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Plates

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PLATE I

All similar views are made on the same scale, irrespective of actual size, and as nearly as possible in exactly similar positions so as to facilitate direct comparison. The lettering is the same for all the skulls, and is the initial letter or letters of the bones referred to: N, nasal; Px, pre maxillary; Mx, maxillary; M, molar; Fr, frontal; Sq, squamosal; Pa, parietal; Ip, inter-parietal; Oc, occipital.

- Fig. 1. Muskrat; natural size. Fig. 2. Beaver; reduced one-half. Fig. 3. Common Brown Rat; enlarged one-half. Fig. 4. Grey Squirrel; natural size. Fig. 5. Chipmunk; natural size.
Fig. 6. Hinder aspect of tibia and fibula of Pocket-Gopher. Fig. 7. Hinder aspect of tibia and fibula of Beaver; reduced one-half. Fig. 8. Hinder aspect of tibia and fibula of Prairie Dog.

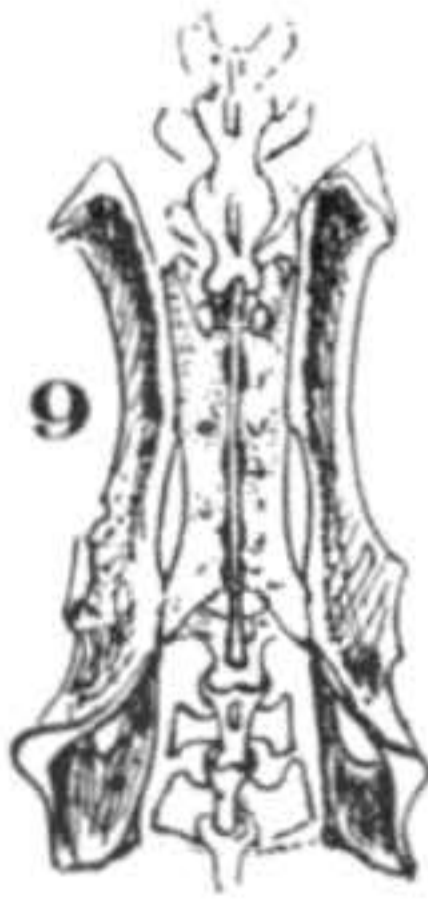
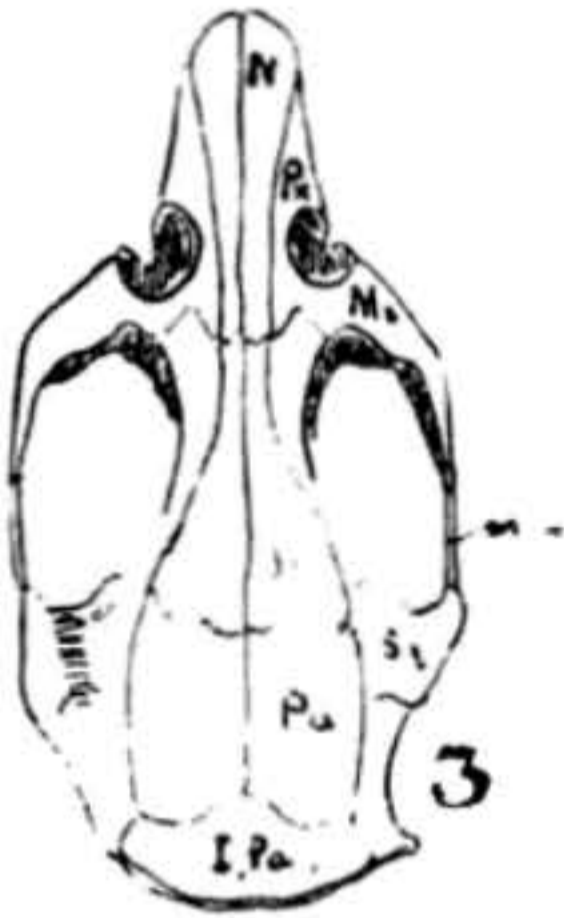
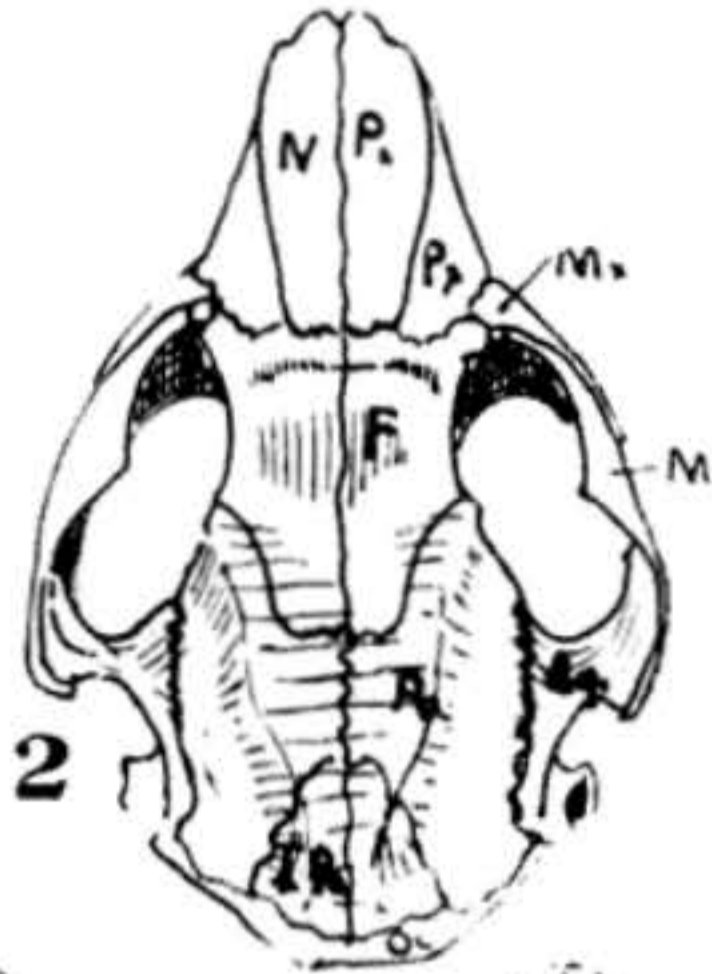
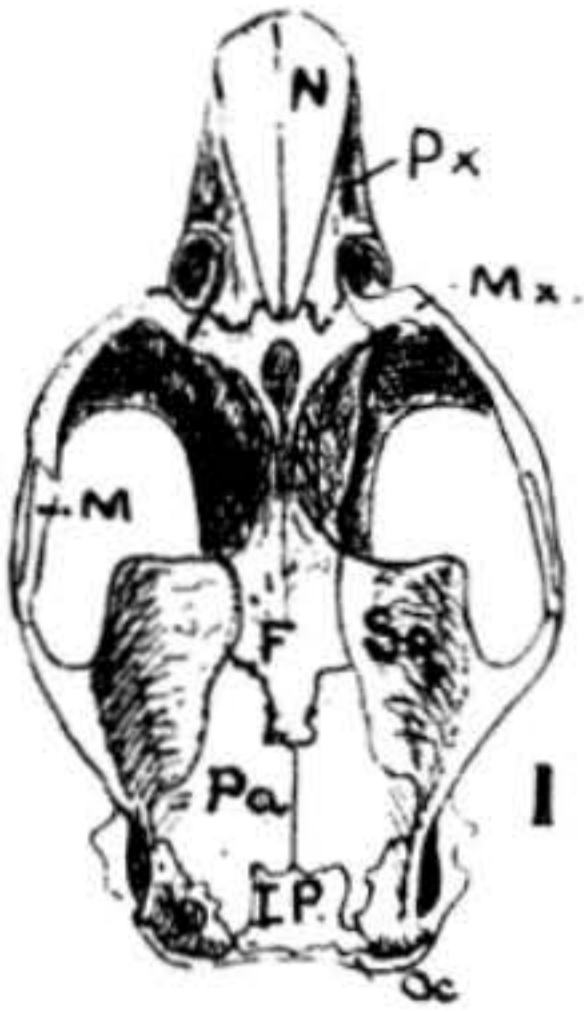
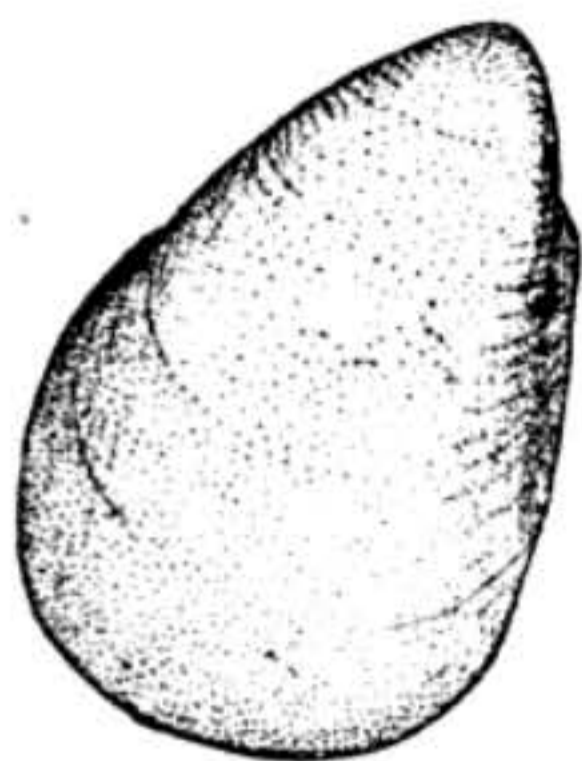


PLATE II

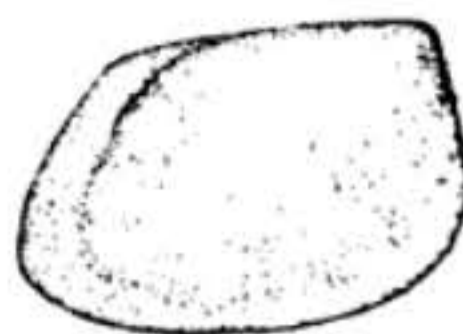
- 1, 2 and 3. *Cypricardites (Vanuxemia) fragosus* n. sp. (1) The right valve of a large specimen. (2) Anterior muscle scar and cardinal teeth of a left valve. (3) The concave cast of the anterior portion of a specimen showing the deep muscle scars, the articulation of the cardinal teeth and a section cutting off the anterior ear and the umbones.
- 4 and 5. *Cypricardites dignus* n. sp. (4) Right valve of the largest specimen, and (5) left valve of another showing a little variation in form.
6. *Cypricardites (?) finitimus* n. sp.
7. *Cypricardites descriptus* n. sp.
8. *Modiolopsis contigua* n. sp. The upper anterior margin is imperfect.
9. *Modiolopsis affinis* n. sp.
- 10, 11 and 12. *Modiolopsis gregalis* n. sp. (10) Left valve of an average sized specimen and (11) (12) cross sections of another specimen at one-fourth and two-thirds the distance from the anterior end respectively.
- 13, 14, 15 and 16. *Modiolopsis litoralis* n. sp. (13) Cast of an average specimen; (14) (15) (16) sections at three-fourths, one-half and one-third the distance from the anterior end.
17. *Modiolopsis senecta* n. sp. Figure of the only specimen seen.



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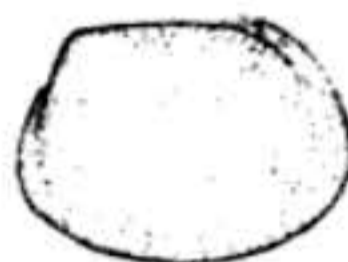
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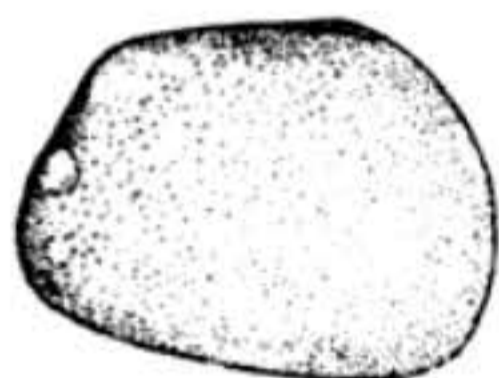
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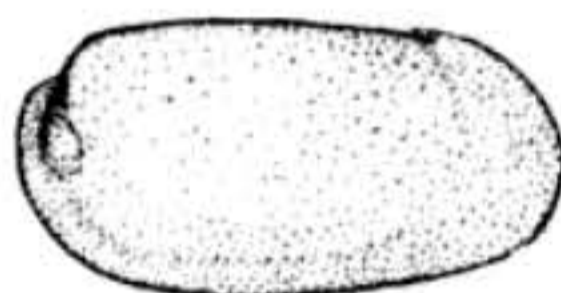
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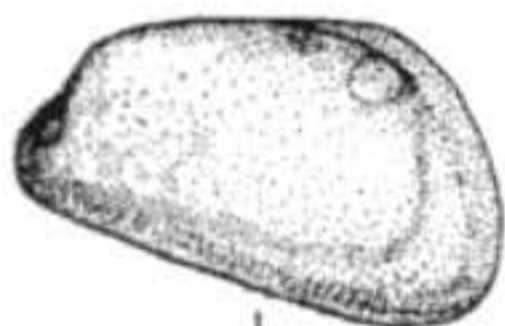
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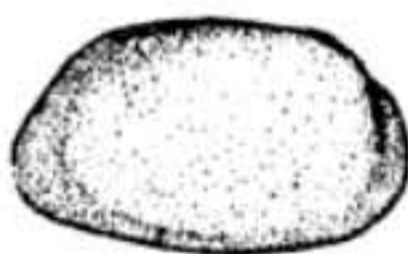
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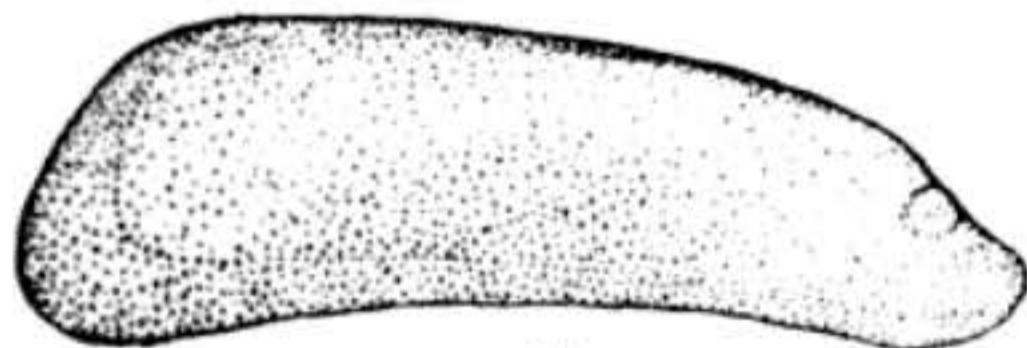
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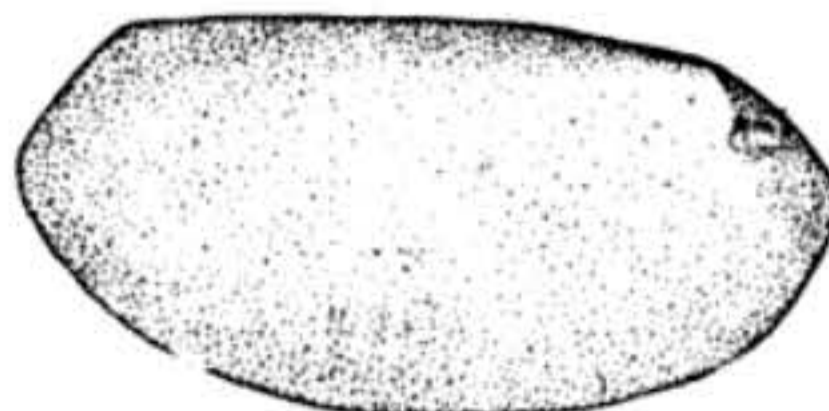
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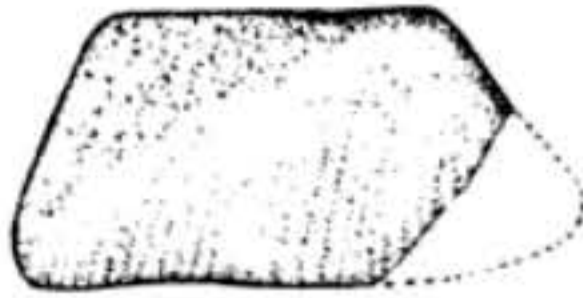
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PLATE III

- 1 and 2. *Tellinomya absimilis* n. sp.
3. *Tellinomya novicia* n. sp.
4. *Murchisonia gracilis* Hall.
5. *Holopea obliqua* Hall.
6 and 7. *Crania ? reversa* n. sp.
8 and 9. *Ophileta fausta* n. sp. (8) Outer surface of part of the last volu-
tion showing the direction of the transverse striæ, and a transverse sec-
tion of the same specimen. (9) Coil of an imperfect cast.
10. *Orthoceras* (?) sp. undet. Cast of a fragment of the shell and recon-
structed circumference.
11 and 12. *Orthoceras minnesotense* n. sp. (1) View from the left side and
(12) from the smaller end of the fragment.
13 and 14. Siphuncle of an *Orthoceras* with a transverse section of the same.
15. Bryozoon (*Ptilodictya* ?).
16 and 17. *Pleurotomaria aiens* n. sp. (16) View showing the deep notch
in the aperture and (17) apical view of the same specimen.



1



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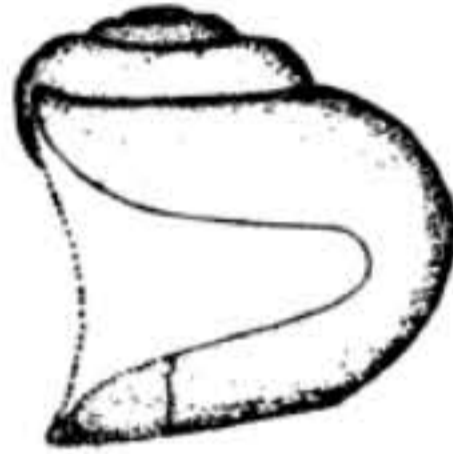
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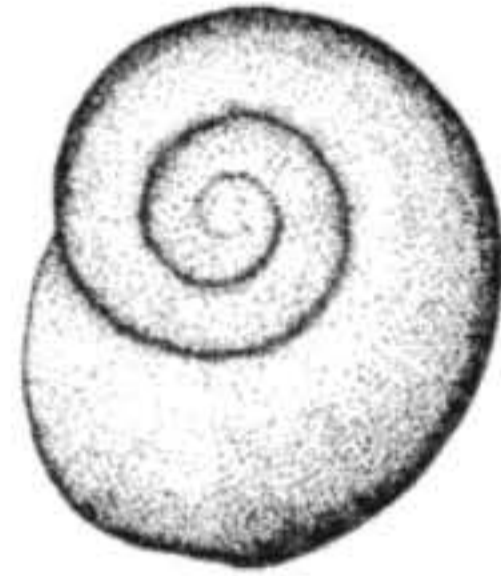
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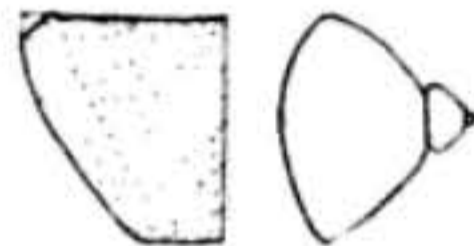
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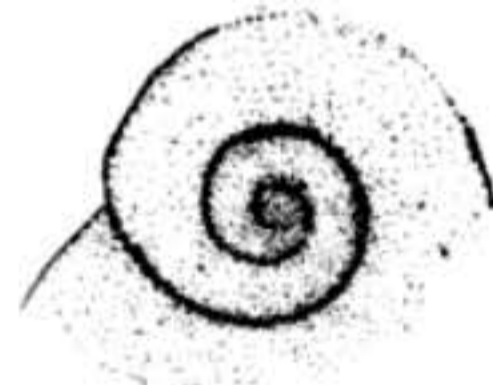
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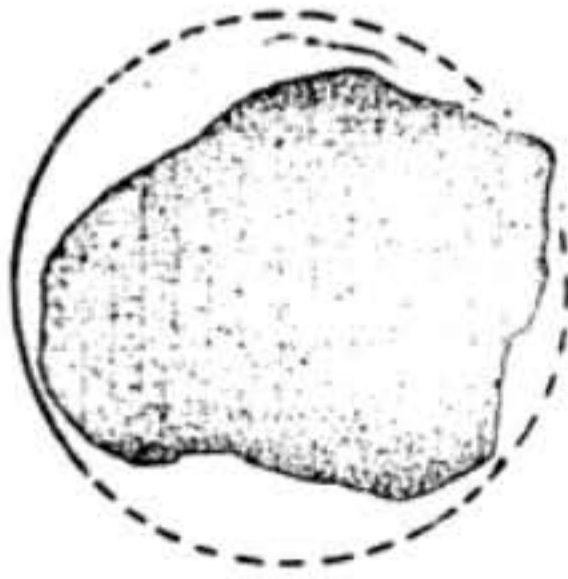
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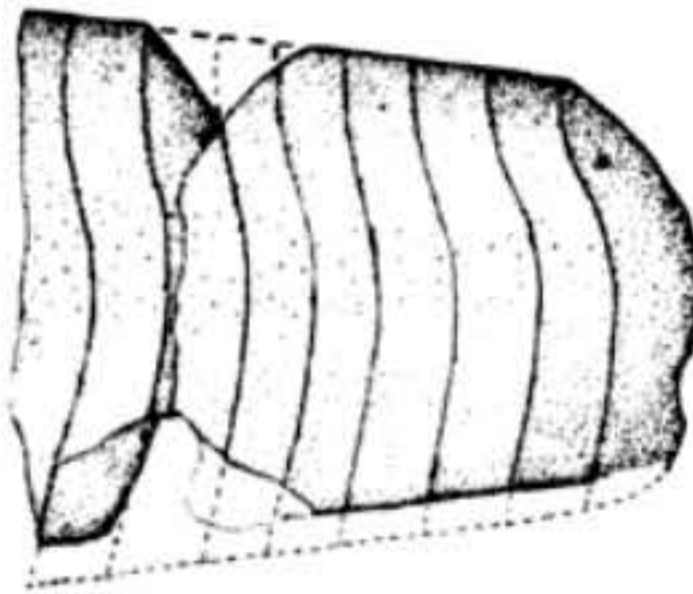
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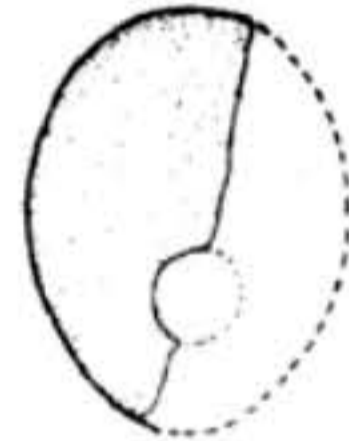
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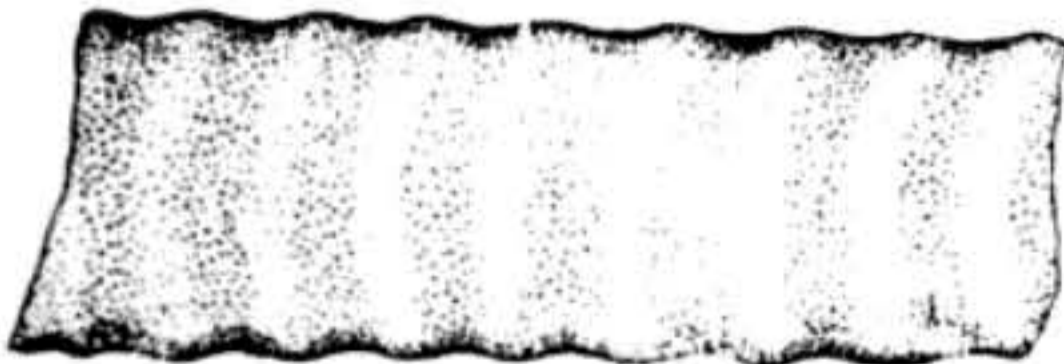
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PLATE IV

1. *Platyceras ? vetulum* n. sp. Apical view.
 - 2 and 3. *Lingula morsii* N. H. Winchell. Outline of a cast (2) and of a shell (3). Both specimens are under the average size.
 4. *Orthis cf. perveta* Conrad. From an imperfect cast of a ventral valve.
 - 5 and 6. *Raufella fucoïda* n. sp.
 7. *Modiolopsis fountainensis* n. sp. Cast of right valve.
 8. *Modiolopsis postica* n. sp.
 9. Transition from Saint Peter to Trenton near Fountain.
 - a. Coarse sand and small ferruginous pebbles and argillaceous shale.
 - b. Coarse light yellow sand; 3 feet 6 inches, variable.
 - c. Argillaceous shale, mixed with sand and lime at the top and bottom; 4 feet.
 - d. Coarse sand.
 - e. Firmer ferruginous laminæ.
- The formations above and below these strata are characteristic Trenton and Saint Peter.
10. Contact of Shakopee and Saint Peter formations near Pickett Station, Wisconsin.
 - a. Saint Peter.
 - b. Green shale laminæ.
 - c. Dolomite, much folded, exposed in elevation about 20 feet.a b c. Illinois Central railway track.

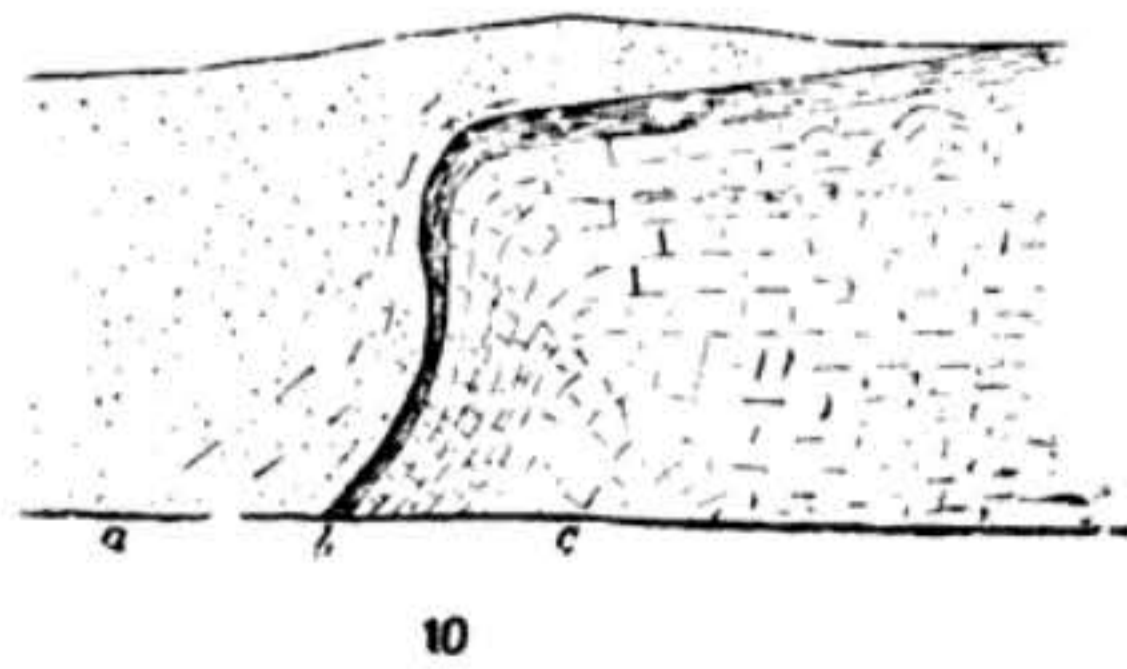
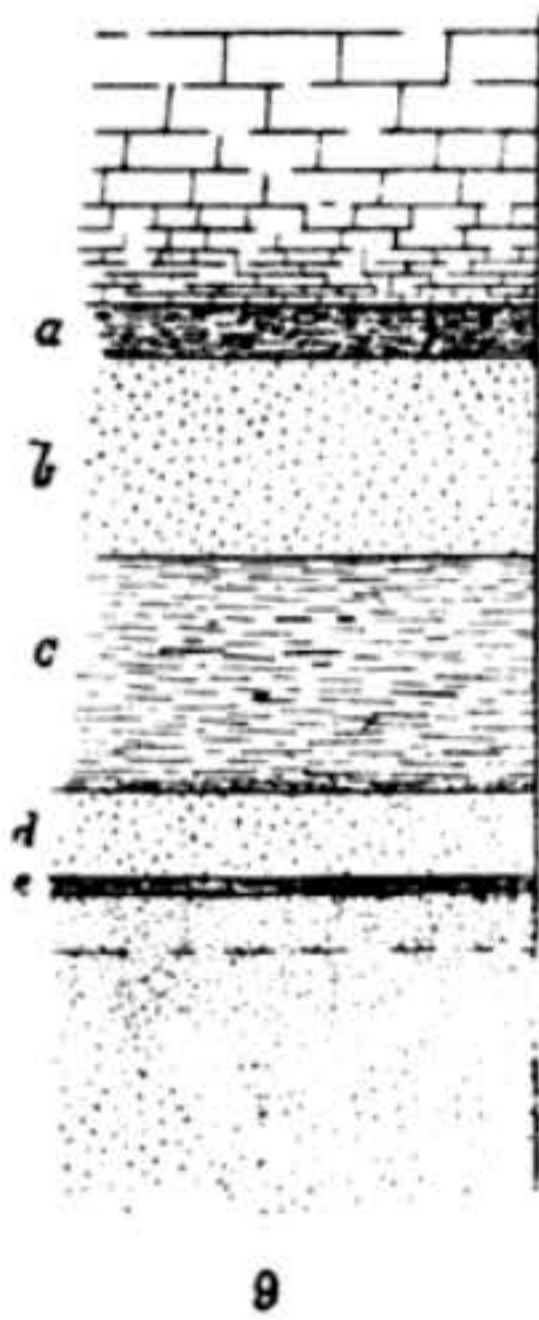
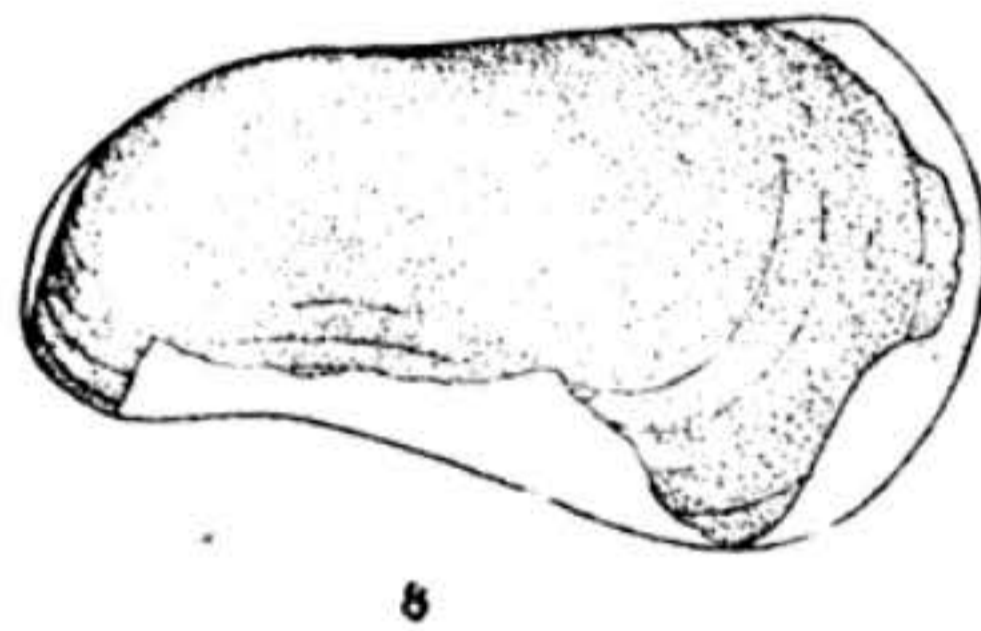
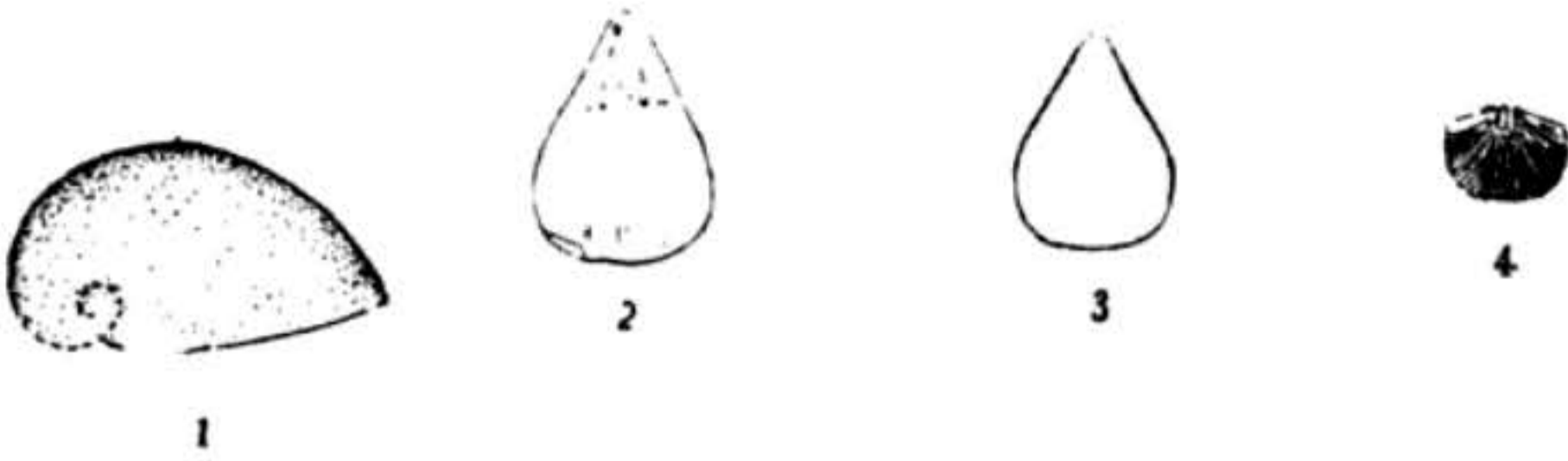


PLATE V

- 1 and 2. *Helicotoma peccatonica* n. sp. Apical view and reconstructed transverse section of the coil.
- 3 and 4. *Ophileta alturensis* n. sp. Apical view of the coil and cross section of the same.
- 5 and 6. *Murchisonia putilla* n. sp. Outline of the coil and of the umbilical side of part of a coil with three or four volutions wanting.
- 7 and 8. *Raphistoma leiosomellum* n. sp. Apical view and an ideal cross section of the coil.
- 9 and 10. *Raphistoma lewistonense* n. sp. Apical view and cross section of a rubber cast of the exterior.
- 11 and 12. *Murchisonia argylensis* n. sp. Natural cast of a smaller specimen and an outline of the exterior of a shell obtained on a rubber cast.
- 13 and 14. *Raphistoma ruidum* n. sp. Apical surface of an interior cast and ideal cross section of the same.
- 15, 16 and 17. *Raphistoma minnesotense* Owen. (15) Apical view of a few of the first volutions; (16) a reconstructed cross section of an interior cast; and (17) a fragment of about the eighth volution. The upper figure shows the upper surface with growth lines, the next is a transverse section, and the last shows the lower surface.
18. *Raphistoma oweni* n. sp. Apical view of the coil.
19. *Holopea obesa* Whitfield. A broken cast showing in part a transverse section.
20. *Straparollus intralobatus* n. sp. Apical view and outline of the aperture of the shell.
- 21 and 22. *Tryblidium repertum* n. sp. Apical and side views.

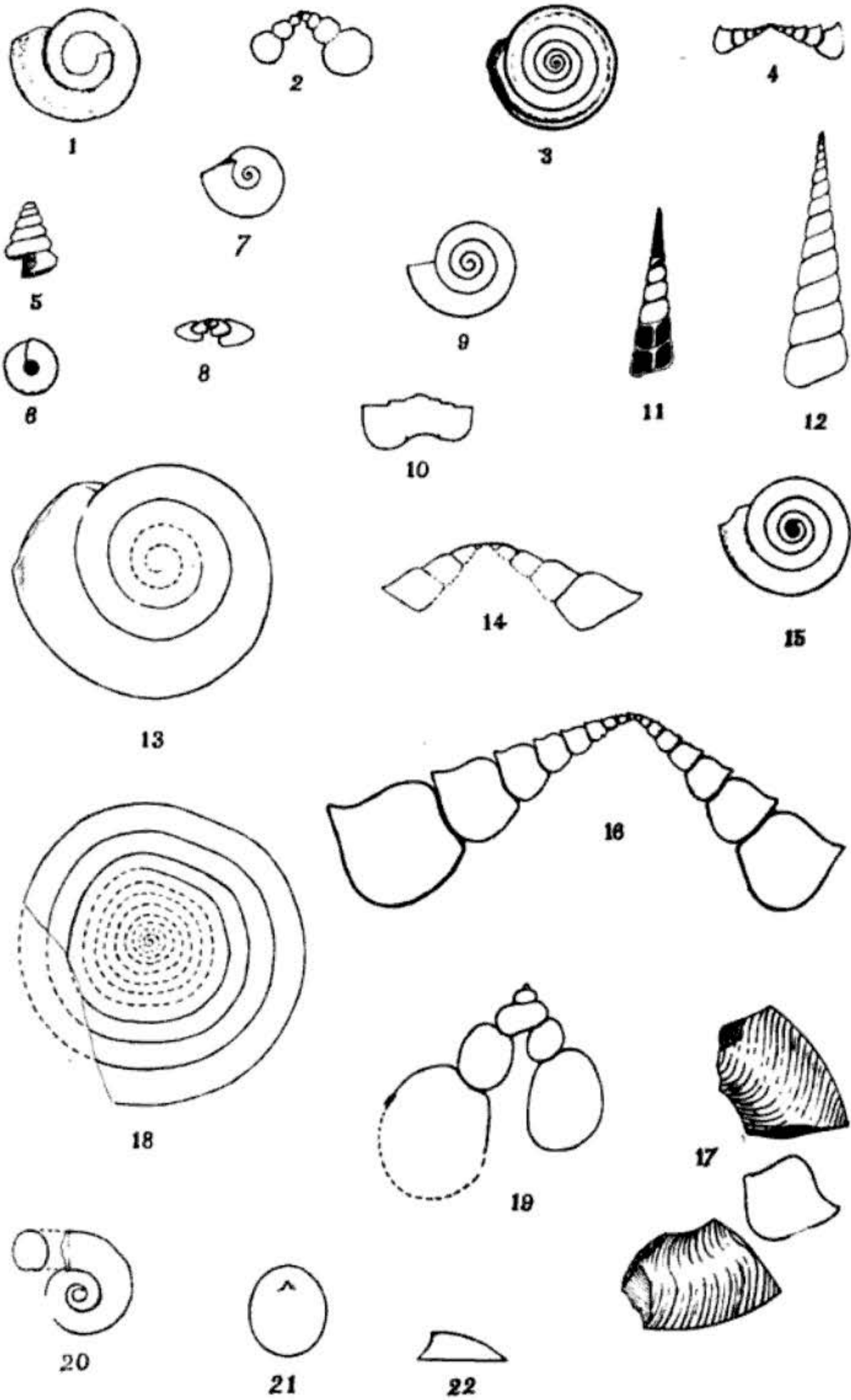


PLATE VI

1. *Euomphalus winonensis* n. sp. Upper surface of a fragment reconstructed from other specimens.
- 2 and 3. *Cyrtoceras winonicum* n. sp. Fragments of two shells preserved as interior casts. The last has a part of the chamber of habitation attached.
4. *Cyrtoceras dresbachense* n. sp.
- 5, 6 and 7. *Piloceras corniculum* n. sp. (5) Specimen, drawn with the concavity of the last septum indicated in dotted lines. (6) Another specimen and (7) cross section of the same.
- 8, 9 and 10. *Ascoceras gibberosum* n. sp. Side view of the septate portion as an internal cast, and (9) longitudinal and (10) transverse sections of the same.
11. *Endoceras consuetum* n. sp.
12. *Lingula dolata* n. sp.
13. *Receptaculites*-like structure from the Shakopee.
14. *Subulites exactus* n. sp.

