

Capítulo 17

LÁMINAS/*PLATES*

PLATE 1

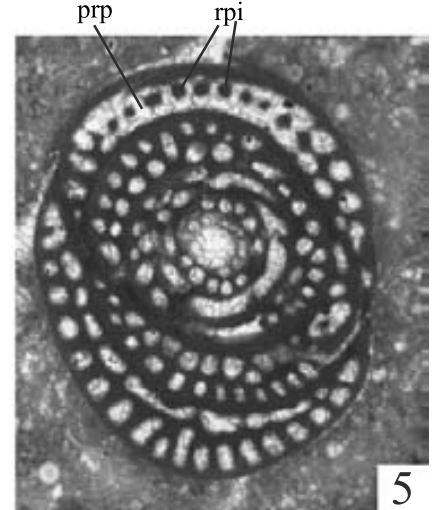
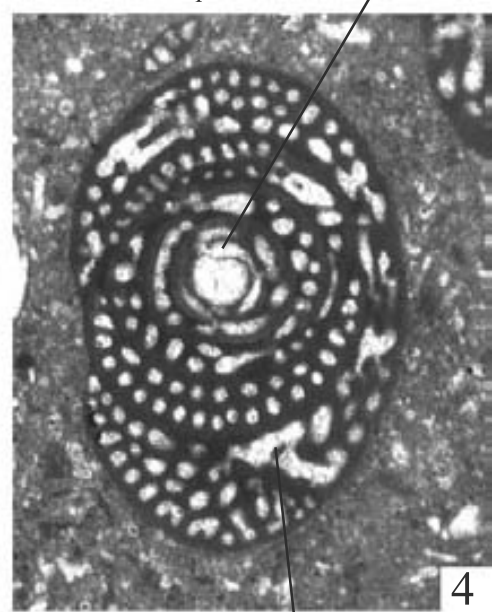
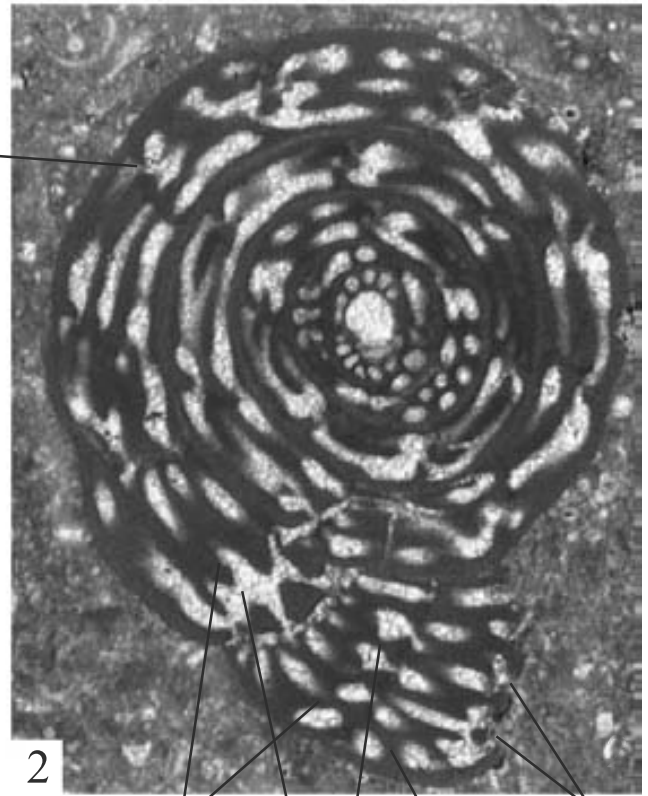
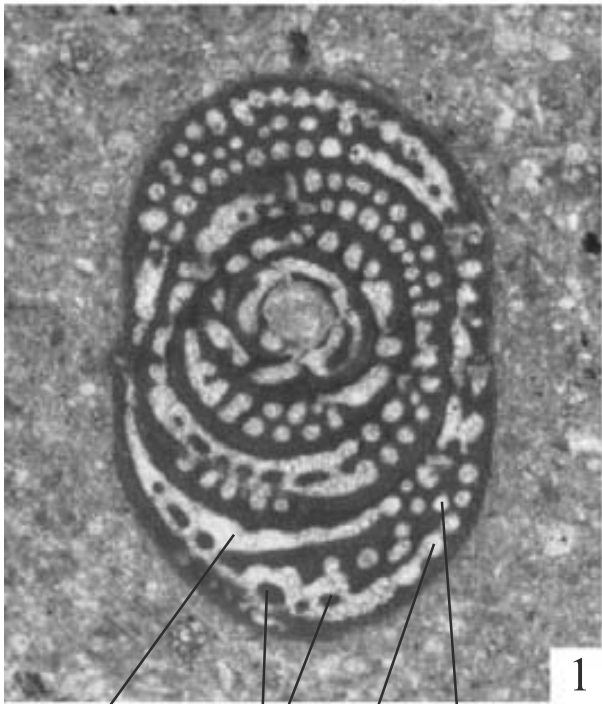
Chubbina jamaicensis Robinson 1968

1, 2, 4, 5: megalospheric forms

3: microspheric form

Transmitted light micrographs of thinsections of cemented carbonates of Maastrichtian age. Sample *Jam-2* from Jamaica, collected close to the type locality. Observe the streptospiral coiling that characterize this genus. 1: axial section (x50); 2: equatorial section (x50); 3: equatorial section (x25); 4, 5: oblique-centered sections near to axial plane (x50).

ABBREVIATIONS: **ap:** *aperture*/abertura; **c chl:** *cortical chamberlet*/camarilla cortical; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sh:** *shaft*; **sl:** *septula*/tabique



prp
rpi
c chl
m chl
flo

fo
flo
sh
rpi
sl
f
ap

x25

prp
rpi

s
sl
c chl
prp

PLATE 2

Chubbina jamaicensis Robinson 1968

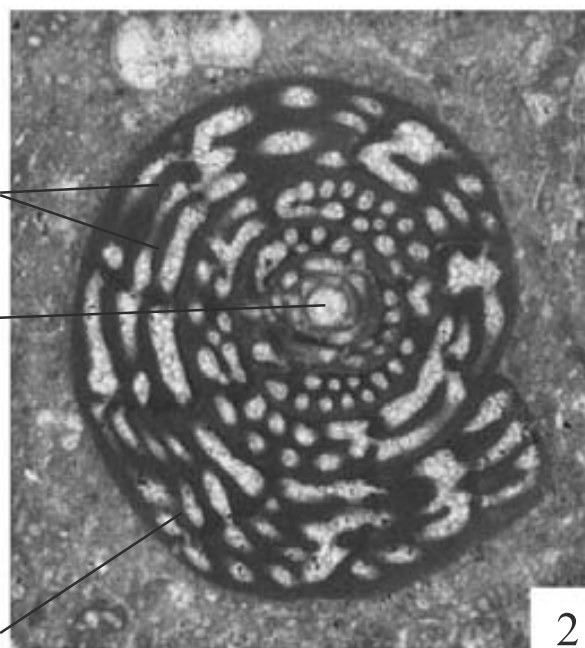
megalospheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Maastrichtian age. Sample *Jam-2* from Jamaica, collected close to the type locality. Observe the streptospiral coiling that characterize this genus. 1, 3, 6: oblique-centered sections near to axial plane; 2: equatorial section; 4, 5: sub-equatorial sections.

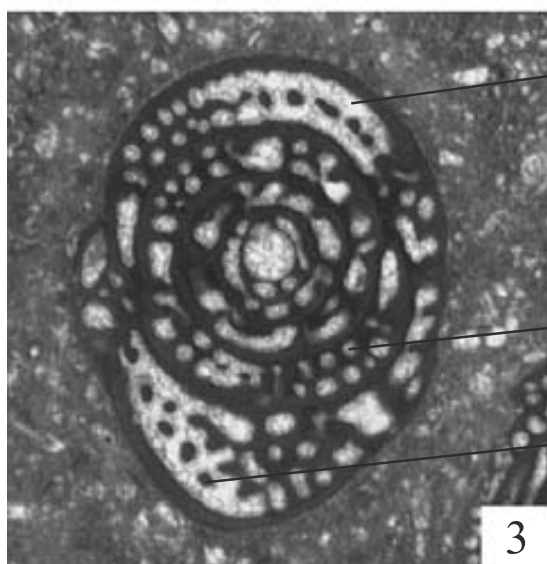
ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sh:** *shaft*; **sl:** *septula*/tabique



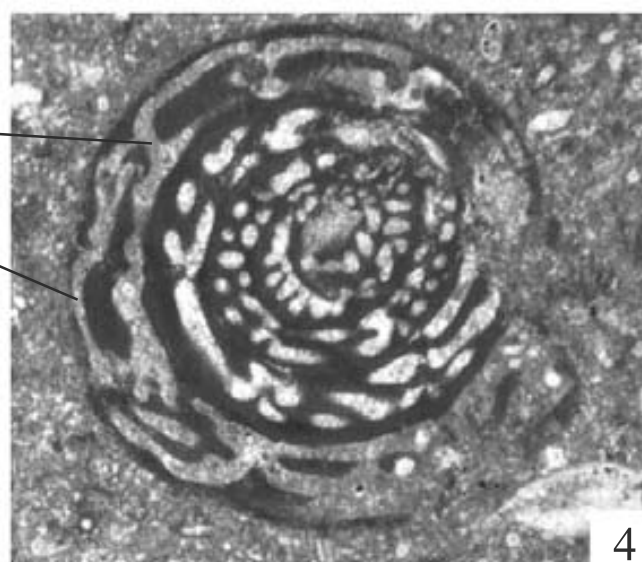
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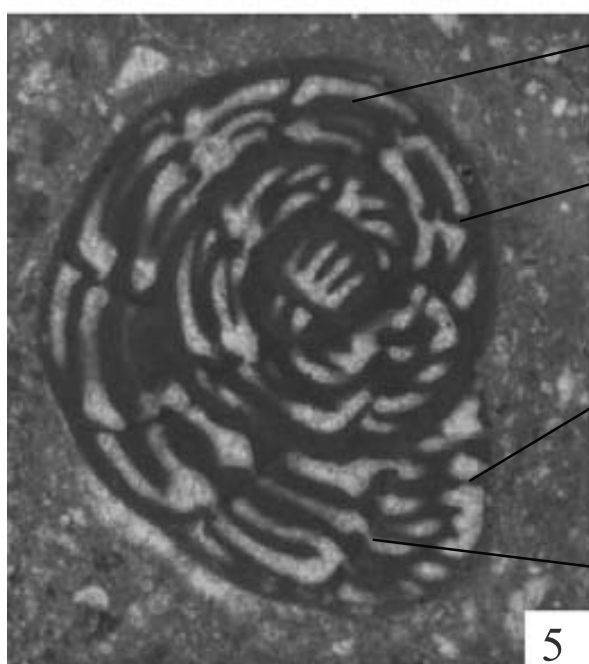
2



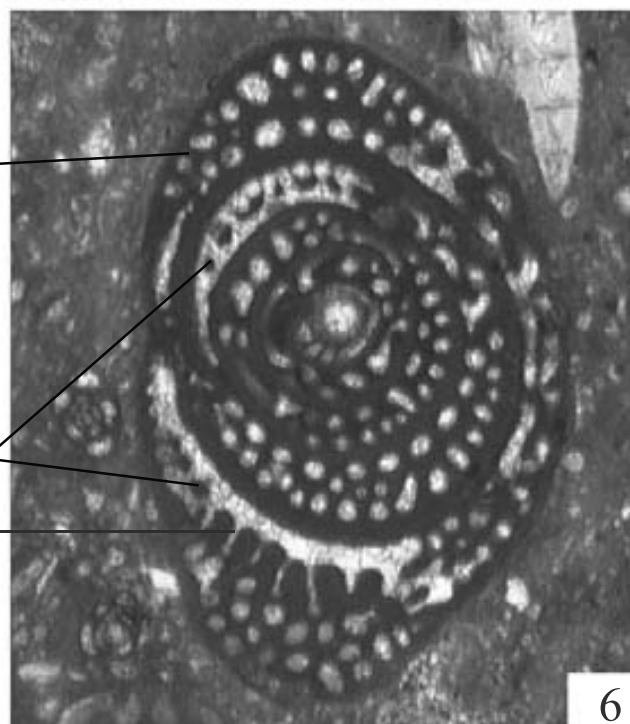
3



4



5



6

PLATE 3

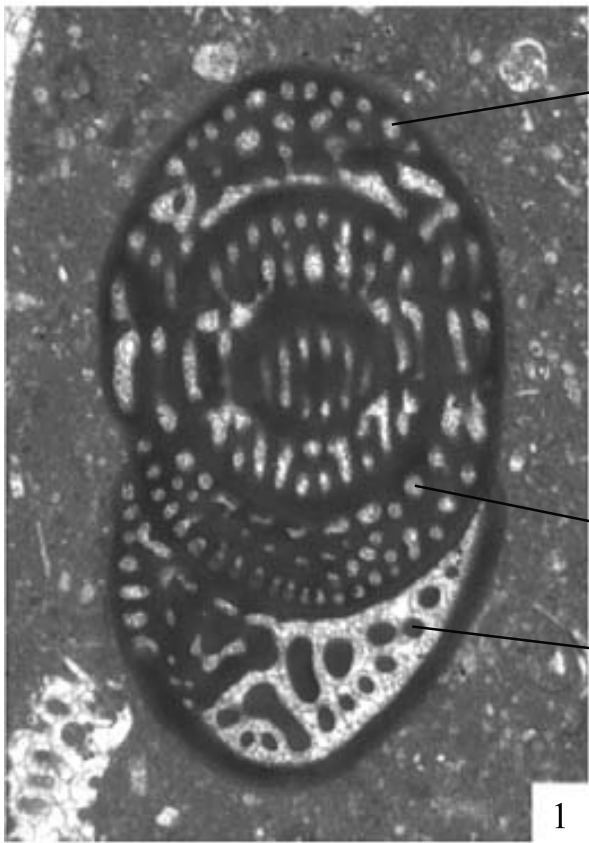
Chubbina jamaicensis Robinson 1968

1 to 6 megalospheric forms (x50)

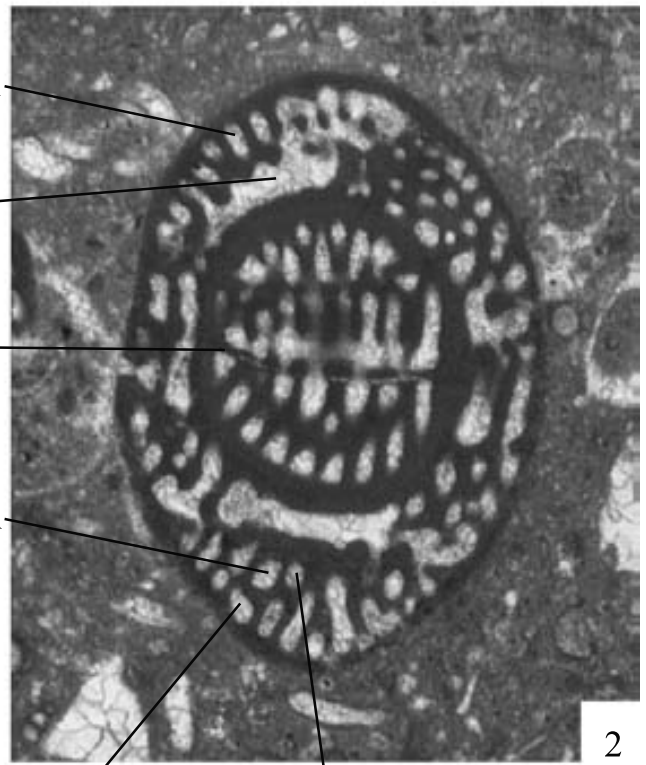
7 microspheric form (x25)

Transmitted light micrographs of thinsections of cemented carbonates of Maastrichtian age. Sample *Jam-2* from Jamaica, collected close to the type locality. 1: sub-axial section; 2-6: tangential sections; 7: oblique section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique



1

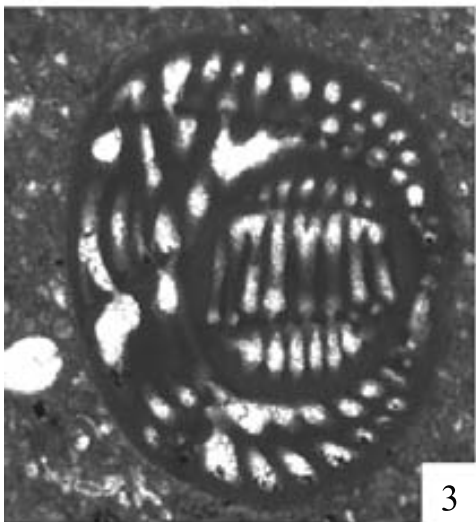


2

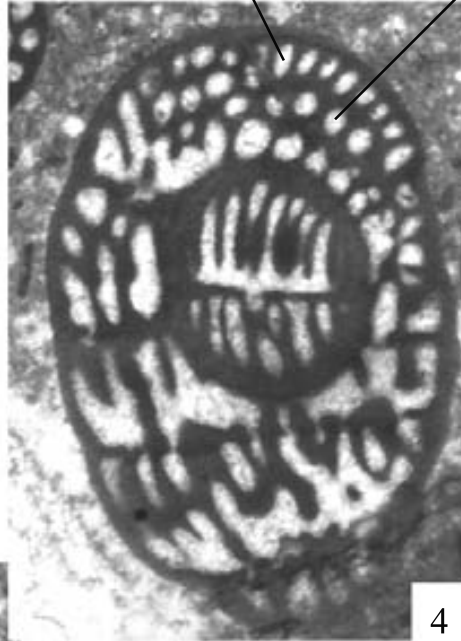
c chl

m chl

rpi



3



4



5



6



7

rpi

prp

c chl

m chl

PLATE 4

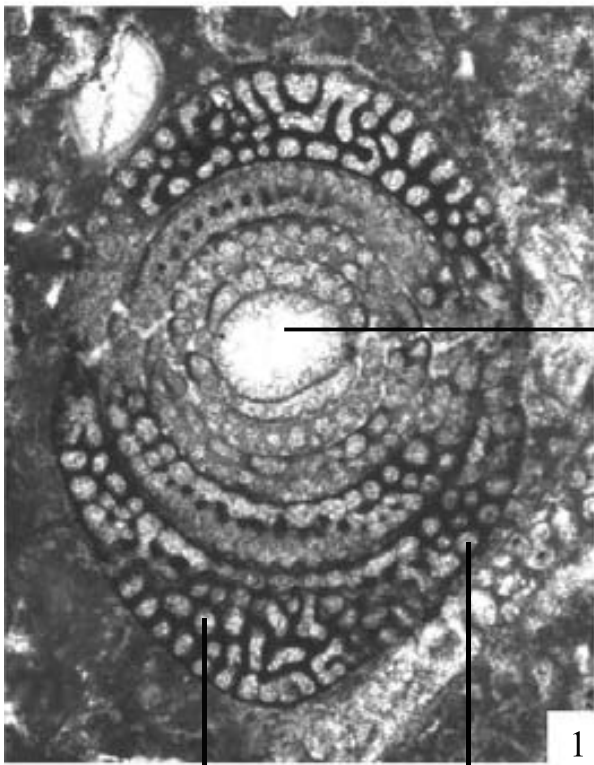
Chubbina macgillavryi Robinson 1968

1 to 4: megalospheric forms

5. microspheric form

Transmitted light micrographs of thinsections of cemented carbonates of Campanian to Maastrichtian age. Sample VV-48 from Ocozocoautla, Chiapas (Mexico), collected close to the type locality. Observe the discoidal growth of microspheric form. 1, 4: axial sections (x50). 2: equatorial section (x50). 3: sub-equatorial section (x50). 5: oblique section (x12,5).

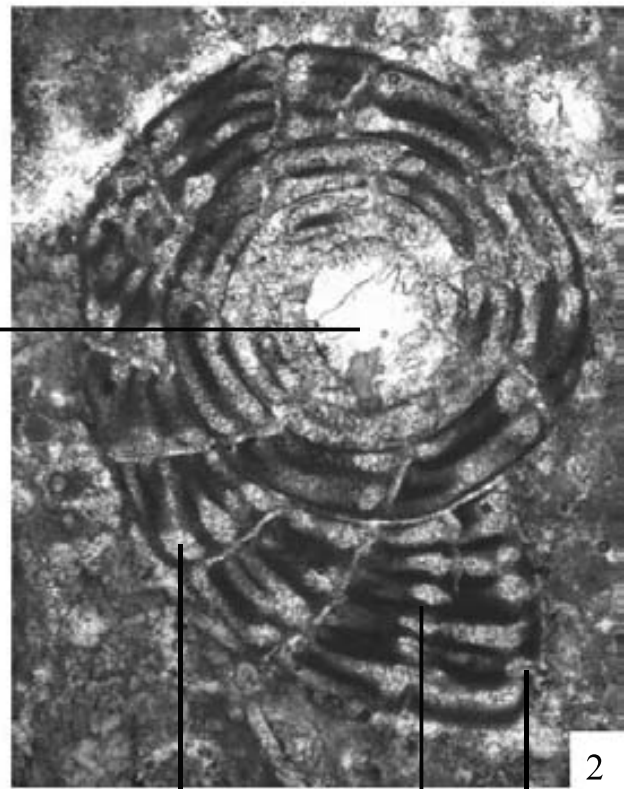
ABBREVIATIONS: **ap:** *aperture/abertura*; **c chl:** *cortical chamberlet/camarilla cortical*; **E:** *embryo/embrión*; **flo:** *floor/suelo*; **m chl:** *medullar chamberlet/camarilla medular*; **prp:** *preseptal passage/espacio preseptal*; **pstp:** *postseptal passage/espacio postseptal*; **rpi:** *residual pillar/pilar residual*;



m chl

c chl

1

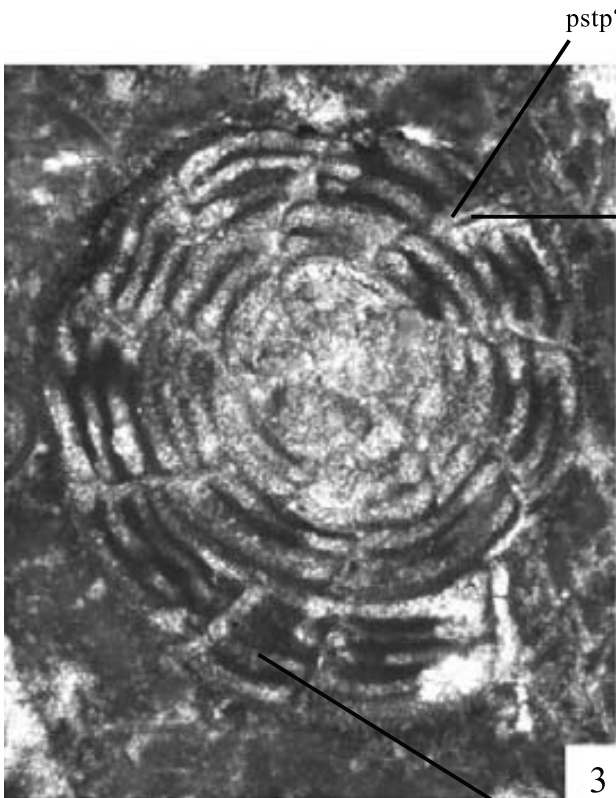


prp

flo

ap

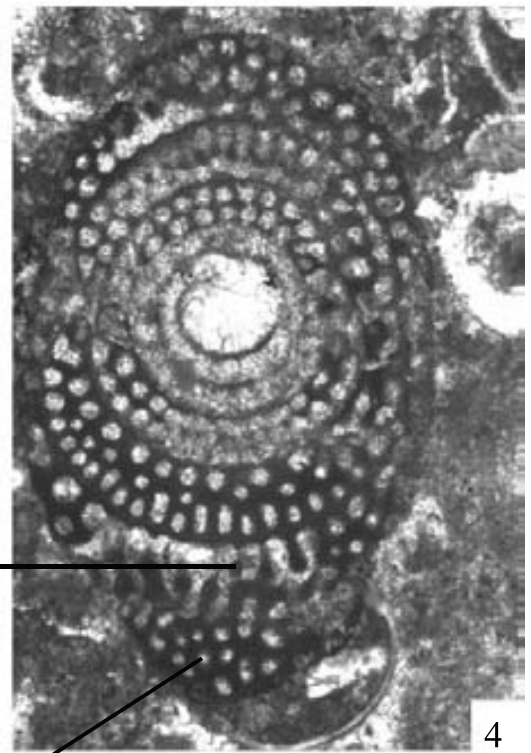
2



pstp?

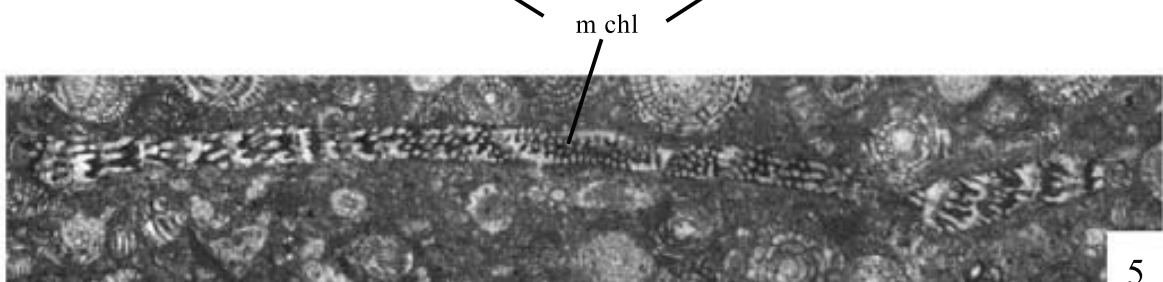
s

3



rpi

4



m chl

5

PLATE 5

Chubbina macgillavryi Robinson 1968

megalospheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample VV-48 from Ocozocoautla, Chiapas (Mexico), collected close to the type locality. 1, 6: equatorial sections; 2, 3, 5, 7: axial sections; 4: oblique section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **flo:** floor/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **s:** *septum*/septo; **sl:** *septula*/tabique

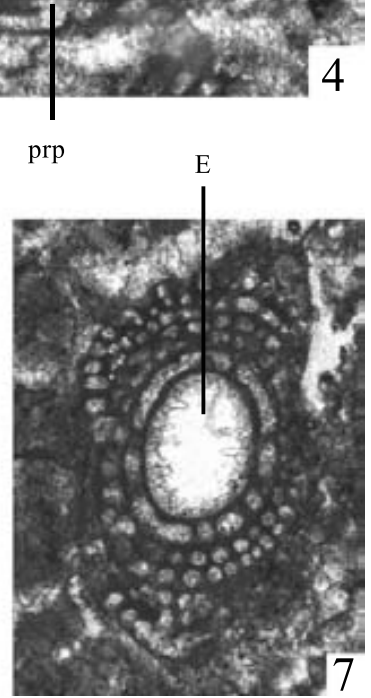
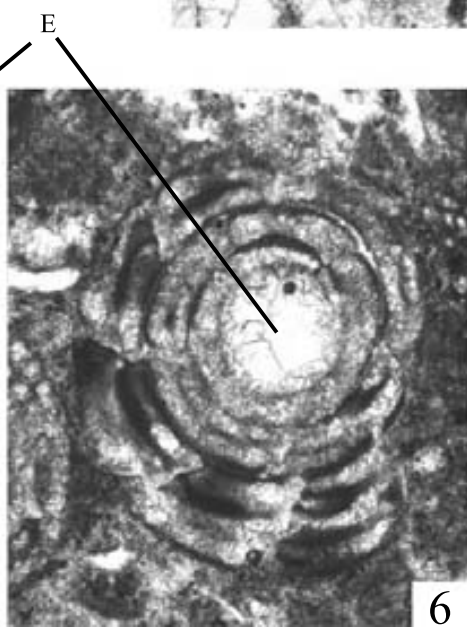
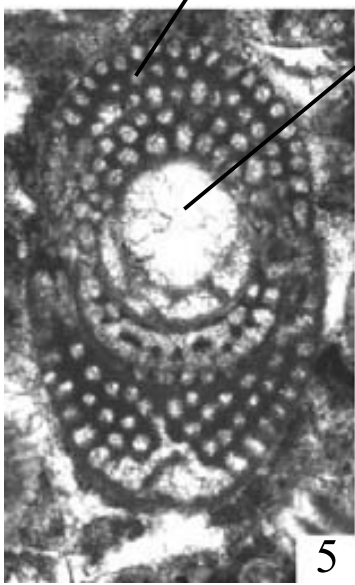
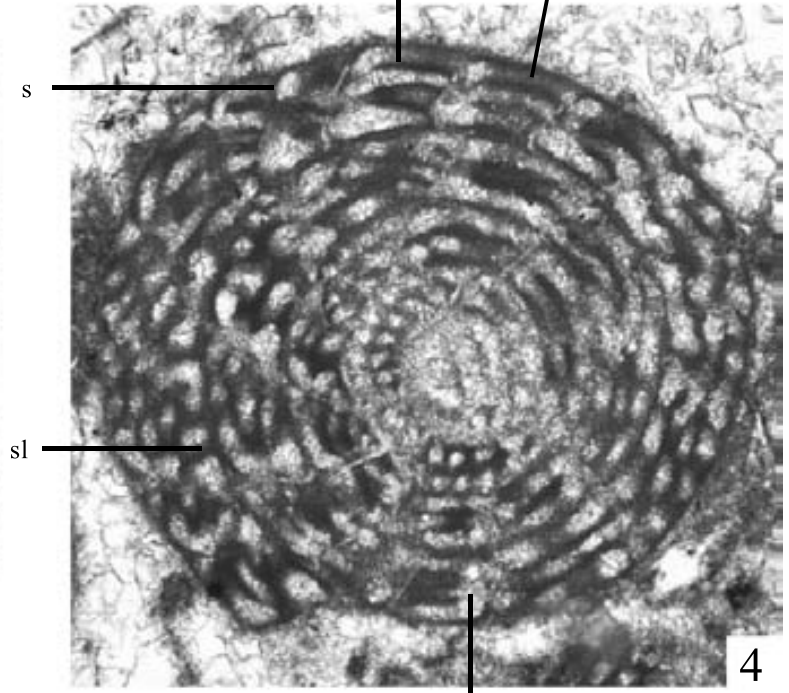
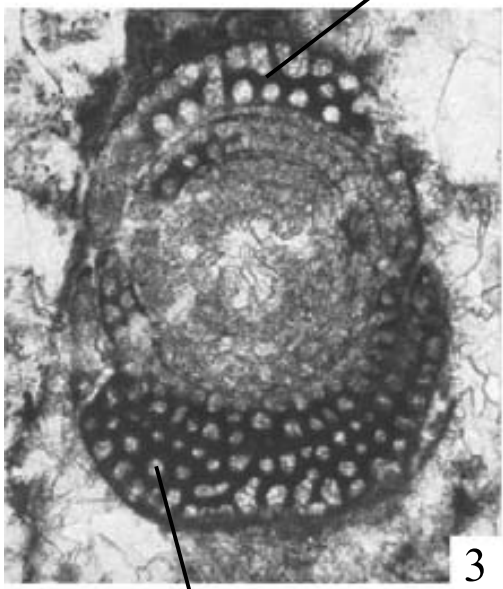
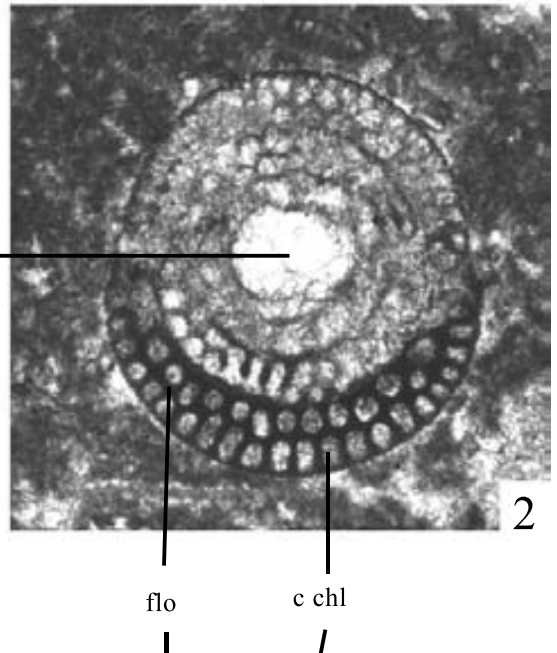
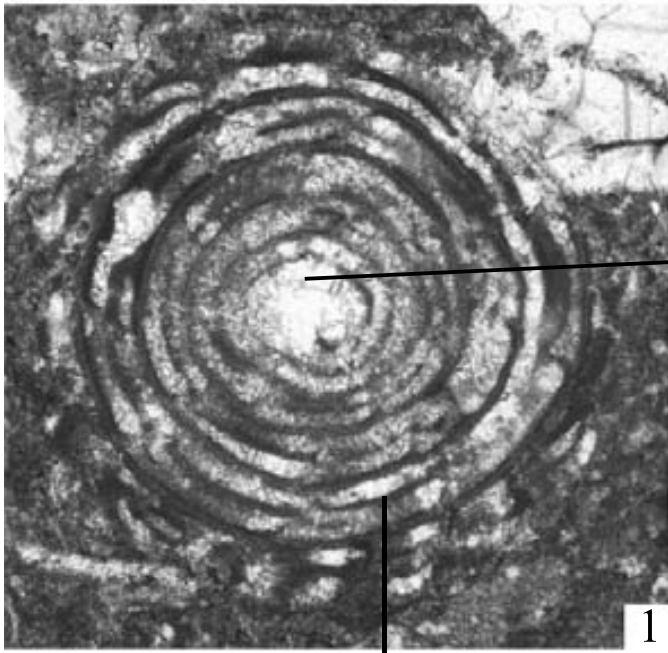


PLATE 6

Chubbina macgillavryi Robinson 1968

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample VV-48 from Ocozocoautla, Chiapas (Mexico), collected close to the type locality. 1, 4: oblique-non centered sections of megalospheric specimens (x50). 2, 6, 7, 9: tangential sections of megalospheric specimens (x50). 3, 5, 8: details (x100). Note the presence of a postseptal space.

ABBREVIATIONS: **c chl:** cortical *chamberlet/camarilla* cortical; **prp:** *preseptal passage/espacio* preseptal; **pstp:** *postseptal passage/espacio* postseptal; **rpi:** *residual pillar/pilar* residual; **s:** *septum/septo*; **sh:** *shaft*; **sl:** *septula/tabique*

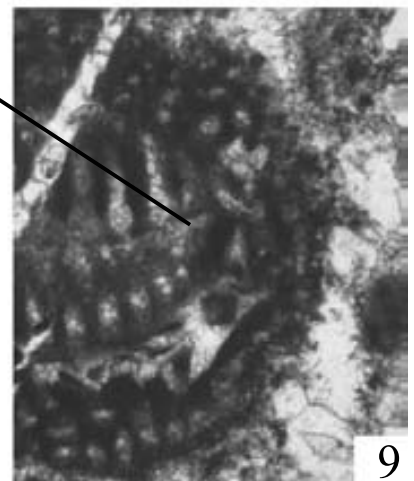
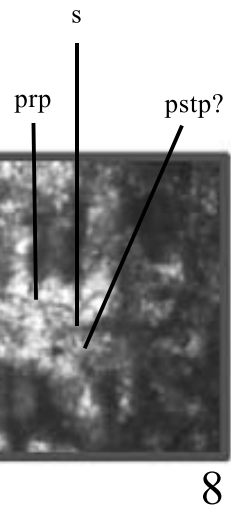
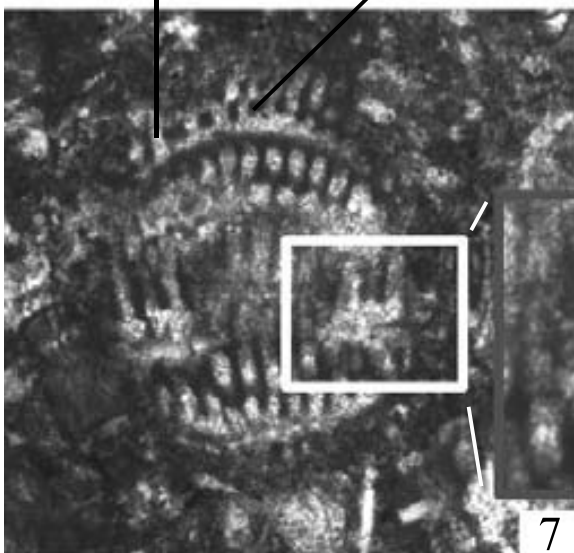
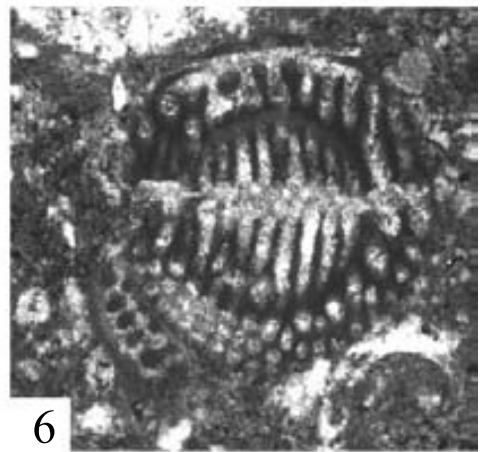
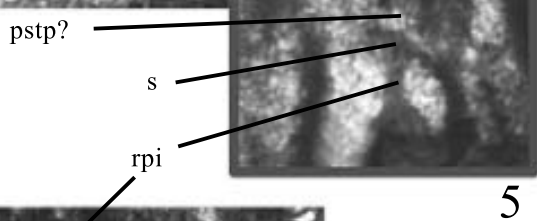
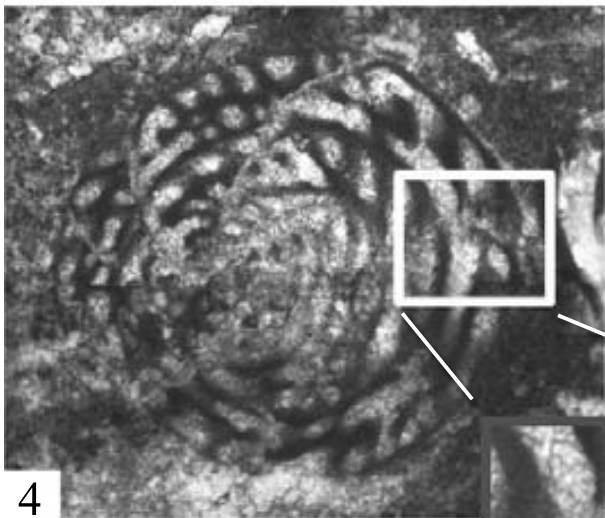
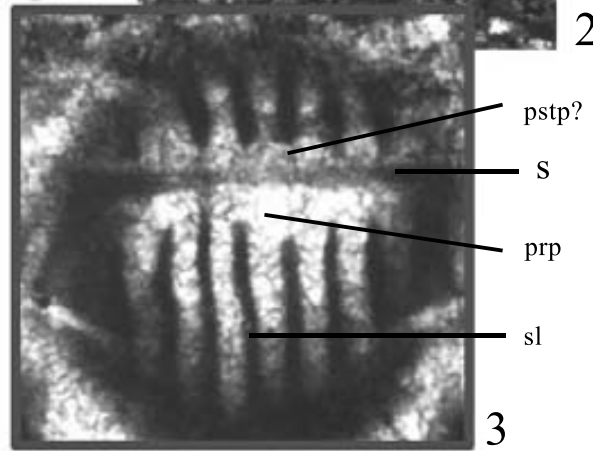
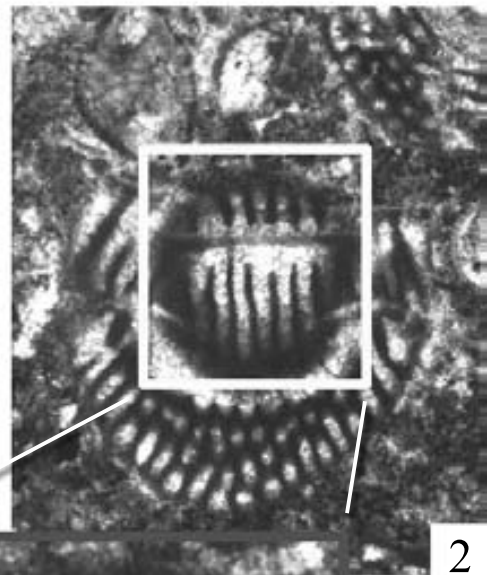


PLATE 7

Chubbina robinsoni n. sp.

megalospheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample VV-80 from Trinitaria, Chiapas (Mexico). Observe the streptospiral coiling that characterize this genus. 1, 2, 5, 7, 8, 13, 14: oblique-centered sections near to axial plane. 3, 4, 10, 11: equatorial sections. 9, 12, 15: sub-axial sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **flo:** floor/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique

PLATE 7

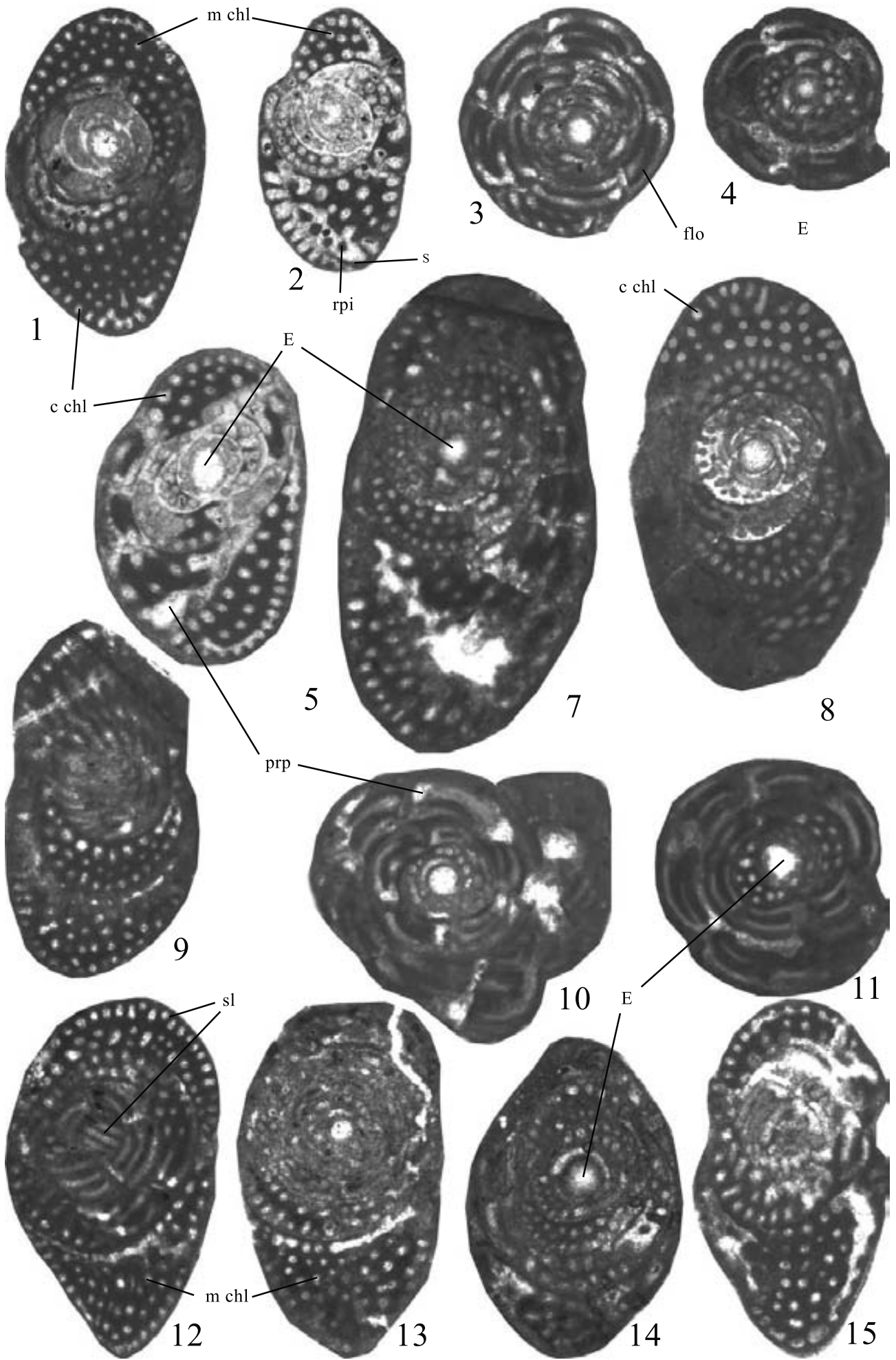


PLATE 8

Chubbina robinsoni n. sp.

1 to 5: megalospheric forms (x50)

6 and 7: microspheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaques. Sample VV-80 from Trinitaria, Chiapas (Mexico). 1, 3: oblique section. 2, 6: transverse sections close to equatorial plane. 4: oblique-centered section close to equatorial plane. 5, 7: transverse sections close to axial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **flo:** floor/suelo; **m chl:** medullar *chamberlet*/camarilla medular; **prp:** preseptal passage/espacio preseptal; **rpi:** residual pillar/pilar residual; **s:** septum/septo; **sh:** shaft;

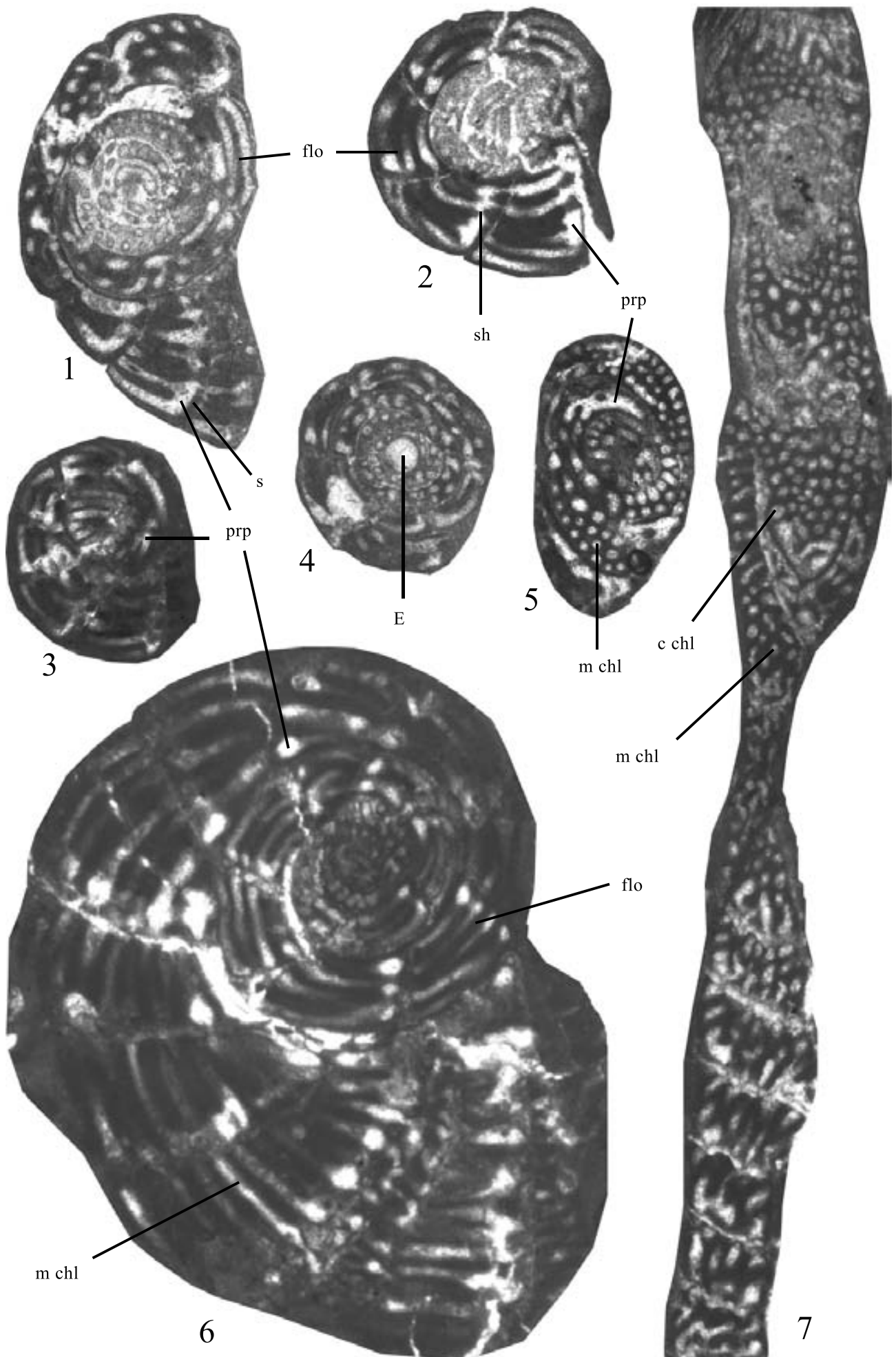


PLATE 9

Chubbina pecheuxi n. sp.

megalospheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample VV-80 from Trinitaria, Chiapas (Mexico). 1-6, 8, 9: axial sections. 7: oblique-centered section. 10, 11: equatorial sections. Note: 7 and 11 broken specimens.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique

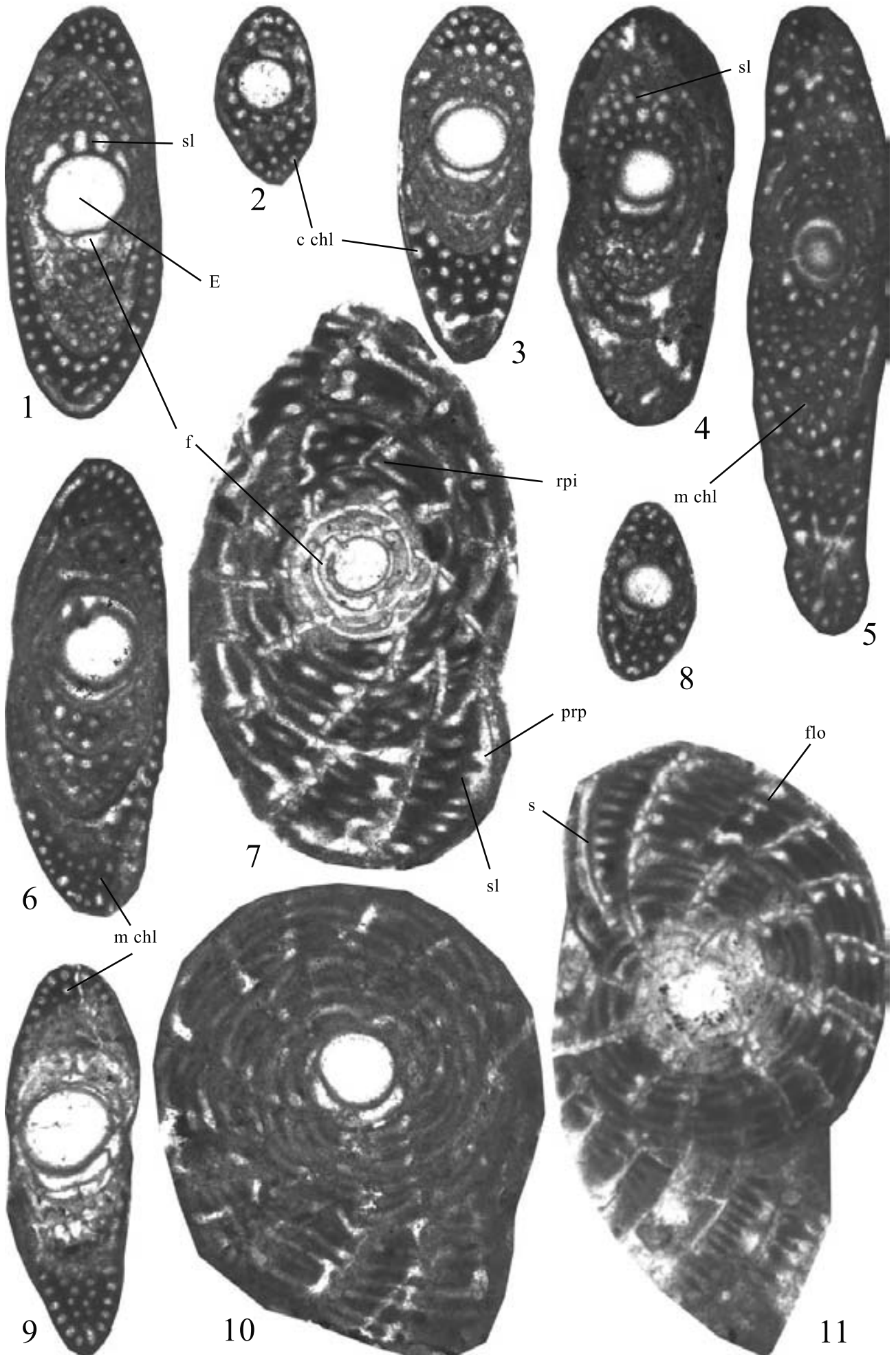


PLATE 10

***Chubbina pecheuxi* n. sp.**

2: megalospheric form (x50)

1 and 3: microspheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample VV-80 from Trinitaria, Chiapas (Mexico). 1, 2: oblique-centered sections close to equatorial plane. 3: oblique section, probably from a microspheric form in a senior growth state.

ABBREVIATIONS: **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **fo:** *floor*/suelo; **m**
chl: *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal;
sl: *septula*/tabique

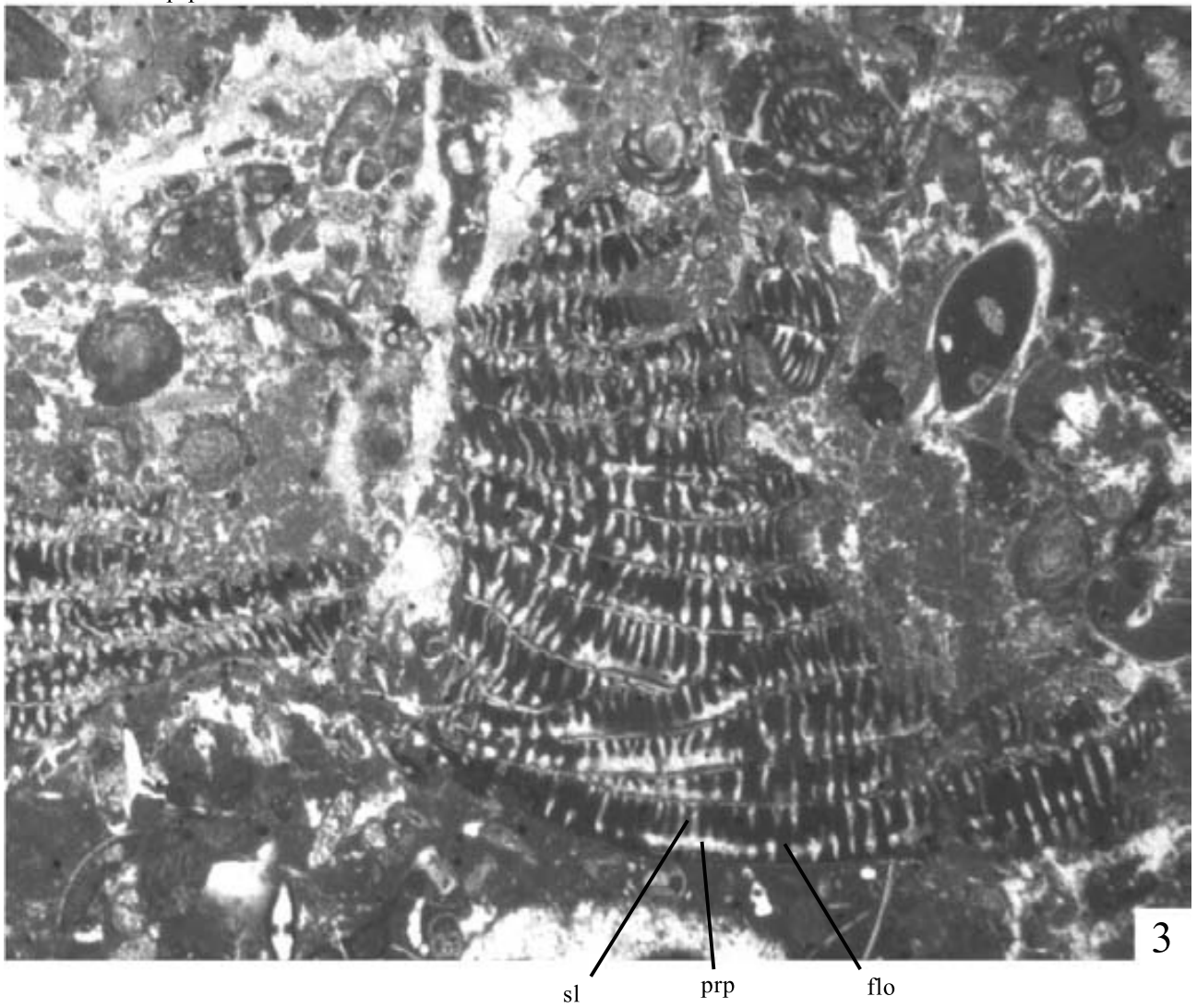
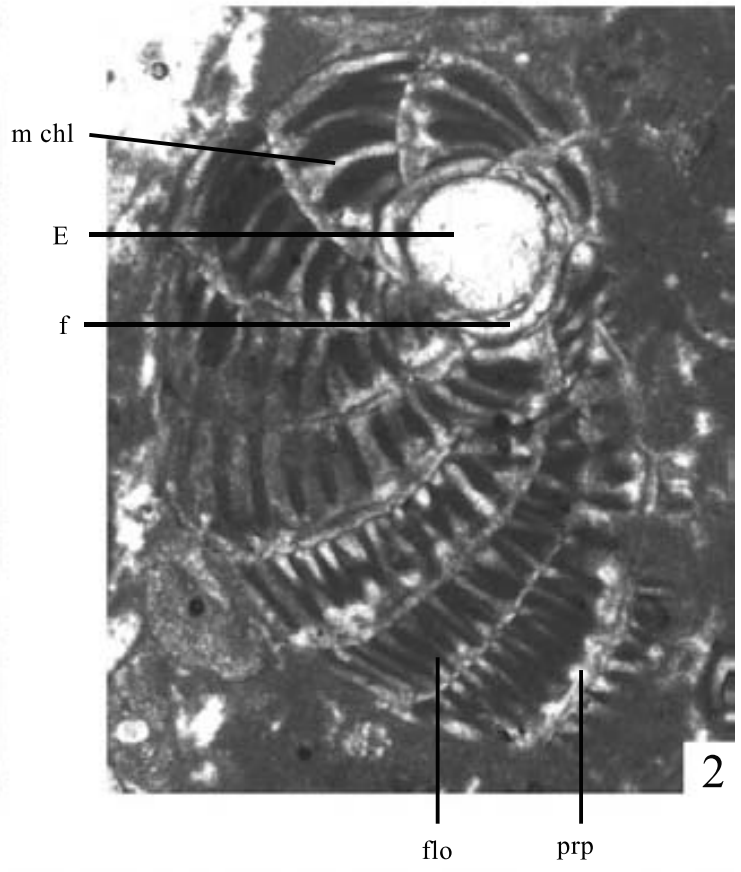
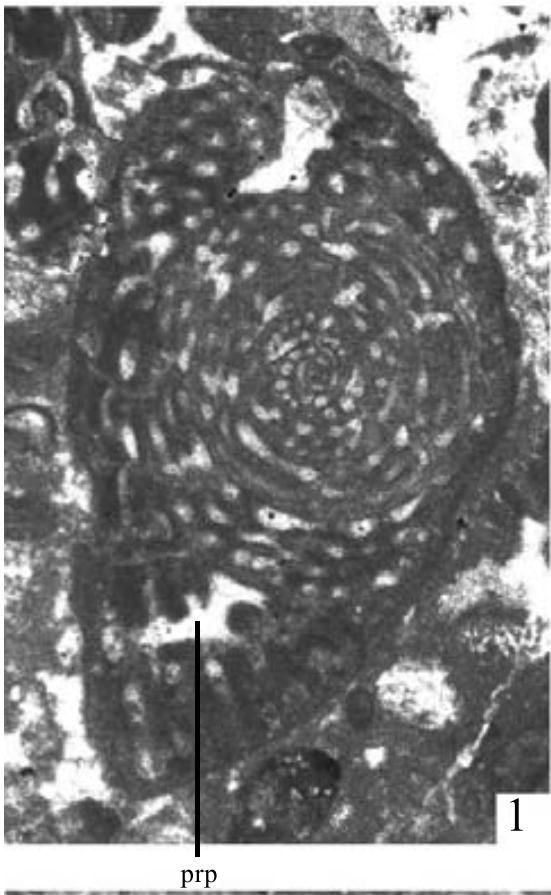


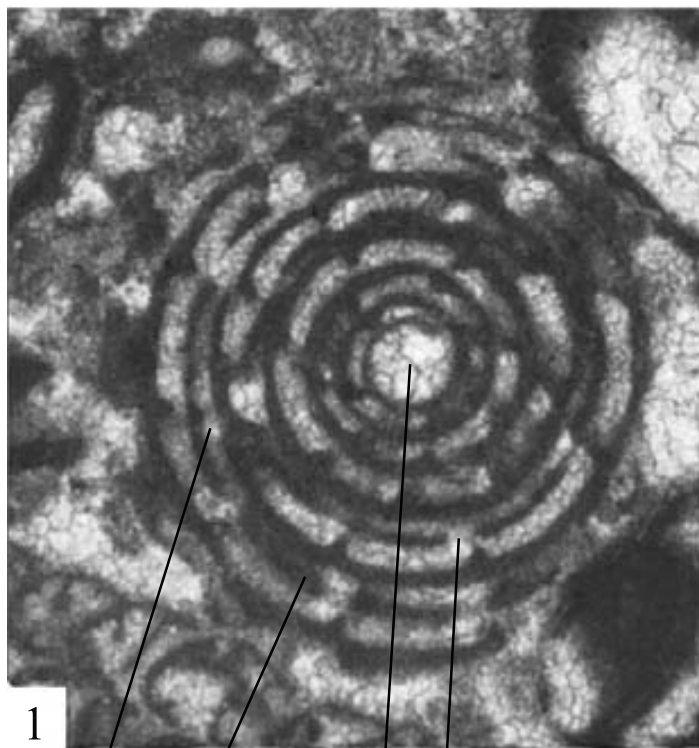
PLATE 11

Sellialveolina viallii Colalongo, 1963

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age. Sample *LC-42* from southern Apennines (Italy). 1: equatorial section. 2-4: oblique sections very close to axial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **flo:** floor/suelo; **m chl:** medullar *chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique



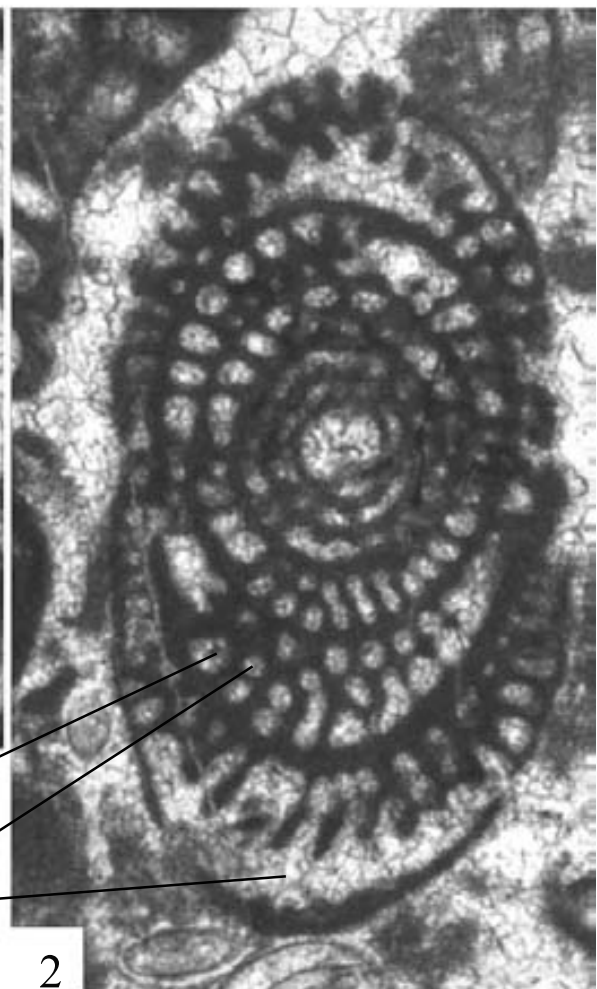
1

m chl

flo

E

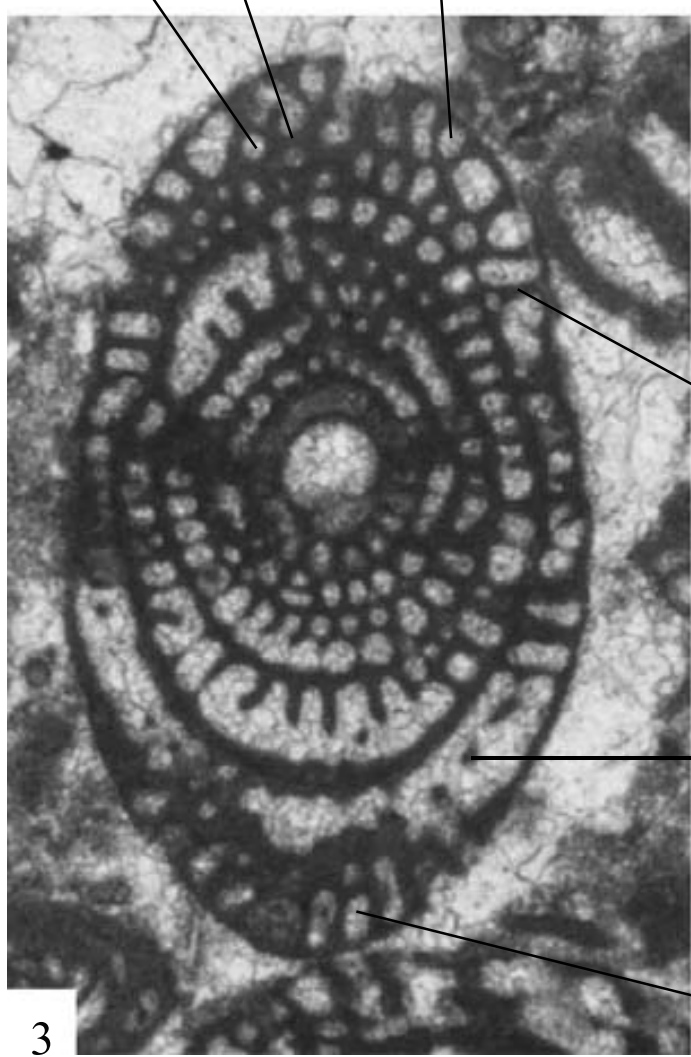
c chl



2

m chl

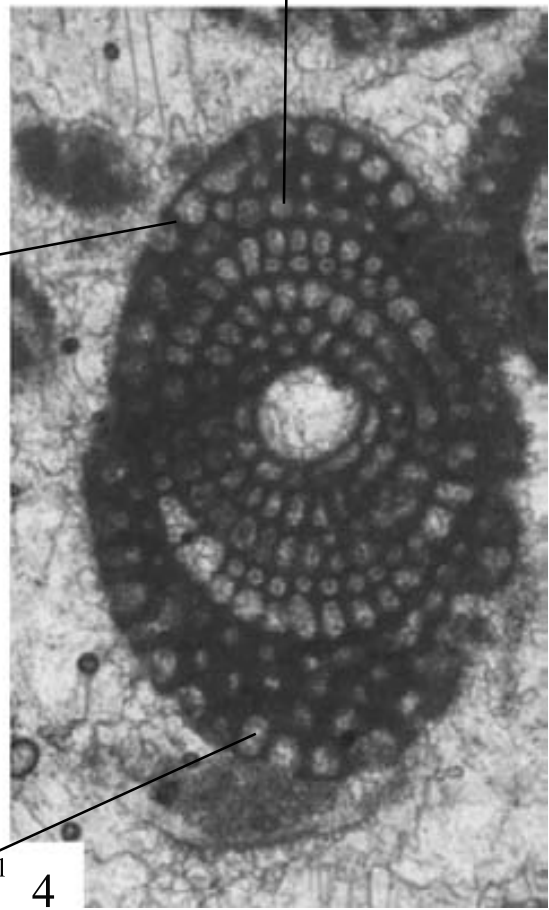
prp



3

sl

rpi



4

m chl

c chl

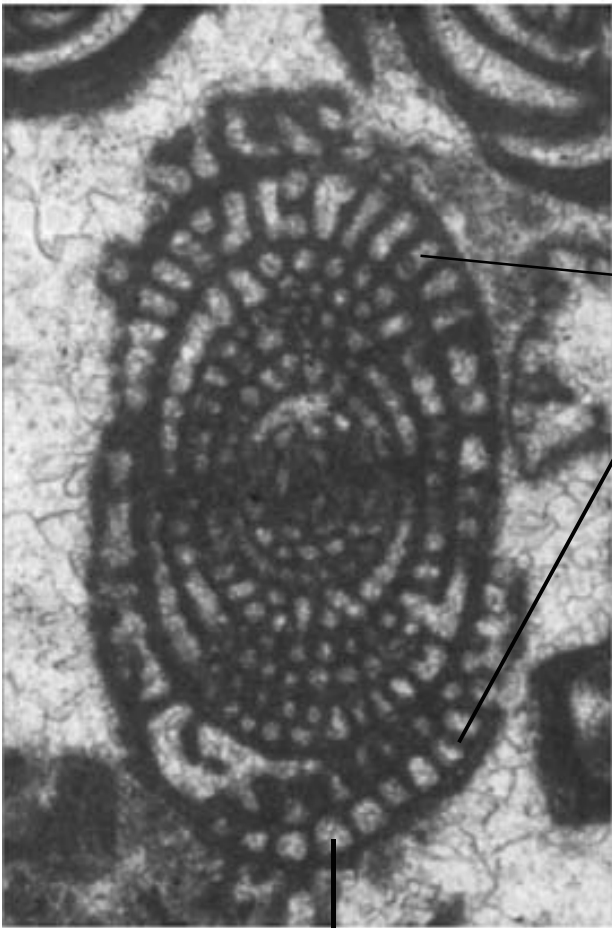
PLATE 12

Sellialveolina viallii Colalongo, 1963

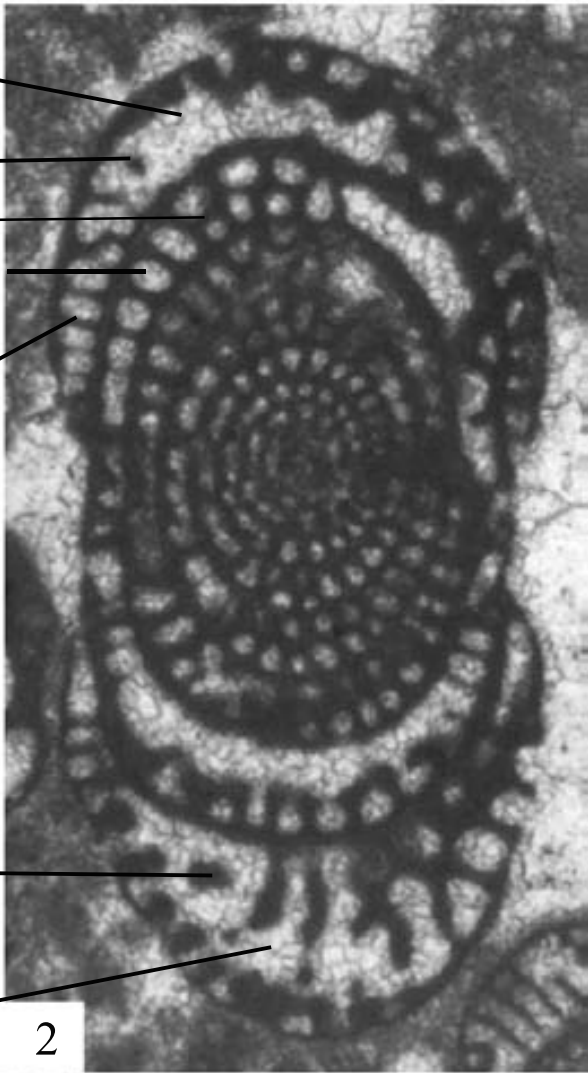
microspheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age. Sample *LC-42* from southern Apennines (Italy). 1, 2, 4: oblique-centered sections close to axial plane. 3: equatorial section.

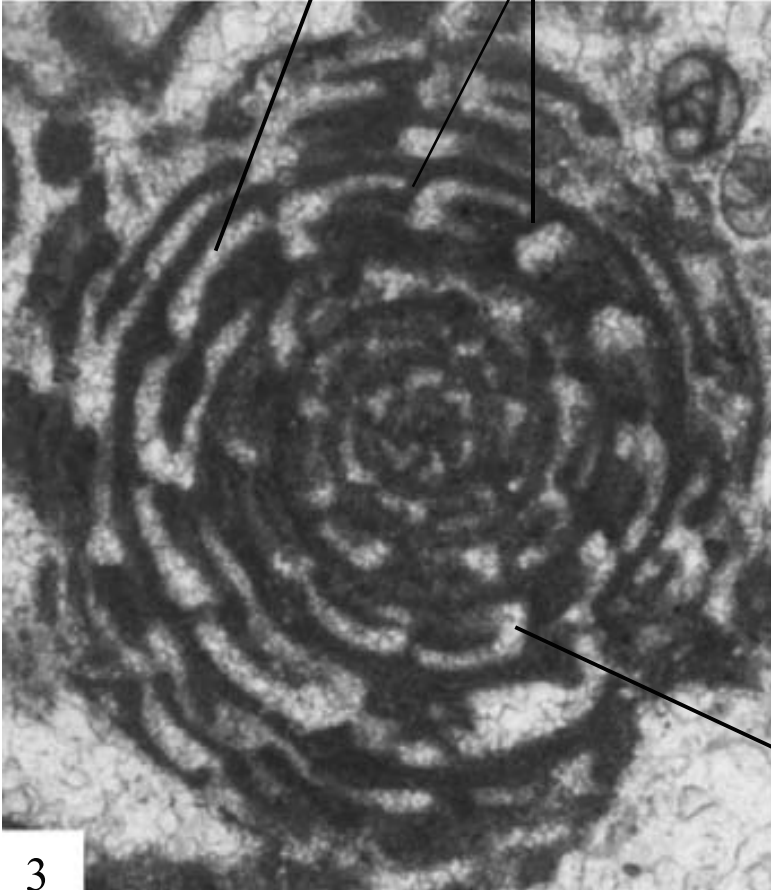
ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique



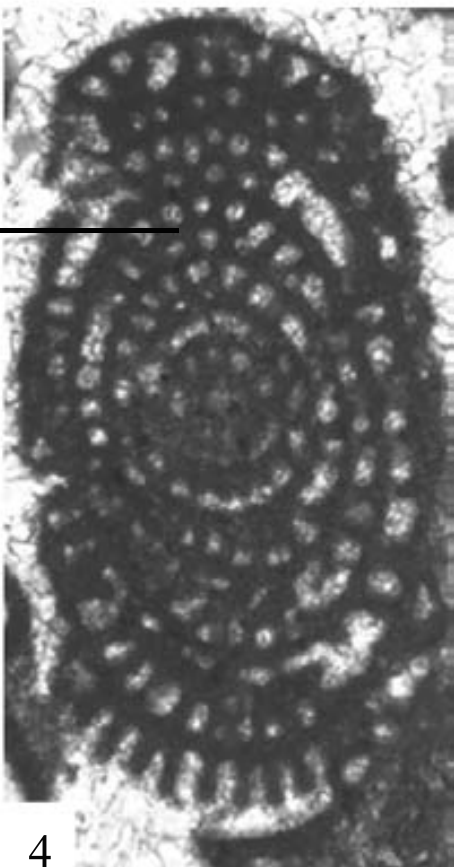
1



2



3



4

prp
rpi
flo
c chl

sl

rpi

prp

c chl

s

flo

prp

PLATE 13

Sellialveolina viallii Colalongo. 1963

1 to 9: megalospheric forms (x50)

10 to 13: microspheric forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age. Sample *LC-42* from southern Apennines (Italy). 1-4: axial sections. 5, 6, 8: tangential sections. 7: oblique section. 9: equatorial section. 10: oblique section close to equatorial plane. 11, 12: oblique sections close to axial plane. 13: equatorial section.

ABBREVIATIONS: **ap:** *aperture/abertura*; **c chl:** *cortical chamberlet/camarilla cortical*; **c fo:** *cortical foramen*; **f:** *flexostyle/canal flexostílico*; **flo:** *floor/suelo*; **m chl:** *medullar chamberlet/camarilla medular*; **prp:** *preseptal passage/espacio preseptal*; **rpi:** *residual pillar/pilar residual*; **s:** *septum/septo*; **sh:** *shaft*; **sl:** *septula/tabique*

PLATE 13

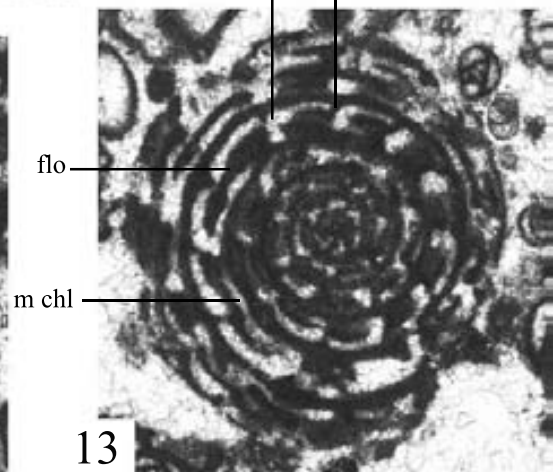
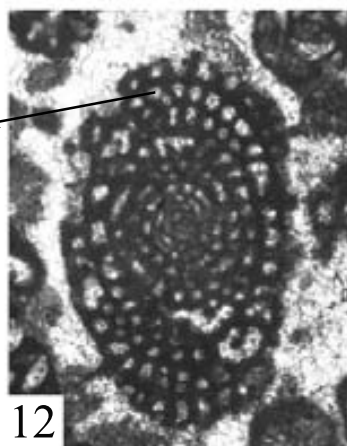
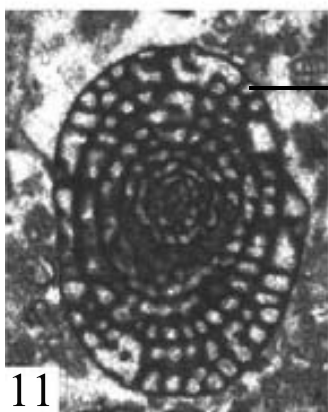
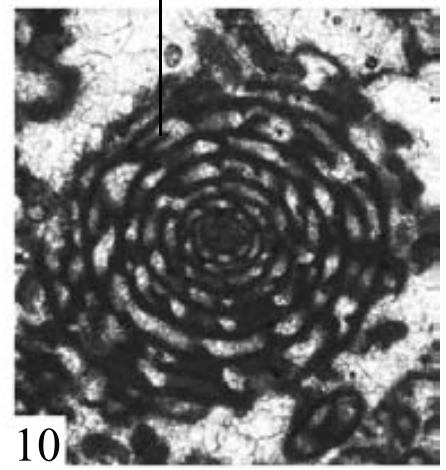
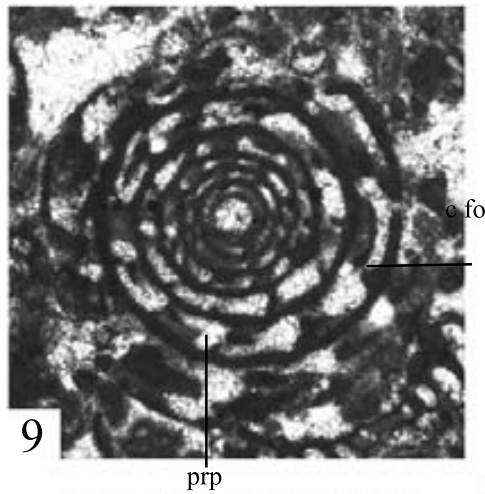
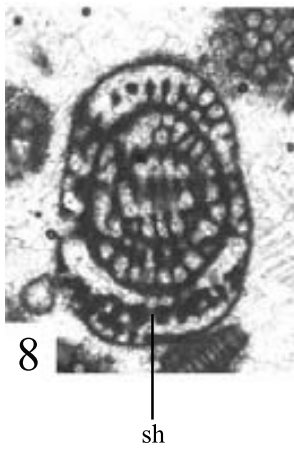
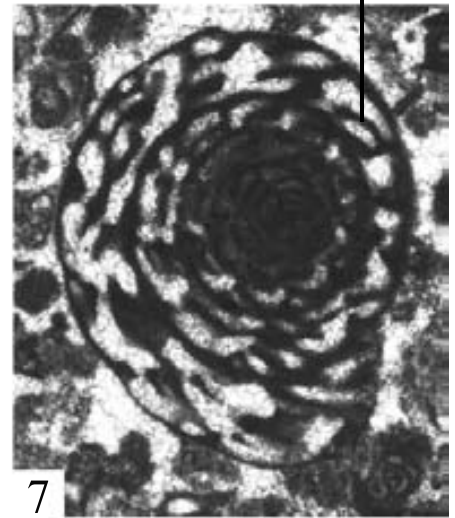
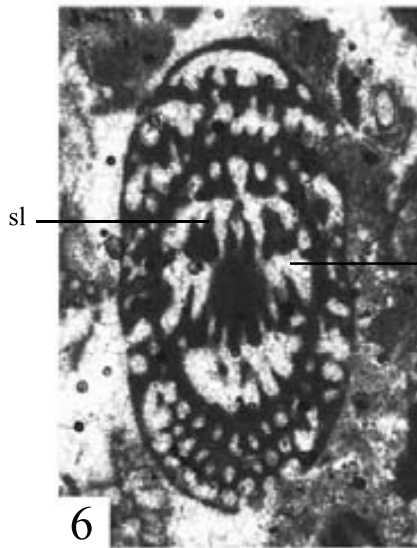
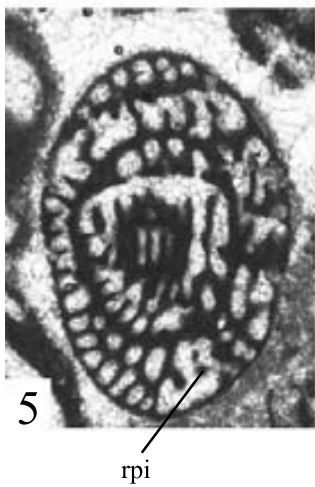
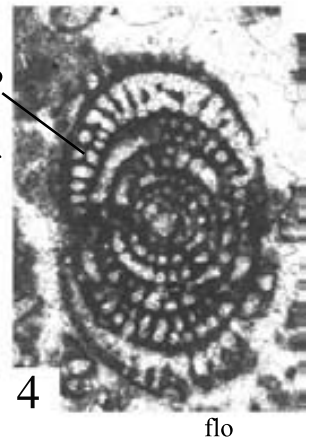
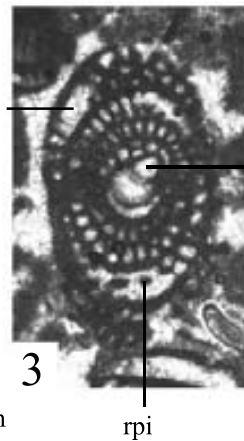
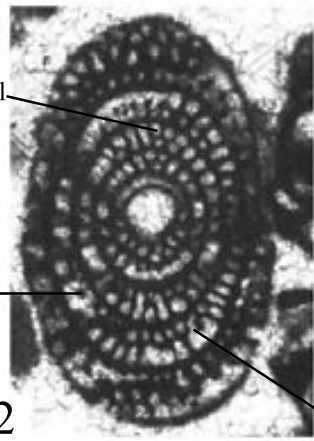


PLATE 14

Sellialveolina quintanensis n. sp.

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Samples 95-xx from Puerto de Villaroya, Iberian range, (Spain). 1: oblique-centered section. 2: tangential section. 3-5: axial sections. 6-11: oblique-centered sections close to axial plane. 12: oblique-centered section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **m chl:** medullar *chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique

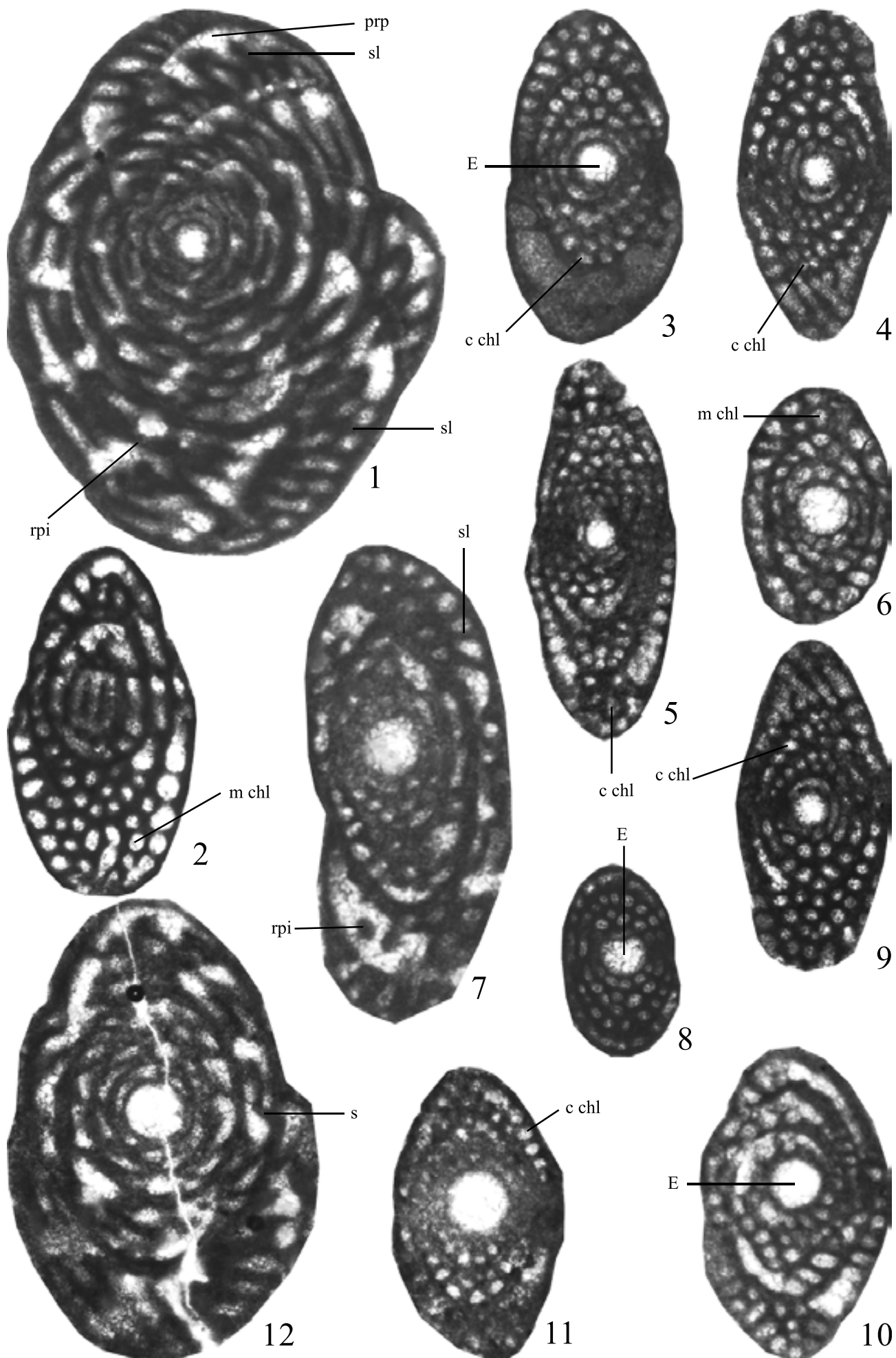


PLATE 15

Sellialveolina quintanensis n. sp.

1, 4 to 7: megalospheric? forms (x100)

2, 3: microspheric? forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Samples 95-11 and 95-40 from Puerto de Villaroya, Iberian range, (Spain). 1: oblique section. 2, 3: sub-axial section. 4, 6: oblique-tangential sections. 5, 7: tangential sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **s:** *septum*/septo; **sl:** *septula*/tabique

PLATE 15

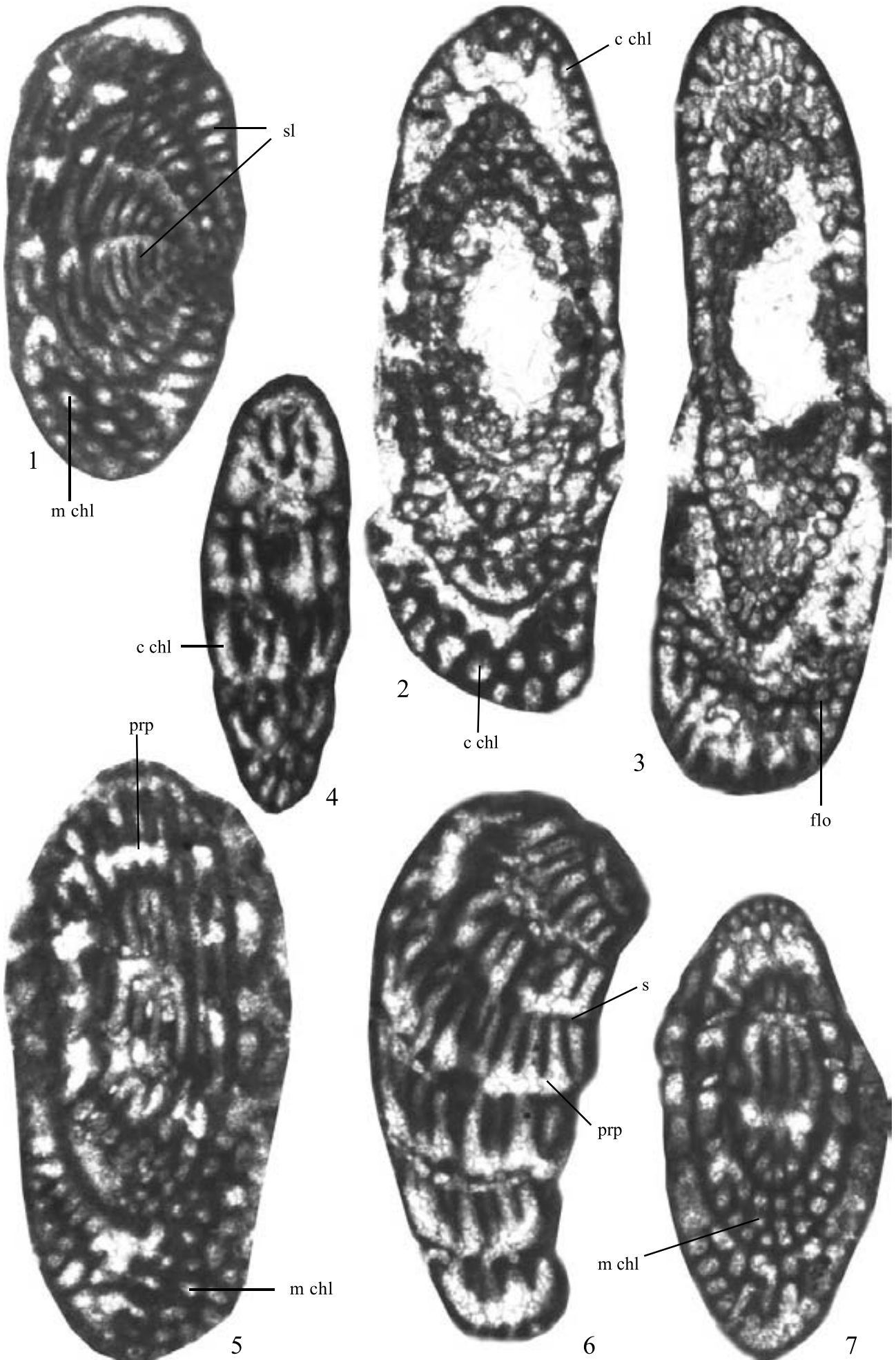


PLATE 16

Sellialveolina montieli n. sp.

1 to 5: megalospheric forms (x100)

6, 7: microspheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample 95-74 from Puerto del Remolcador, Iberian range, (Spain). 1, 3, 5: axial sections. 2, 4: oblique-centered sections close to equatorial plane. 6: sub-axial section. 7: oblique section close to equatorial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **s:** *septum*/septo; **sl:** *septula*/tabique

PLATE 16

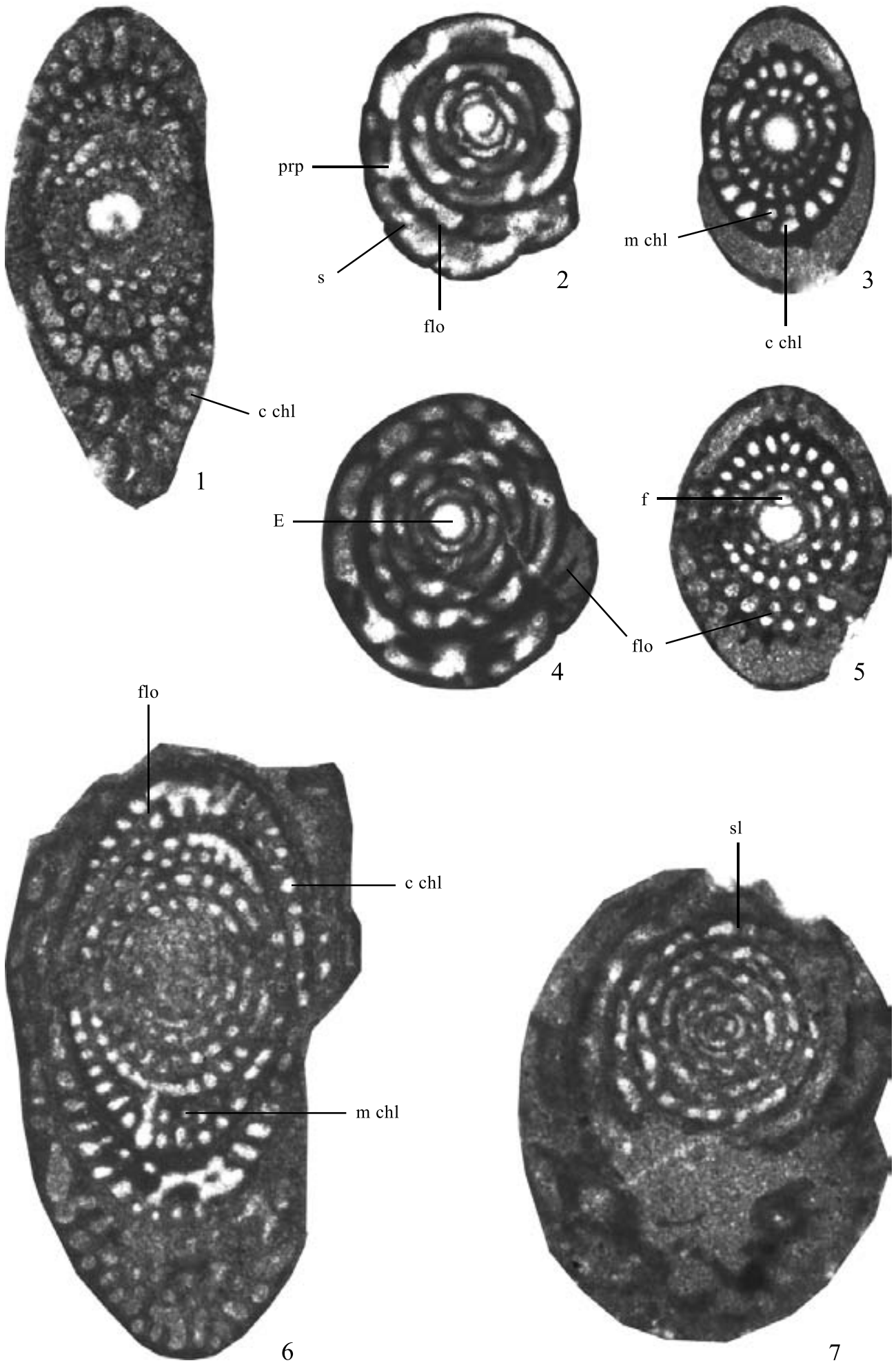


PLATE 17

Sellialveolina montieli n. sp.

1 to 6: megalospheric forms (x100)

7: microspheric form (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample 95-74 from Puerto del Remolcador, Iberian range, (Spain). 1, 2, 3: axial sections. 4: oblique-centered sections close to axial plane. 5: oblique-centered section close to equatorial plane. 6: oblique section close to equatorial plane. 7: oblique section close to axial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **flo:** floor/suelo; **m ap:** *medullar aperture*/abertura medular; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **sh:** *shaft*; **sl:** *septula*/tabique

PLATE 17

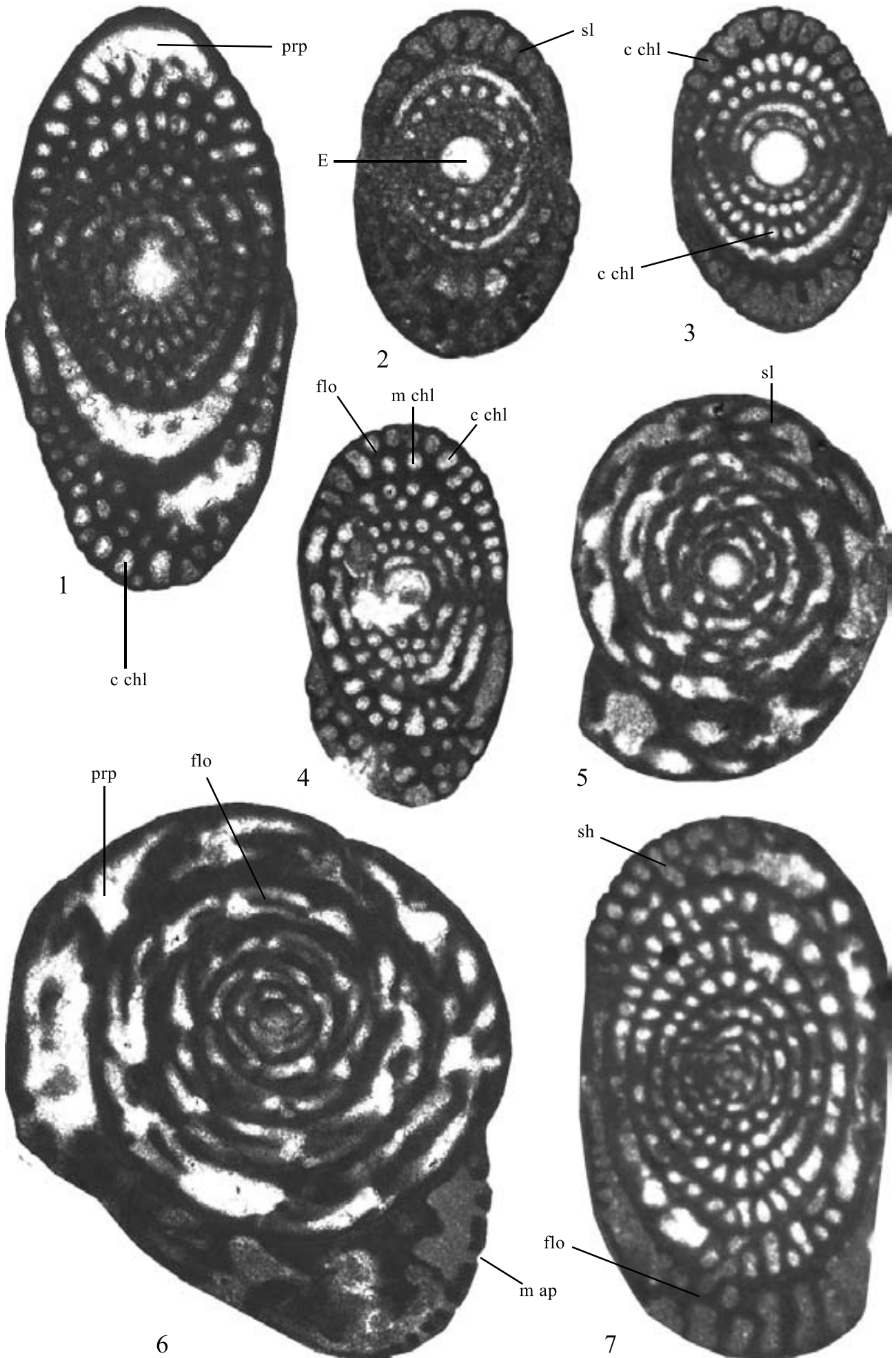


PLATE 18

Sellialveolina montieli n.sp.

1 to 6: megalospheric forms (x100)

7: microspheric form (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *M-02* from Montiel, Iberian range, (Spain). 1, 2, 3: oblique-centered sections close to axial plane. 4, 5, 7, 9, 10: tangential sections. 6: oblique section. 6: oblique section close to equatorial plane. 7: oblique section close to axial plane. 8: tranverse section parallel to equatorial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **sl:** *septula*/tabique

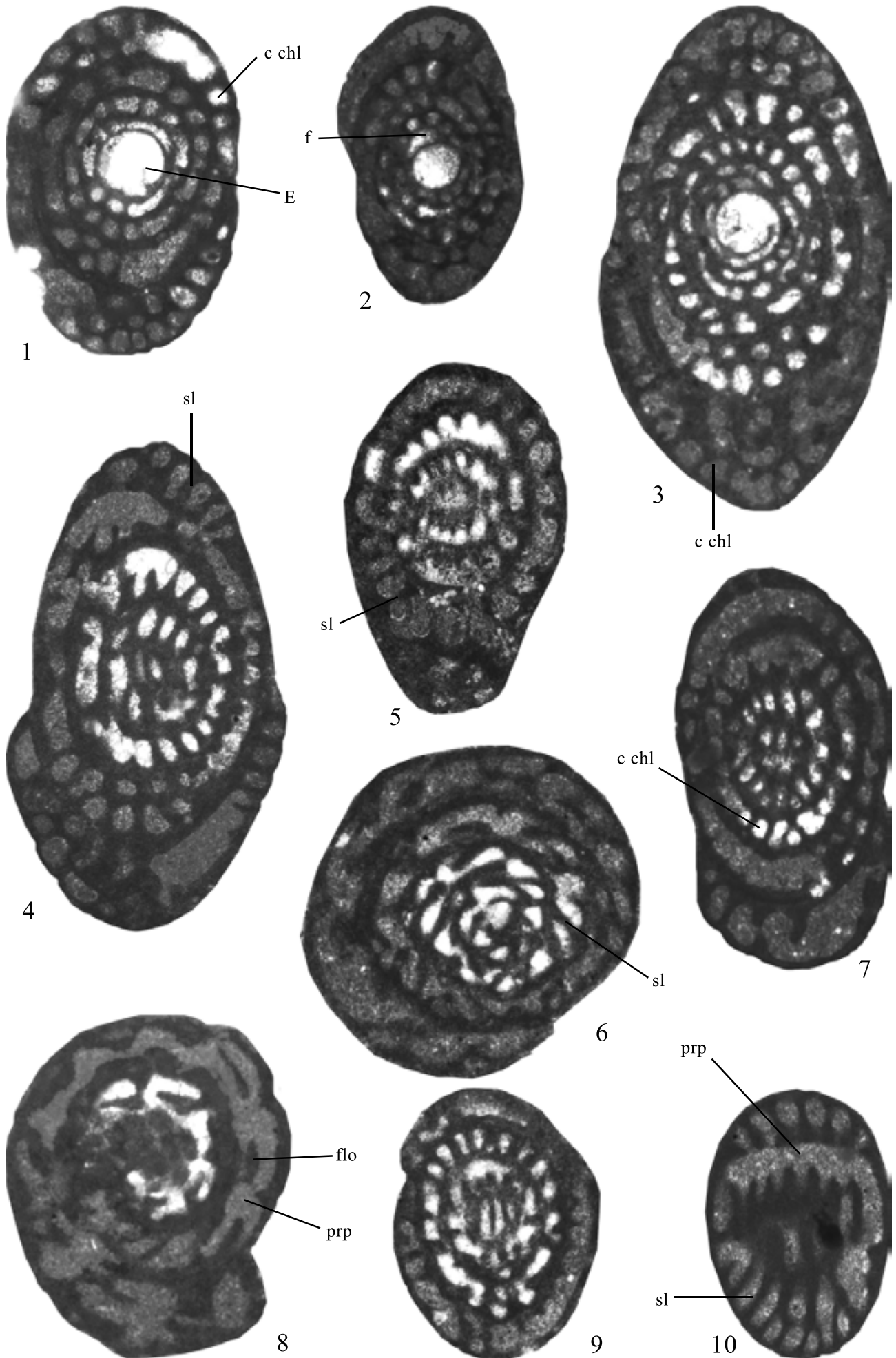


PLATE 19

Sellialveolina gutzwilleri n. sp.

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *VVTE-1* from Ejulve, Iberian range, (Spain). 1, 2: oblique-centered sections close to axial plane. 3: axial section. 4, 5: equatorial sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo

PLATE 19

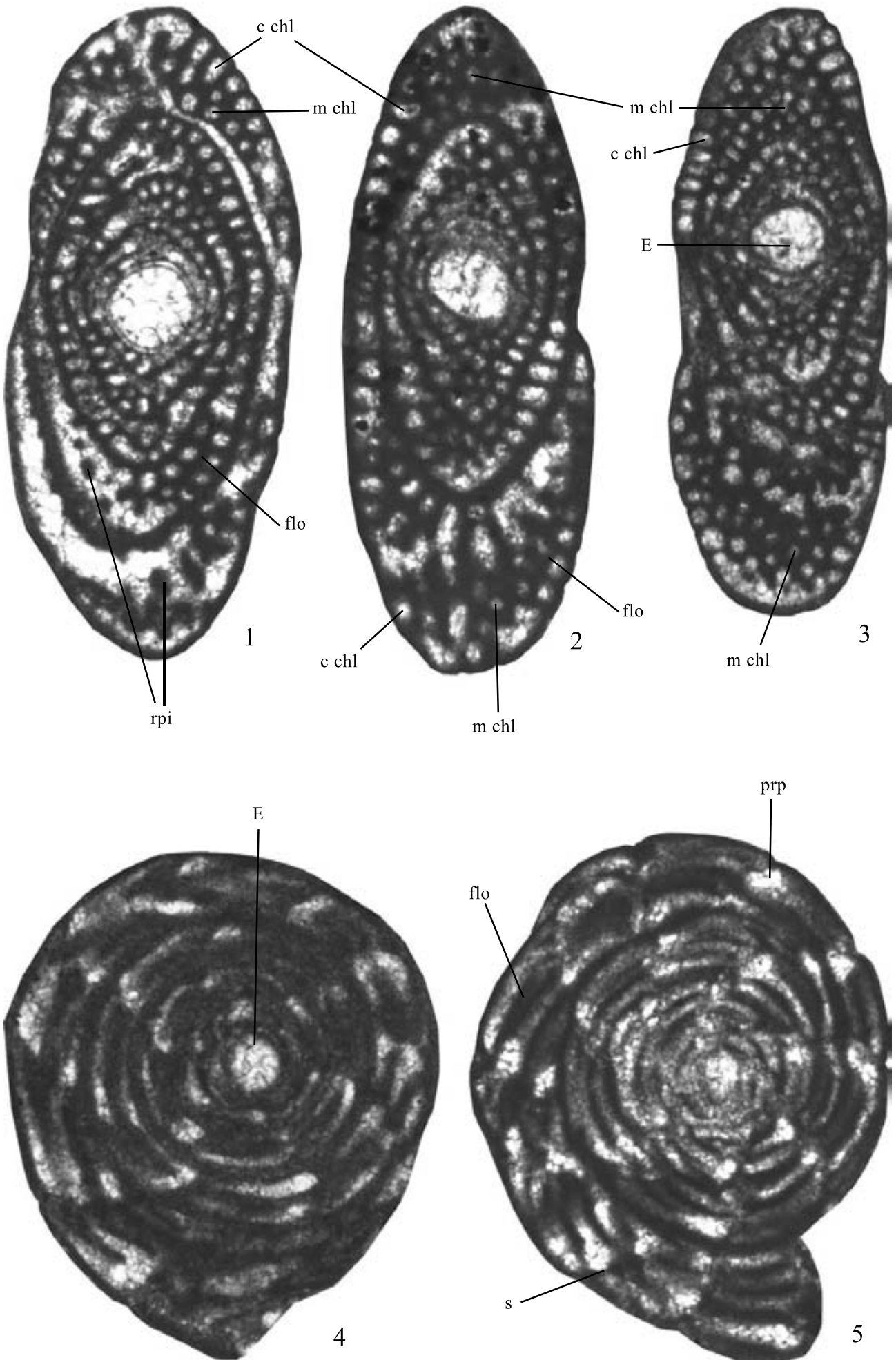


PLATE 20

Sellialveolina gutzwilleri n. sp.

magalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *VVTE-1* from Ejulve, Iberian range, (Spain). 1:axial section. 2, 4, 6: oblique-centered sections close to axial plane. 3: transverse section. 5: oblique-centered section close to equatorial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **s:** *septum*/septo; **sl:** *septula*/tabique

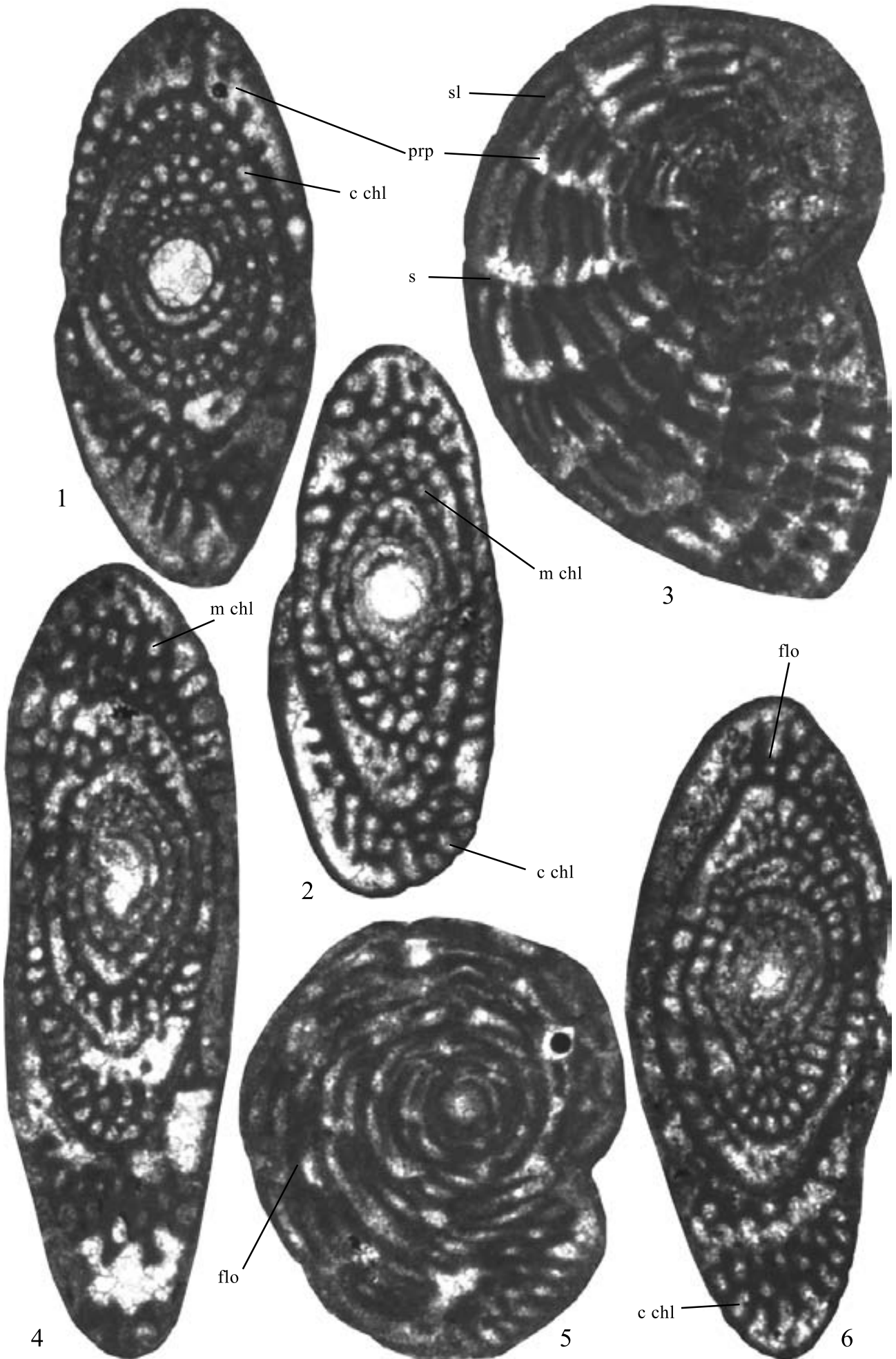


PLATE 21

Sellialveolina gutzwilleri n. sp.

megalospheric? forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *VVTE-1* from Ejulve, Iberian range, (Spain). 1-6: tangential sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique

PLATE 21

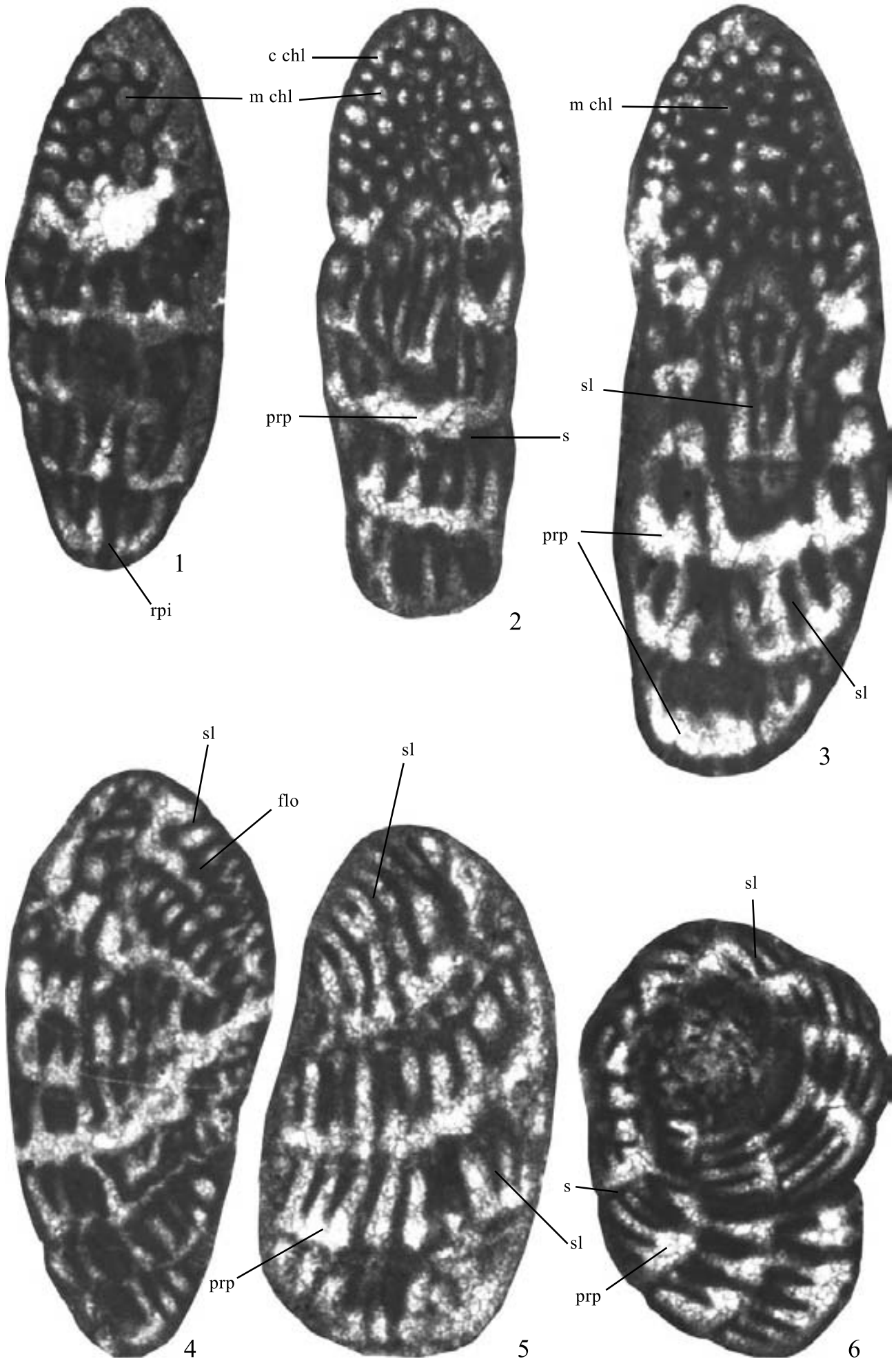


PLATE 22

Sellialveolina gutzwilleri n. sp.

1, 3, 5, 6: megalospheric forms (x100)

2, 4: microspheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *VVTE-2* from Morrón de Pinarueco, Iberian range, (Spain). 1, 2, 6: axial sections. 3-5: oblique-centered sections close to axial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique

PLATE 22

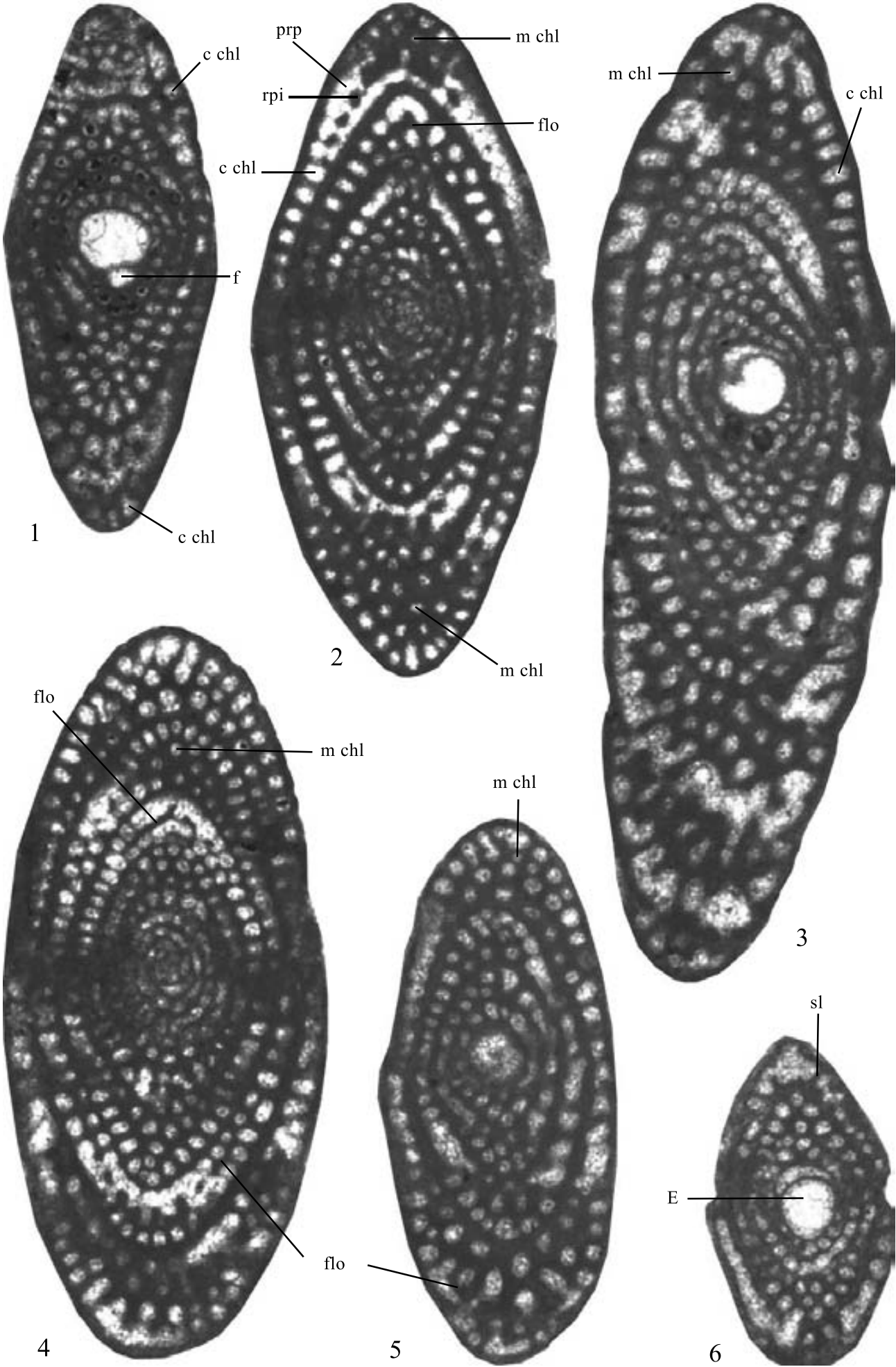


PLATE 23

Sellialveolina gutzwilleri n. sp.

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample *VVTE-2* from Morrón de Pinarueco, Iberian range, (Spain). 1-4, 6: oblique sections (x100). 5: oblique section (x50)

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sh:** *shaft*; **sl:** *septula*/tabique

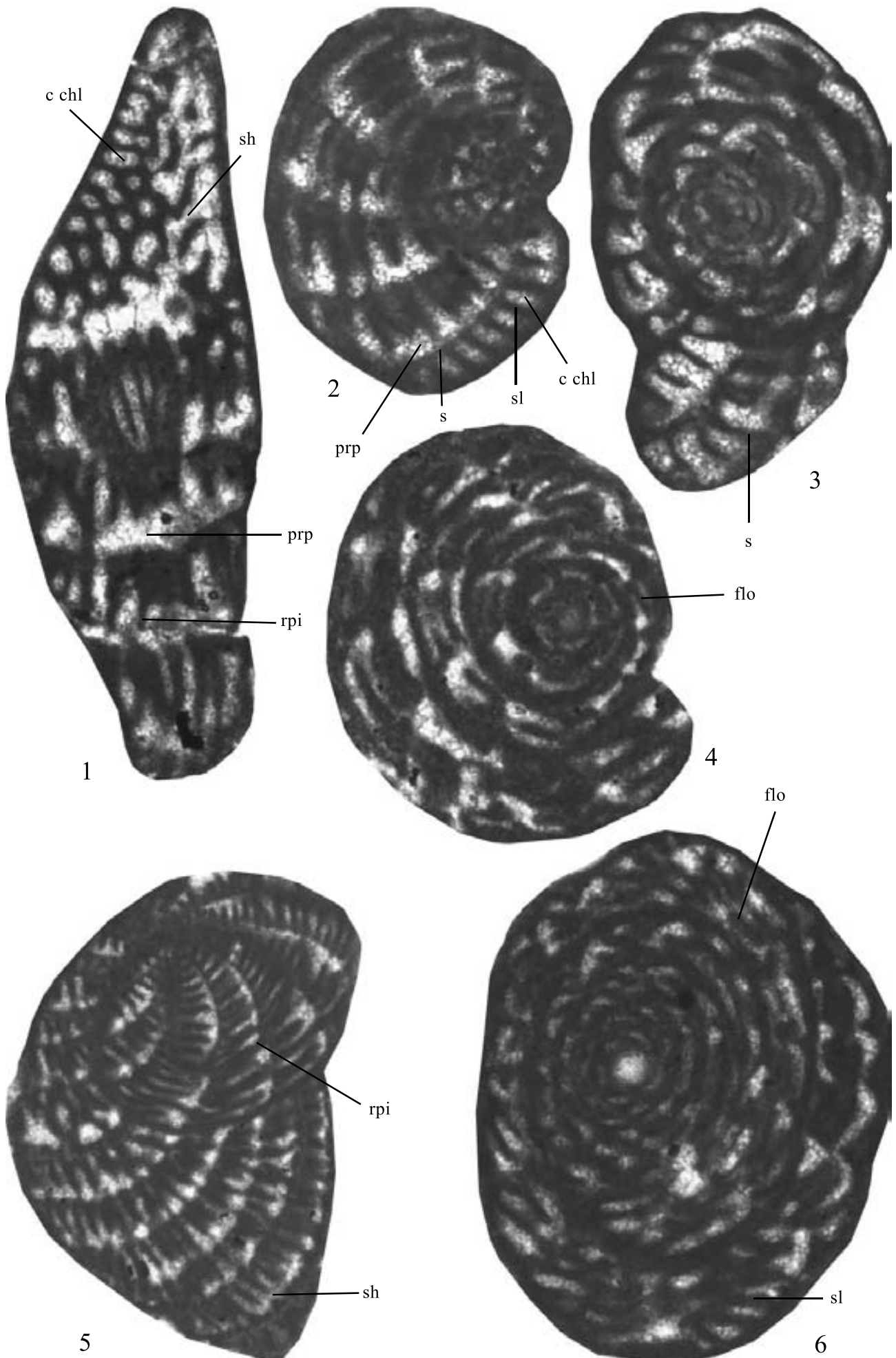


PLATE 24

Sellialveolina gutzwilleri n. sp.

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Cenomanian age, cut out from the including sediment of similar opaqueness. Sample 86050407 from Puerto de Villaroya, Iberian range, (Spain). 1, 2, 5: oblique sections close to axial plane. 3, 4: axial sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **m chl:** *medullar chamberlet*/camarilla medular

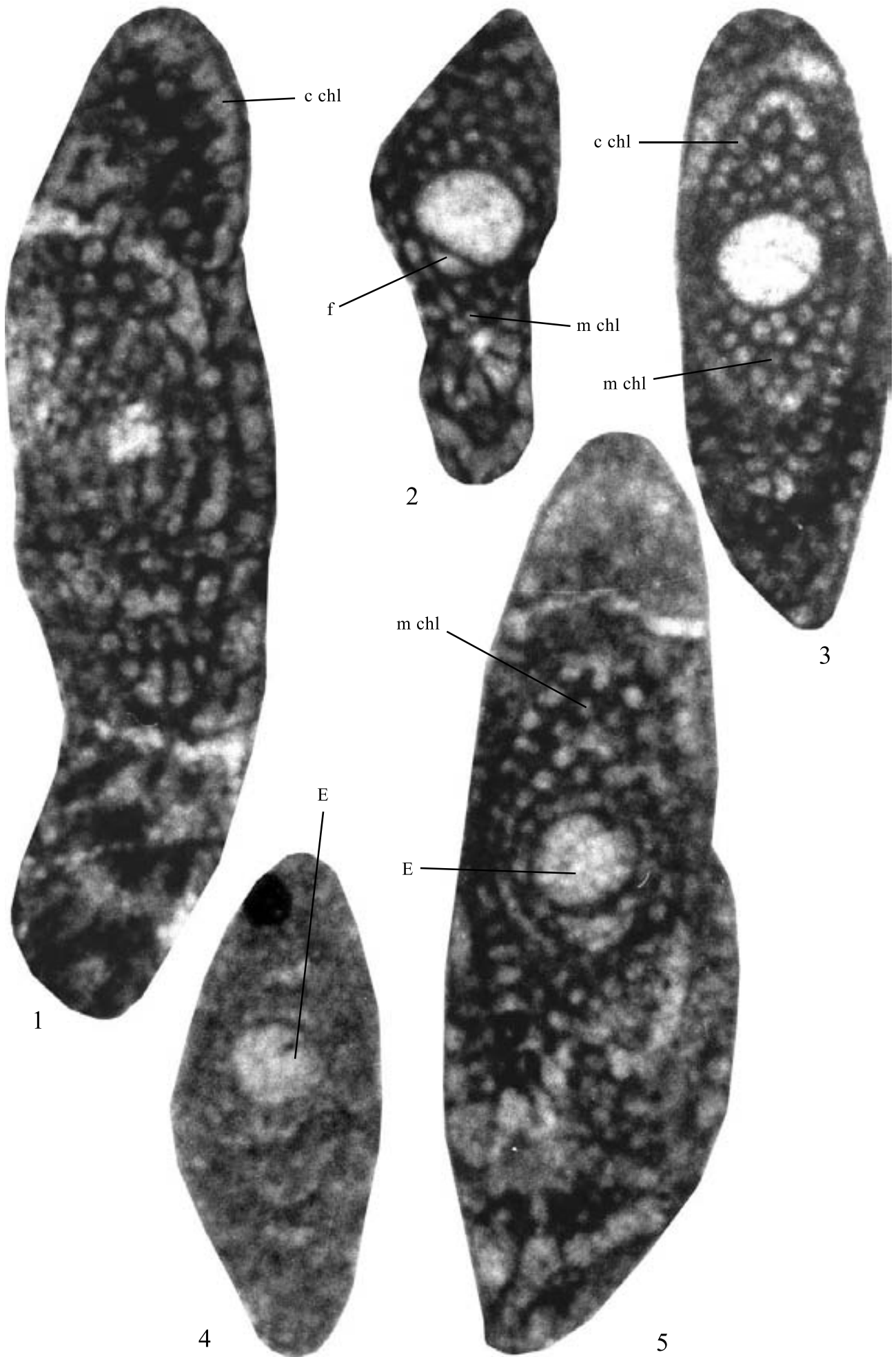


PLATE 25

Murciella cuvillieri Fourcade 1966

1-7, 9-11: megalospheric forms (x100)

8: microspheric form (x100)

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates, cut out from the including sediment of similar opaqueness. Sample *Be-92* from Sierra de los Agüeros, Betic domain, (Spain). 1-3: oblique-centered sections close to axial plane. 4-9: axial sections. 10: oblique-centered section close to equatorial plane. 11: equatorial section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique

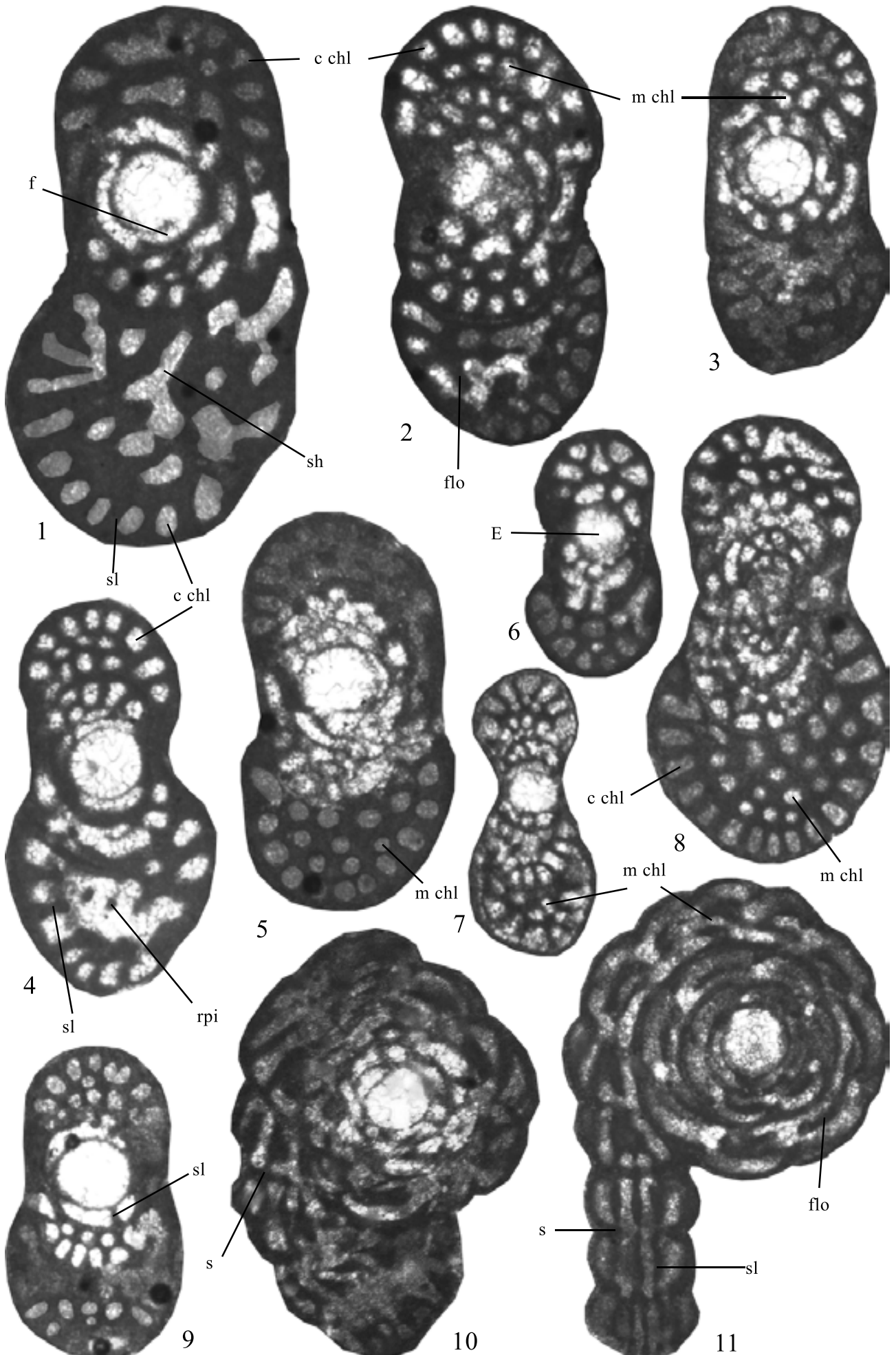


PLATE 26

Murciella cuvillieri Fourcade 1966

megalospheric forms (x100)

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates, cut out from the including sediment of similar opaqueness. Sample *Be-92* from Sierra de los Agüeros, Betic domain, (Spain). 1, 2, 5: axial sections. 3: tangential section. 4, 7: oblique sections of uncoiled growth. 6: oblique-centered section. 8, 9: transverse section of uncoiled growth.

ABBREVIATIONS: **m ap:** medullar *aperture/abertura* medular; **c chl:** cortical *chamberlet/camarilla* cortical; **E:** embryo/embrión; **flo:** *floor/suelo*; **m chl:** *medullar chamberlet/camarilla* medular; **prp:** *preseptal passage/espacio* preseptal; **rpi:** *residual pillar/pilar* residual; **s:** *septum/septo*; **sh:** *shaft*; **sl:** *septula/tabique*

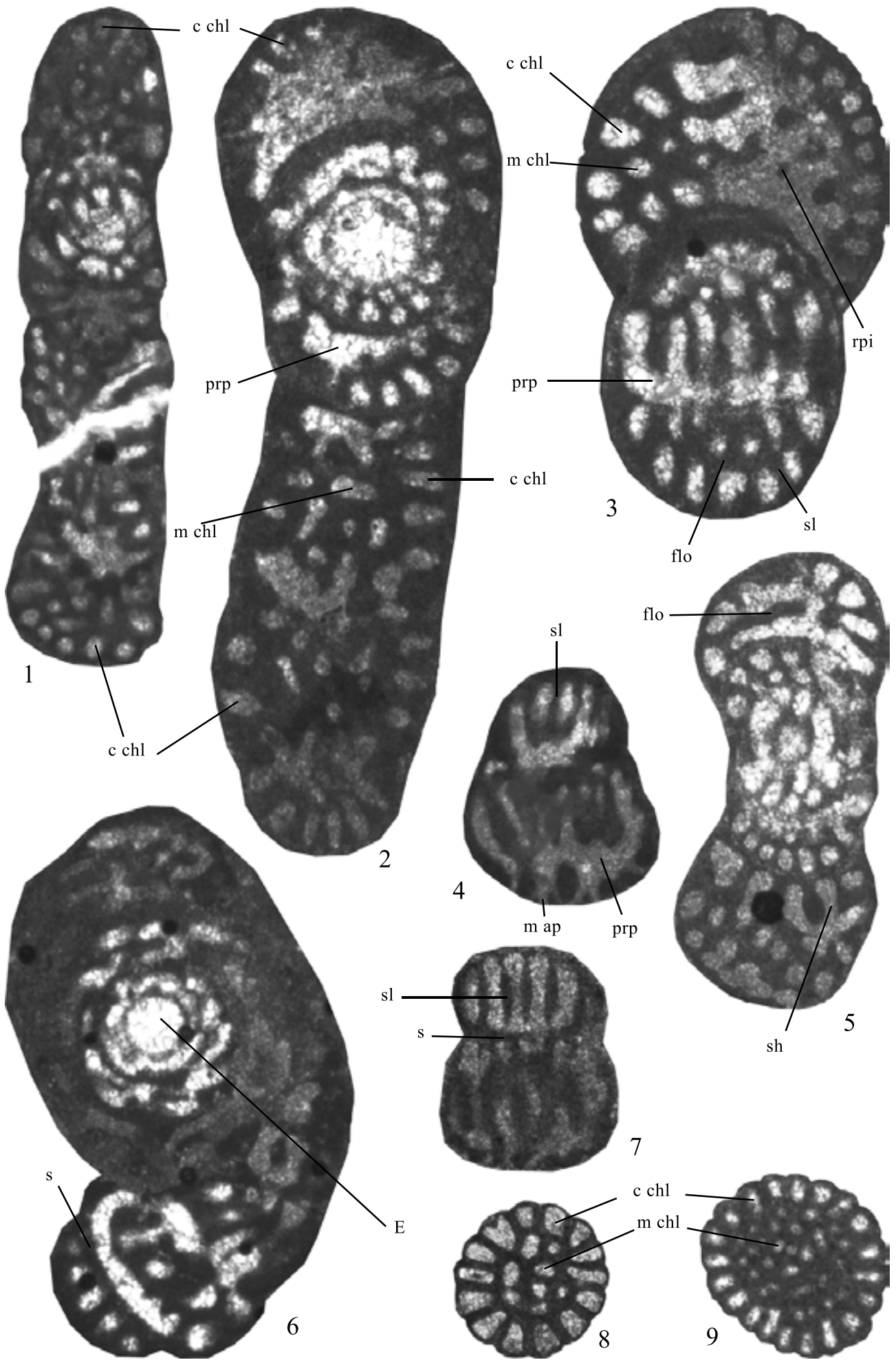


PLATE 27

Murciella cuvillieri Fourcade 1966

1-2, 4-8: megalospheric forms (x100)

3: microspheric form (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample GAV-3 from Sierra Gavilanes, Betic domain, (Spain). 1-3, 6: axial sections. 4-5: equatorial sections. 7: oblique-centered section close to axial plane. 8: tangential section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **s:** *septum*/septo

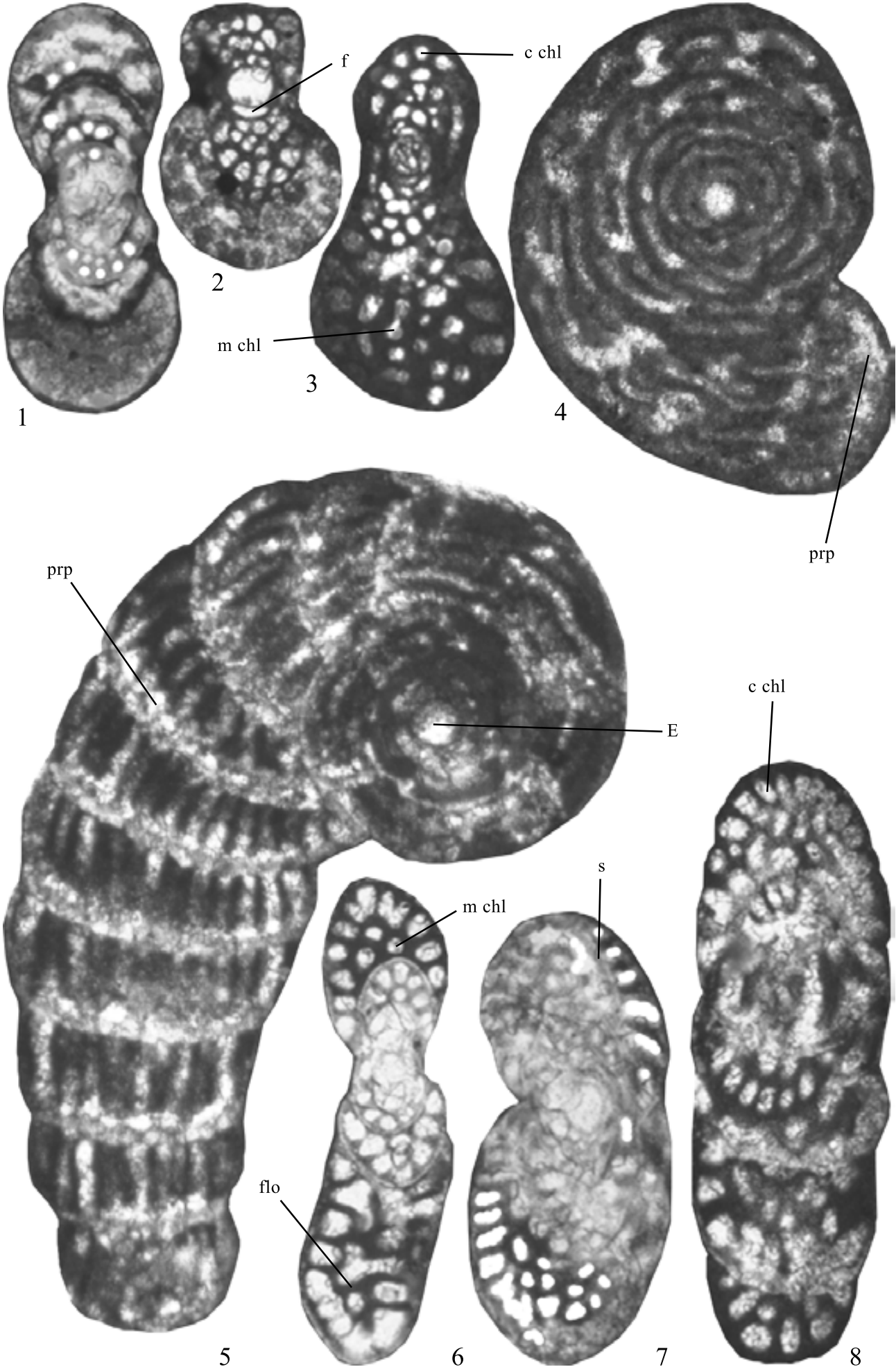


PLATE 28

Murciella cuvillieri Fourcade 1966

2-7: megalospheric? forms (x100)

1: microspheric form (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample GAV-3 from Sierra Gavilanes, Betic domain, (Spain). 1, 2, 4, 5: oblique sections. 3: tangential section. 6, 7: longitudinal section of uncoiled growth.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo; **sl:** *septula*/tabique

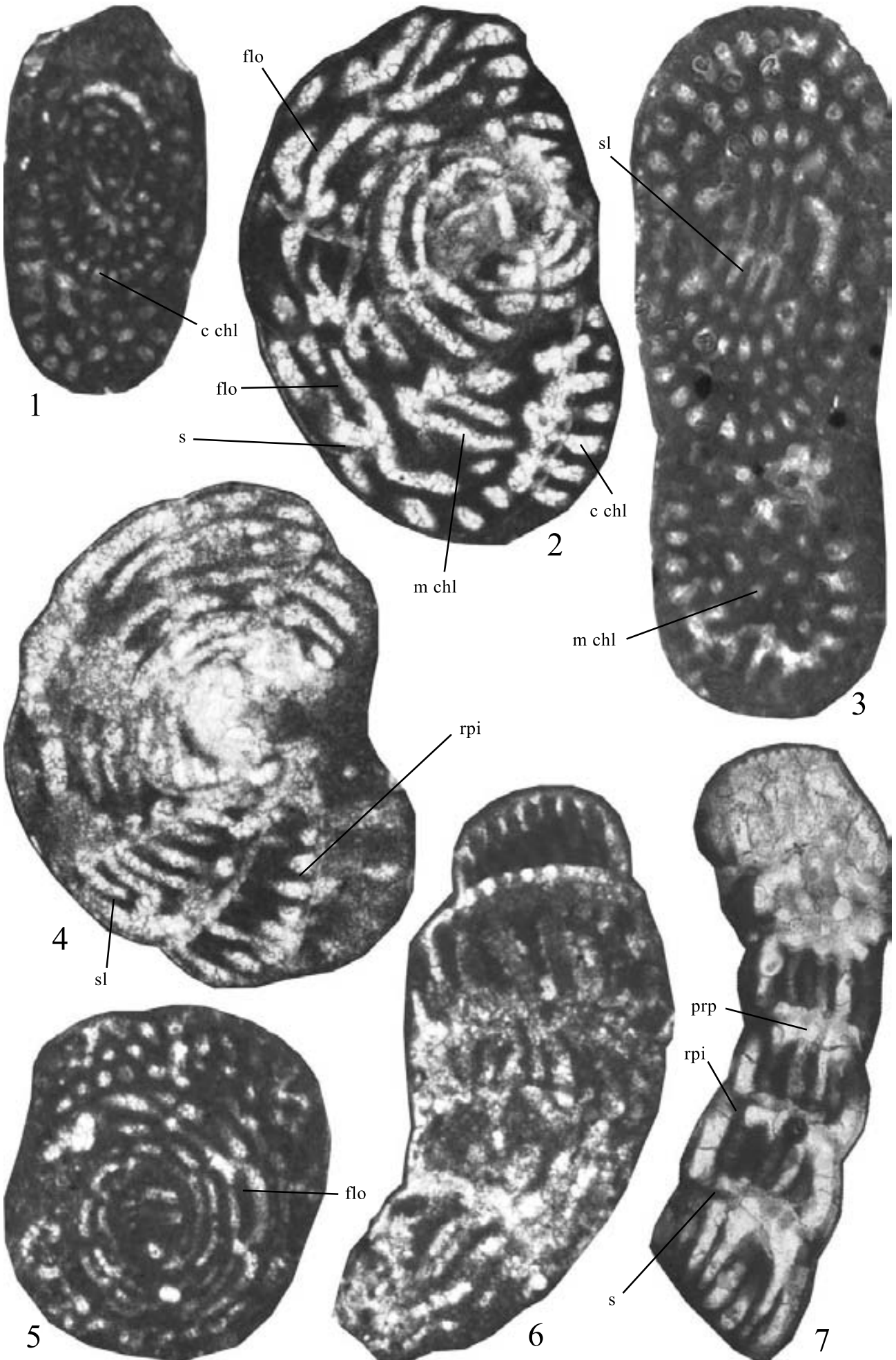


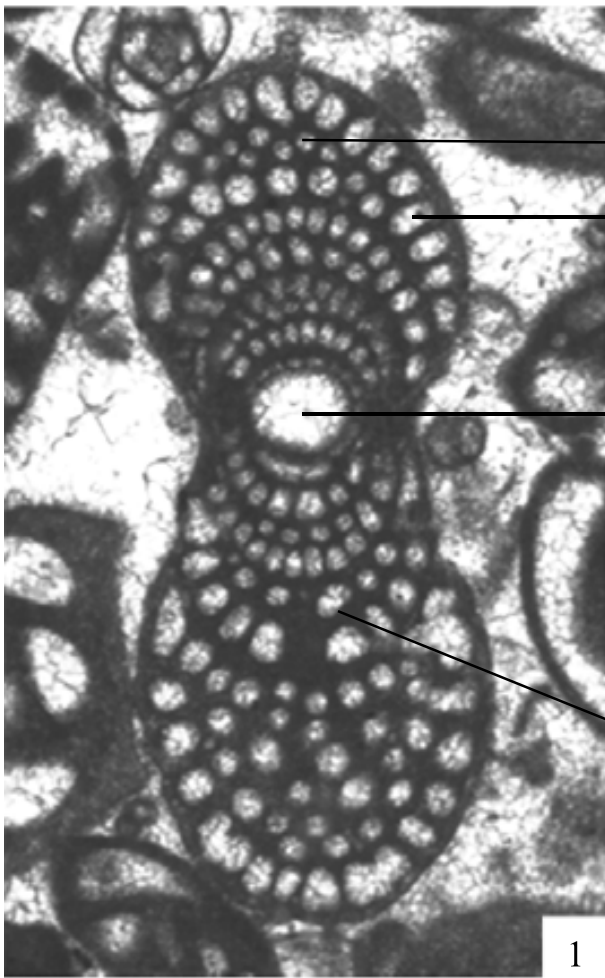
PLATE 29

***Murciella* n. sp. 1**

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *HE* from Hellín, Betic domain, (Spain). Observe the umbilical depression in picture 1, and the final uncoiled growth in pictures 5 and 6. 1: axial section (x100). 2: oblique-centered section very close to axial plane (x100). 3: axial section (x50). 4: oblique-centered section very close to equatorial plane (x50). 5: equatorial section (x50). 6: oblique-centered section close to equatorial plane (x100).

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sh:** *shaft*; **sl:** *septula*/tabique

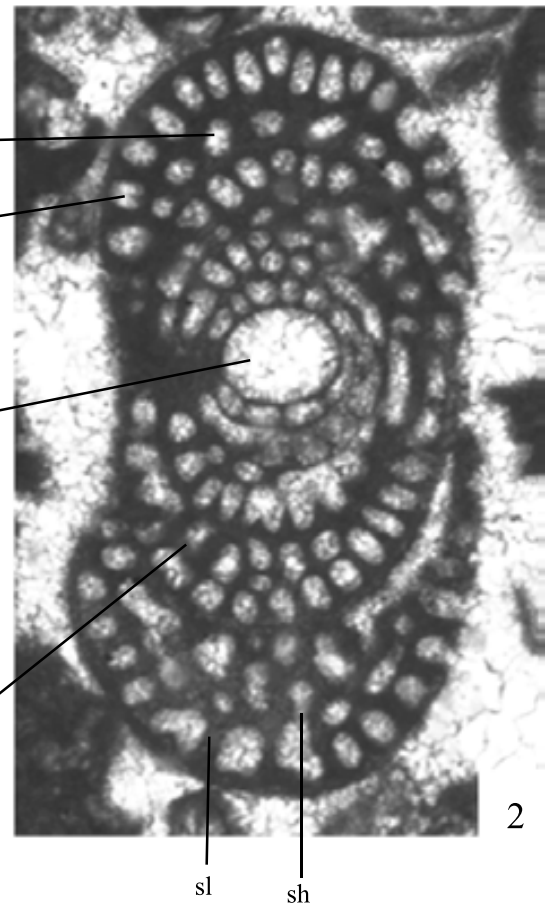


m chl

c chl

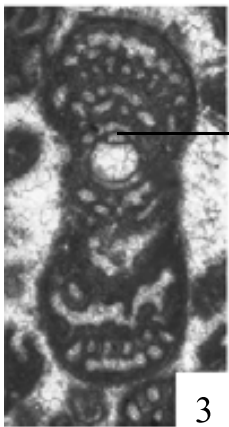
E

flo

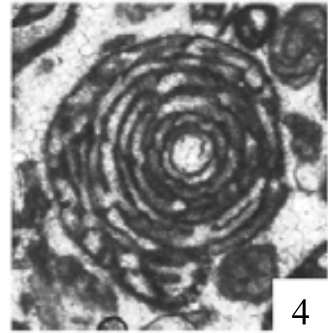


sl

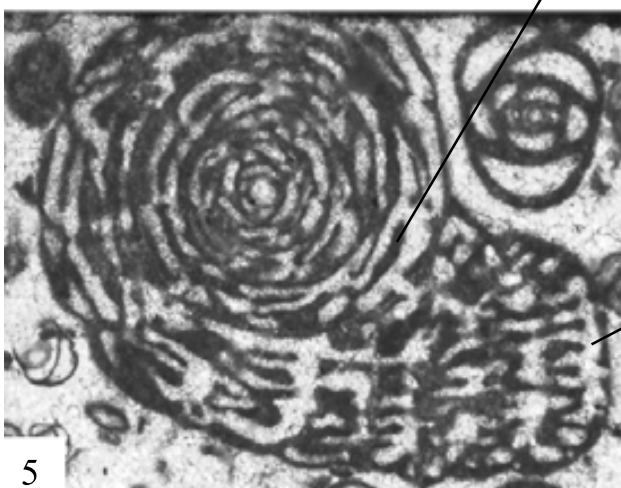
sh



f



flo



rpi

prp



sl

PLATE 30

Murciella n. sp. 1

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *HE* from Hellín, Betic domain, (Spain). Observe final uncoiled growth in picture 8. 1-3: axial section (x100). 4, 5, 7: oblique-centered section close to equatorial plane (x50). 6: oblique section close to equatorial plane (x50). 8: subequatorial section (x50).

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique; **s:** *septum*/septo

PLATE 30

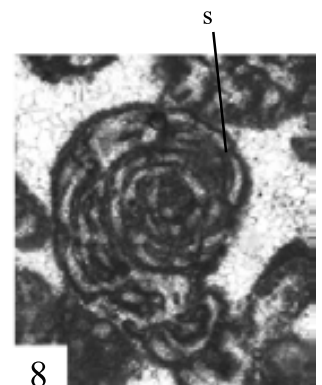
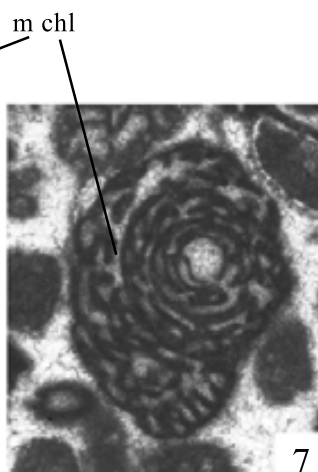
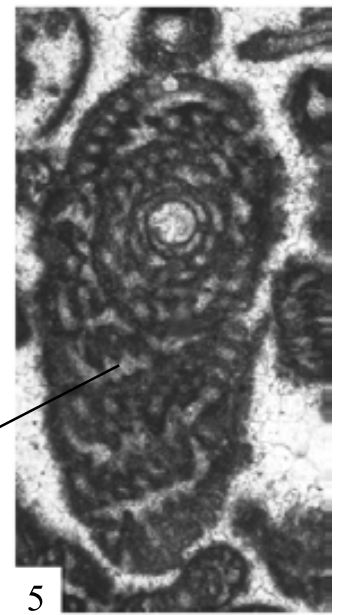
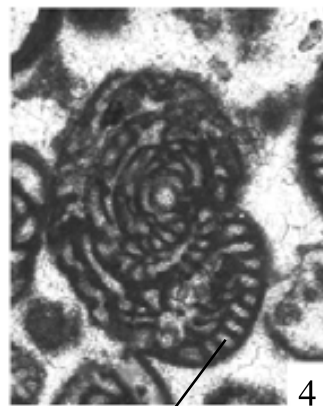
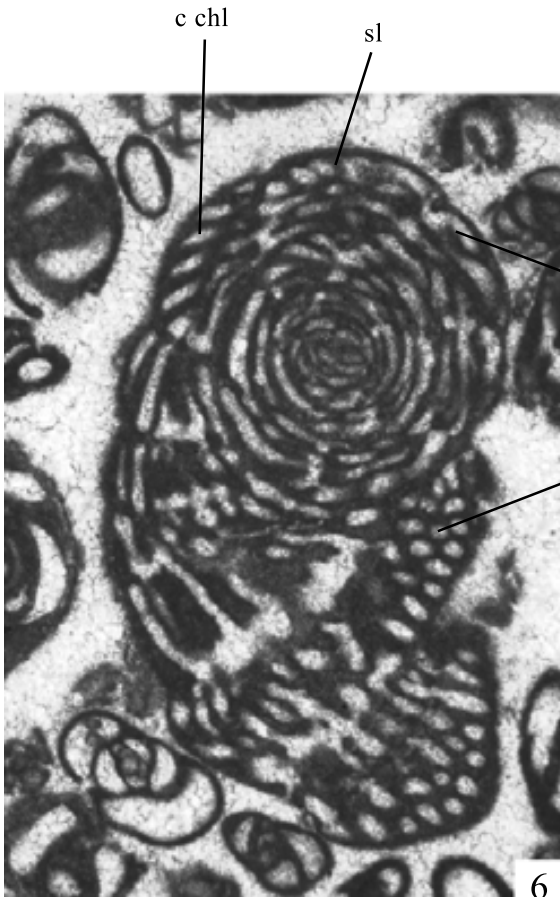
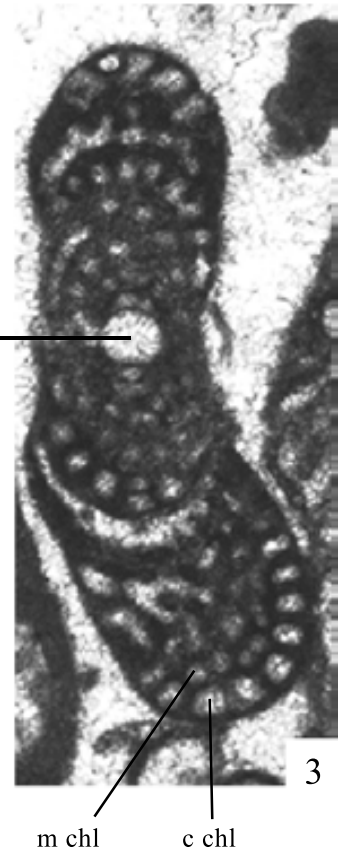
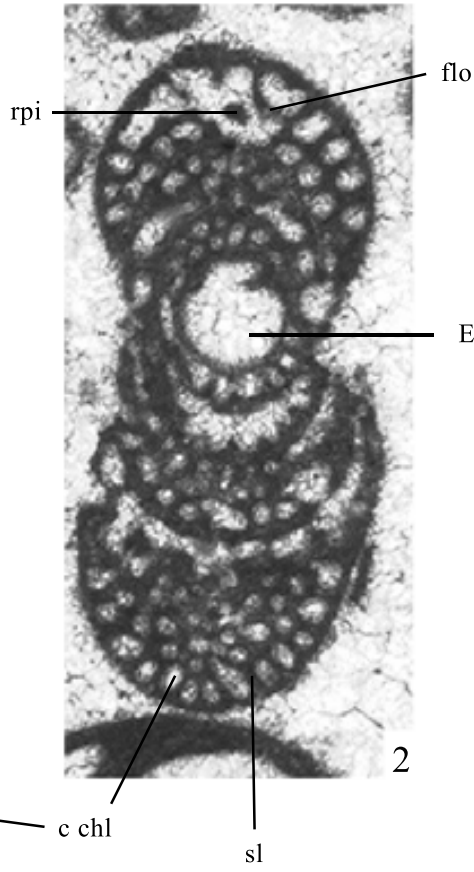


PLATE 31

Murciella n. sp. 1

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *HE* from Hellín, Betic domain, (Spain). Observe the sections of uncoiled state. 1, 3, 5, 7: tangential sections (x50). 2: longitudinal section of uncoiled part of the shell (x100). Observe the cross-wise structure 4, 8: longitudinal section of uncoiled part of the shell (x50). 6, 9-15: transverse sections of uncoiled part of the shell (x50).

ABBREVIATIONS: **ap:** *aperture/abertura*; **c chl:** *cortical chamberlet/camarilla cortical*; **flo:** *floor/suelo*; **m chl:** *medullar chamberlet/camarilla medular*; **prp:** *preseptal passage/espacio preseptal*; **rpi:** *residual pillar/pilar residual*; **sl:** *septula/tabique*

PLATE 31

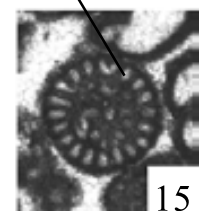
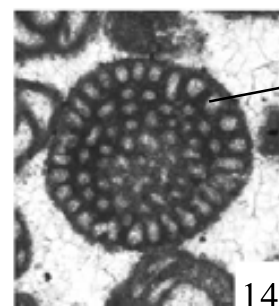
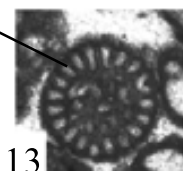
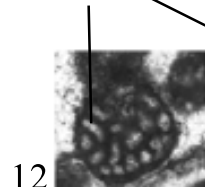
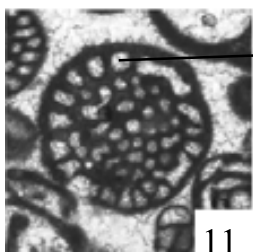
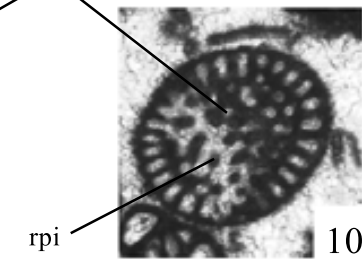
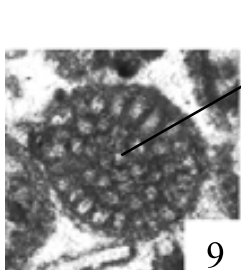
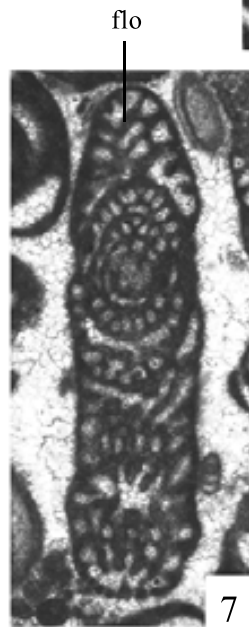
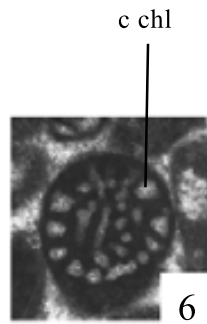
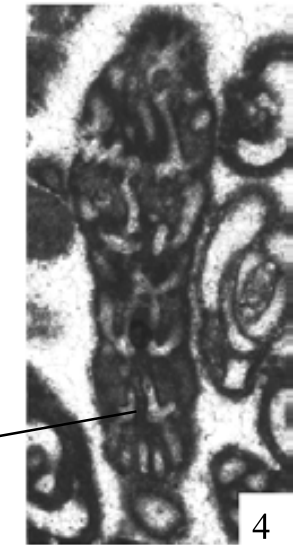
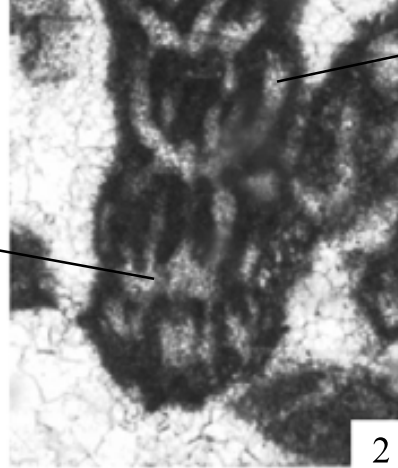
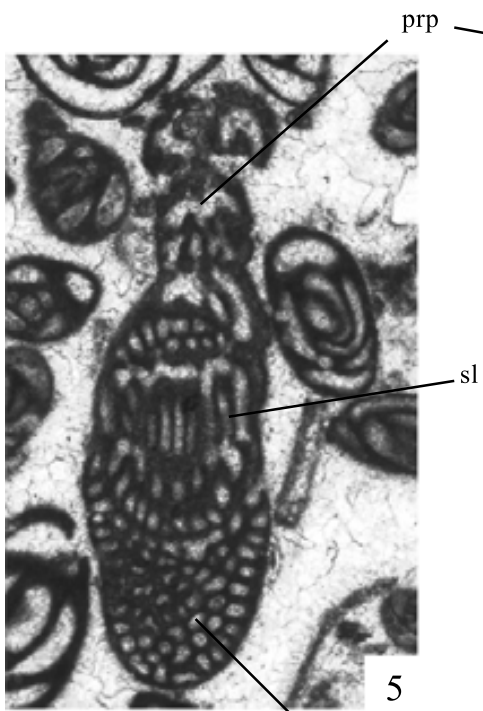
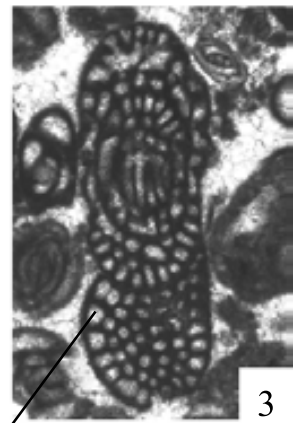
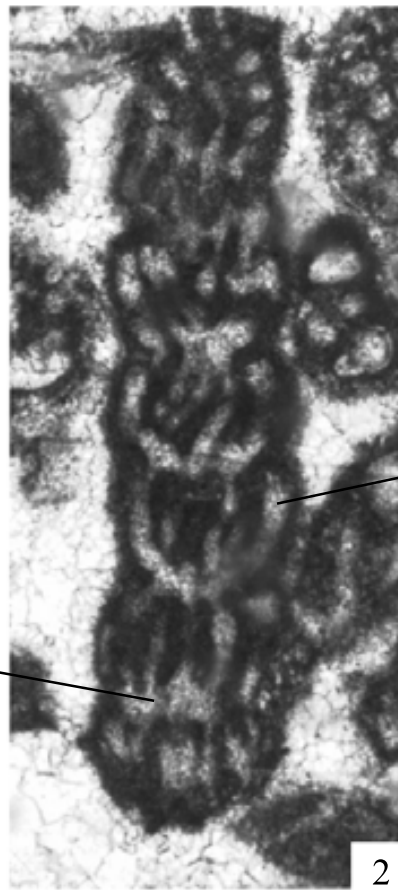
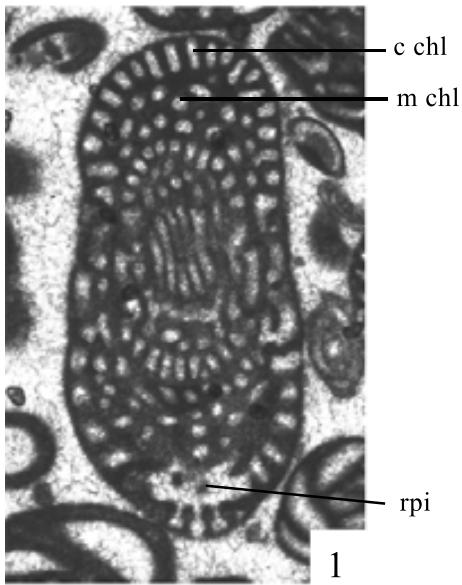


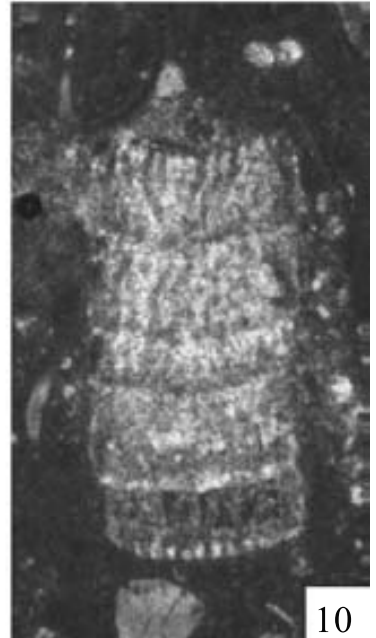
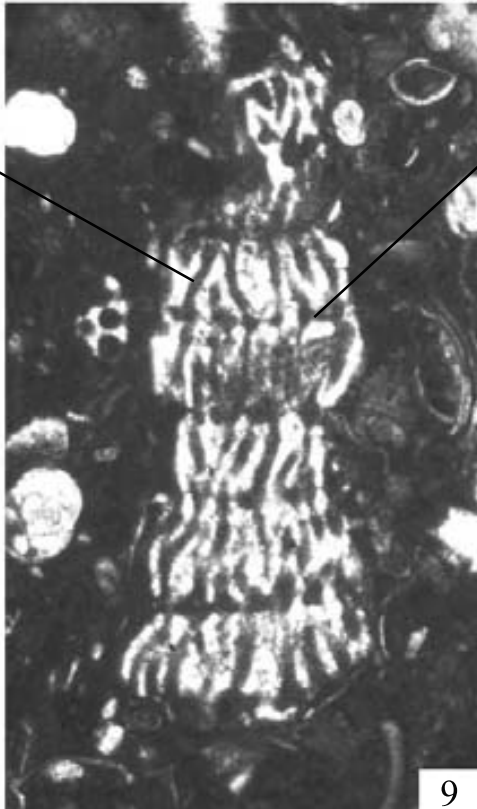
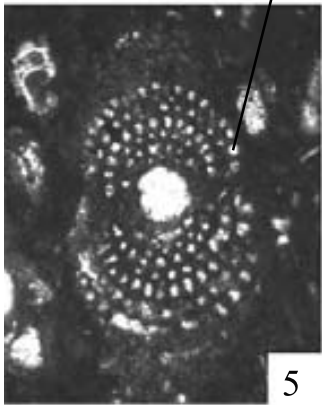
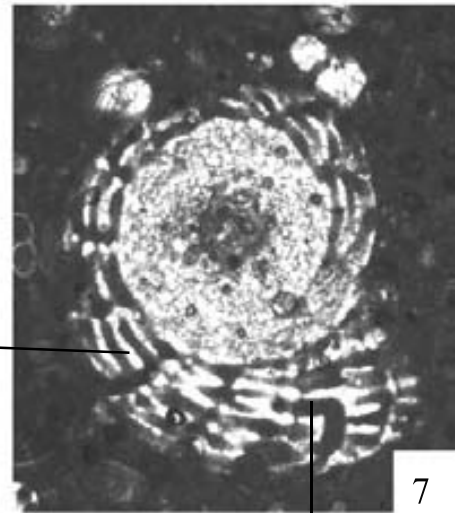
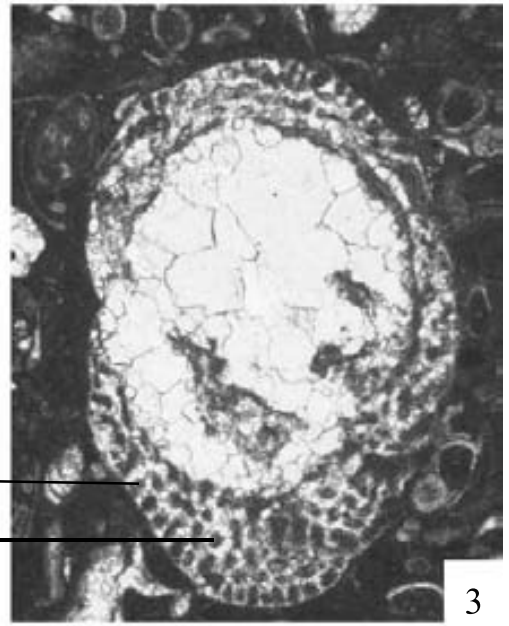
PLATE 32

Murciella? n. sp. 2

megalospheric? forms (x50)

Transmitted light micrographs of thinsections of cemented carbonates of Upper Maastrichtian age. Samples *VVGR 40.x* from Sierra Grossa, Betic domain, (Spain). 1-4: oblique sections close to axial plane. 5: axial section. 6, 7: equatorial sections. 8-10: longitudinal sections of uncoiled growth.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **s:** *septum*/septo; **sl:** *septula*/tabique



c chl

c chl
m chl

c chl

m chl

flo

sl

s

PLATE 33

Cyclopseudedomia smouti Fleury 1974

megalospheric forms (x50)

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Py-12* from Pylos, Peloponese, (Greece). 1: equatorial section. 2-5, 10: oblique-centered sections. 6-9: axial sections.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **f:** *flexostyle*/canal flexostílico; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo

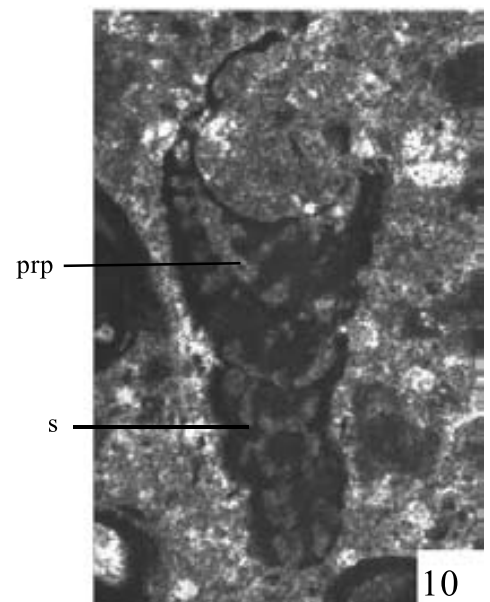
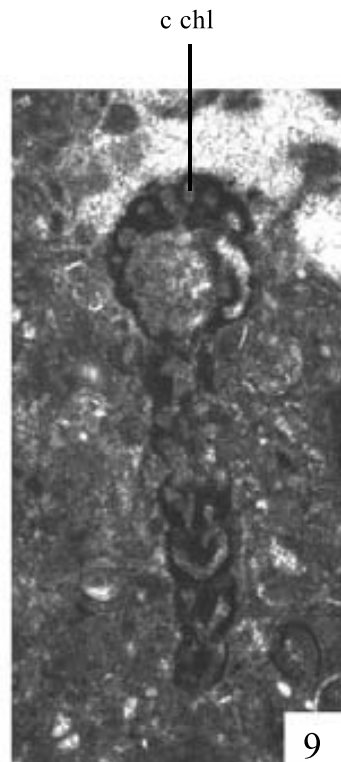
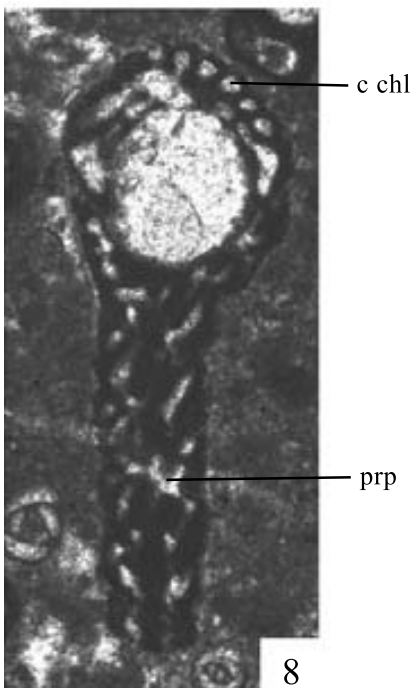
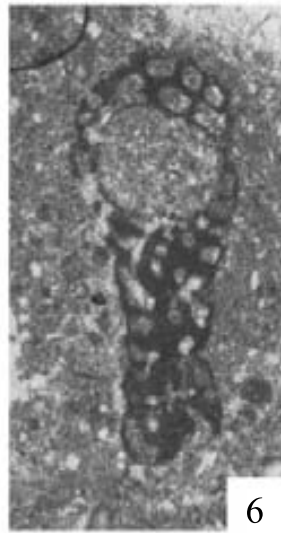
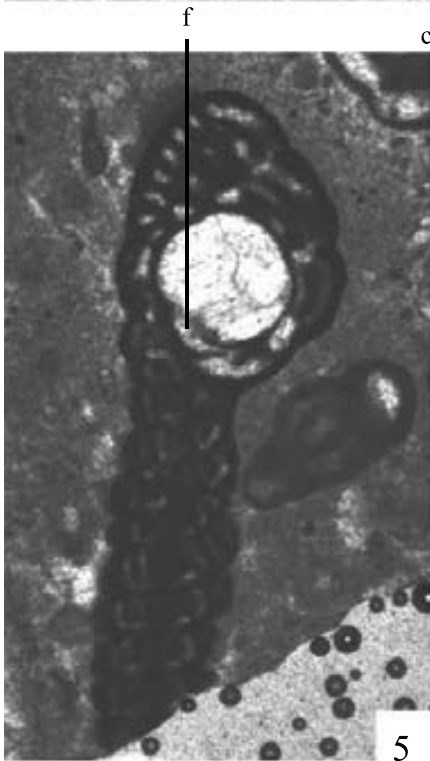
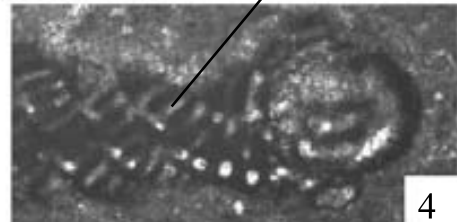
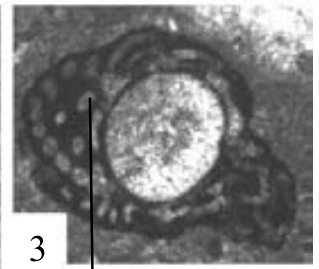
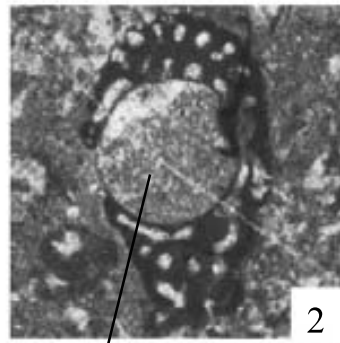
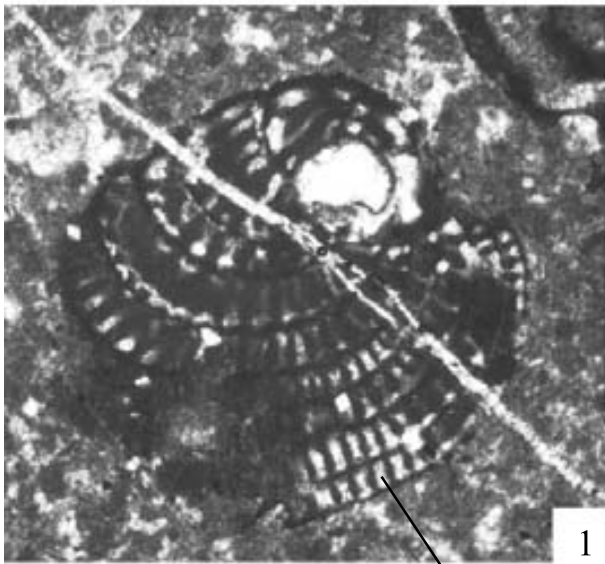


PLATE 34

Cyclopseudomia smouti Fleury 1974

megalospheric forms (x50)

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1-6: oblique sections. 7-10: transverse sections.

ABBREVIATIONS: **bl:** *basal layer/capa basal*; **c chl:** *cortical chamberlet/camarilla cortical*; **m ap:** *medullar aperture/abertura medular*; **m chl:** *medullar chamberlet/camarilla medular*; **prp:** *preseptal passage/espacio preseptal*; **rpi:** *residual pillar/pilar residual*; **s:** *septum/septo*; **sl:** *septula/tabique*

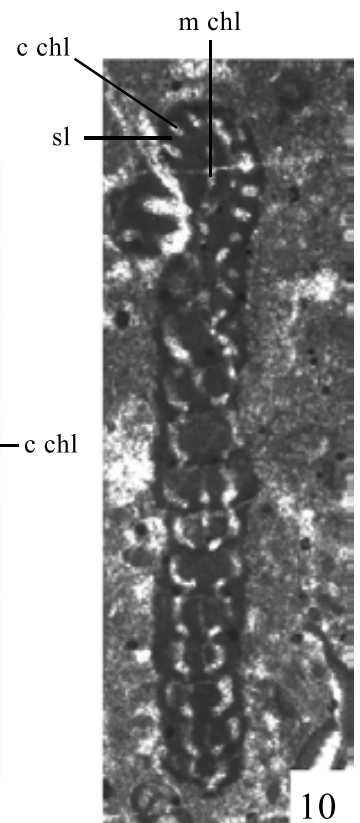
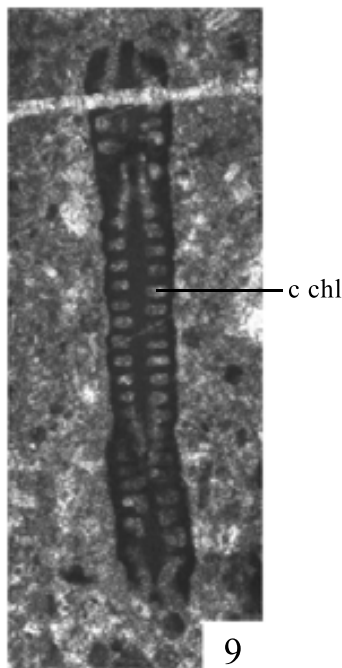
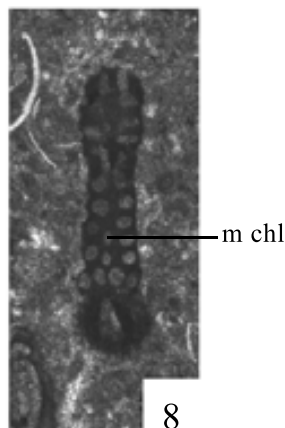
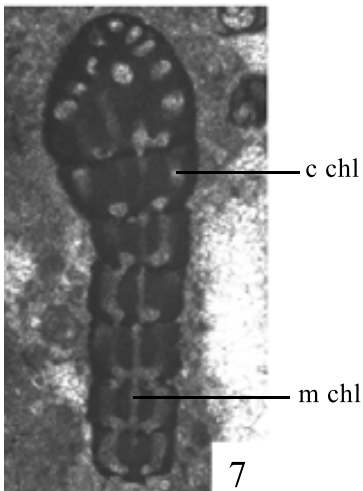
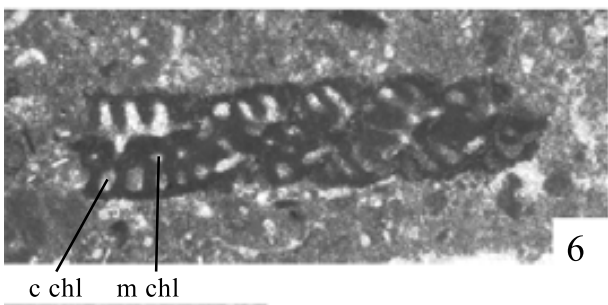
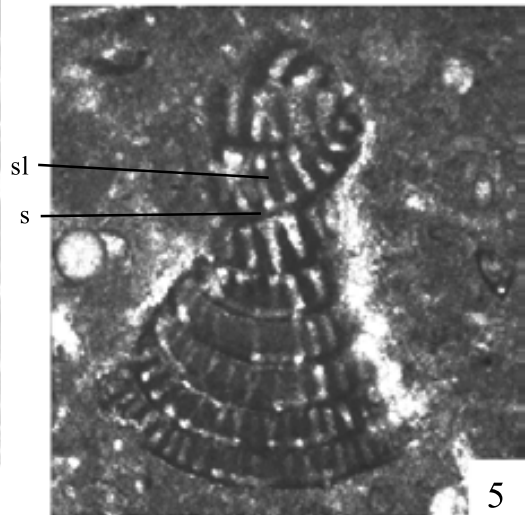
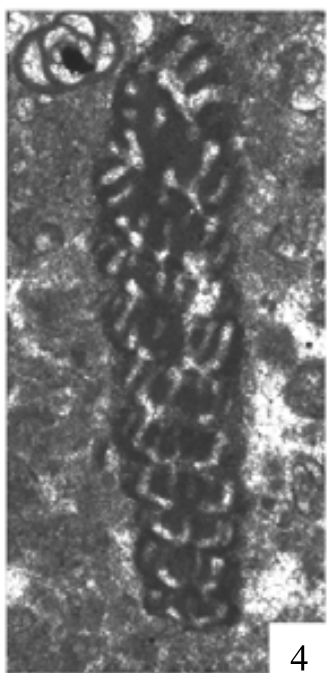
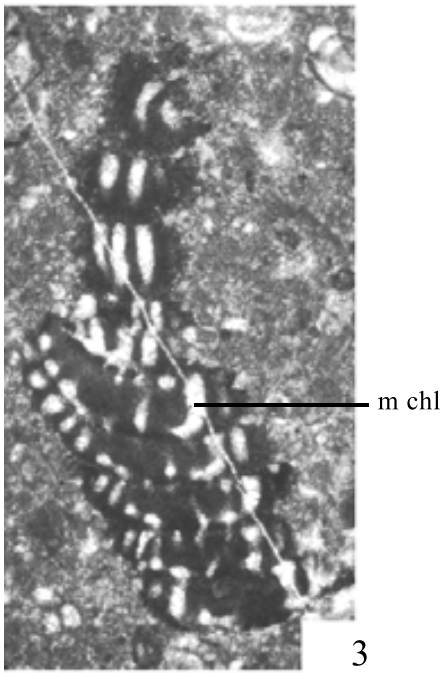
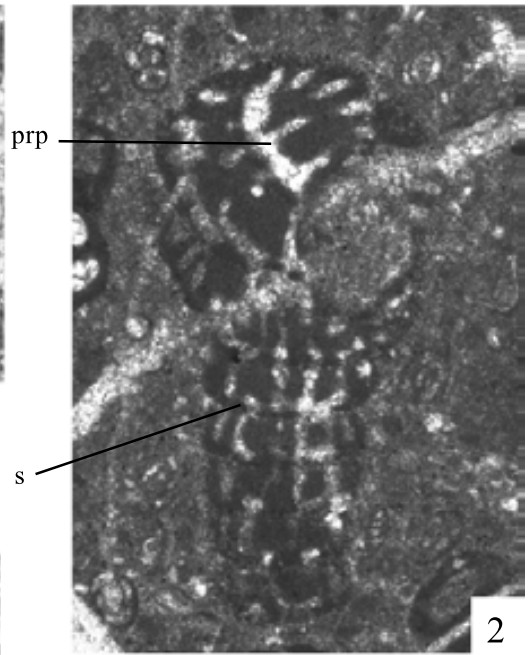
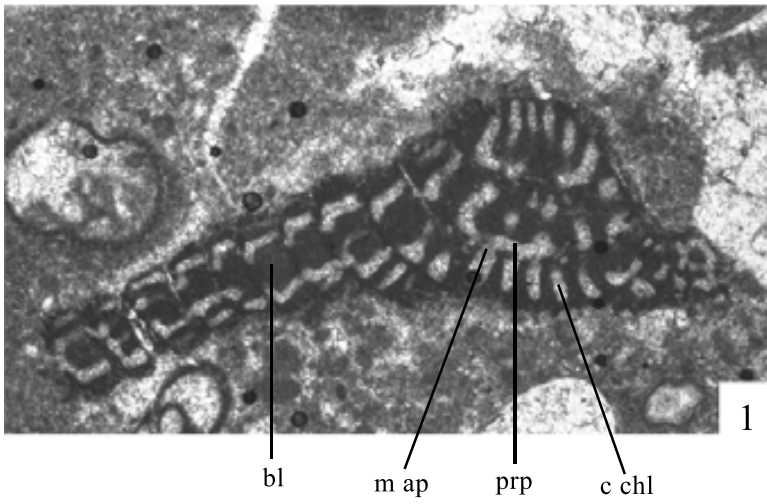


PLATE 35

Cyclopseudodomia smouti Fleury 1974

megalospheric? forms

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1: transverse section (x25). 2: oblique section (x25). 3, 4: oblique sections (x50). 5, 6: transverse sections (x50).

ABBREVIATIONS: **bl:** *basal layer/capa basal*; **c chl:** *cortical chamberlet/camarilla cortical*; **m chl:** *medullar chamberlet/camarilla medular*; **prp:** *preseptal passage/espacio preseptal*; **sl:** *septula/tabique*

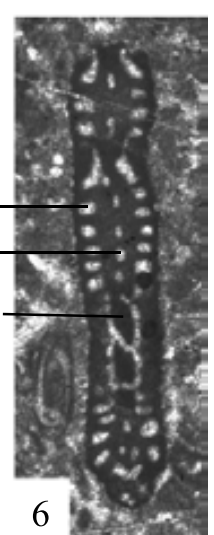
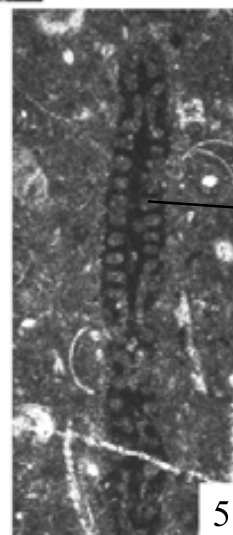
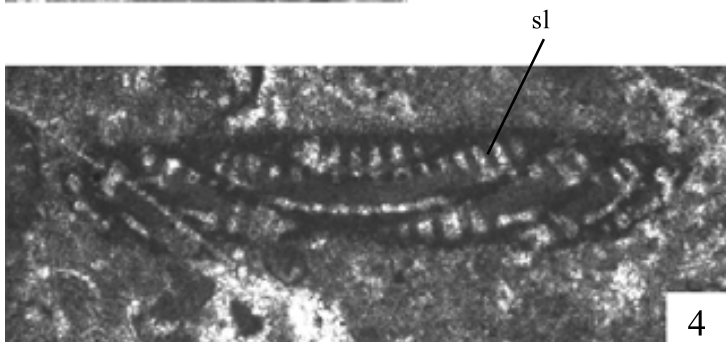
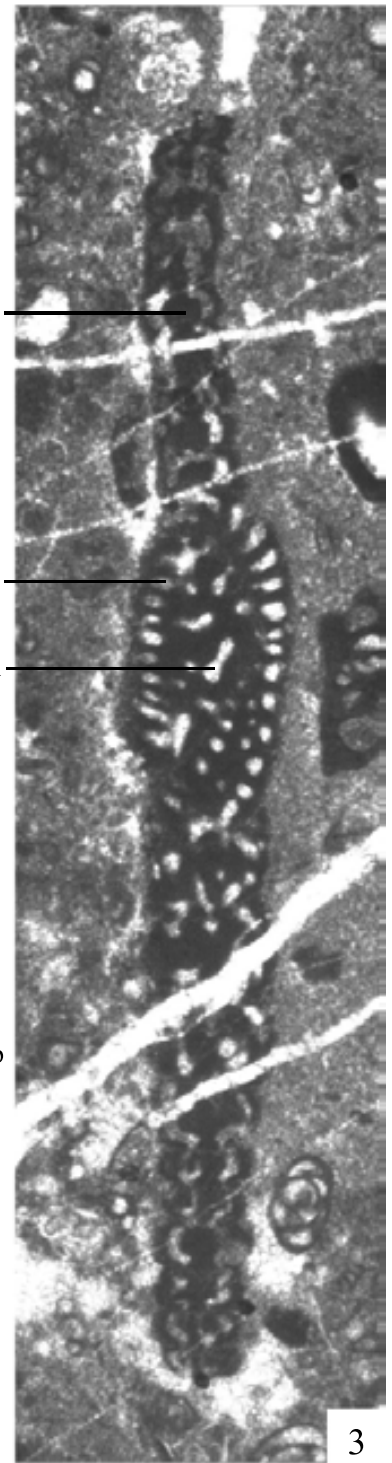
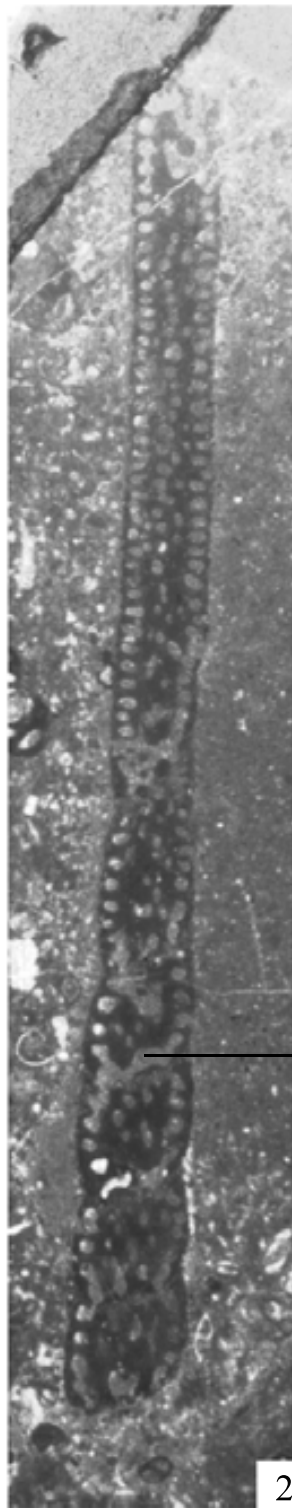
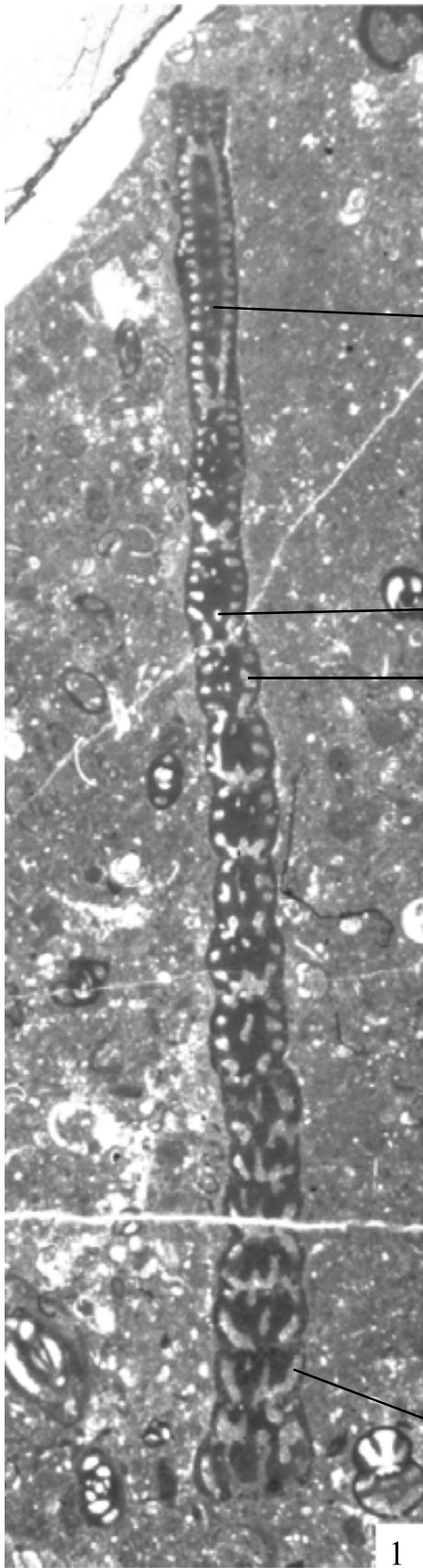


PLATE 36

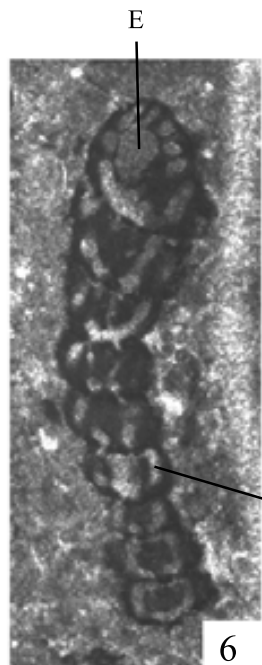
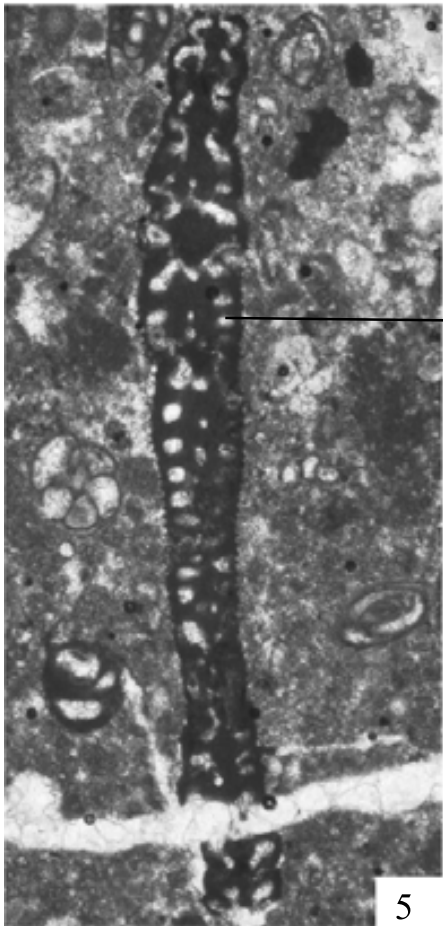
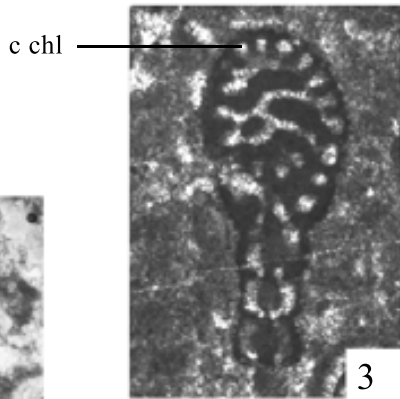
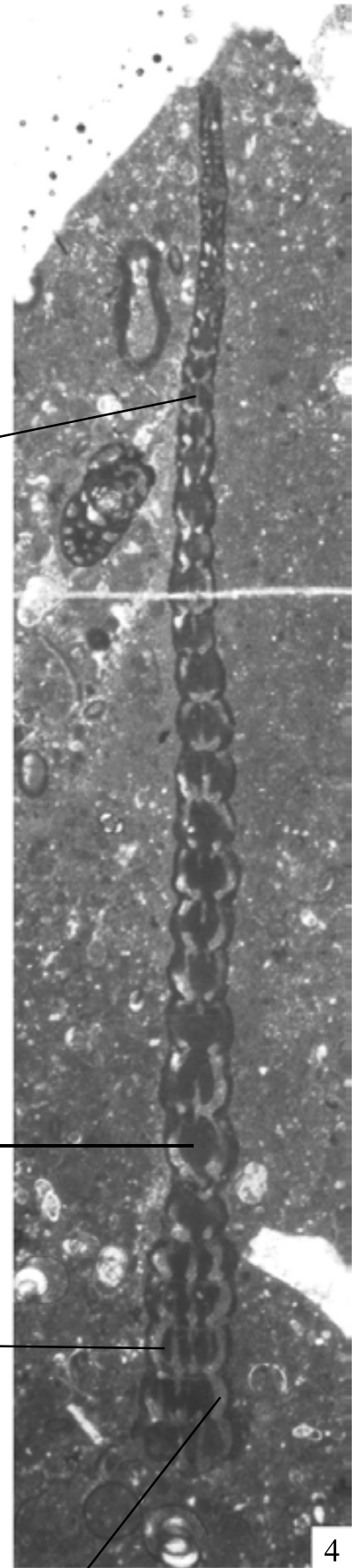
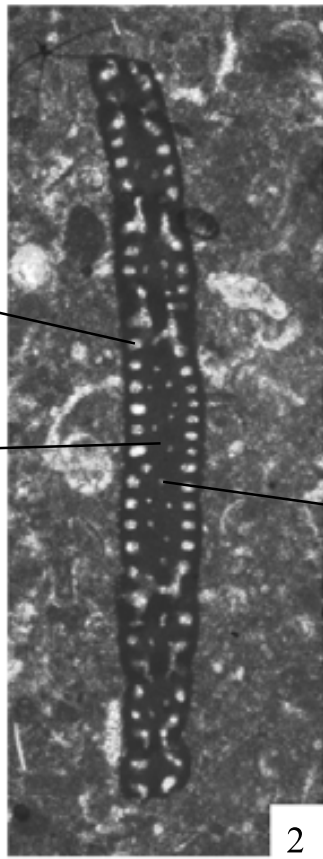
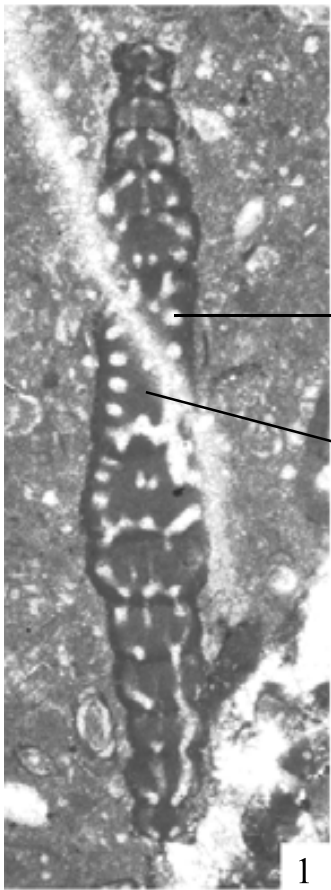
Cyclopseudomia smouti Fleury 1974

1-3, 5, 6: megalospheric? forms

4: microspheric? form

Topotypes. Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1-3, 5, 6: oblique sections (x50). 4: oblique section (x25).

ABBREVIATIONS: **bl:** *basal layer/capa basal*; **c chl:** *cortical chamberlet/camarilla cortical*; **m chl:** *medullar chamberlet/camarilla medular*; **sl:** *septula/tabique*



c chl

bl

m chl

c chl

bl

sl

c chl

E

c chl

PLATE 37

Cuvillierinella salentina Papetti and Tedeschi 1965

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1, 3, 5, 6: axial sections. 2, 7: equatorial sections. 8: oblique-centered section close to axial plane.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **c fo:** cortical *foramen*; **f:** *flexostyle*/canal flexostílico; **fo:** *floor*/suelo; **m chl:** medullar *chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sh:** *shaft*; **sl:** *septula*/tabique

PLATE 37

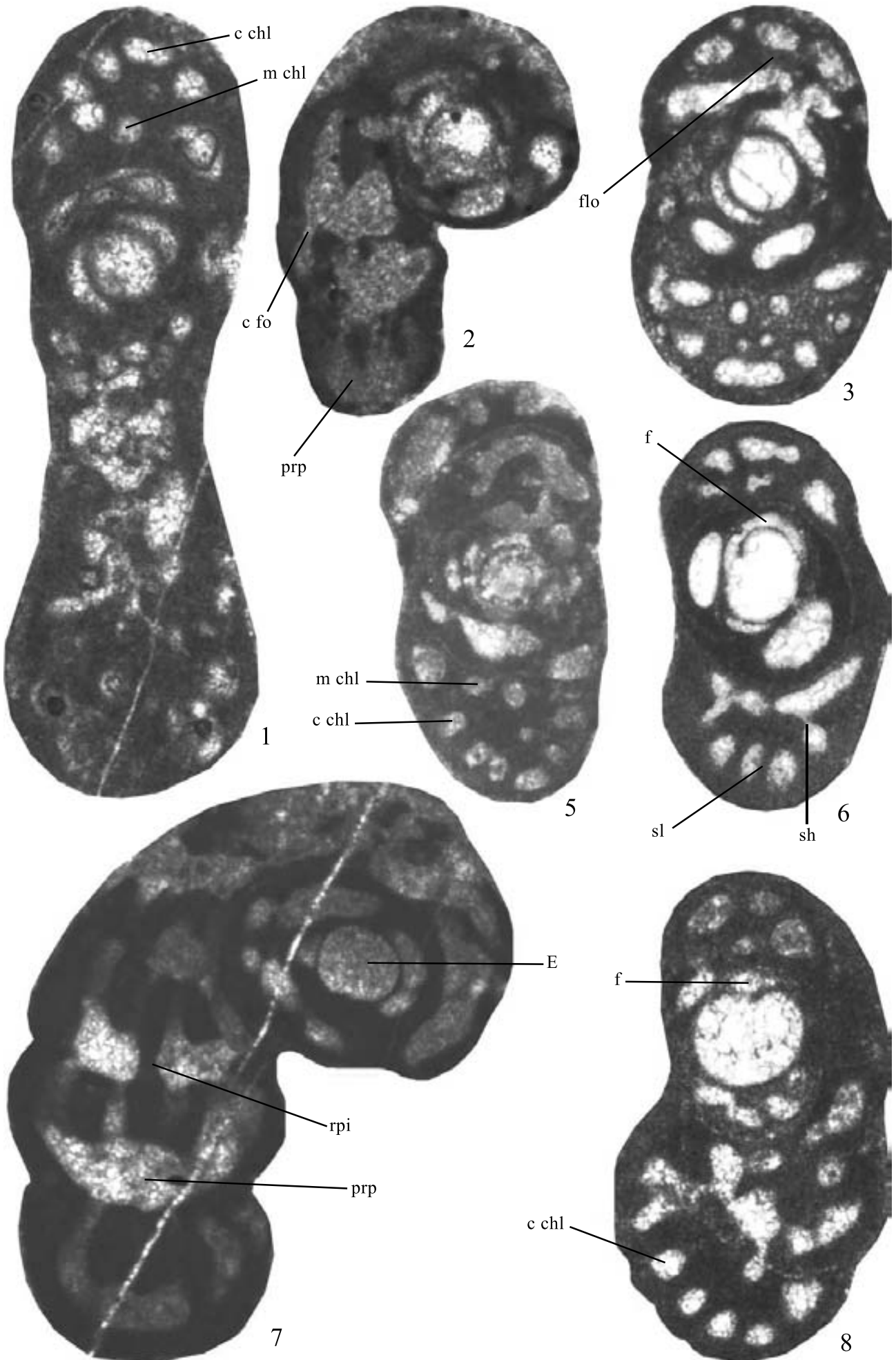


PLATE 38

Cuvillierinella salentina Papetti and Tedeschi 1965

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1, 3, 6-8: axial sections. 2: sub-axial section. 4, 5: oblique-centered sections close to axial plane. 9: oblique section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **flo:** *floor*/suelo; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **sl:** *septula*/tabique

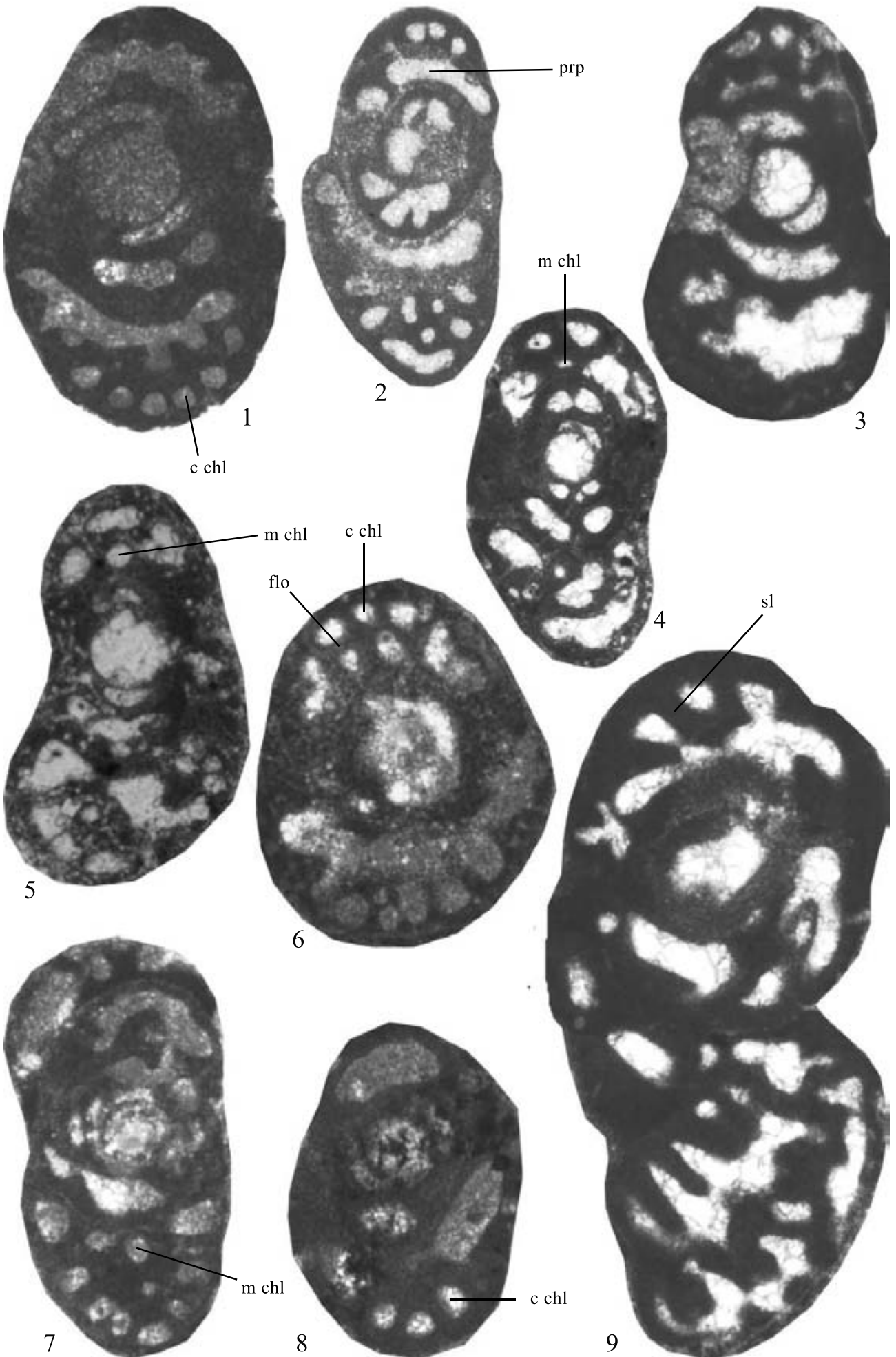


PLATE 39

Cuvillierinella salentina Papetti and Tedeschi 1965

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1: oblique-centered section close to axial plane. 2: oblique section close to equatorial plane. 3, 5, 6: longitudinal section of uncoiled growth. 4: oblique section. 7-9: transverse section of uncoiled growth.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **m chl:** *medullar chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual; **s:** *septum*/septo

PLATE 39

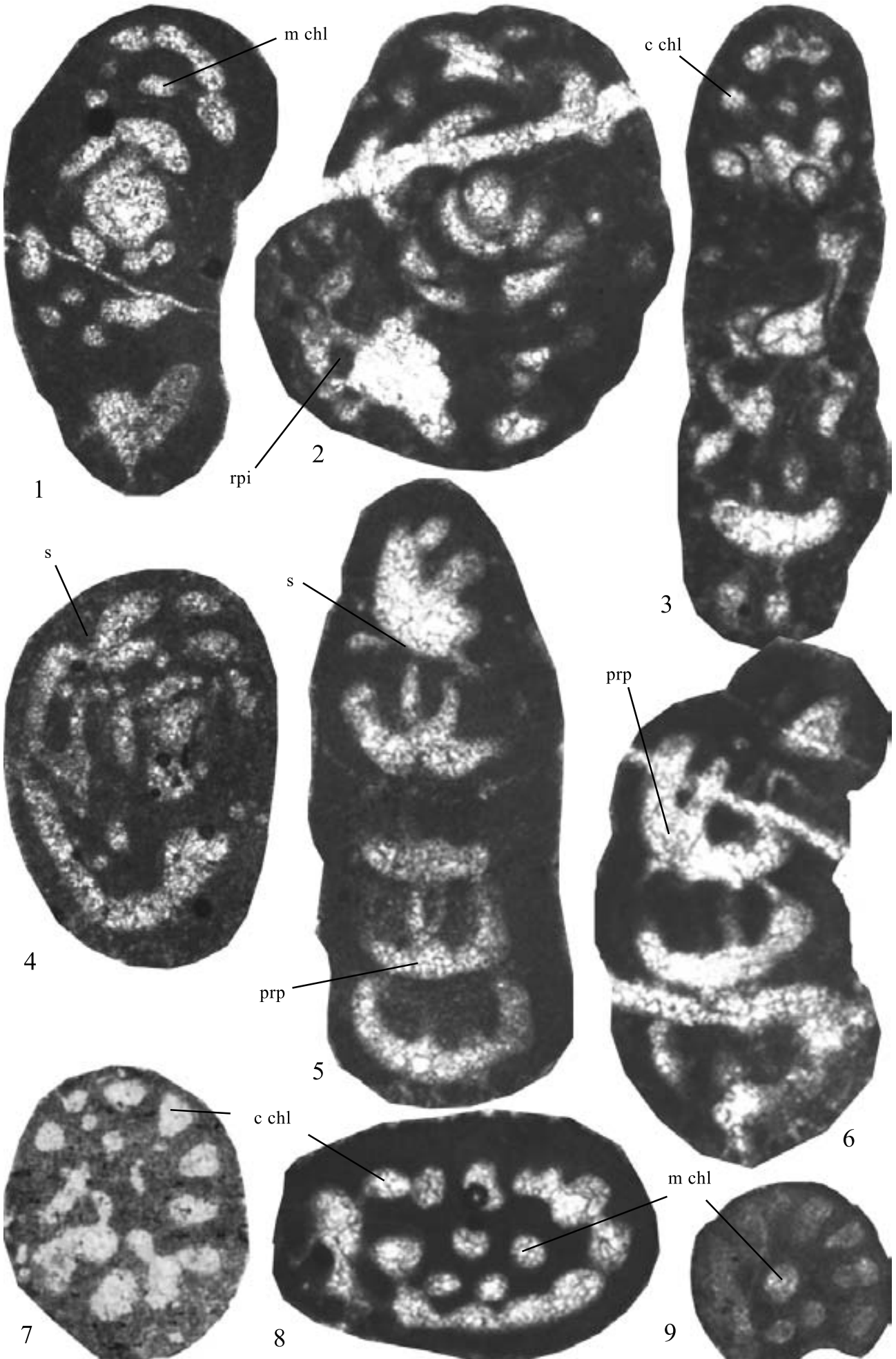


PLATE 40

Cuvillierinella n. sp.1

1-6, 9: megalospheric forms (x100)

7, 8: microspheric forms? (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *HE* from Hellín, Betic domain (Spain). 1: oblique-centered section close to equatorial plane; 2, 3: longitudinal section from uncoiled part of the shell. 4-6: oblique section; 7: oblique section close to equatorial plane; 8: subaxial section; 9: transverse section from uncoiled part of the shell.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **E:** embryo/embrión; **fo:** *foramen*; **m chl:** *medullar chamberlet*/camarilla medular; **m fo:** *medullar foramen*/foramen medular; **prp:** *preseptal passage*/espacio preseptal; **sl:** *septula*/tabique

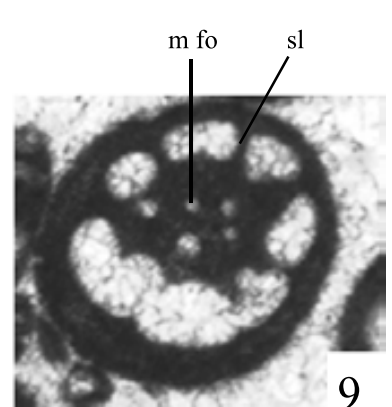
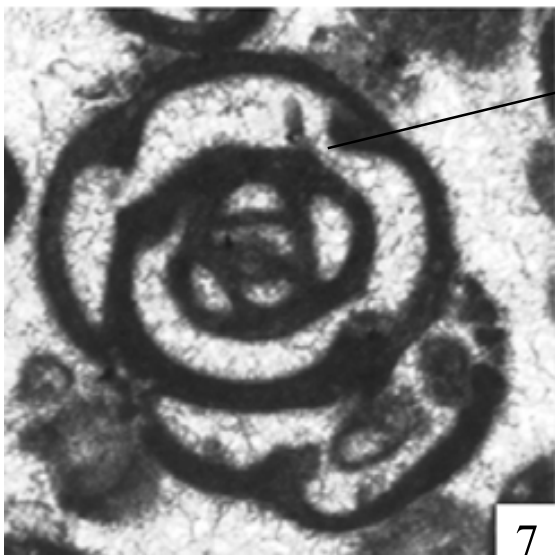
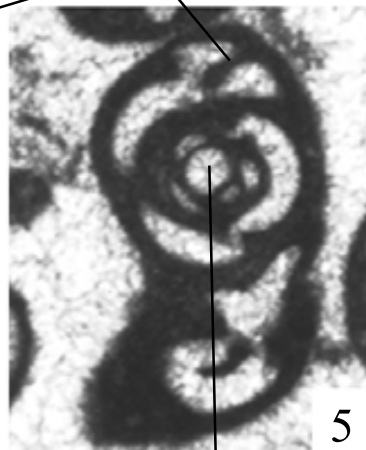
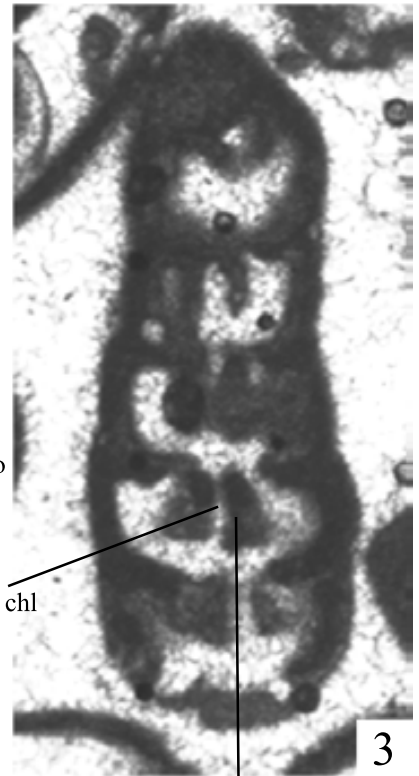
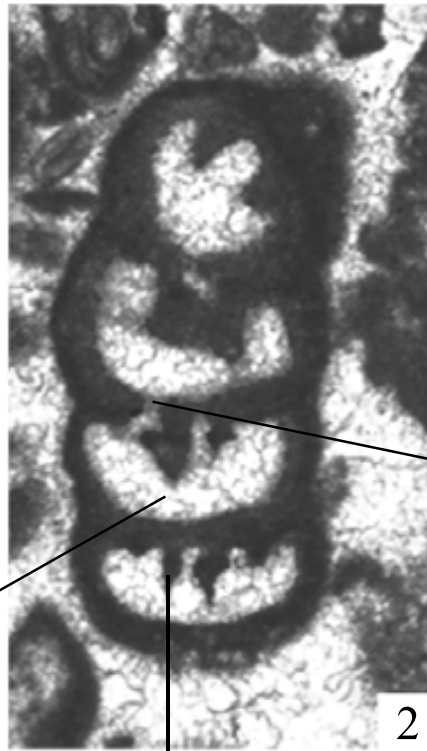


PLATE 41

Rhapydionina fleuryi n. sp.

megalospheric forms (x100)

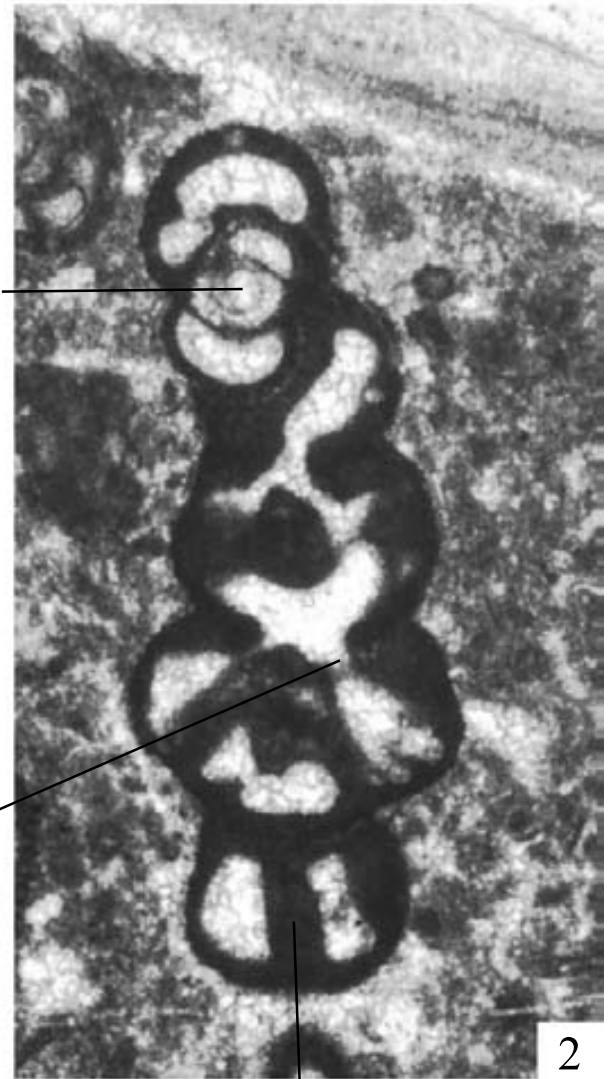
Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample *Py-12* from Pylos, Peloponnese, (Greece). 1: oblique section. 2: axial section. 3: oblique section. 4: oblique-centered section.

ABBREVIATIONS: **c fo:** *cortical foramen*; **E:** *embryo/embrión*; **m fo:** *median foramen*;
prp: *preseptal passage/espacio preseptal*; **sl:** *septula/tabique*



1

sl

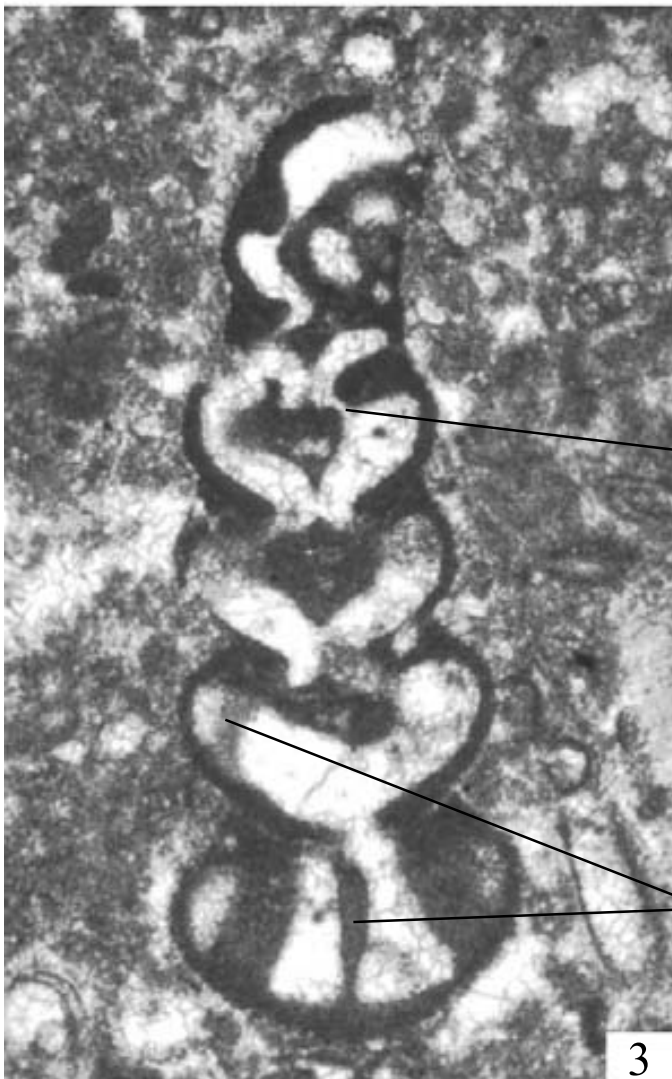


2

E

c fo

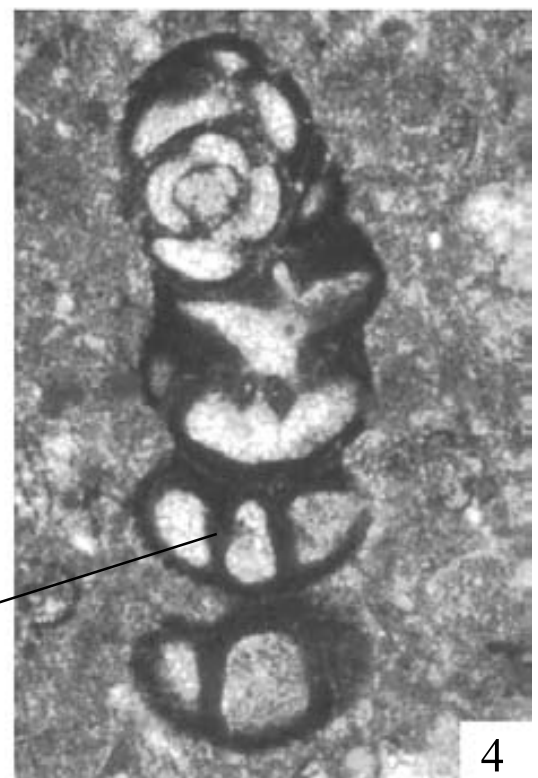
sl



3

c fo

sl



4

sl

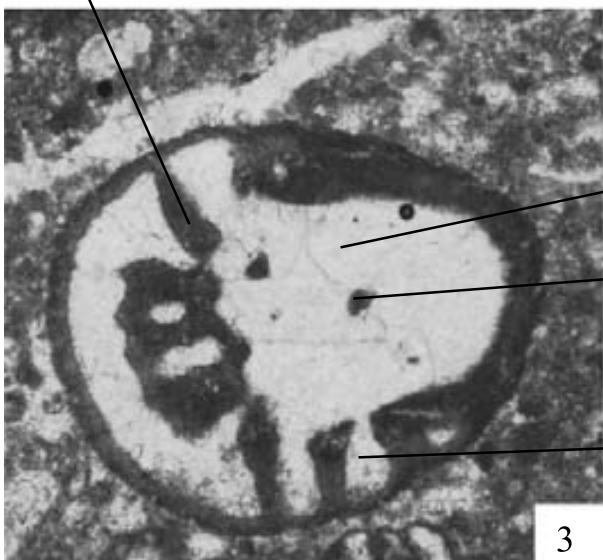
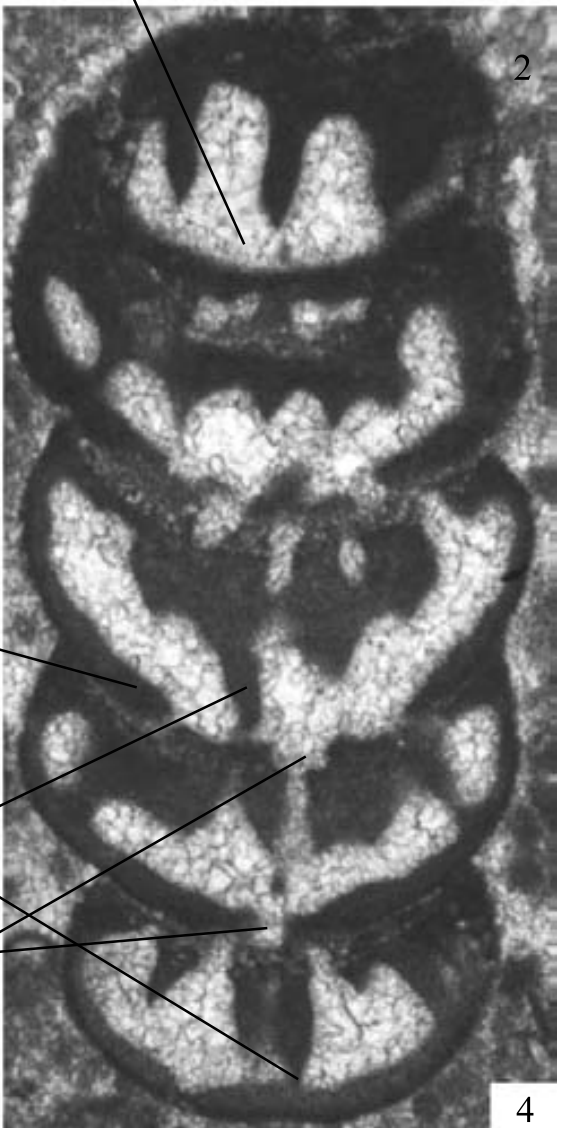
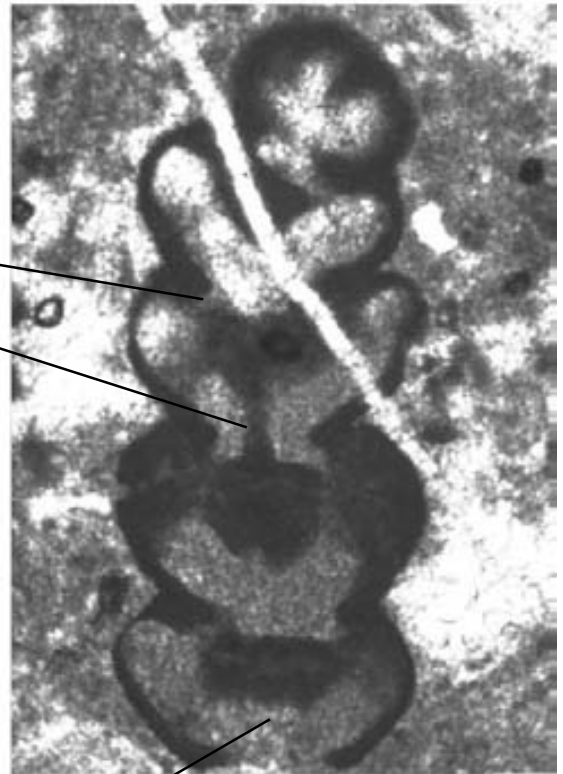
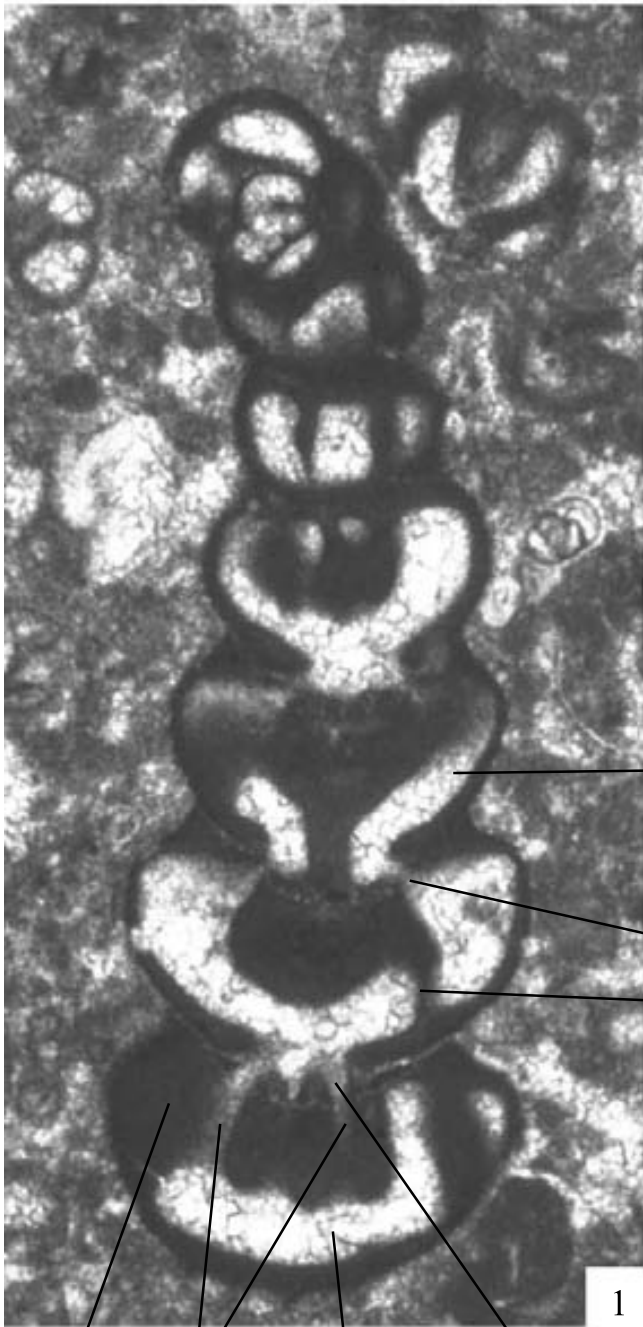
PLATE 42

Rhapydionina fleuryi n. sp.

megalospheric forms (x100)

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age, cut out from the including sediment of similar opaqueness. Sample *Py-12* from Pylos, Peloponnese (Greece). 1: axial section. 2-4: longitudinal sections of uncoiled stage. 3: transversal section.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **c fo:** cortical foramen; **m chl:** medullar *chamberlet*/camarilla medular; **m fo:** median foramen; **prp:** preseptal passage/espacio preseptal; **rpi:** residual pillar/pilar residual; **s:** septum/septo; **sl:** septula/tabique



1

2

3

4

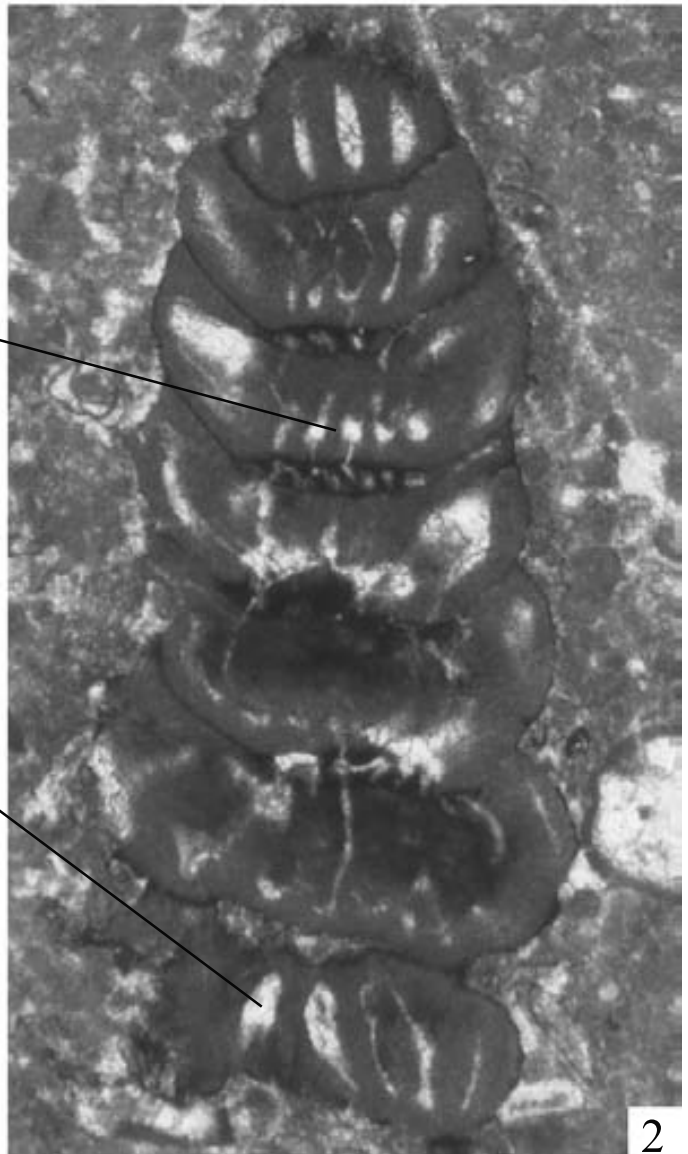
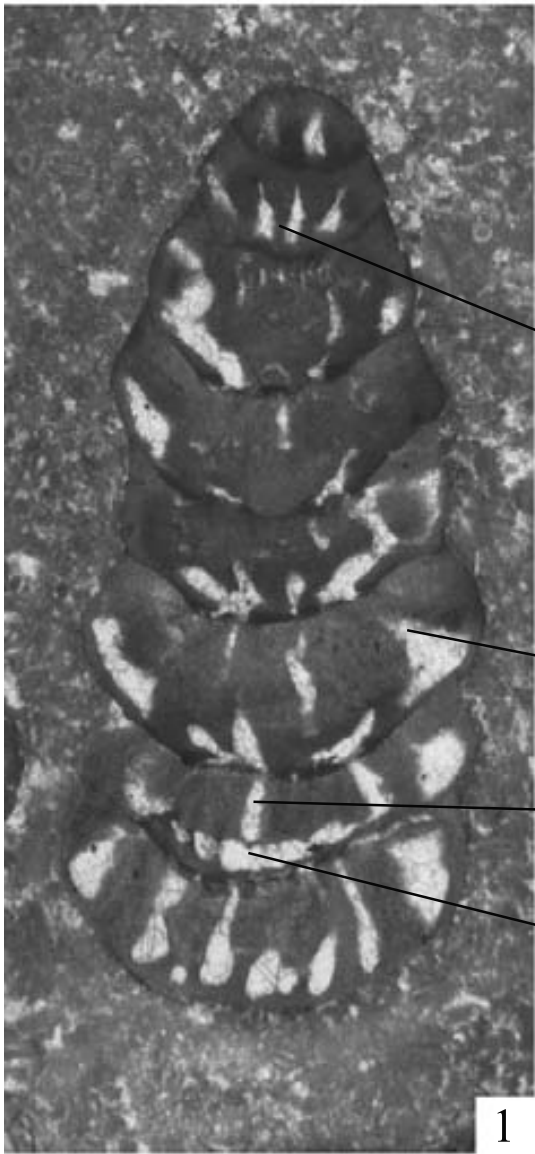
PLATE 43

***Rhapydionina liburnica* Stache 1913**

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Vytina* from Vytina, Peloponnese (Greece). 1: longitudinal/oblique section of uncoiled stage of growth (x50). 2: longitudinal/oblique section of uncoiled stage of growth (x100). 3: detail from fig.2 (x200). Observe in the last figure that in the central part of the septum the shell thickness seems to increase.

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **m chl:** medullar *chamberlet*/camarilla medular; **prp:** *preseptal passage*/espacio preseptal; **rpi:** *residual pillar*/pilar residual



rpi

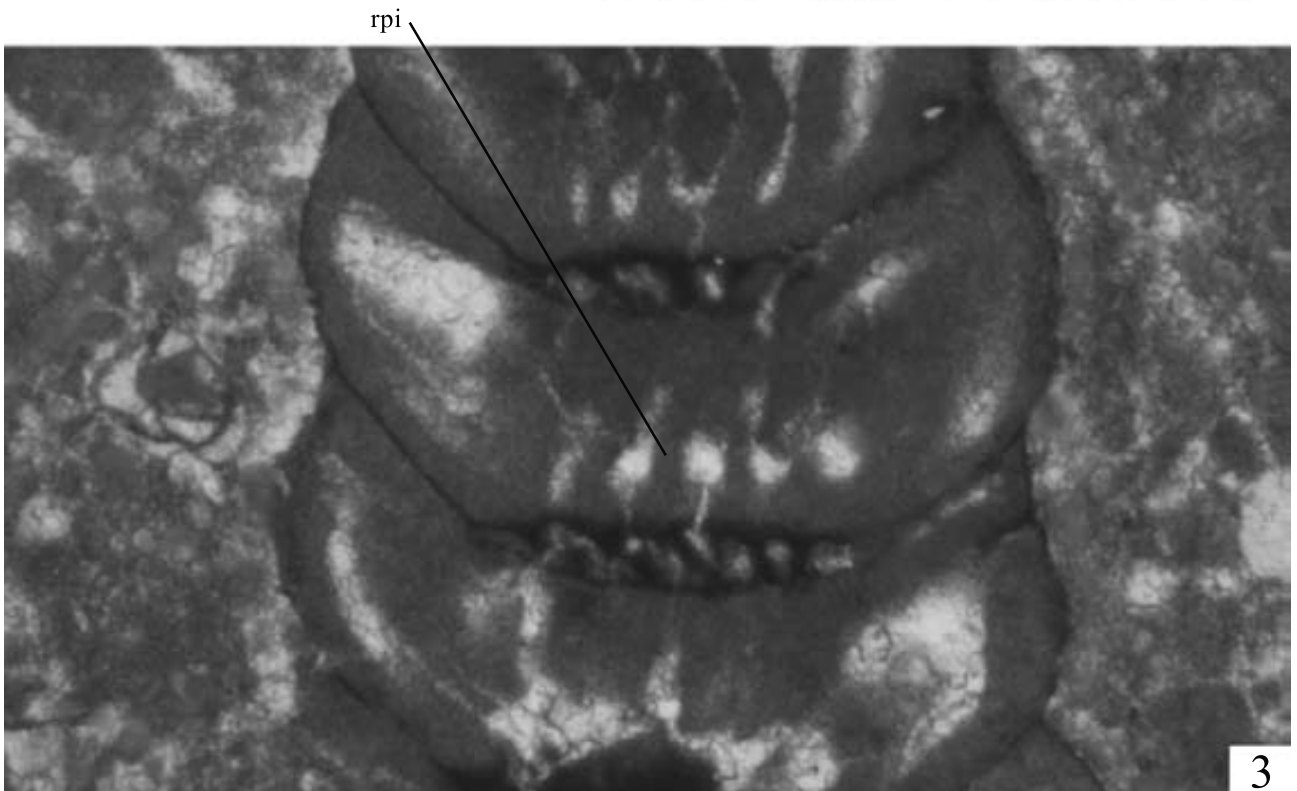
c chl

m chl

prp

1

2



rpi

3

PLATE 44

Rhapydionina liburnica Stache 1913

megalospheric forms

Transmitted light micrographs of thinsections of cemented carbonates of Campanian-Maastrichtian age. Sample *Vytina* from Vytina, Peloponnese (Greece). Sections of the uncoiled stage. 1, 4: oblique section (x50). 2, 3: longitudinal sections (x50). 5: transverse section (x100).

ABBREVIATIONS: **c chl:** cortical *chamberlet*/camarilla cortical; **m chl:** medullar *chamberlet*/camarilla medular; **m fo:** median foramen; **rpi:** residual pillar/pilar residual; **sl:** *septula*/tabique

