PLATE 1.

HELIOLITES MEGASTOMA.

- 1. Upper surface of a corallum from the ferruginous clay of the Upper Niagara, near Louisville. Collection of the author.
- 2. Upper surface of a fragment from the stratum of white clay ten feet below the passage-beds, separating the Niagara and Devonian, near Louisville. Collection of Mr. McConathy.

HELIOLITES INTERSTINCTUS.

- 3. Upper surface of a corallum from the stratum of white clay seven feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.
- 4. Under surface of a corallum from the ferruginous clay, near Louisville. Collection of the author.

HELIOLITES PYRIFORMIS.

- 5. Upper surface of a corallum from the ferruginous clay, near Louisville. Collection of the author.
- 6. Lateral view of a small corallum from the white clay seven feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

HELIOLITES SUBTUBULATUS.

- 7. Upper surface of a corallum invested by Stromatopora concentrica, from the white clay, near Louisville. Collection of the author.
- 8. Upper surface of a corallum from the white clay, near Louisville. Collection of the author.

PLASMOPORA POLLIS.

- 9. Upper surface of a corallum from the white clay, near Louisville. Corallets of smaller size than those of typical examples. Collection of Mr. Nettelroth.
- 10. Lateral view of a corallum from the white clay, near Louisville. Collection of Mr. Nettelroth.

PLASMOPORA ELEGANS.

- 11. 13. Lateral views of coralla from the white clay, near Louisville. Collection of the author.
- 12. Upper surface of a corallum from the white clay, near Louisville. Collection of the author.

Niagara.

Niagara.

Niagara.

Niagara,

Niagara.

KENTUCKY GEOLOGICAL SURVEY. PLATE 1.



PLATE 2.

LYELLIA GLABRA.

1. Upper surface of a corallum from the white clay nine feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

LYELLIA PAPILLATA.

2. Upper surface of a corallum from the white clay seven feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

LYELLIA PUELLA, Nova Species.

Niagara.

Niagara.

 Upper surface of a weathered corallum from the limestone twelve feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

PLATE 2.



PLATE 3.

LYELLIA PAPILLATA.

1. Portion of the upper surface of a corallum from the ferruginous clay just below the Niagara and Devonian passage-beds, near Louis ville. Collection of the author.

LYELLIA AMERICANA.

2. Upper surface of a corallum from the white clay ten feet below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

Niagara.

PLATE 3.



PLATE 4.

CLADOPORA LABIOSA.

1. Front lateral view of the upper fronds of a corallum imbedded in rock matrix, from the Falls of the Ohio. Collection of the author.

LYELLIA DISCOIDEA, Nova Species.

- 2. Convex upper surface of a corallum from the white clay, near Louisville. Collection of the author. [The example figured is exquisitely preserved, but its color seems to have prevented good photographic delineation.]
- 3. Plane upper surface of a corallum, found near Louisville. Collection of Dr. J. Knapp.

LYELLIA PAPILLATA.

4. Lateral view of a weathered corallum showing the vesiculose coenenchyma, found near Louisville. Collection of the author.

CŒNITES LAMINATA.

5. Upper surface of a weathered corallum from the white clay, near Louisville. Collection of the author.

CŒNITES CRASSA.

6. Upper surface of a corallum from the ferruginous clay just below the Niagara and Devonian passage-beds, near Louisville. Collection of the author.

Niagara.

Niagara.

Niagara.

Niagara.

Middle Devonian.

PLATE 4.



PLATE 5.

COLUMNOPORA RAYI, Nov. Spec.

Hudson River Group.

- 1. Upper surface of a corallum found in Nelson county. Collection of the author.
- 3. Lateral view of a corallum from the same locality. Collection of the author.

COLUMNOPORA CRIBRIFORMIS. Hudson River Group.

- 2. Lateral view of a corallum found in Nelson county.
- 4. Tipper surface of a corallum from the same locality. Collection of the author.
- 5. View of the under surface of a corallum from which the epitheca has been removed, showing diaphragms and mural pores; from Nelson county. Collection of the author.

PLATE 5.



PLATE 6.

COLUMNOPORA RAYI, Nov. Spec.

Hudson River Group.

1. Lateral view of the corallum figured in Plate 5, Fig. 1.

COLUMNOPORA CRIBRIFORMIS.

Hudson River Group.

2. Lateral view of a pyriform corallum found in Nelson county. Collection of the author.

COLUMNARIA ALVEOLATA.

Hudson River Group.

3. Portion of the upper surface of a corallum found in Nelson county. Collection of the author.

PLATE 6.



PLATE 7.

COLUMNARIA STELLATA.

Hudson River Group.

1. Vertical section of a corallum found in Trimble county. Collection of the author.

COLUMNARIA ALVEOLATA.

Hudson River Group.

2. Longitudinal section of a corallum found near Fisherville, Jefferson county. Collection of the author.

PLATE 7.



PLATE 8.

FAVOSITES FAVOSUS.

- 1. Upper surface of a fragment from the ferruginous clay, near Louisville. Collection of Mr. Nettelroth.
- 2. Longitudinal section of an example whose corallets are smaller, found in the same horizon and locality. Collection of the author.

FAVOSITES NIAGARENSIS.

- 3. Upper surface of a corallum, composed of very small corallets, showing spinulous walls; near Louisville. Collection of the author.
- 4. Upper surface of an example, composed of the largest sized corallets, with smooth walls; near Louisville. Collection of the author.

FAVOSITES FORBESI.

- 5. Upper surface of a large corallum found near Louisville. Collection of Mr. McConathy.
- 6. View of epithecated under surface of a corallum of average size; near Louisville. Collection of the author.

FAVOSITES SPONGILLA.

Niagara.

7. 8. 9. Lateral views of coralla found near Louisville. Collection of the author.

Niagara.

Niagara.

PLATE 8.



PLATE 9.

| FAVOSITES CRISTATUS. | | Niagara. |
|--|---|---------------------|
| 1. Lateral view of a | weathered corallum from the ferru | iginous clay, near |
| Louisville. | Collection of the author. | |
| 2. 3. 4. 5. Lateral views of several coralla from the white clay, near | | |
| Louisville. | Collection of the author. | |
| FAVOSITES LOUISV | ILLENSIS, Nov. Spec. | Niagara. |
| 6. Upper surface of author. | a corallum found near Louisville. | Collection of the |
| FAVOSITES VENUST | TUS. | Niagara. |
| 7. Epithecated under surface of a corallum from the white clay, near | | |
| Louisville. | Collection of the author. | |
| | a fragment, showing spinulous wa llection of the author. | alls; from the same |
| FAVOSITES DISCUS, | Nov. Spec. | Niagara. |
| 8. Upper surface of Collection of | a fragment from the white clay, ne the author. | ar Louisville. |
| 9 Under surface o | f a corallum from which the enit | heca has been |

9. Under surface of a corallum, from which the epitheca has been eroded; near Louisville. Collection of the author.

PLATE 9.



PLATE 10.

FAVOSITES HEMISPHERICUS.

Lower Devonian.

Lateral view of a portion of a corallum, showing squamous walls; from the Falls of the Ohio. Collection of the author.

PLATE 10.

