

PLATE 71.

DRYMOPORA NOBILIS.

Devonian.

1. Lateral view of a corallum from the Lower Devonian rocks, Falls of the Ohio.
2. Upper surface of a corallum, from the same horizon and place.
3. Upper surface of a corallum of procumbent habit; from the same place.
4. Basal corallets of a young community, attached to *Cyathophyllum halli*; from the ferruginous clay of the Lower Devonian, near Louisville.

Examples from the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 71.

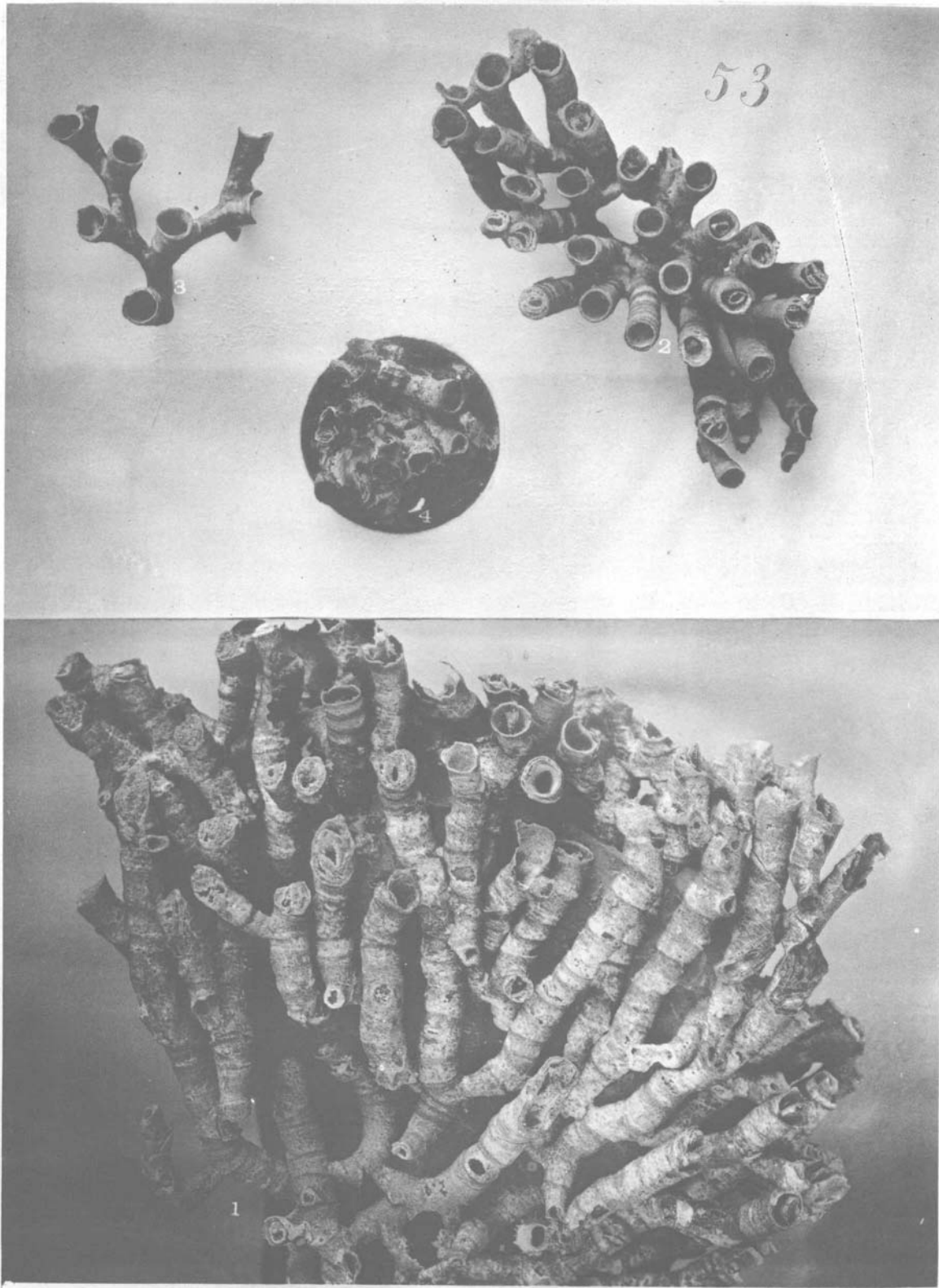


PLATE 72.

DRYMOPORA AULOPOROIDEA, Nov. Spec.

Devonian.

1. 2. 3. 4. Front lateral views of corallets of prolific habit.
5. Lateral views of two inosculating coralla.
6. 10. 11. Coralla of biserial growth.
7. 8. Examples of quadriserial growth. 9.
A triserial form.
12. Basal corallets of a jejune community, attached to the upper surface
of a Chetetes.

Examples 1-11 are found in the encrinal limestone dark red clay of the
Upper. Devonian, near Louisville. Specimen 12 was gathered from
the rotten chert of the Middle Devonian, Falls of the Ohio.

DRYMOPORA FRUTECTOSA, Nov. Spec.

Devonian.

13. Upper surface of a corallum composed of large corallets.
14. Upper surface of a corallum whose corallets are of medium size.
15. Under surface of a corallum.
16. Front lateral view of a corallum.

All from the horizon and vicinage of *D. auloporoidea*, Figs. 1-11.

DRYMOPORA INTERMEDIA.

Devonian.

17. Rear lateral view of corallets invested by *Stromatopora granulata*, from
the Lower Devonian ferruginous clay, near Louisville.
Specimen 1 belongs to the collection of Mr. Gaines. The other
specimens herein figured are from the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 72.

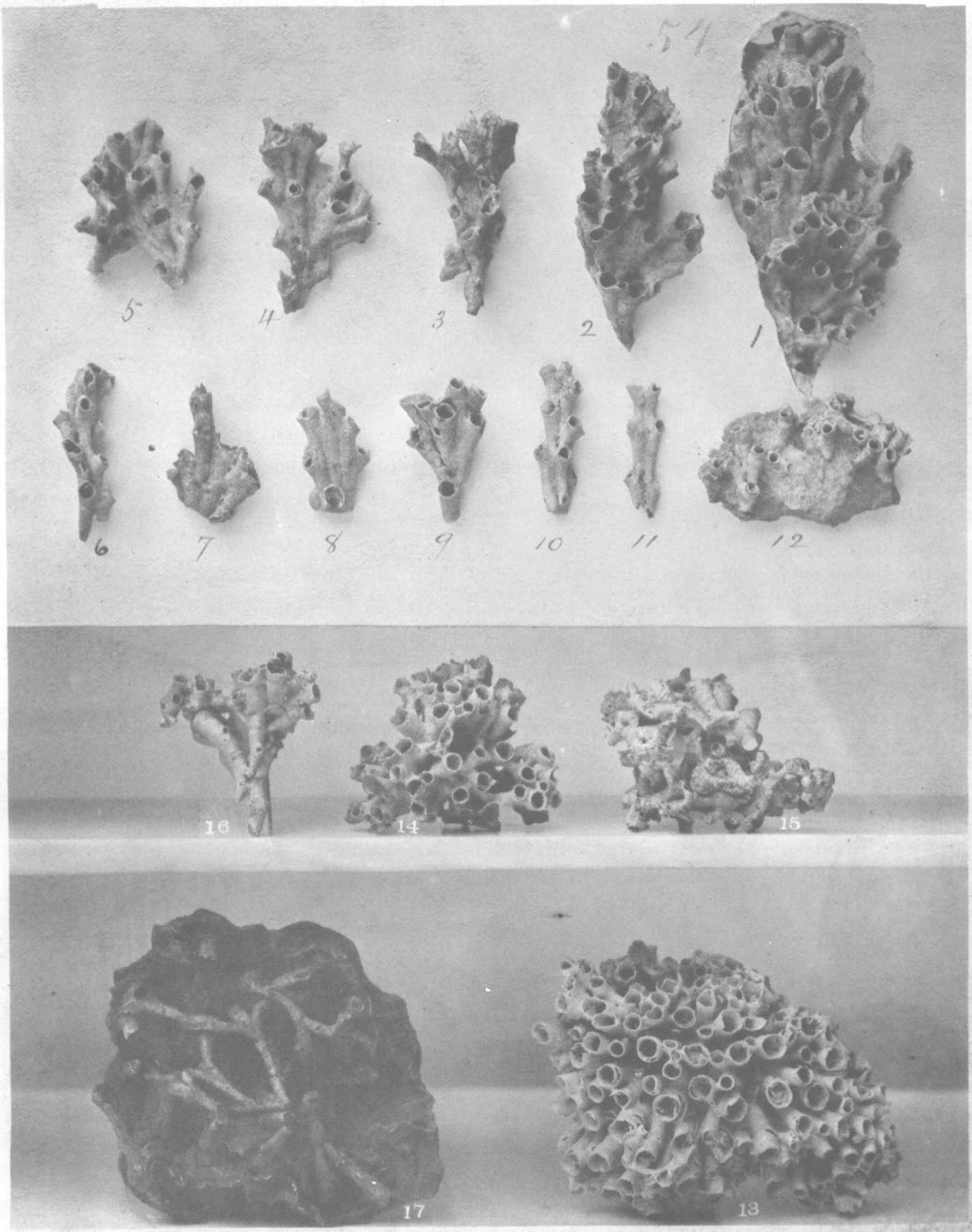


PLATE 73.

AULOPORA EDITHANA.

Devonian.

1. Corallum incrusting the dorsal valve of *Strophomena hemispherica*, from the rotten hornstone of the Middle Devonian, Falls of the Ohio. Collection of the author.

ROMINGERIA INCRUSTANS, Nov. Spec.

Devonian.

2. Corallum, somewhat eroded, incrusting *Cyathophyllum pocillum*.
3. Under surface and lateral view of a corallum.
4. Upper surface of a corallum.
From the Middle Devonian, Falls of the Ohio. Collection of the author.

AULOPORA PYGMOEA, Nov. Spec.

Niagara.

5. Corallum incrusting *Thecia swindernana*, from the Upper Niagara white clay, near Louisville.
6. Example incrusting *Stromatopora concentrica*, from the Upper Niagara red clay, near Louisville. Collection of the author.

AULOPORA CORNUTA.

Devonian.

7. Corallum incrusting interior and margin of calyx of *Cyathophyllum corniculum*, from the Middle Devonian, Falls of the Ohio. Collection of the author.
8. Corallum incrusting fragment of *Cyathophyllum scyphus*, from the Upper Devonian dark red encrinal limestone clay, near Louisville. Collection of Mr. Gaines.

AULOPORA CULMULA, Nov. Spec.

Devonian.

9. Corallum incrusting a jejune frond of *Favosites clausus*, from the Lower Devonian, Falls of the Ohio. Collection of the author.

NICHOLSONIA (Nov. Gen.) CANADENSIS.

Devonian.

10. 11. Corallets incrusting a *Fenestella*, from the rotten chert of the Middle Devonian, Falls of the Ohio. Collection of the author.
[The corals and bryozoa both being white, the photographic delineation of the former is unsatisfactory, although the examples are good.]

AULOPORA PROCUMBENS, Nov. Spec.

Devonian.

12. Corallets incrusting a species of *Stromatopora*, from the Lower Devonian ferruginous clay, near Louisville. Collection of the author.
13. Corallets similarly incrusting *Stromatopora*, from the horizon and place of example 12. Collection of Mr. McConathy.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 73.

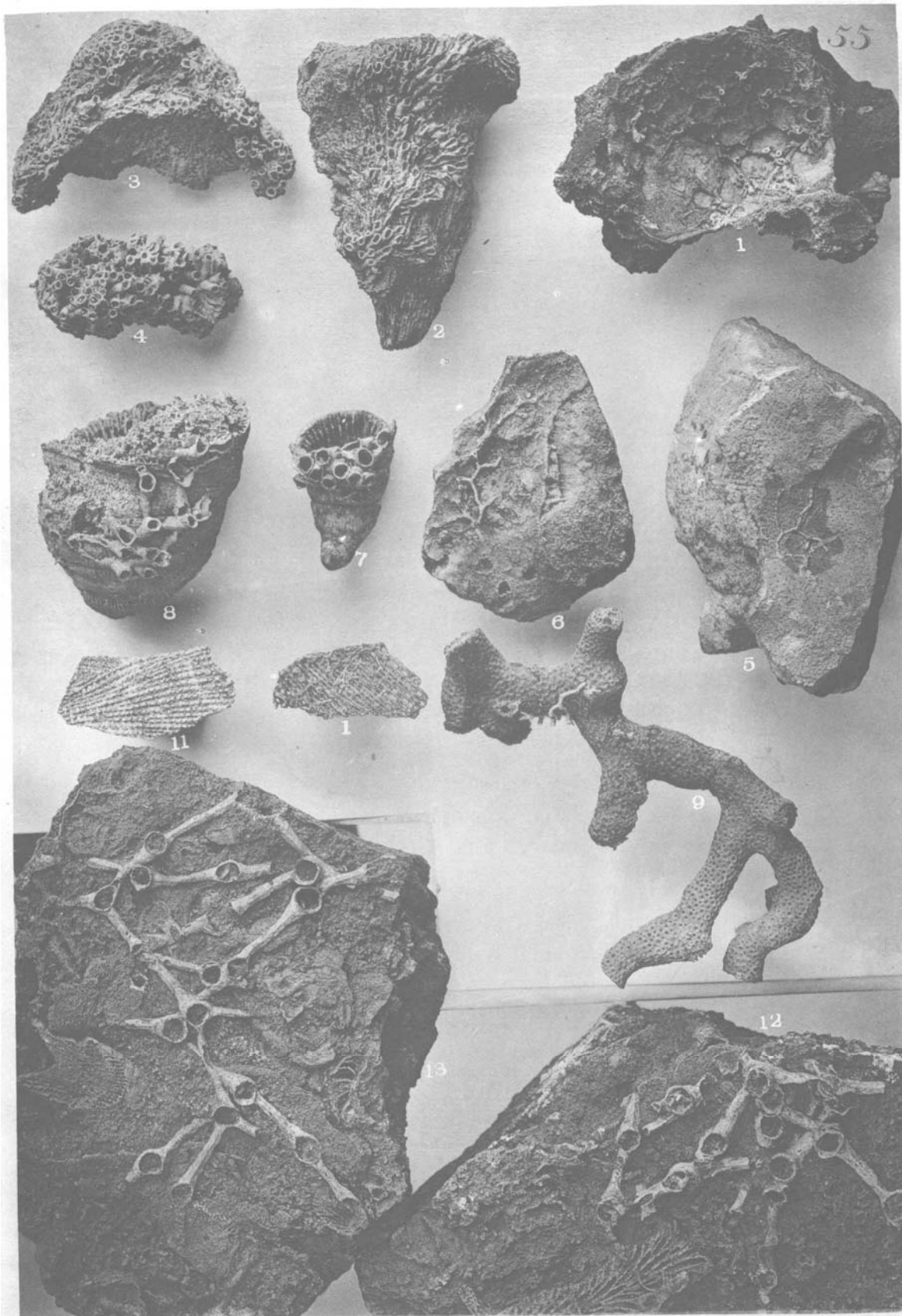


PLATE 74.

AULOPORA SERPENS.

Devonian.

1. (Upper left-hand specimen.) Corallites incrusting under surface of *Stromatopora texilis*, from the Lower Devonian rocks, Falls of the Ohio.
2. Corallites incrusting a fragment of *Favosites*, from the Lower Devonian red clay, near Louisville.

DRYMOPORA INTERMEDIA.

Devonian.

3. View of the corallum figured in Plate 72.
4. Basal corallites attached to a fragment of *Favosites canadensis*, from the Lower Devonian rocks, Falls of the Ohio.

ROMINGERIA INCRUSTANS, Nov. Spec.

Devonian.

5. Corallites incrusting a frond of *Cladopora cryptodens*, from the Lower Devonian, Falls of the Ohio.

DIORYCHOPORA (Nov. Gen.) TENUIS, Nov. Spec.

Niagara.

6. Corallum (inverted) from the Upper Niagara white clay, near Louisville.

DRYMOPORA FASCICULARIS.

Devonian.

7. Fragment from the Lower Devonian, Falls of the Ohio. Collected by Dr. Theiss.

CLADOPORA FRANCISCI.

Devonian.

8. Upper fronds of a corallum from the Lower Devonian, Falls of the Ohio.

The specimens herein figured are from the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 74.

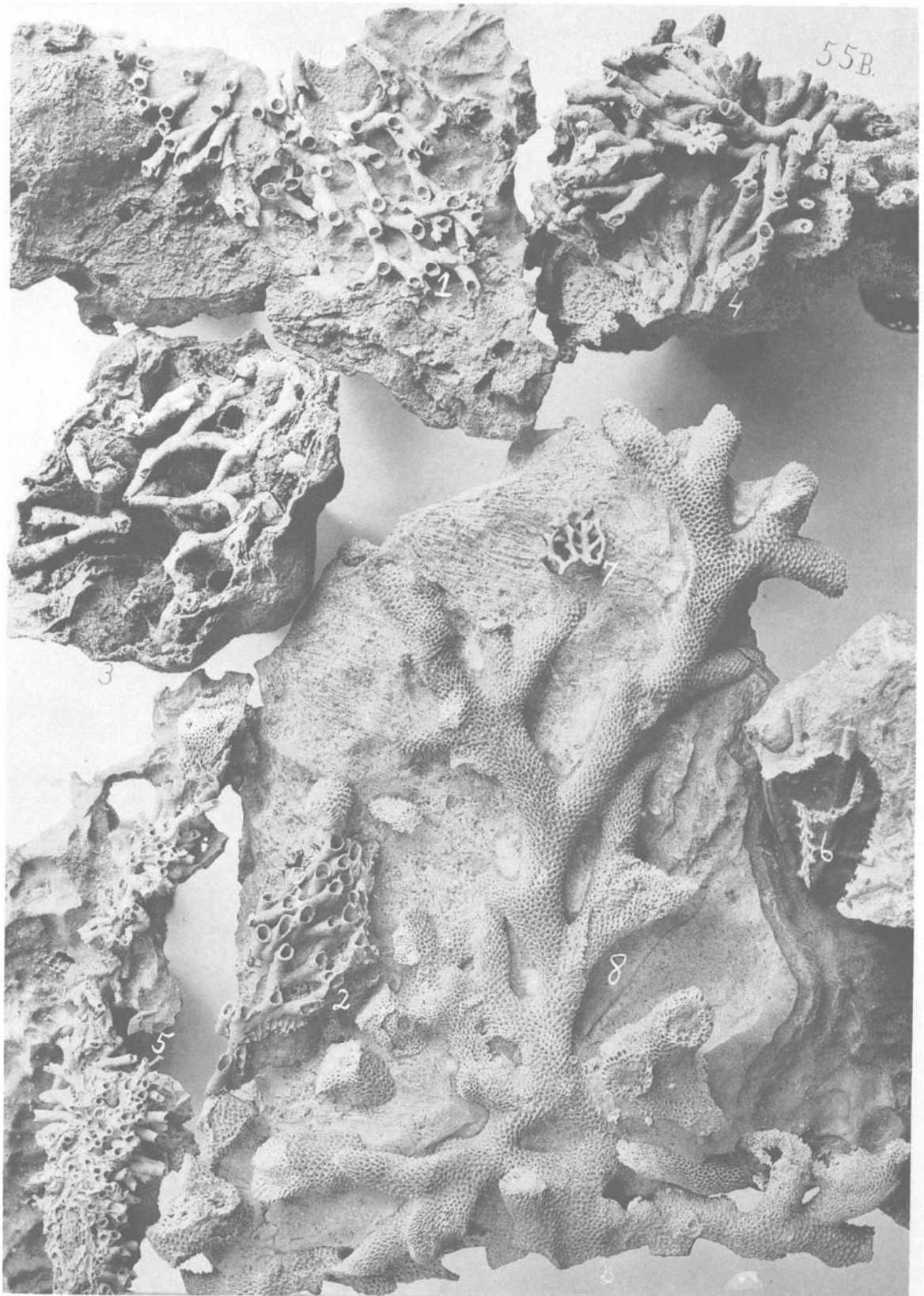


PLATE 75.

ROMINGERIA VANNULA, Nov. Spec.

Niagara.

1. Upper surface of corallets from the Upper Niagara white clay, near Louisville. Collection of Mr. Nettelroth.
2. Similar view of corallets from the same horizon and locality. Collection of Mr. Gaines.
5. Similar view of corallets attached to a Favosites, from a lower horizon of the same group, near Louisville. Collection of the author.
3. Under surface of two inosculated cymes, from the Upper Niagara red clay, near Louisville. Collection of the author.

ROMINGERIA UVA, Nov. Spec.

Niagara and Devonian.

6. Basal corallets incrusting a Fenestella frond, from the rotten chert of the Middle Devonian, Falls of the Ohio. Collection of the author.
7. Corallum from the Upper Niagara white clay stratum three feet below the passage-beds, near Louisville. Collection of the author.

ROMINGERIA UMBELLIFERA.

Devonian.

4. Upper surface of two cymes, from the Lower Devonian, Falls of the Ohio. Collection of the author.
8. Fragment showing verticillate sprouts, from the Lower Devonian red clay. Collection of Mr. Nettelroth.
9. Similar fragment from the Lower Devonian rocks, Falls of the Ohio. Collection of the author.
10. 11. 12. Fragments from the horizon and place of example 9. Collection of the author.
13. Jeune corallets from the same place. Collection of the author.

ROMINGERIA FASCICULATA, Nov. Spec.

Devonian.

14. 15. 16. Lateral views of corallets from the decomposing chert of the Middle Devonian, Falls of the Ohio.
18. Upper surface of corallets from the same place. Collection of the author.

ROMINGERIA INCRUSTANS, Nov. Spec.

Devonian.

17. Corallets incrusting Cladopora imbricata, from the Lower Devonian rocks, Falls of the Ohio. Collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 75.



PLATE 76.

ROMINGERIA UMBELLIFERA.

Devonian.

1. Rear lateral view of verticillate umbels, showing spinulous inner-walls, from the Lower Devonian, Falls of the Ohio. Collection of the author.

ROMINGERIA INCRUSTANS, Nov. Spec.

Devonian.

2. Corallum incrusting *Zaphrentis gregaria*, from the Middle Devonian, Falls of the Ohio. Collection of Mr. Gaines.

AULOPORA EDITHANA.

Devonian.

3. Corallum attached to *Favosites hemisphericus*, from the Middle Devonian, Falls of the Ohio. Collection of the author.

SYRINGOPORA HISINGERI.

Devonian.

4. Lateral view (inverted) of example figured in Plate 68, Fig. 1.

SYRINGOPORA STRAMINEA, Nov. Spec.

Devonian.

5. Upper surface of corallum, from the Lower Devonian rocks, Falls of the Ohio. Collection of the author.

CLADOPORA DESQUAMATA, Nov. Spec.

Devonian.

6. Corallum partly imbedded in matrix, from the Lower Devonian rocks, Falls of the Ohio. Collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 76.

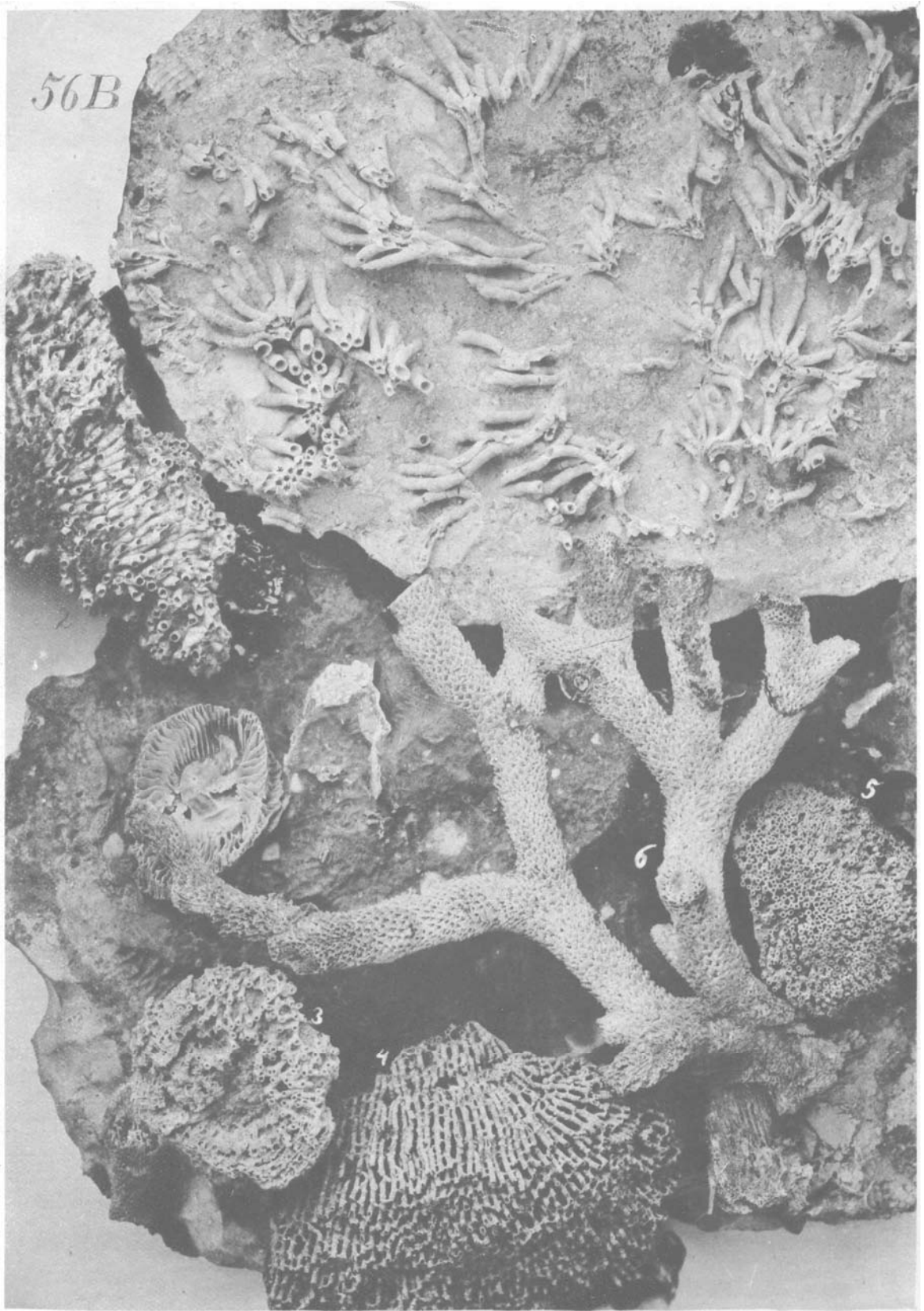


PLATE 77.

CYATHOPHYLLUM HALLI.

Devonian.

1. Left lateral view of corallum, from the blue clay of the Middle Devonian, Falls of the Ohio.
2. Right lateral view of corallum, from which the epitheca is worn; from the Lower Devonian ferruginous clay, near Louisville.
Collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 77.



PLATE 78.

ANTHOLITES (Nov. Gen.) SPECIOSUS, Nov. Spec. *Devonian.*

1. View of the upper surface of a corallum, from the dark-red clay derived from the encrinal limestone of the Upper Devonian, near Louisville.
2. Sectional view of the same specimen, showing avituous corallets attached to a crinoid column.

CYATHOPHYLLUM PUSTULOSUM, Nov. Spec. *Devonian.*

3. Oblique front and right lateral view of a corallum of typical shape and size.
4. Calyx of a corallum.
Found in the vicinage of the antholite, but in a horizon about a foot lower.

CYATHOPHYLLUM INSIGNE, Nov. Spec. *Devonian.*

5. View of the calyx of a corallum, found associated with the former species.

CHONOPHYLLUM MULTIPLICATUM, Nov. Spec. *Devonian.*

6. View of the calyx of a corallum, from the Lower Devonian lime stones, Falls of the Ohio.

CYATHOPHYLLUM EXIGUUM. *Devonian.*

7. View of the calyx of a huge corallum, from the Lower Devonian clay, near Louisville.

CYATHOPHYLLUM GREENI, Nov. Spec. *Devonian.*

8. Rear lateral view of an adult corallum.
9. Left lateral view of a weathered example.
10. A jejune specimen.
Cut from the Lower Devonian rocks, Falls of the Ohio.

PLATE 78.—*Continued.*

CYATHOPHYLLUM FLOS, Nov. Spec. *Niagara and Devonian.*

11. View of the calyx of a prolific corallum, from the stratum, of white clay seven feet below the Niagara and Devonian passage-beds, near Louisville.
12. Central view of a corallum of average size, from the same horizon and place.
13. View of the calyx of a small corallum, from the Lower Devonian clay, near Louisville.
14. View of the calyx of a large corallum, from the red clay of the Middle Devonian, near Louisville.

ZAPHRENTIS GREENANA, Nov. Spec. *Devonian.*

15. Right lateral view of a medium-sized corallum.
16. View of the calyx of a corallum.
From the Middle Devonian clay, near Louisville.

ZAPHRENTIS ROMINGERI, Nov. Spec. *Devonian.*

17. View of the calyx of a corallum, from the red clay of the Middle Devonian, near Louisville.

NICHOLSONIA (Nov. Gen.) CANADENSIS. *Devonian.*

18. Corallites of continuous growth attached to a zaphrentis, from the blue clay of the Middle Devonian, near Louisville.

NICHOLSONIA ADNATA, Nov. Spec. *Devonian.*

19. Corallites incrusting a zaphrentis and overrunning a portion of the less robust *N. canadensis*.

The specimens figured in this plate belong to the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 78.



PLATE 79.

CYATHOPHYLLUM CORNICULUM.

Devonian.

1. Left lateral view of corallum of uncommon altitude, from the Middle Devonian red clay, near Louisville.
2. 4. Left lateral views.
3. 5. Right lateral views.
6. Central view.
7. View of calyx.
8. View of gemmiferous calyx. The several coralla are from the Middle Devonian, Falls of the Ohio.

CYATHOPHYLLUM JUVENE.

Devonian.

9. Central view.
10. 11. Right lateral views.
12. View of calyx.

The several coralla are from the dark-red encrinal limestone clay of the Upper Devonian, near Louisville.

CYATHOPHYLLUM BREVICORNE, Nov. Spec.

Devonian.

13. Apertural view.
14. Central view.
15. 16. Left lateral views. 17.
18. Views of calyces.

The coralla are from the Middle Devonian, Falls of the Ohio.
Examples herein figured are from the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 79.

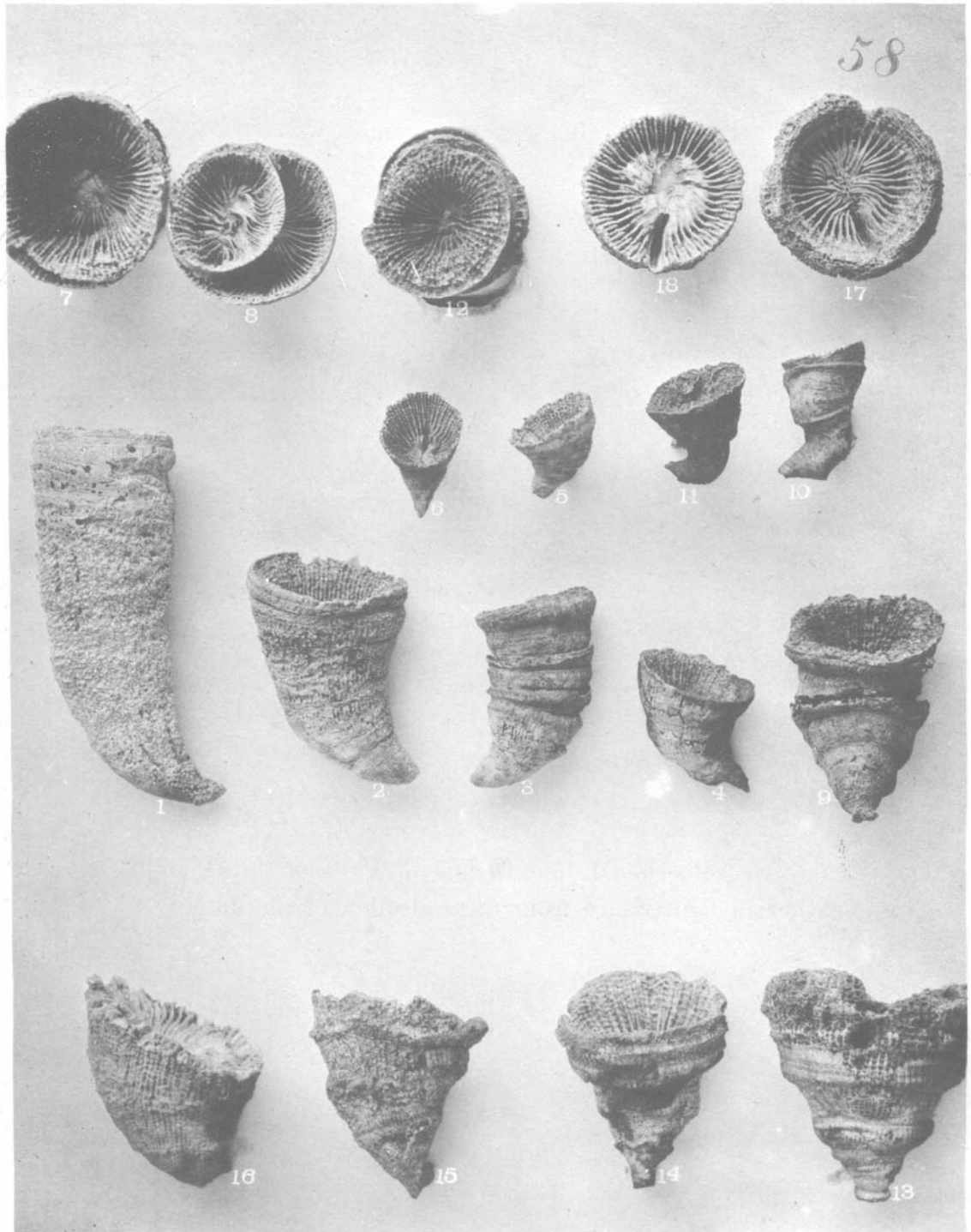


PLATE 80.

CYATHOPHYLLUM TORNATUM, Nov. Spec.

Devonian.

1. Exterior apertural view of a corallum from the superior stratum of the encrinal limestone dark-red clay, near Louisville.

CYATHOPHYLLUM JUVENE.

Devonian.

2. Right lateral view of a young corallum.
6. View of the gemmiferous calyx of a corallum.
7. Apertural view of a corallum of more than average altitude.
8. Explanate calyx of a corallum of medium size.
From the horizon and vicinage of examples figured in Plate 79.

CYATHOPHYLLUM ETHELANUM, Nov. Spec.

Devonian.

3. Lateral and apertural-gap view of corallum of slender, tortuous growth.
5. Oblique anterior view of a corallum of medium size.
Found from three to four feet below the shale which caps the Upper Devonian, near Louisville.

CYATHOPHYLLUM TRAUTHANUM, Nov. Spec.

Devonian.

4. Right lateral view of a corallum of average size.
Associated with *C. ethelanum*.

CYSTIPHYLLUM CUYAGAENSE.

Devonian.

9. Right lateral view of corallum with flattened apex.
10. View of the calyx of a corallum.
Both examples from the Middle Devonian red clay, near Louisville.

CHONOPHYLLUM NANUM, Nov. Spec.

Devonian.

11. Left lateral view of a corallum of average size.
12. Similar view of a corallum of unsymmetrical growth above medium size.
13. View of the calyx of a small corallum.
From the dark-red clay of the Upper Devonian encrinal limestone, near Louisville

PLATE 80.—*Continued,*

CYATHOPHYLLUM GREENI, Nov. Spec. *Devonian.*

14. View of the calyx of a corallum, from the Middle Devonian, Falls of the Ohio.

NICHOLSONIA CANADENSIS. *Devonian.*

15. Coralllets attached to Stromatopora, from the Middle Devonian, Falls of the Ohio.

NICHOLSONIA ANGULATA, Nov. Spec. *Devonian.*

16. Corallum incrusting Stromatopora texilis, from the blue clay of the Middle Devonian, Falls of the Ohio.

CYATHOPHYLLUM MULTIGEMMATUM, Nov. Spec. *Devonian.*

17. View of confluent calyces of coralllets, from the Middle Devonian waste, Marion county, Kentucky.

ZAPHRENTIS IMMANIS, Nov. Spec. *Devonian.*

18. Central view and oblique view of calyces of twin coralla, from the Middle Devonian clay, near Louisville.

The examples figured in this plate belong to the collection of the author.

KENTUCKY GEOLOGICAL SURVEY.

PLATE 80.

