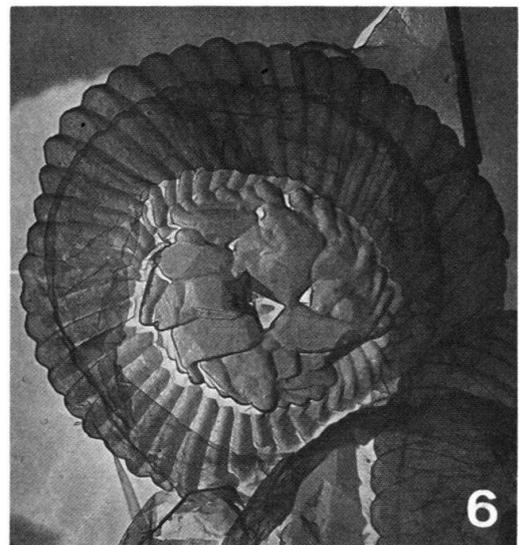
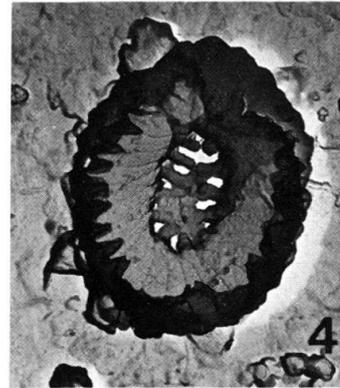
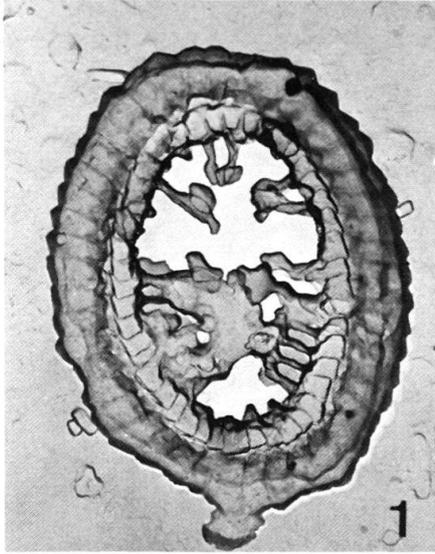


Plate VI

- Fig. 1 *Cyclococcolithus arabellus* n. sp. Holotype A 613 443 [A 836], 15000×, distal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 2 *Cyclococcolithus arabellus* n. sp. Paratype J 507 264 [A 837], 15000×, distal view, JOIDES Hole 5, 337'11" below top, Blake Plateau, W Atlantic.
- Fig. 3 *Cyclococcolithus ciproensis* n. sp. Holotype ETH 291 A-399 [A 838], 10000×, proximal view, Cipro Fm., Trinidad.
- Fig. 4 *Cyclococcolithus lunulus* n. sp. Holotype J 518 099 [A 841], 6000×, distal view, JOIDES Hole 5, 460'5¹/₂" below top, Blake Plateau, W Atlantic.
- Fig. 5 *Cyclococcolithus kingi* n. sp. Paratype A 606 025 [A 43], 10000×, proximal view, Red Bluff Fm., 6' above base, Alabama.
- Fig. 6 *Cyclococcolithus ciproensis* n. sp. Paratype ETH 291 A-510 [A 839], 12000×, distal view, Cipro Fm., Trinidad.

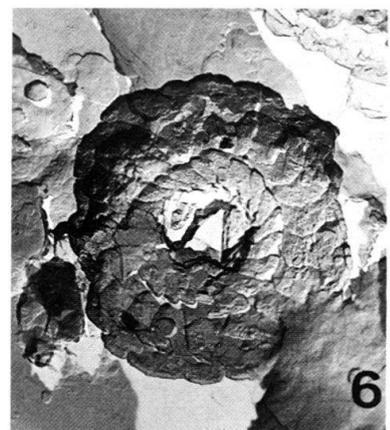
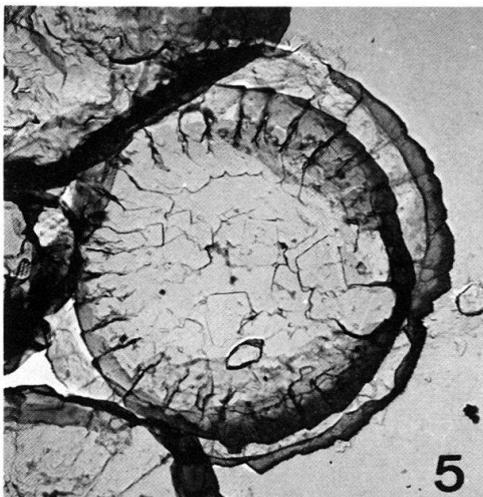
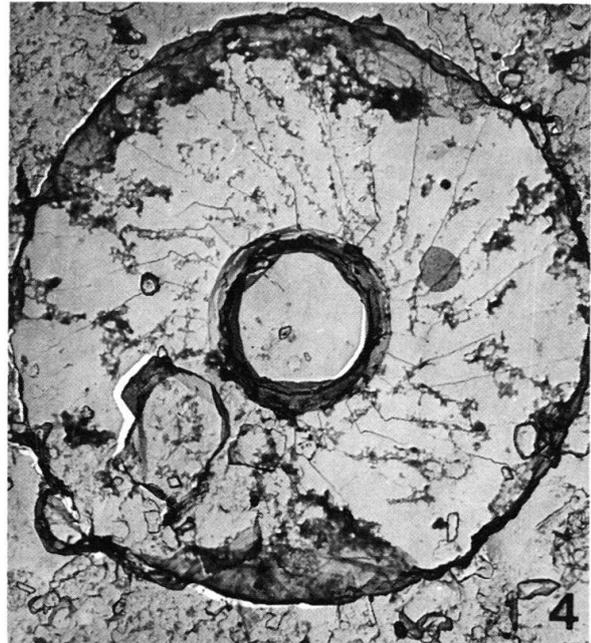
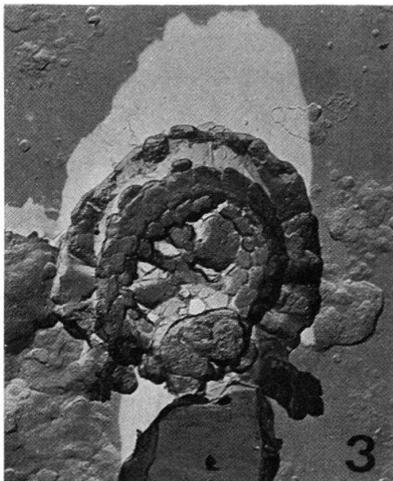
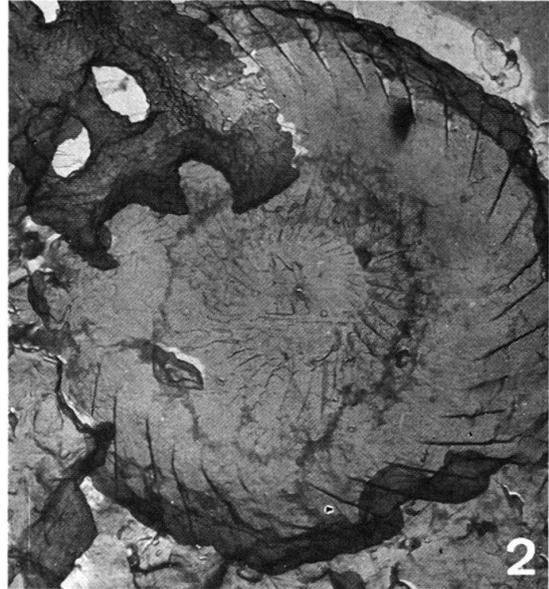
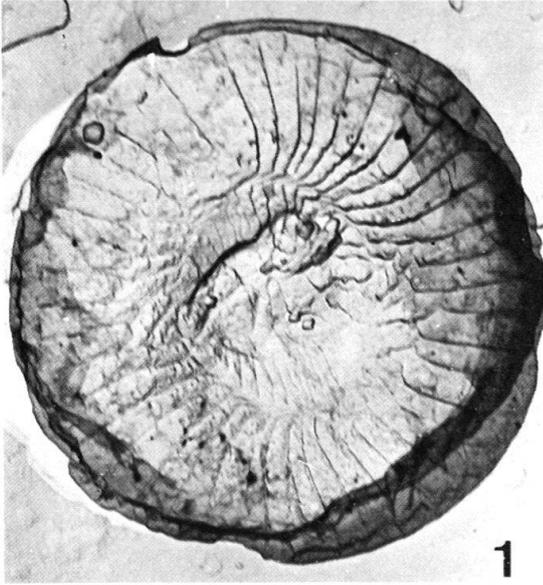


Plate VII

- Fig. 1 *Cyclococcolithus kingi* n. sp. Holotype A 815 022 [A 842], 10000×, distal view, Marianna Ls., 15' from base, Alabama.
- Fig. 2 *Ilseolithina fusa* n. sp. Paratype A 600 162 [A 845], 15000×, proximal view, Red Bluff Fm., base, Alabama.
- Fig. 3 *Ilseolithina fusa* n. sp. Holotype A 608 372 [A 844], 15000×, distal view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 4 *Coronocyclus serratus* HAY, MOHLER & WADE. Hypotype J3-4222-20-11 [A 846], 10000×, distal view, JOIDES Hole 3, 422' below top, Blake Plateau, W Atlantic.
- Fig. 5 *Blackites incompertus* n. sp. Holotype A 610 358 [A 850], 5000×, side view, Red Bluff Fm., 10' above base, Alabama.
- Fig. 6 *Blackites amplus* ROTH & HAY. Hypotype J 503 189 [A 849], 6000×, distal view, JOIDES Hole 5, 484' below top, Blake Plateau, W Atlantic.

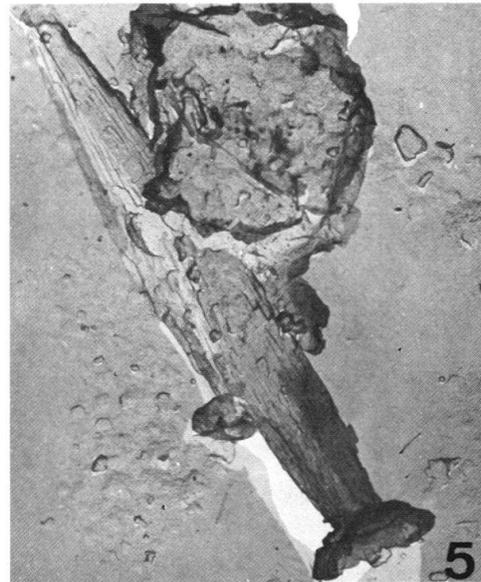
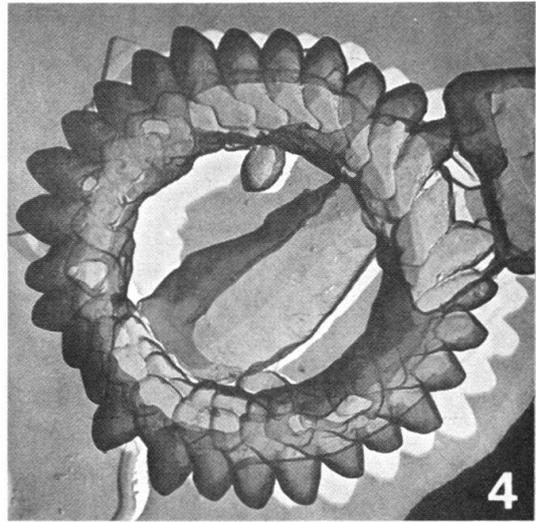
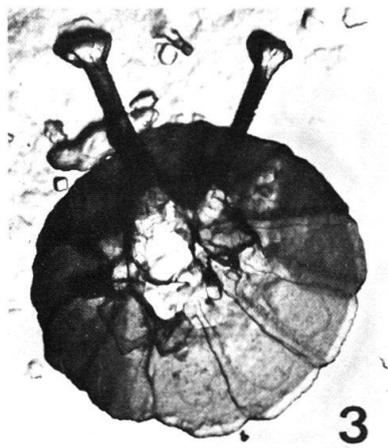
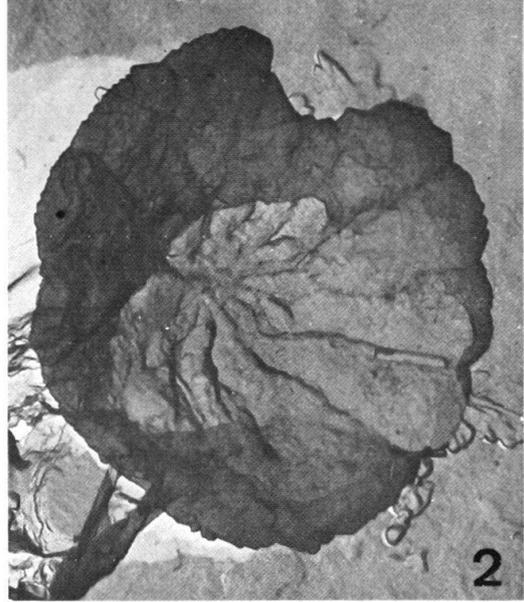
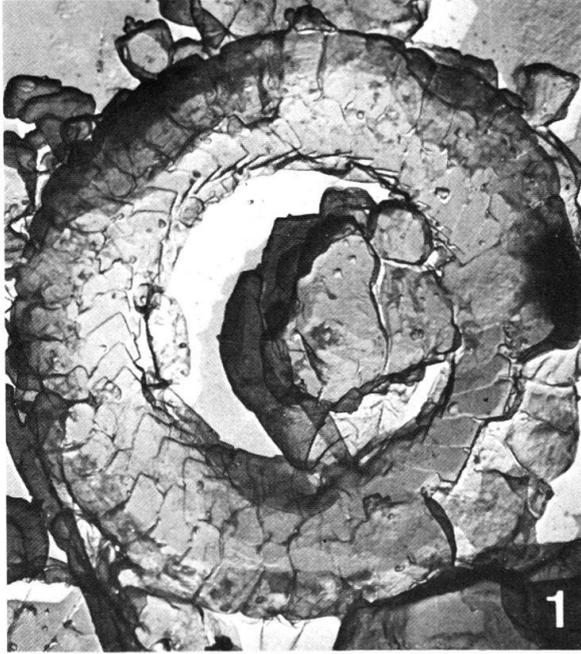


Plate VIII

- Fig. 1 *Blackites incompertus* n. sp. Paratype A 610 266 [A 852], 5000×, side view, Red Bluff Fm., 10' above base, Alabama.
- Fig. 2 *Blackites incompertus* n. sp. Paratype A 610 105 [A 851], 10000×, side view, Red Bluff Fm., 10' above base, Alabama.
- Fig. 3 *Bramletteius variabilis* n. sp. Holotype A 608 432 [A 854], 15000×, side view Red Bluff Fm., 8' above base, Alabama.
- Fig. 4 *Blackites spinulus* (LEVIN) n. comb. Hypotype A 600 271 [A 853], 5000×, side view, Red Bluff Fm., base, Alabama.
- Fig. 5 *Bramletteius variabilis* n. sp. Paratype A 608 420 [A 855], 15000×, side view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 6 *Rhabdosphaera vitrea* (DEFLANDRE) BRAMLETTE & SULLIVAN. Hypotype A 608 189 [A 848], 10000×, side view, Red Bluff Fm., 8' above base.

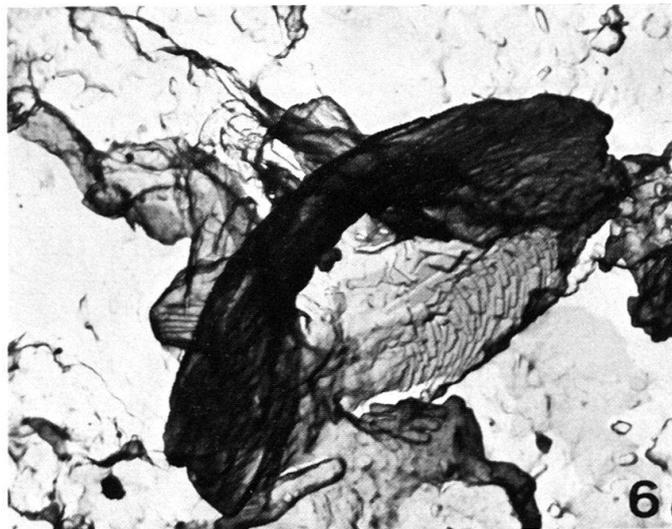
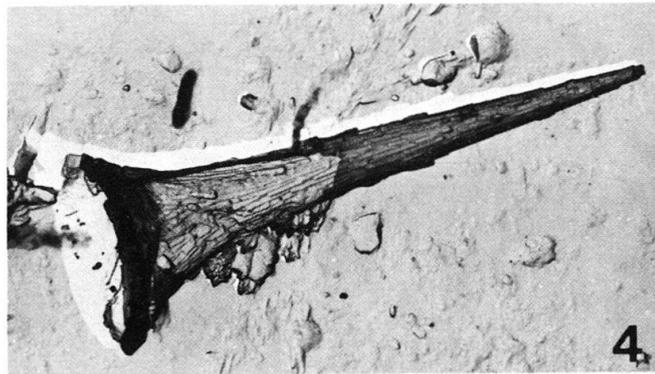
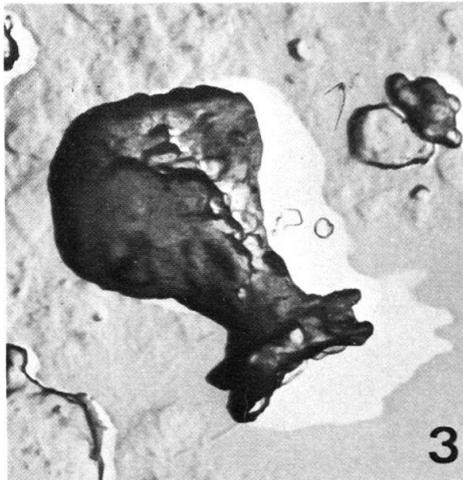
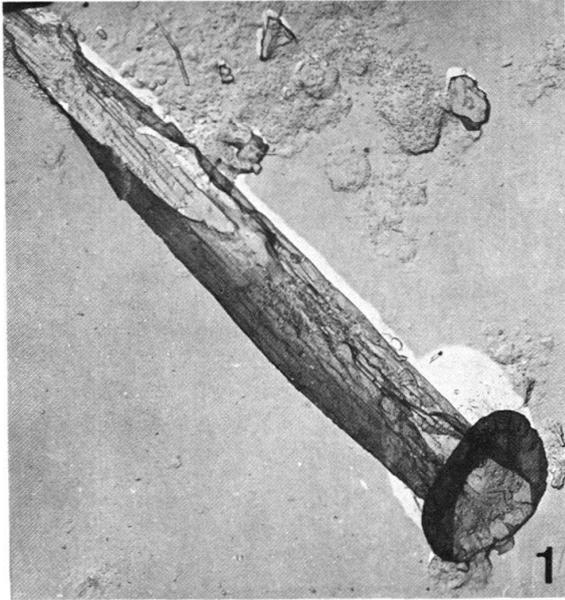


Plate IX

- Fig. 1 *Rhabdosphaera vitrea* (DEFLANDRE) BRAMLETTE & SULLIVAN. Hypotype A 6000 296 [A 847], 10000 \times , side view, Red Bluff Fm., base, Alabama.
- Fig. 2 *Pontosphaera alta* n. sp. Paratype A 613 386 [A 857], 5000 \times , proximal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 3 *Pontosphaera alta* n. sp. Holotype A 613 138 [A 856], 5000 \times , proximal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 4 *Pontosphaera crucifera* n. sp. Holotype A 613 652 [A 858], 15000 \times , proximal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 5 *Pontosphaera crucifera* n. sp. Paratype A 613 643 [A 859], 15000 \times , distal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 6 *Pantosphaera rigida* n. sp. Holotype JS 1847 445 [A 860], 15000 \times , distal view, Ciperó Fm., Trinidad.

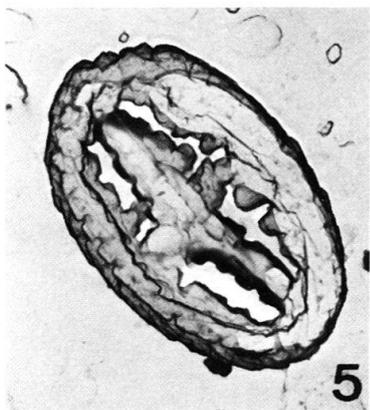
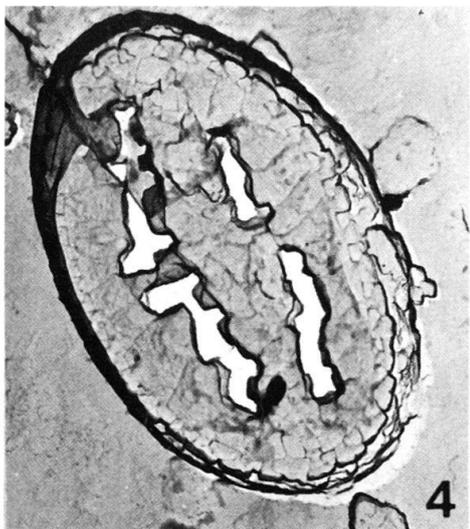
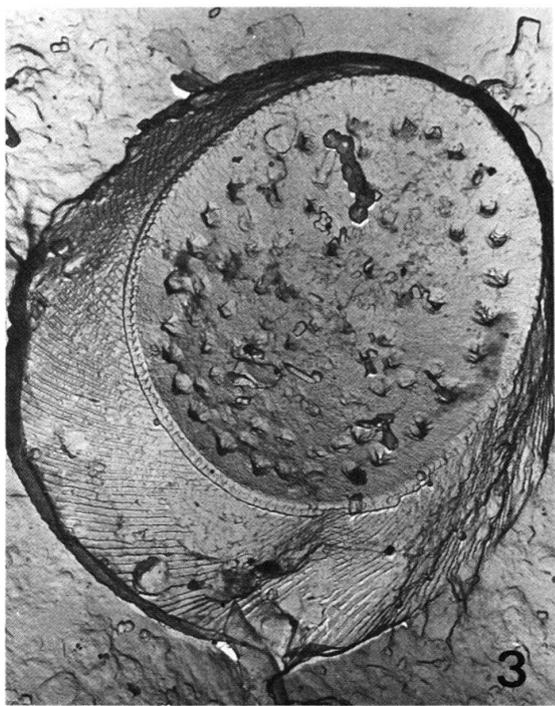
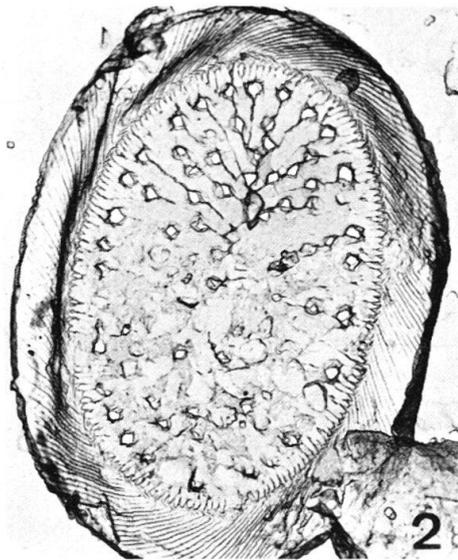


Plate X

- Fig. 1 *Pontosphaera rigida* n. sp. Paratype JS 1847 576 [A 861], 15000 \times , proximal view, Ciperó Fm., Trinidad.
- Fig. 2 *Helicopontosphaera compacta* (BRAMLETTE & WILCOXON) n. comb. Hypotype JS 1847 490 [A 862], 10000 \times , proximal view, Ciperó Fm., Trinidad.
- Fig. 3 *Helicopontosphaera truncata* (BRAMLETTE & WILCOXON) n. comb. Hypotype JS 20 008 [A 866], 10000 \times , convex side, Ciperó Fm., Trinidad.
- Fig. 4 *Helicopontosphaera compacta* (BRAMLETTE & WILCOXON) n. comb. Hypotype JS 1847 502 [A 863], 10000 \times , concave side, Ciperó Fm., Trinidad.
- Fig. 5 *Helicopontosphaera reticulata* (BRAMLETTE & WILCOXON) n. comb. Hypotype JS 1066 047 [A 865], 10000 \times , convex side, Oceanic Fm., Barbados.
- Fig. 6 *Helicopontosphaera intermedia* (MARTINI) HAY & MOHLER. Hypotype JS 20 462 [A 864], 10000 \times , convex side, Ciperó Fm., Trinidad.

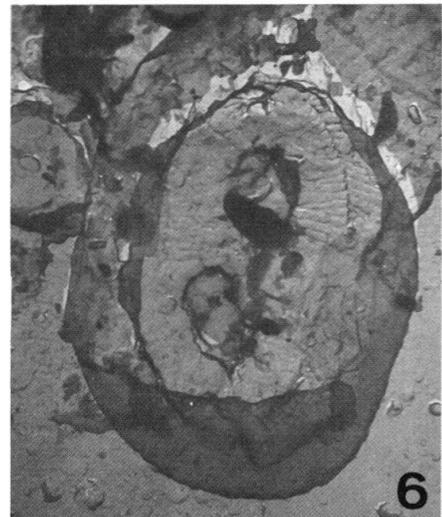
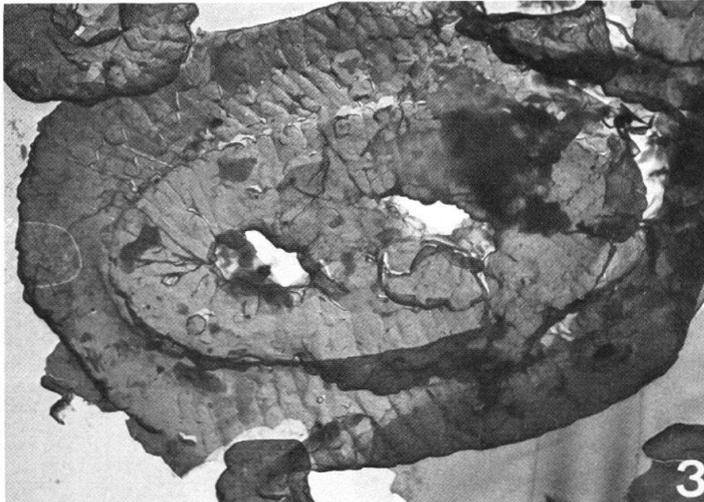


Plate XI

- Fig. 1 *Cepekiella elongata* n. sp. Holotype A 613 574 [A 867], 15000×, distal view, Red Bluff Fm., 13' above base, Alabama.
- Fig. 2 *Cepekiella elongata* n. sp. Paratype ETH 68-30-806 [A 868], 15000×, proximal view, Silberberg Fm., near Helmstedt, Northern Germany.
- Fig. 3 *Cepekiella hayi* (STRADNER) n. comb. Hypotype ETH 68-70-855 [A 869], distal view, Silberberg Fm., Silberberg, Northern Germany.
- Fig. 4 *Discoturbella moori* n. sp. Holotype A 608 297 [A 870], 10000×, side view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 5 *Holodiscolithus solidus* (DEFLANDRE) n. comb. Hypotype A 608 343 [A 873], 15000×, distal view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 6 *Holodiscolithus macroporus* (DEFLANDRE) n. comb. Hypotype A 600 088 [A 872], 15000×, distal view, Red Bluff Fm., base, Alabama.

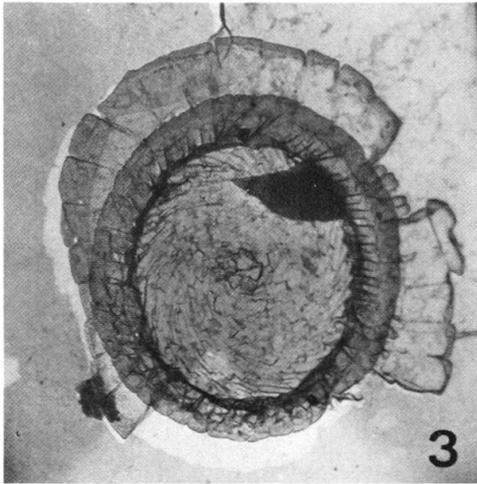
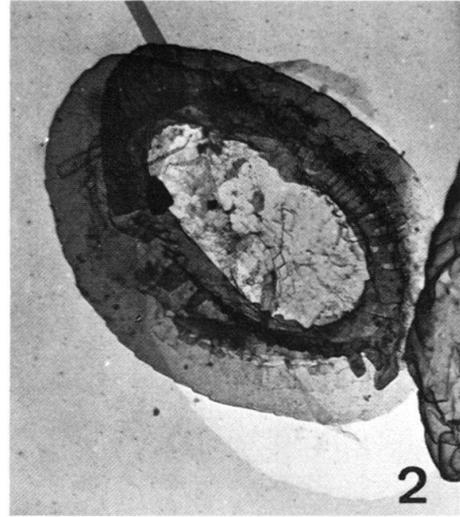
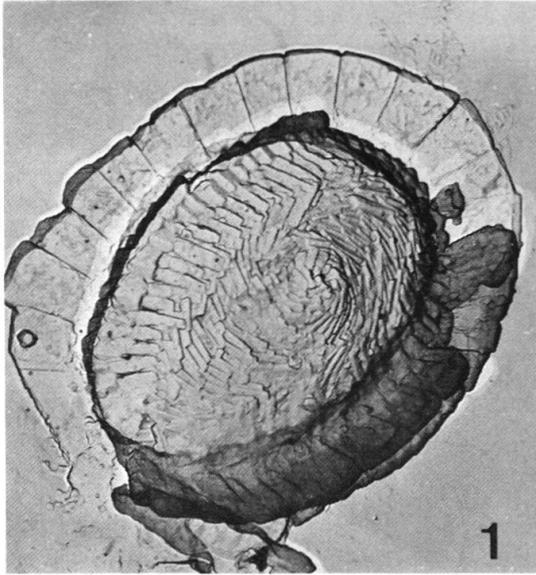


Plate XII

- Fig. 1 *Zygosphaera brytika* n. sp. Holotype A 608 088 [A 871], 15000 \times , distal view, Red Bluff Fm., 8' above base, Alabama.
- Fig. 2 *Clathrolithus minutus* DEFLANDRE. Hypotype A 809 098 [A 874], 10000 \times , distal view, Marianna Ls., 9' above base, Alabama.
- Fig. 3 *Discoaster rufus* n. sp. Holotype J3-397-7-6 [A 875], 8600 \times , JOIDES Hole 3, 397' below top, Blake Plateau, W Atlantic.
- Fig. 4 *Discoaster tani nodifer* BRAMLETTE & RIEDEL. Hypotype A 800046 [A 876], 5000 \times , base of Marianna Ls., Alabama.
- Fig. 5 *Discoaster trinus* STRADNER. Hypotype J3-475-9-1 [A 877], 4800 \times , JOIDES Hole 3, 475' below top, Blake Plateau, W Atlantic.
- Fig. 6 *Discoaster woodringi* BRAMLETTE & RIEDEL. Hypotype J 301 003 [A 878], 5000 \times , JOIDES Hole 3, 270' below top, Blake Plateau, W Atlantic.

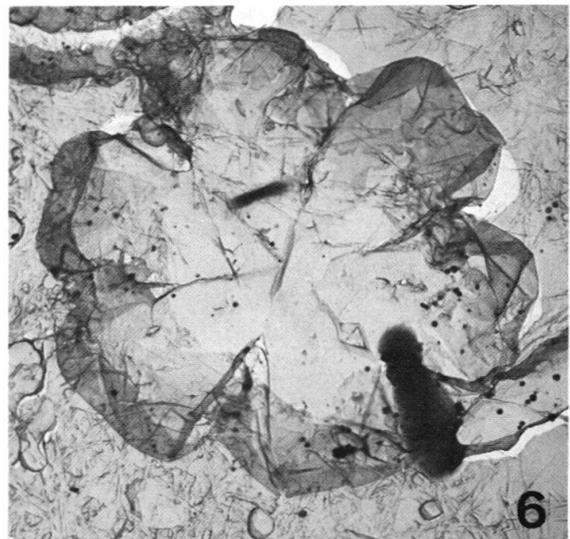
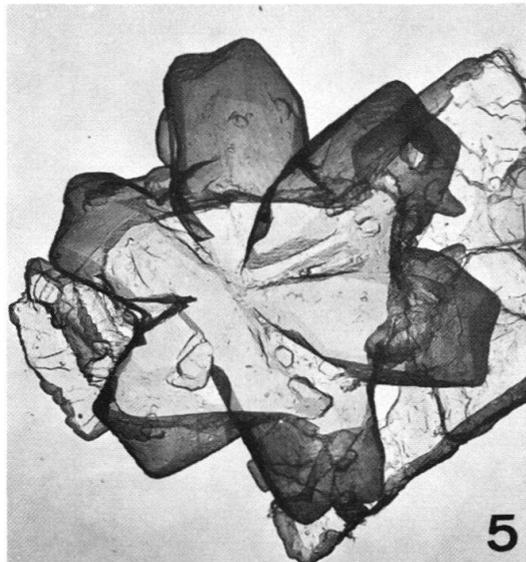
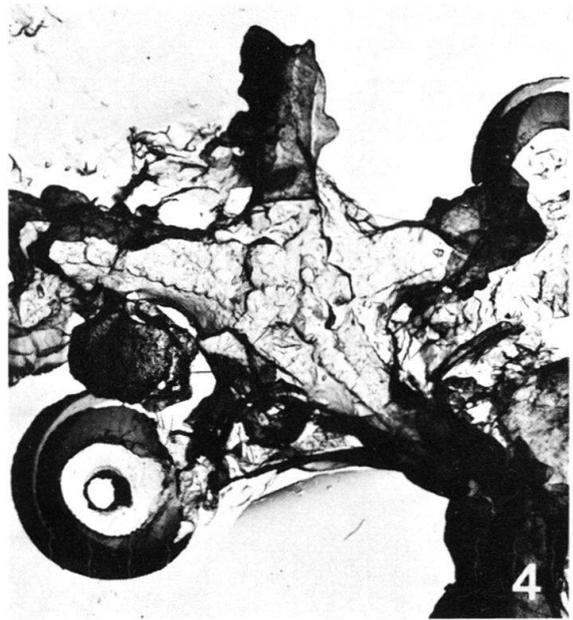
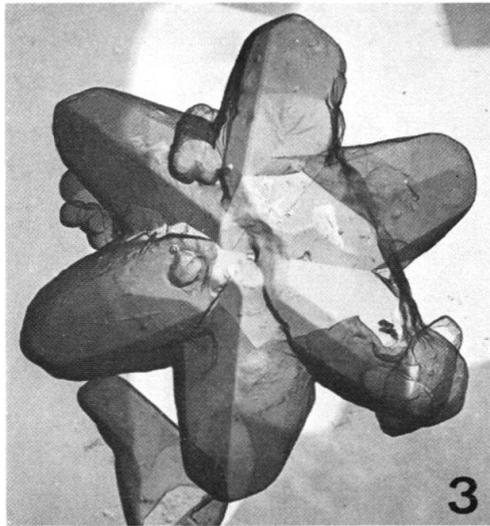
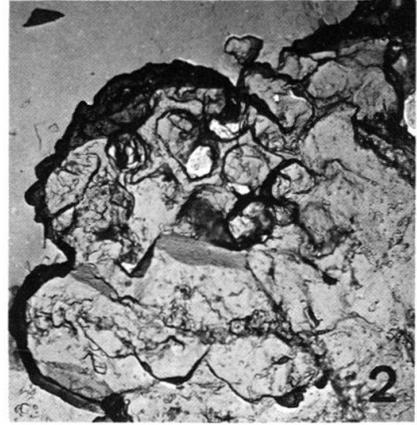


Plate XIII

- Fig. 1 *Lithostromation perdurum* DEFLANDRE. Hypotype J 509 209 [A 879], 5000 ×, JOIDES Hole 5, 260' 2" below top, Blake Plateau, W Atlantic.
- Fig. 2 *Lithostromation perdurum* DEFLANDRE. Hypotype A 800 072 [A 880], 5000 ×, base of Marianna Ls., Alabama.
- Fig. 3 *Sphenolithus distentus* (MARTINI) BRAMLETTE & WILCOXON. Hypotype J3-422-20-10 [A 888], 3850 ×, JOIDES Hole 3, 422' below top, Blake Plateau, W Atlantic.
- Fig. 4 *Sphenolithus ciperoensis* BRAMLETTE & WILCOXON. Hypotype J3-270-18-2 [A 885], 10300 ×, JOIDES Hole 3, 270' below top, Blake Plateau, W Atlantic.
- Fig. 5 *Sphenolithus belemnos* BRAMLETTE & WILCOXON. Hypotype JS 267* 083 [A 883], 6000 ×, Cipro Fm., Trinidad.
- Fig. 6 *Sphenolithus belemnos* BRAMLETTE & WILCOXON. Hypotype J3-270-18-8 [A 882], 6800 ×, JOIDES Hole 3, 270' below top, Blake Plateau, W Atlantic.
- Fig. 7 *Sphenolithus distentus* (MARTINI) BRAMLETTE & WILCOXON. Hypotype J3-397-13-5 [A 887], 6800 ×, JOIDES Hole 3, 397' below top, Blake Plateau, W Atlantic.

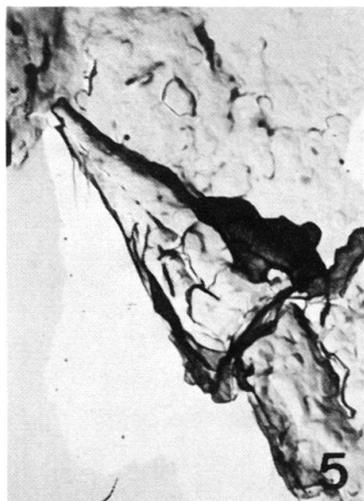
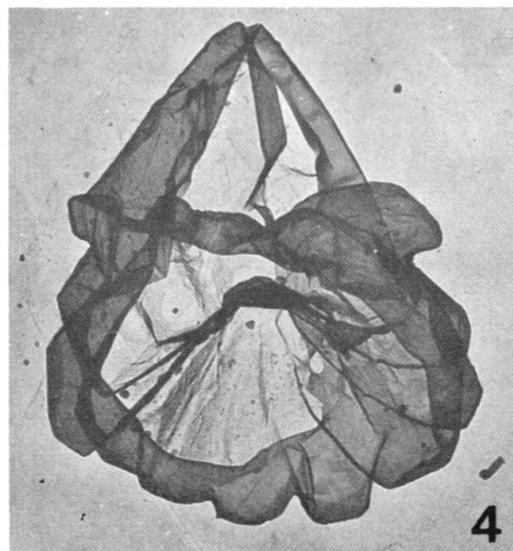
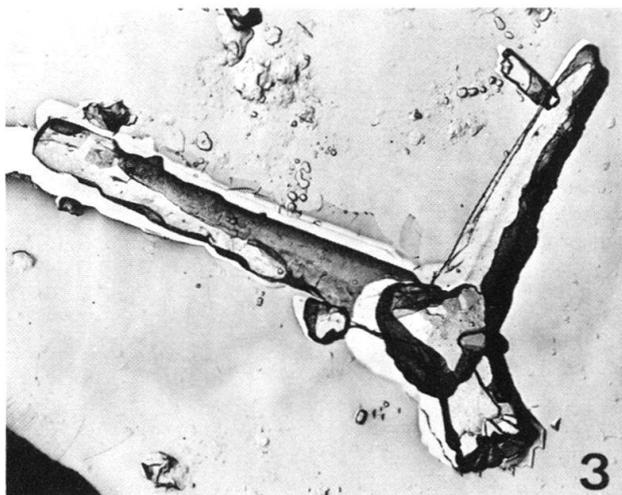
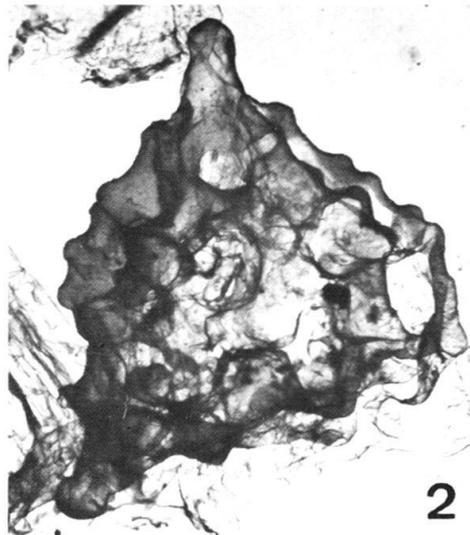


Plate XIV

- Fig. 1 *Sphenolithus ciperoensis* BRAMLETTE & WILCOXON. Hypotype JS 267* 070 [A 886], 5000 \times , Ciperó Fm., Trinidad.
- Fig. 2 *Sphenolithus ciperoensis* BRAMLETTE & WILCOXON. Hypotype J3-306-16-7 [A 884], 10000 \times , JOIDES Hole 3, 306' below top, B lake Plateau, W Atlantic.
- Fig. 3 *Sphenolithus moriformis* (BRÖNNIMANN & STRADNER) BRAMLETTE & WILCOXON, Hypotype J3-475-11-1 [A 889], 9000 \times , JOIDES Hole 3, 475' below top, B lake Plateau, W Atlantic.
- Fig. 4 *Sphenolithus moriformis* (BRÖNNIMANN & STRADNER) BRAMLETTE & WILCOXON. Hypotype J3-381-20-5 [A 890], 9500 \times , JOIDES Hole 3, 381' below top, Blake Plateau, W Atlantic.
- Fig. 5 *Sphenolithus tribulosus* n. sp. Holotype A 608 504 [A 891], 10000 \times , Red Bluff Fm., 8' above base, Alabama.
- Fig. 6 *Triquetrorhabdulus carinatus* MARTINI. Hypotype Bo291 A 458 [A 881], 10000 \times , Ciperó Fm., Trinidad.
- Fig. 7, 8 *Sphenolithus tribulosus* n. sp. Paratype A 613-Lool A + B, 1750 \times , (7)A, long axis 45° to crossed nicols, [A 892], (8) B, long axis 0° to crossed nicols [A 893]; Red Bluff Fm., 13' above base, Alabama.

