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UNITED STATES GEOLOGICAL SURVEY


VOLUME XLVIII

Part II.—PLATES.



WASHINGTON
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1905



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UNITED STATES GEOLOGICAL SURVEY

CHARLES D. WALCOTT, DIRECTOR

STATUS

OF THE

MESOZOIC FLORAS OF THE UNITED STATES

SECOND PAPER

BY

LESTER F. WARD

WITH THE COLLABORATION OF

WILLIAM M. FONTAINE, ARTHUR BIBBINS, AND G. R. WIELAND

Part II.—PLATES.



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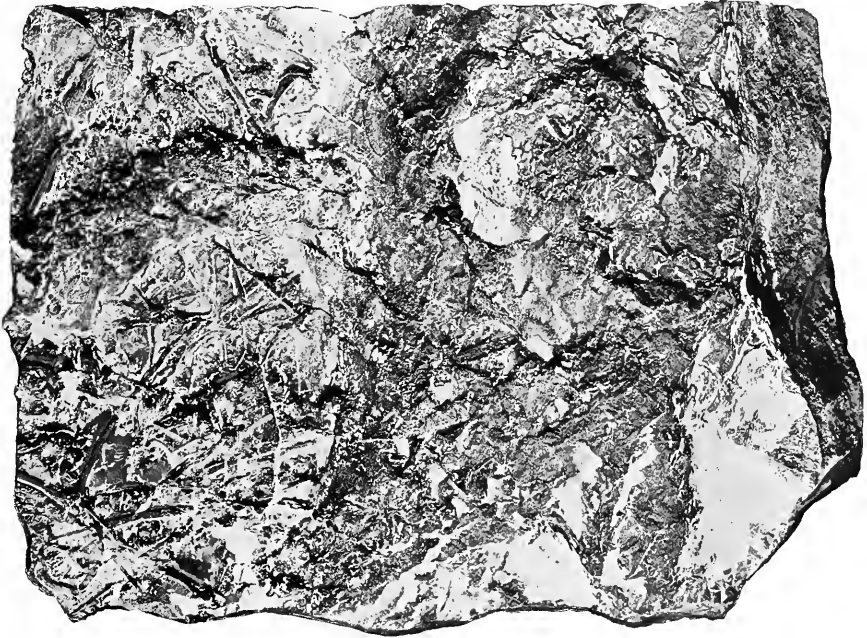
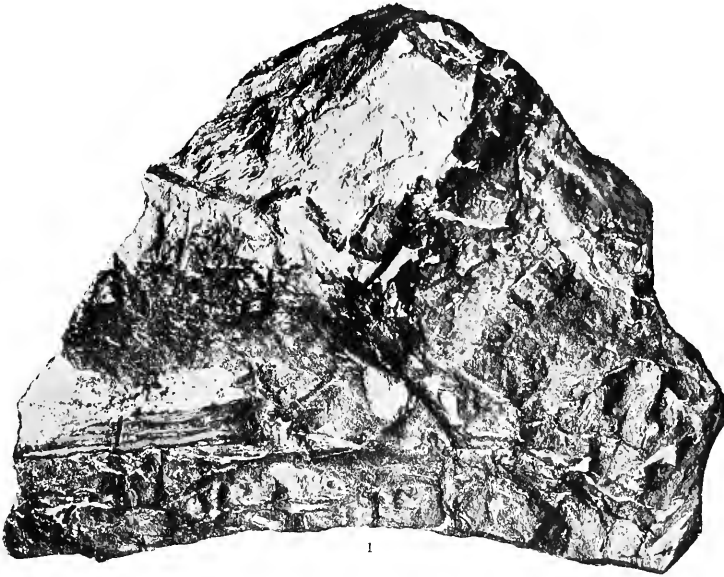
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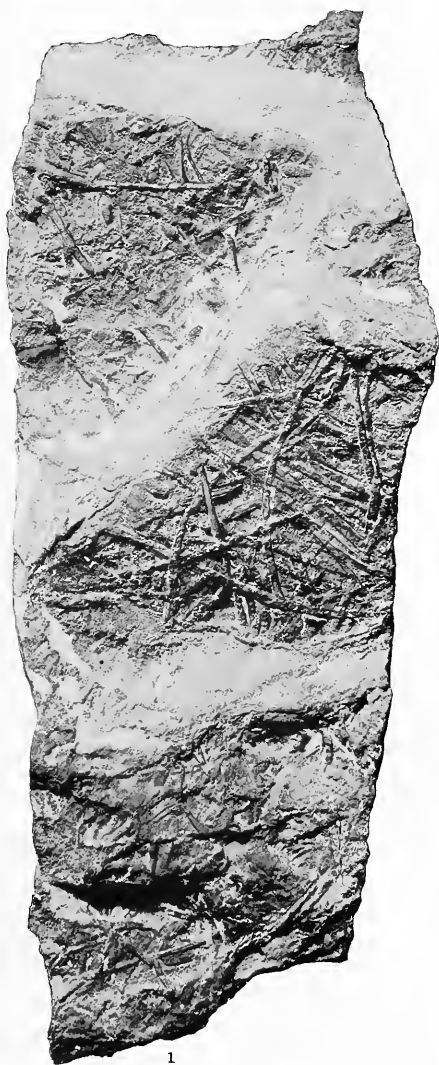
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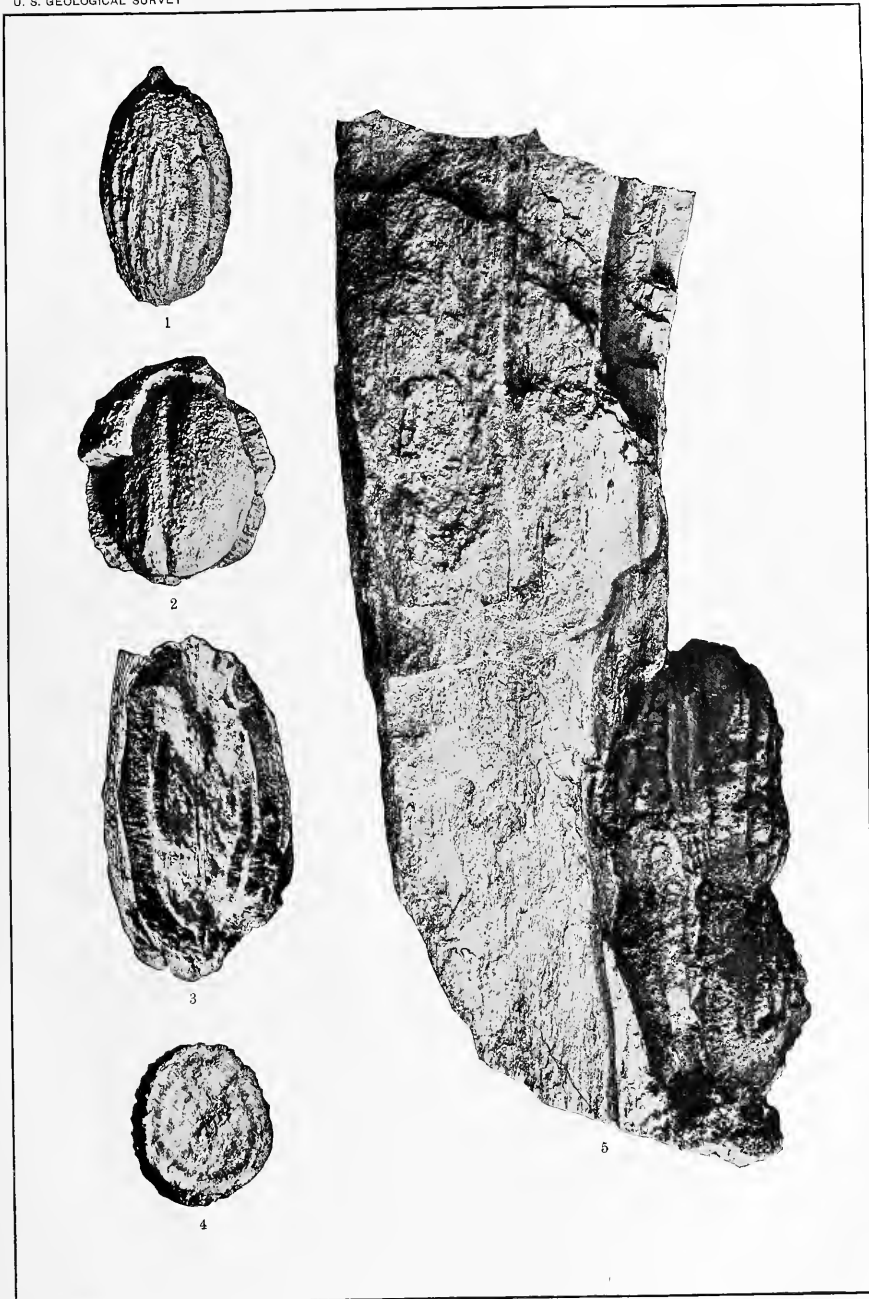
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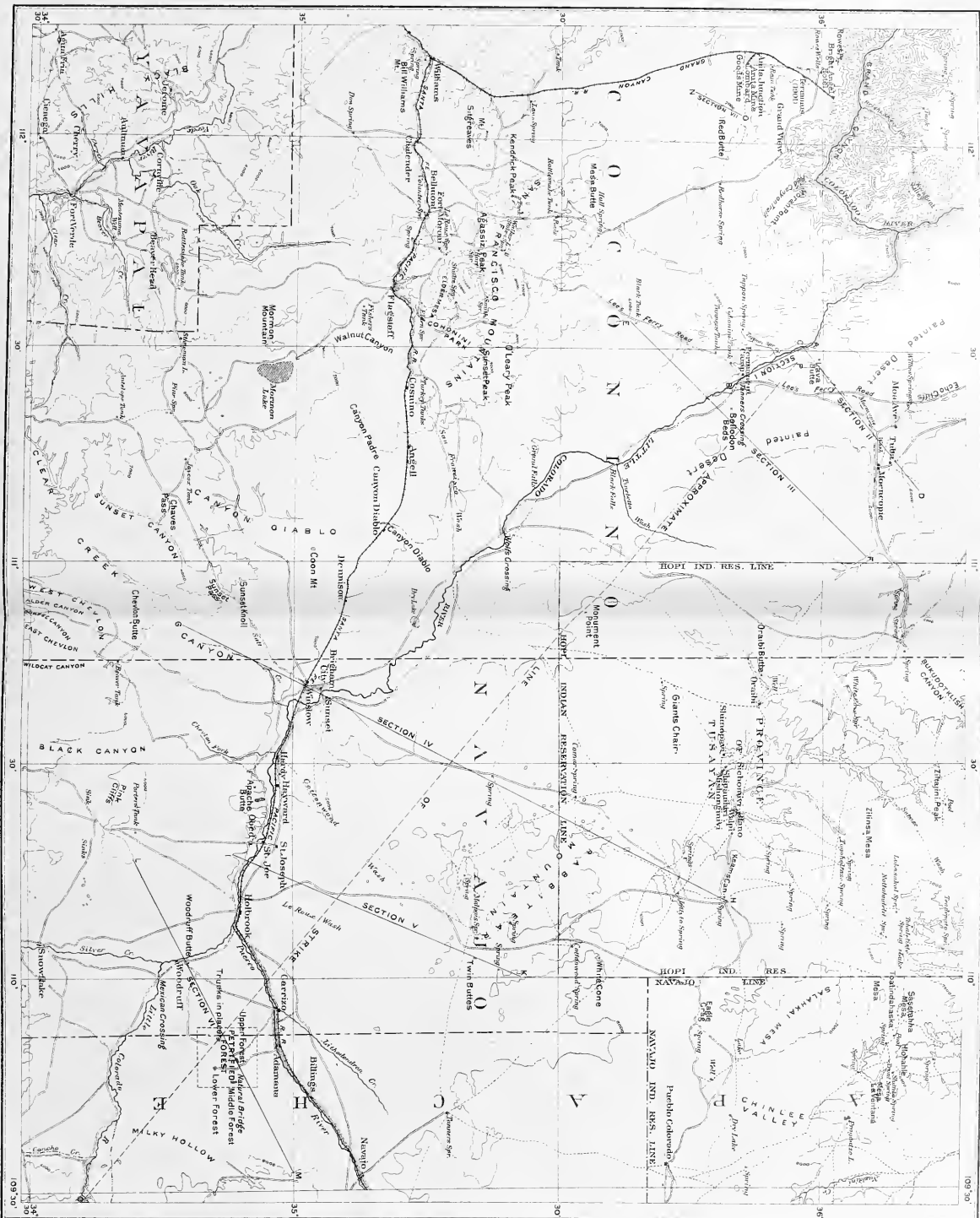


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Scale
Contour interval 1000 feet

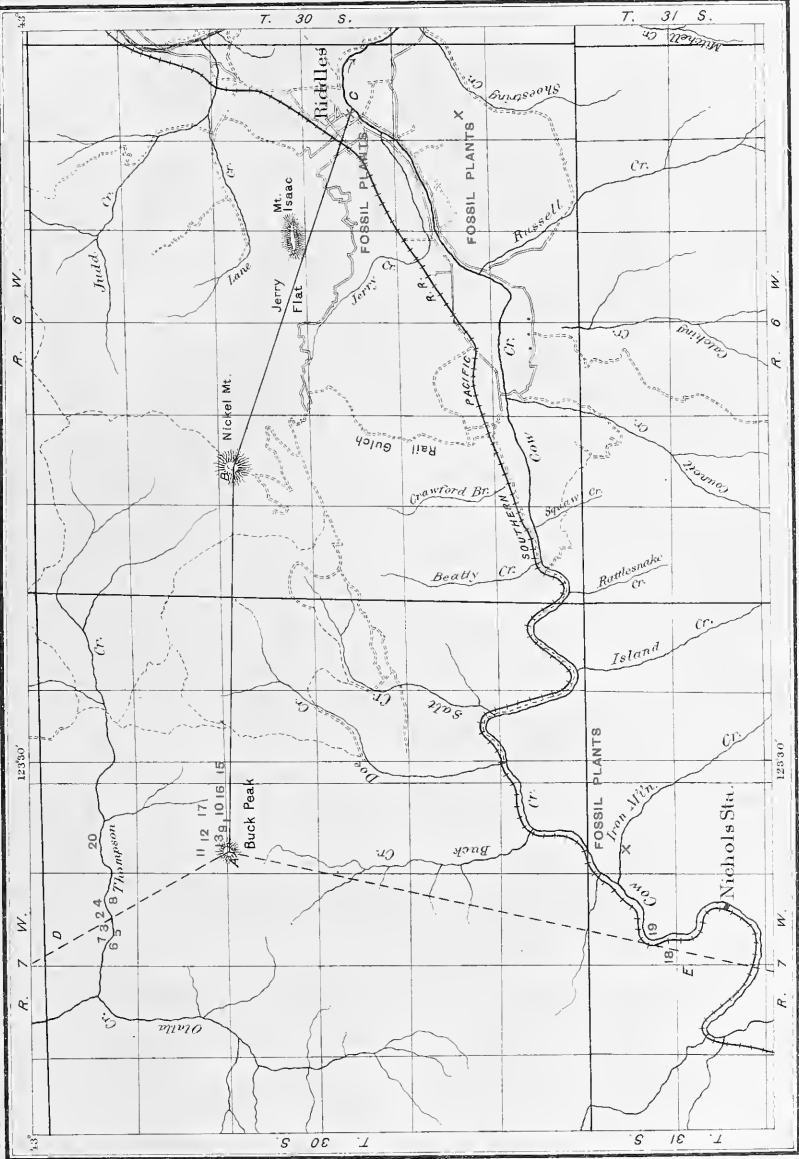
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Scale
 0 1 2 3 4 miles
 A. HOFFMANN, DRAWING

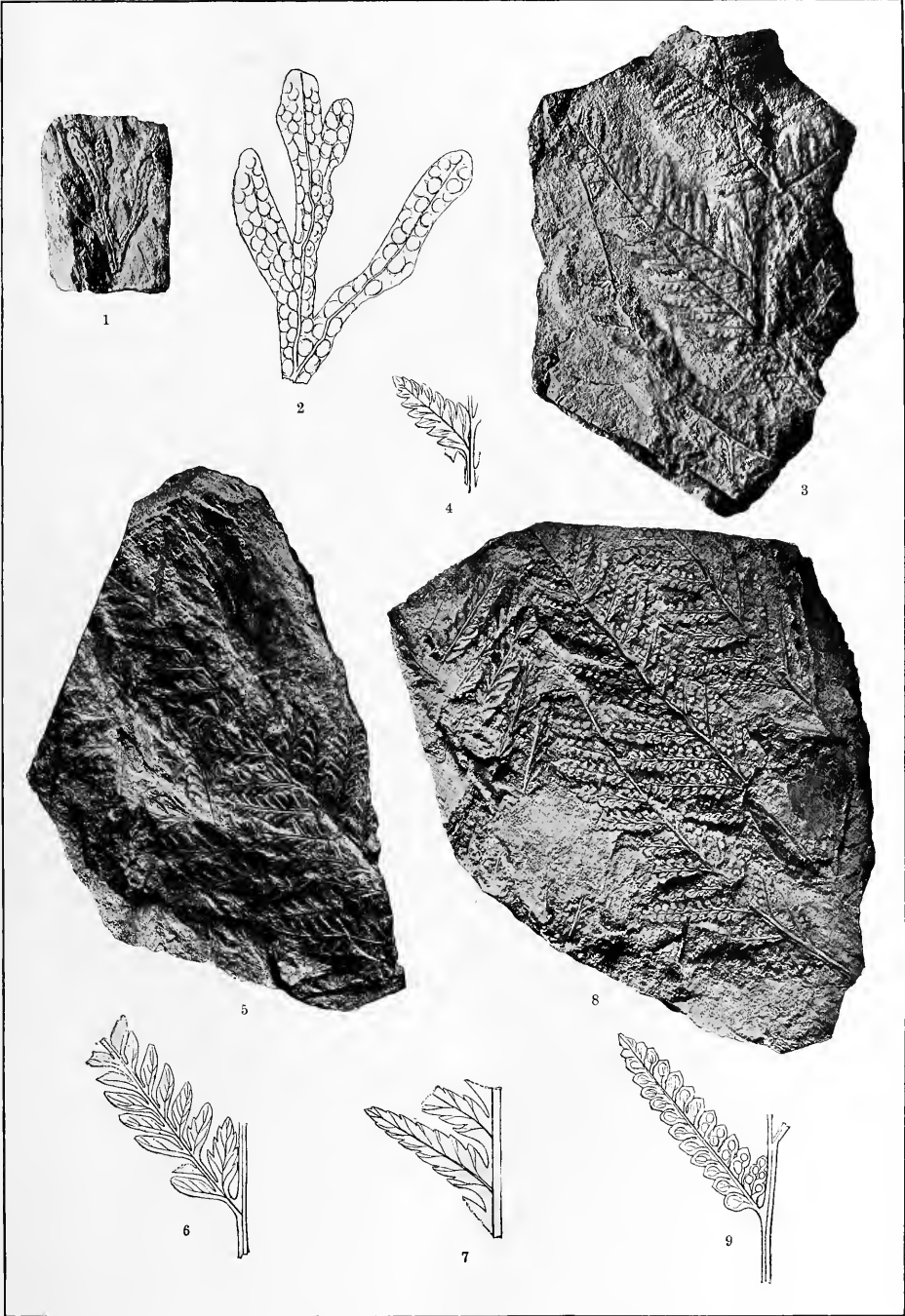


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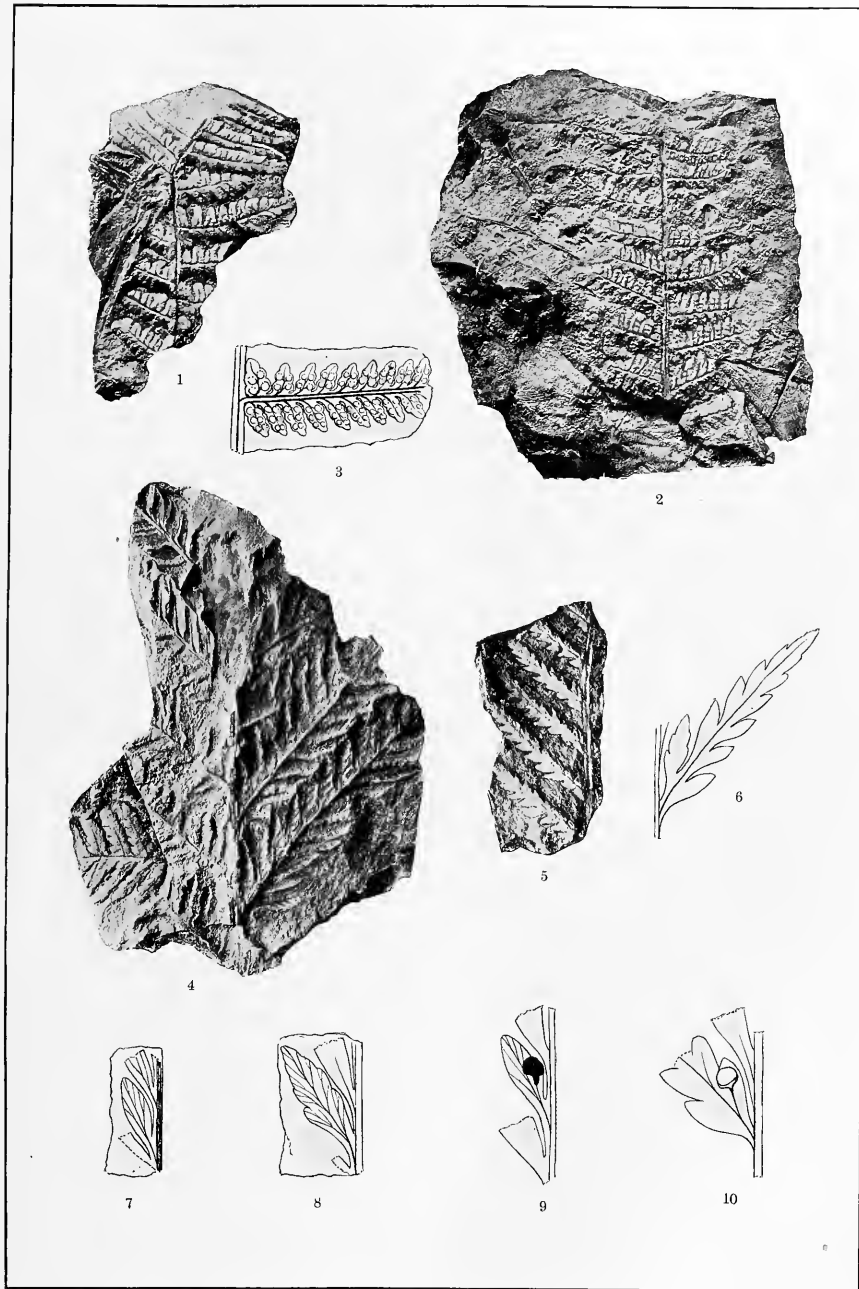
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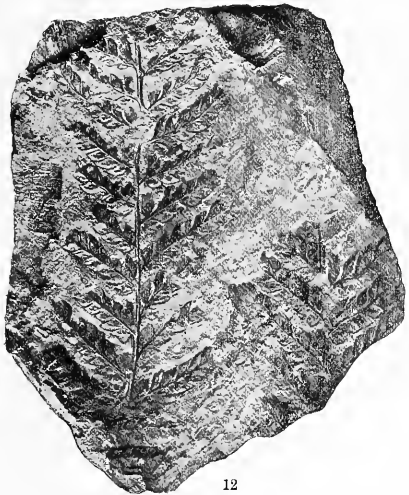
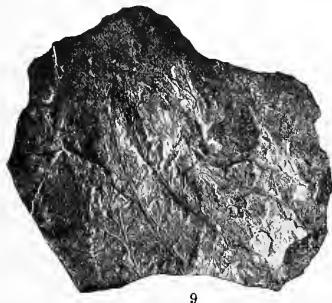
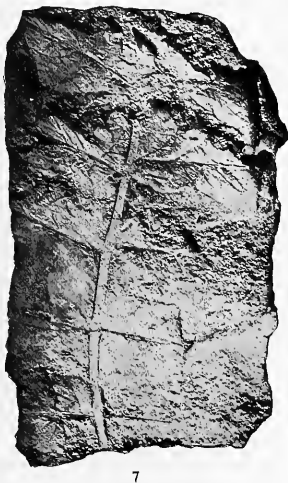
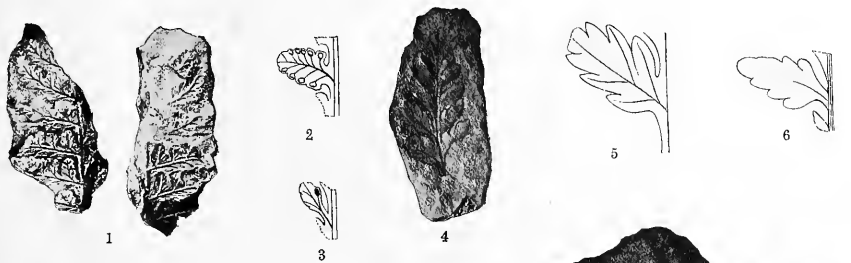
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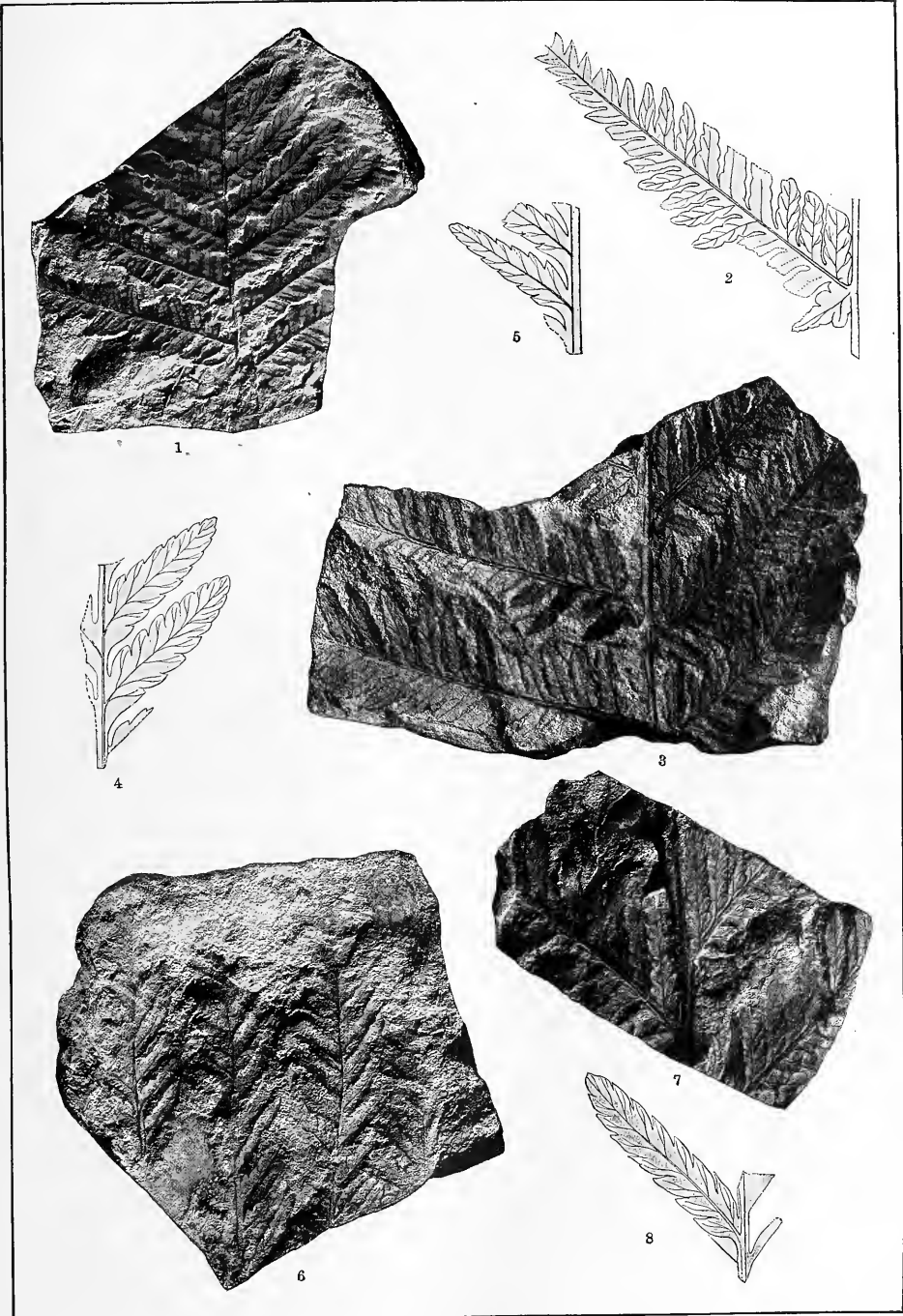
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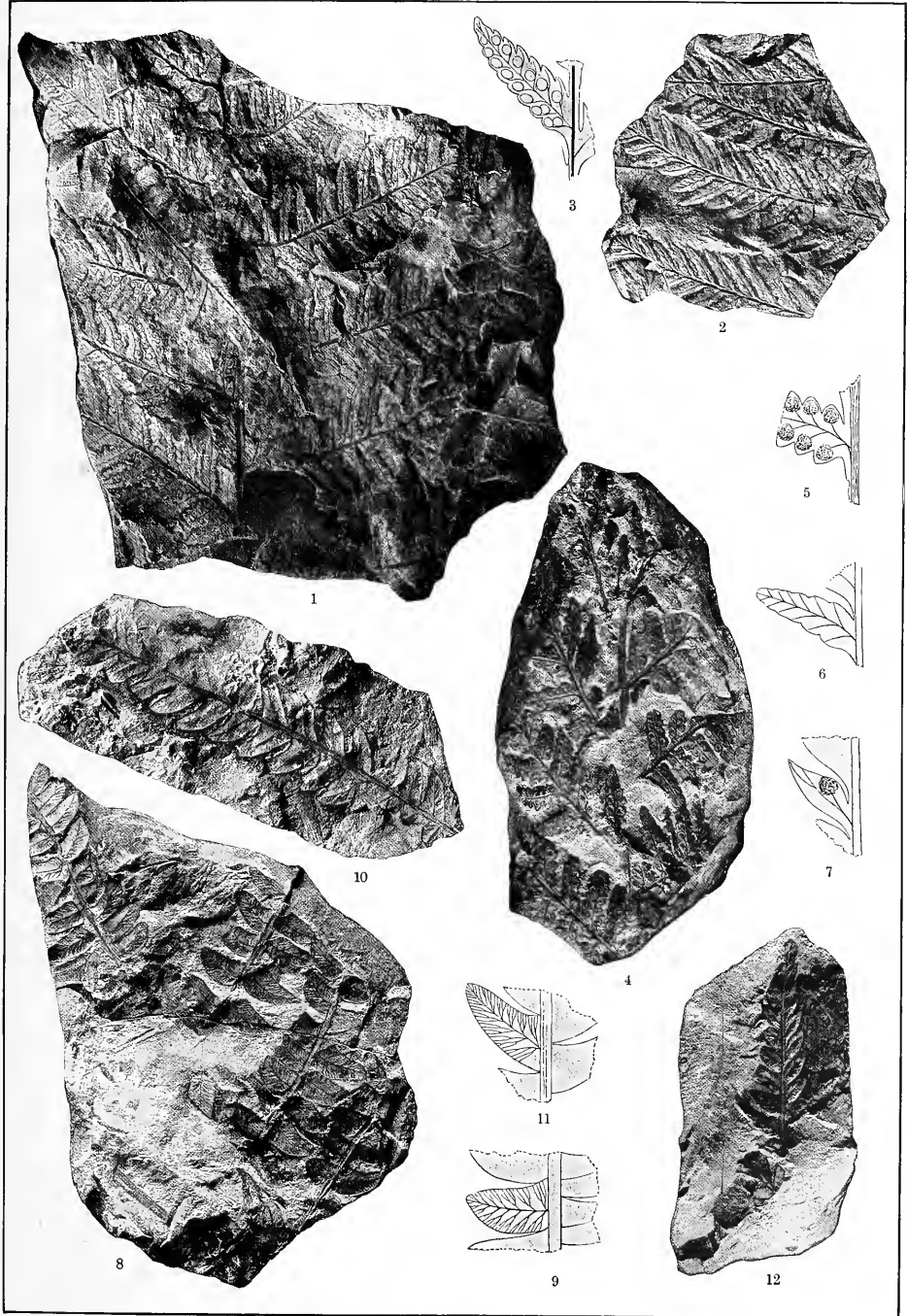


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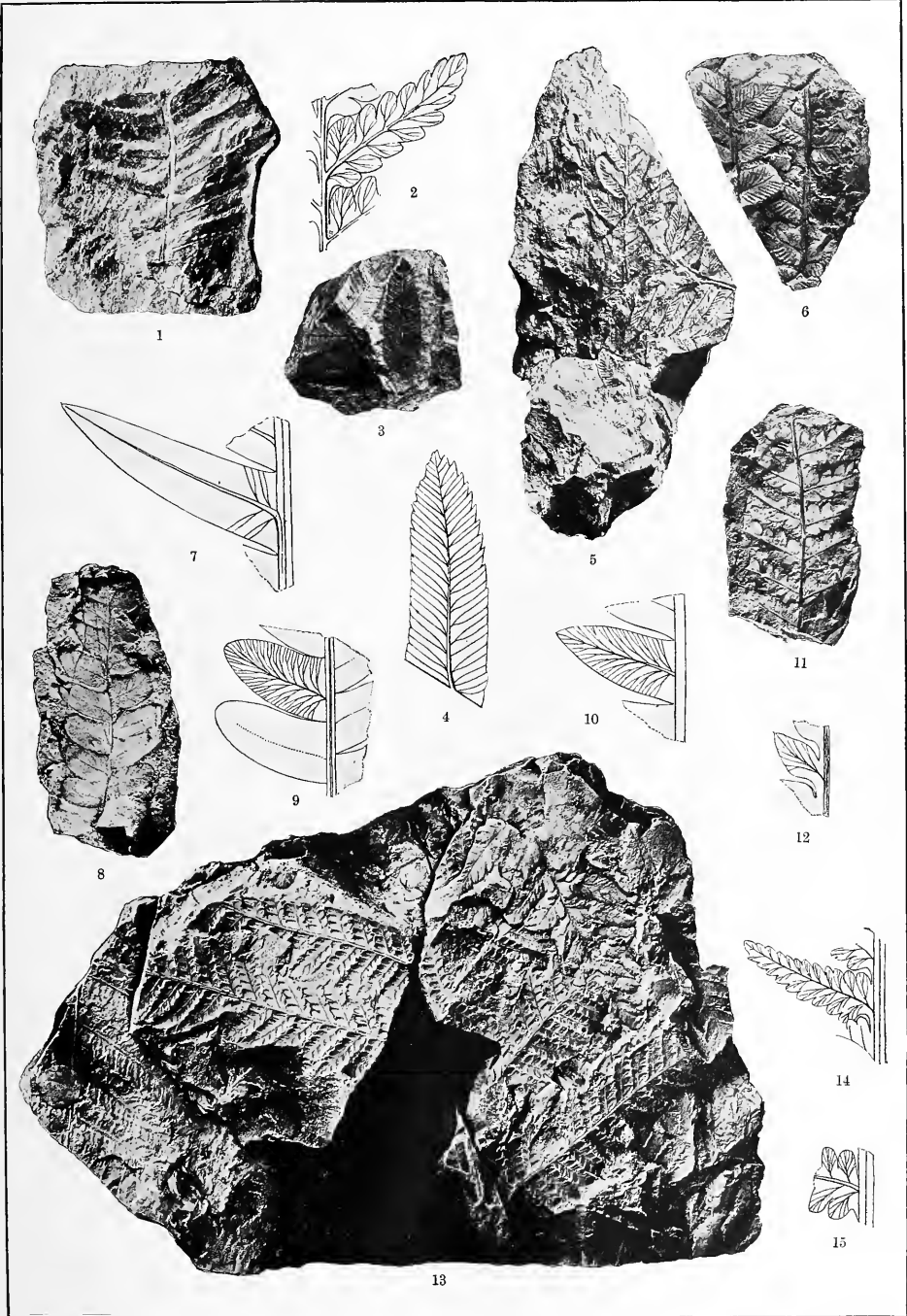
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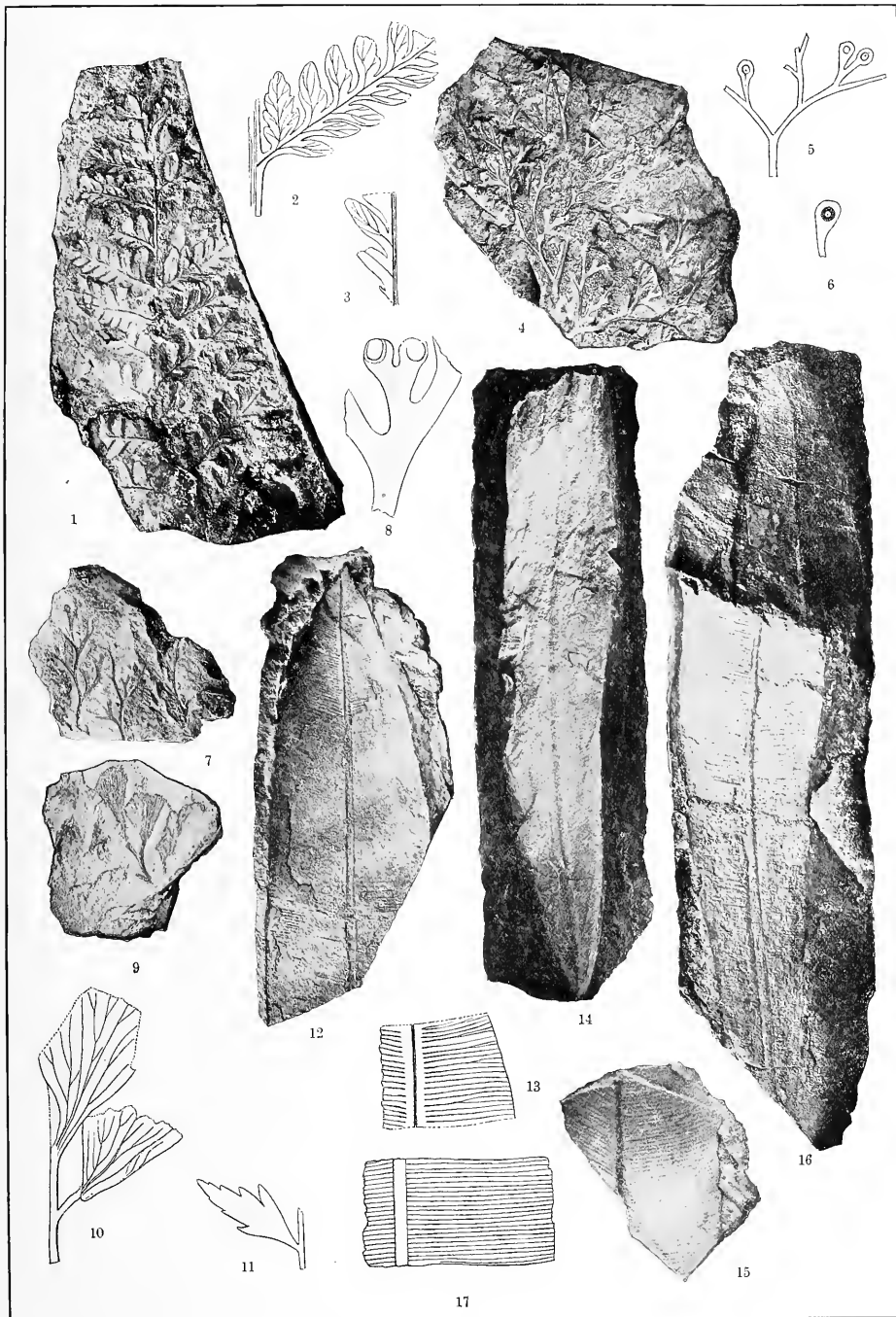
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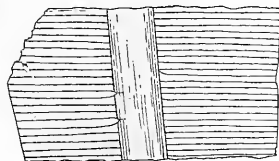
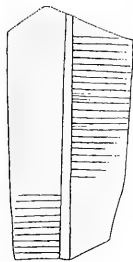
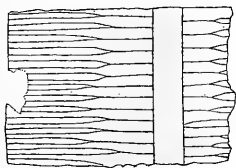
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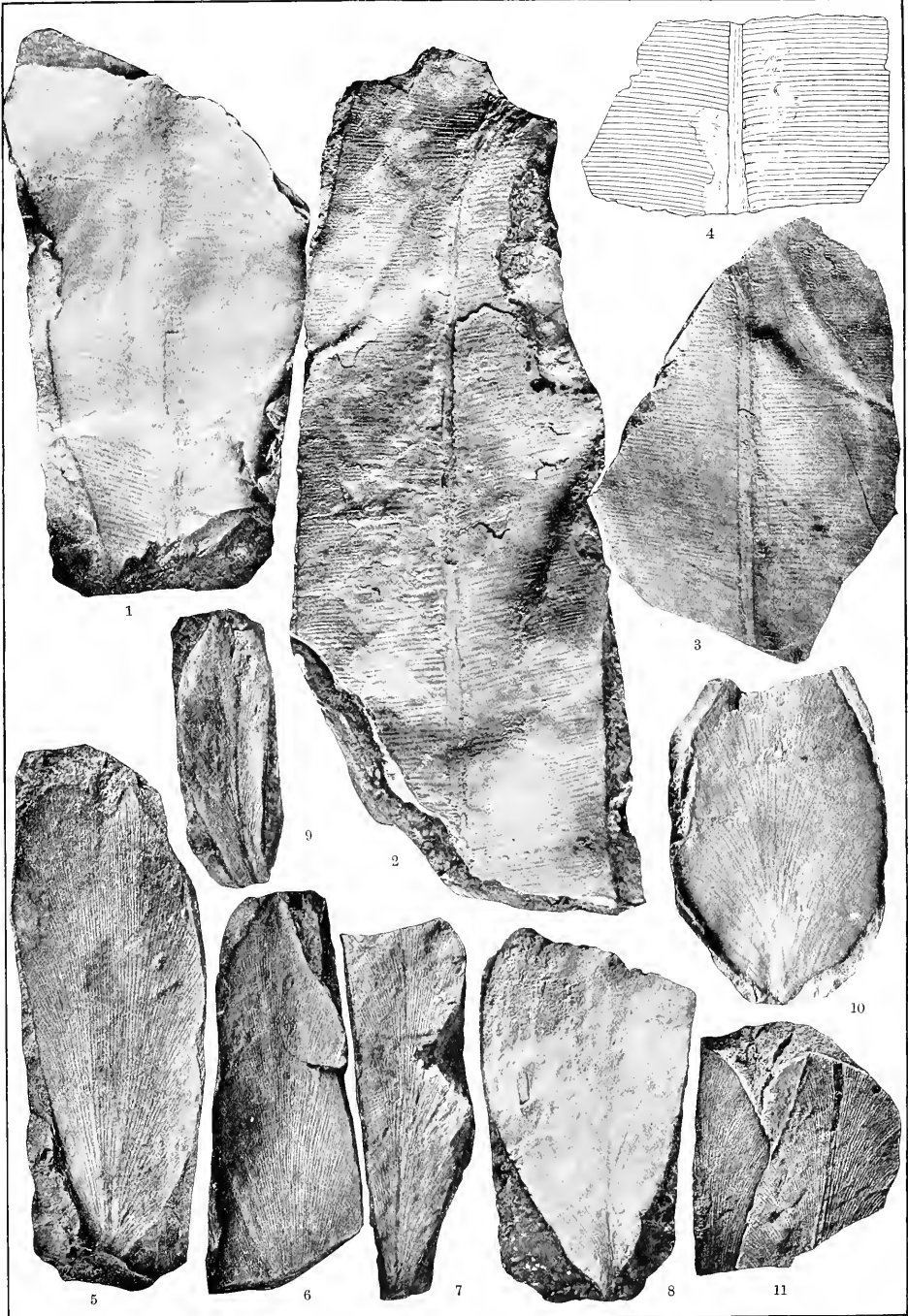
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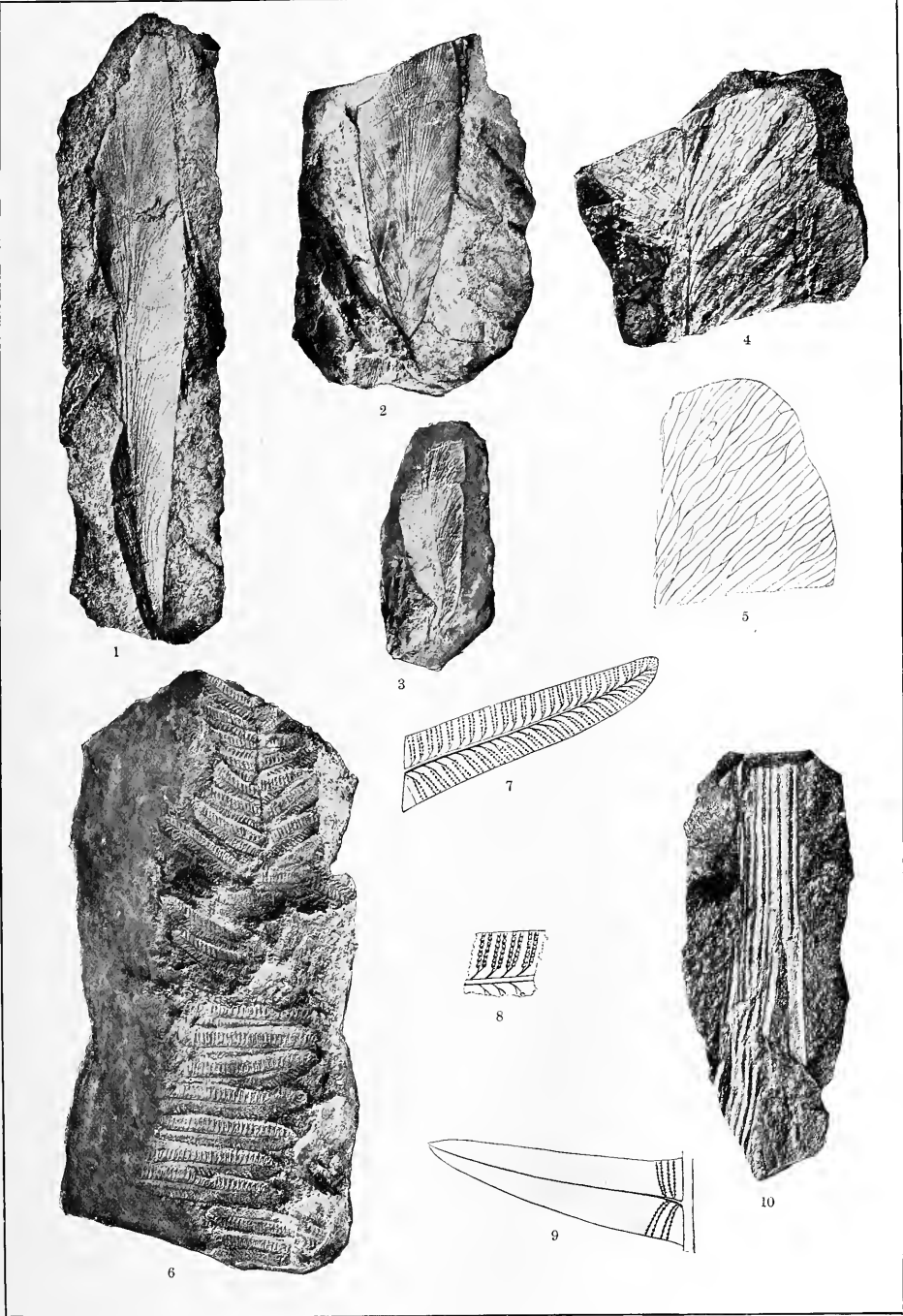
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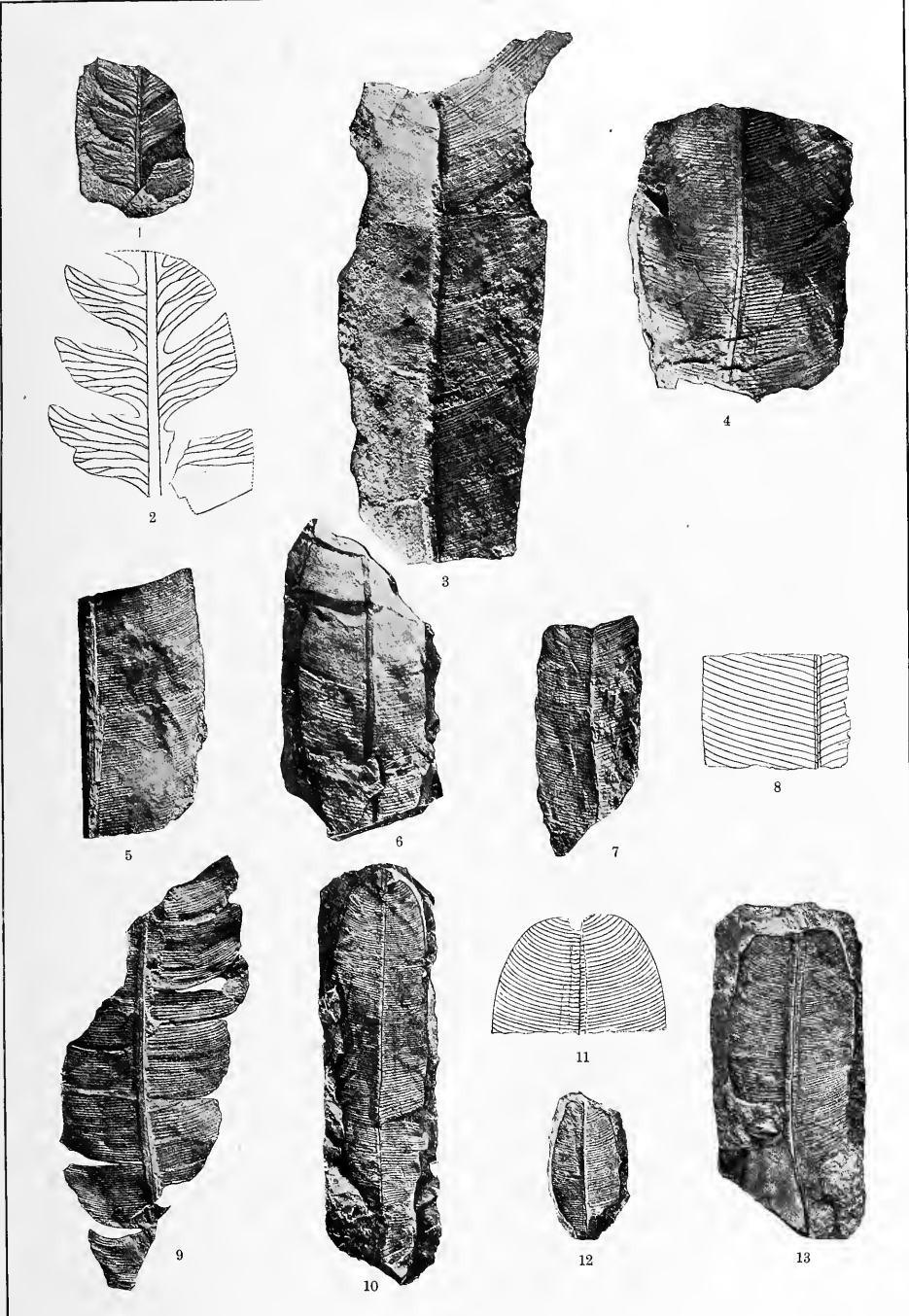
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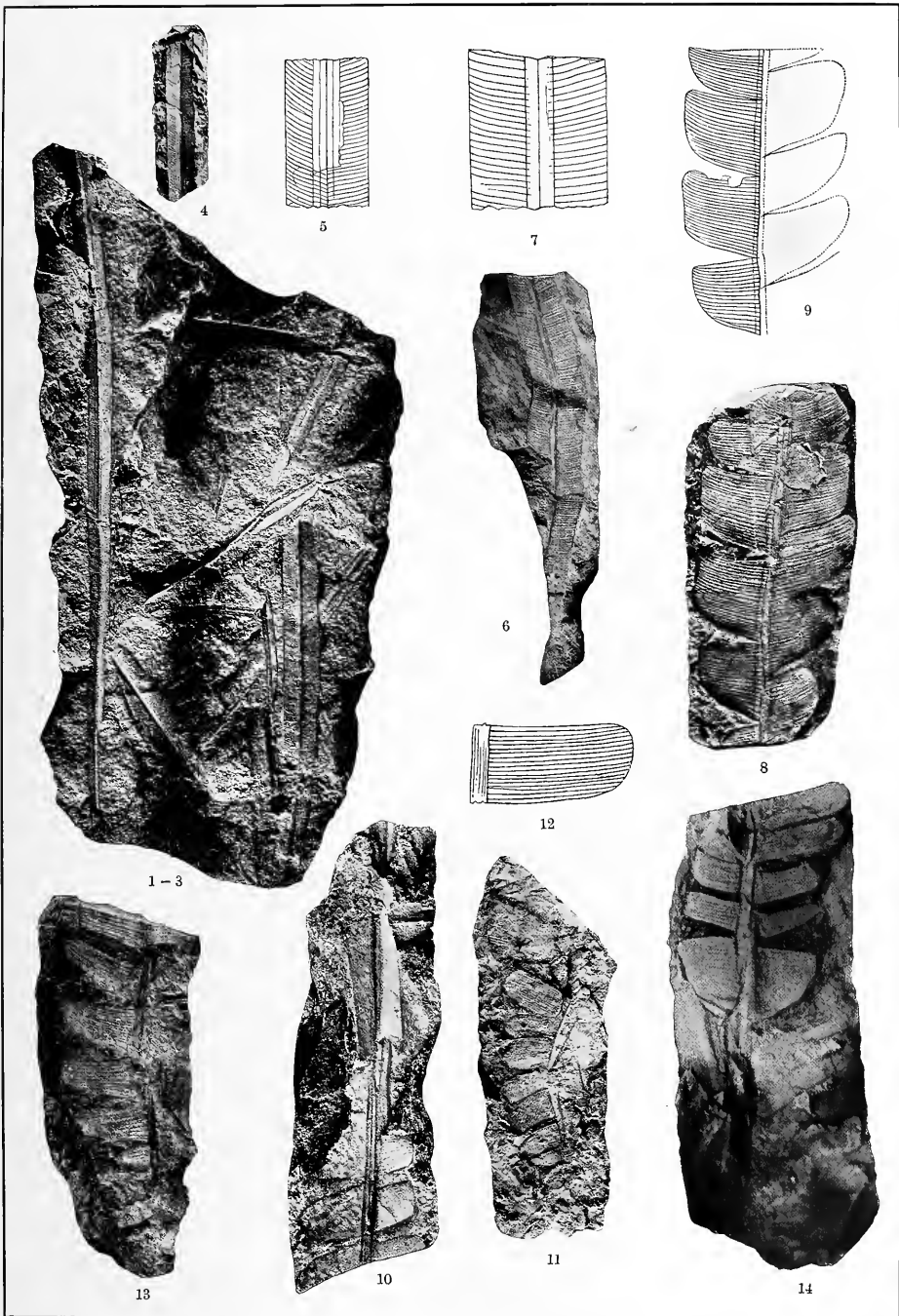
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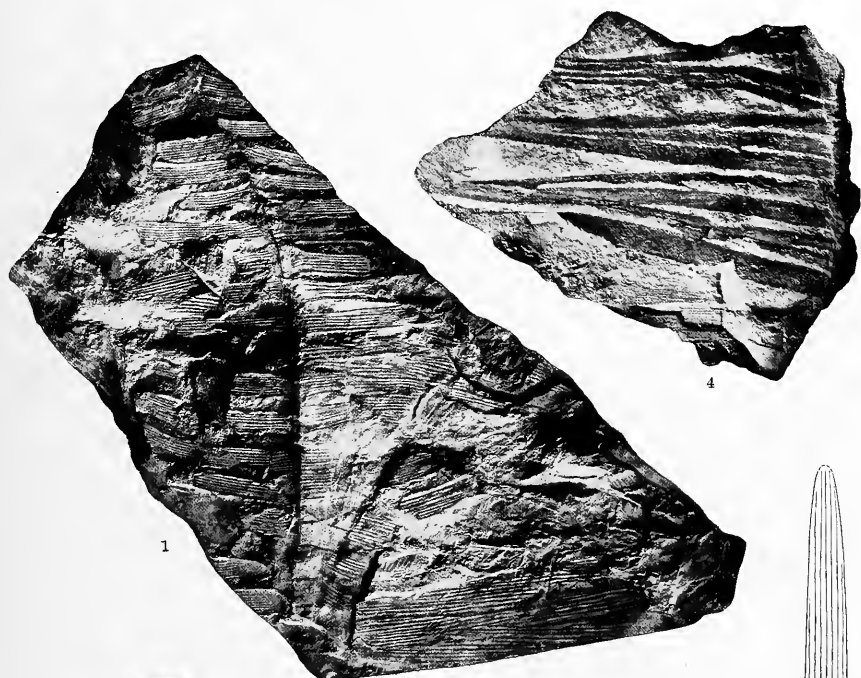


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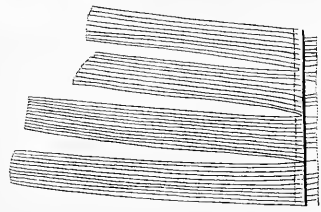
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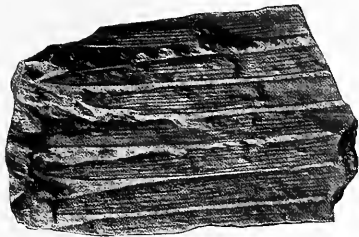
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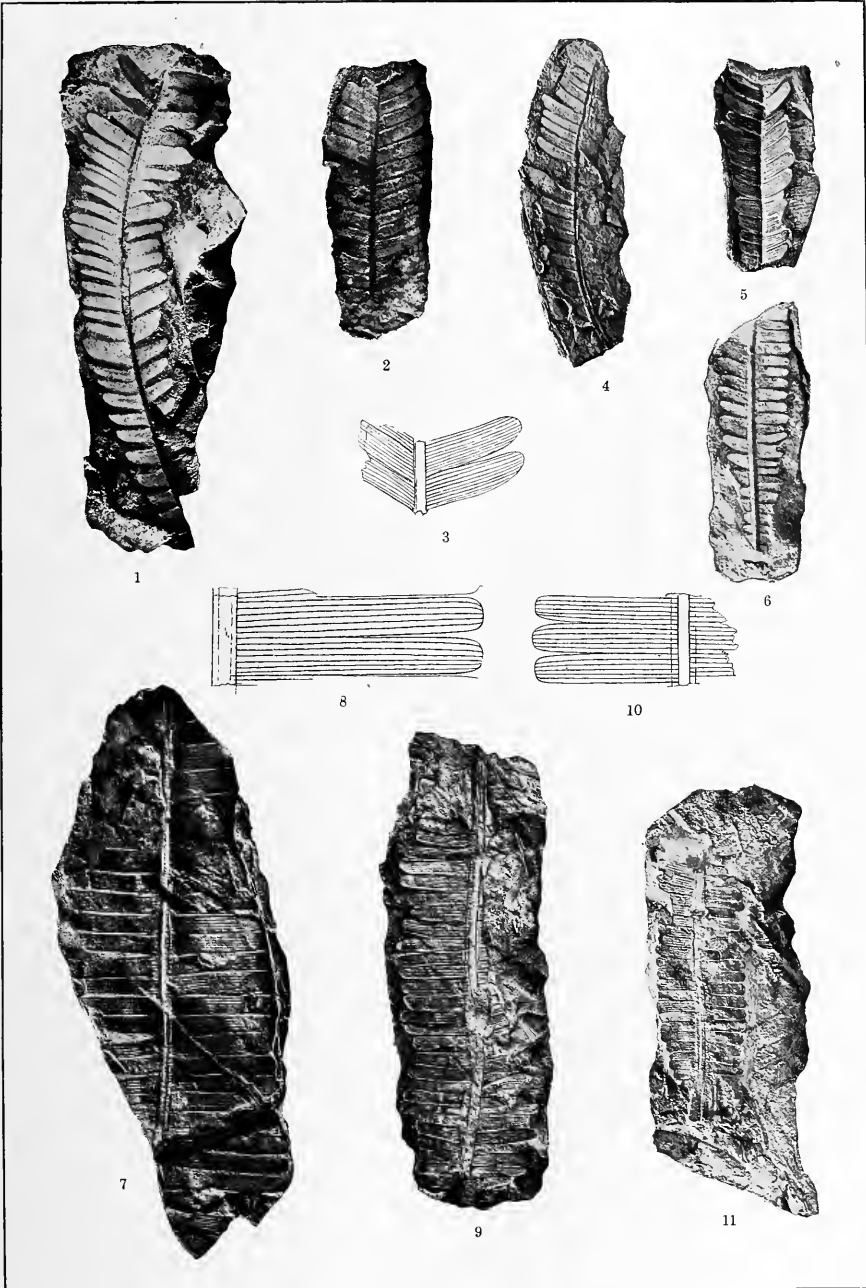


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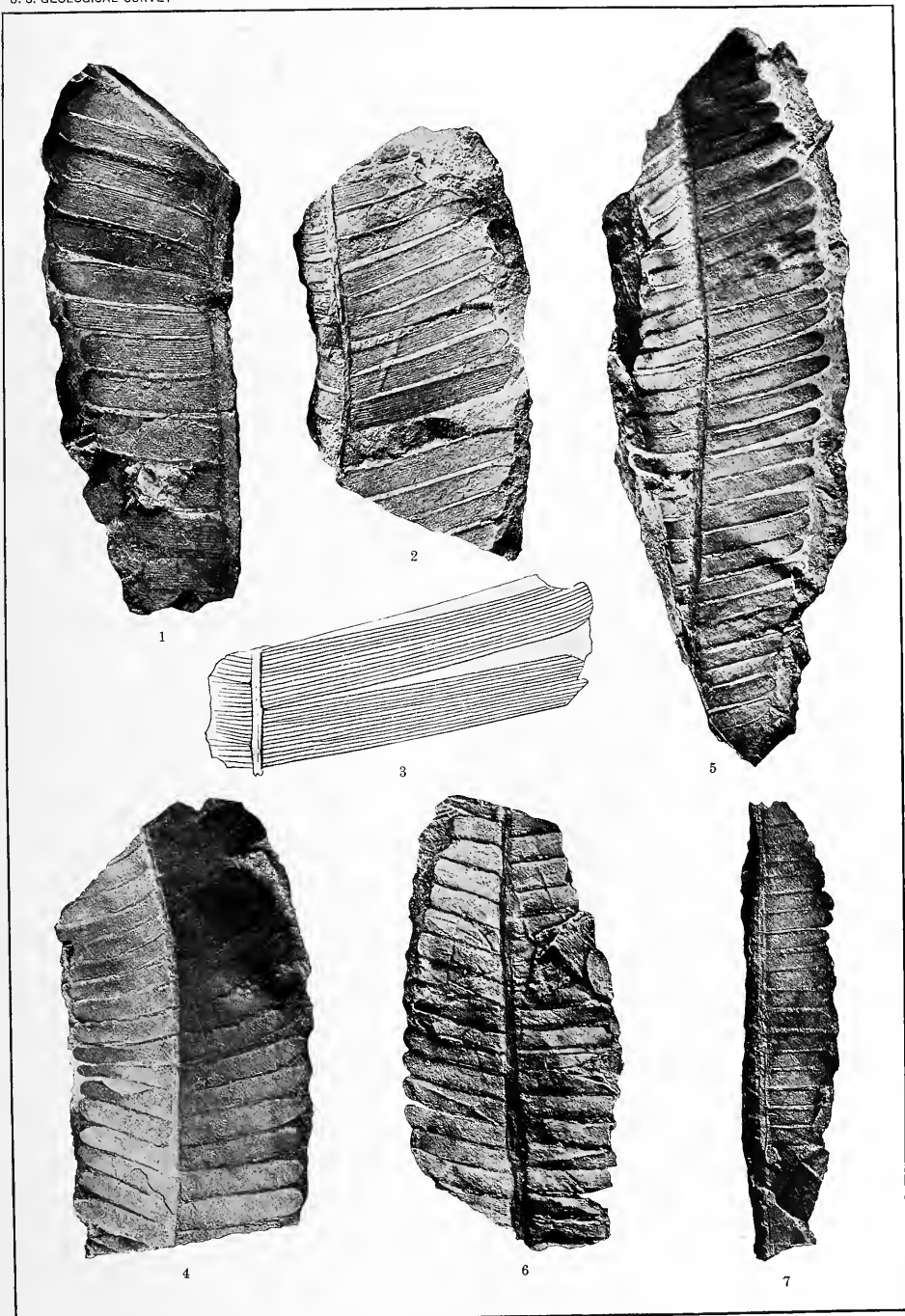


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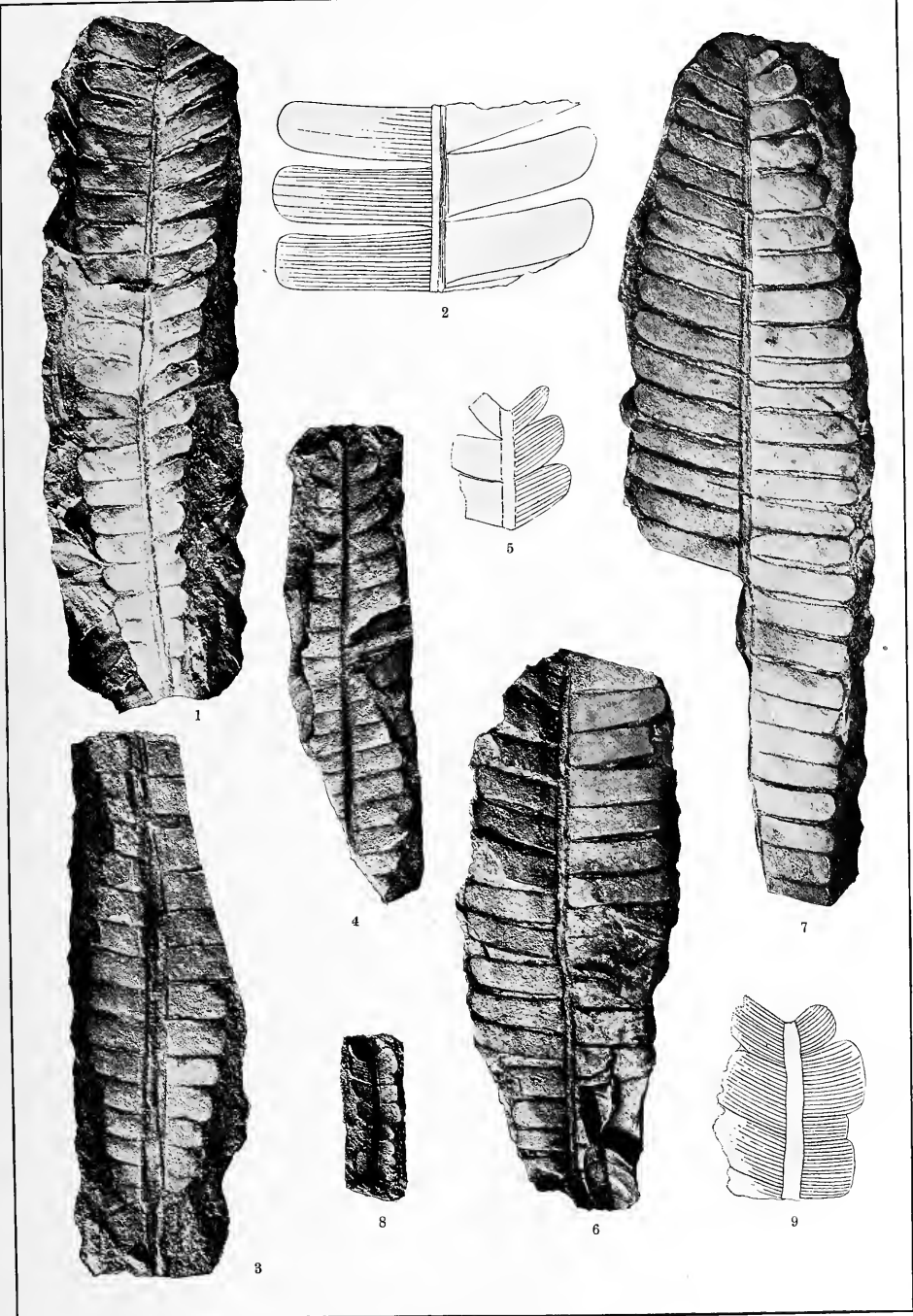
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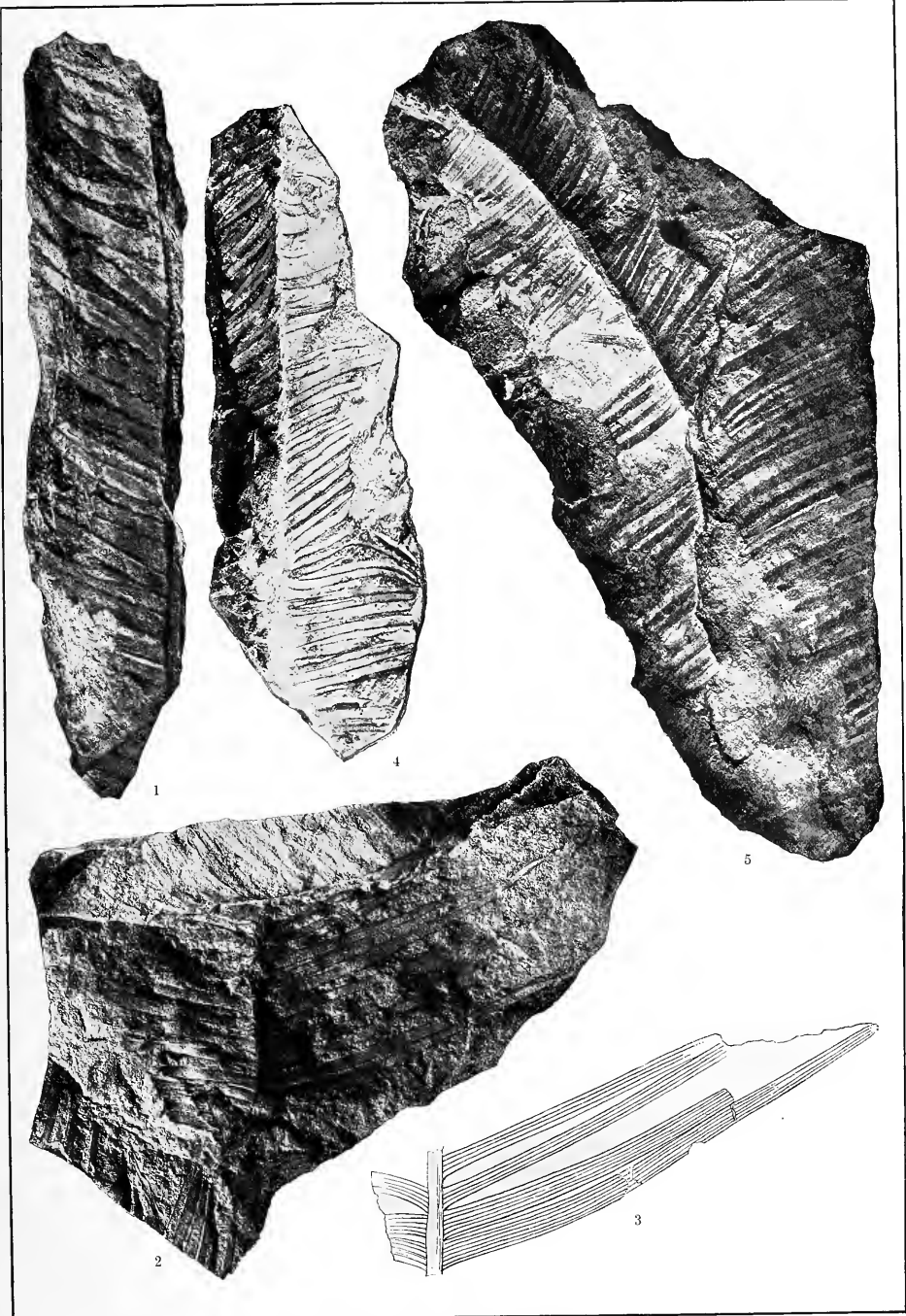
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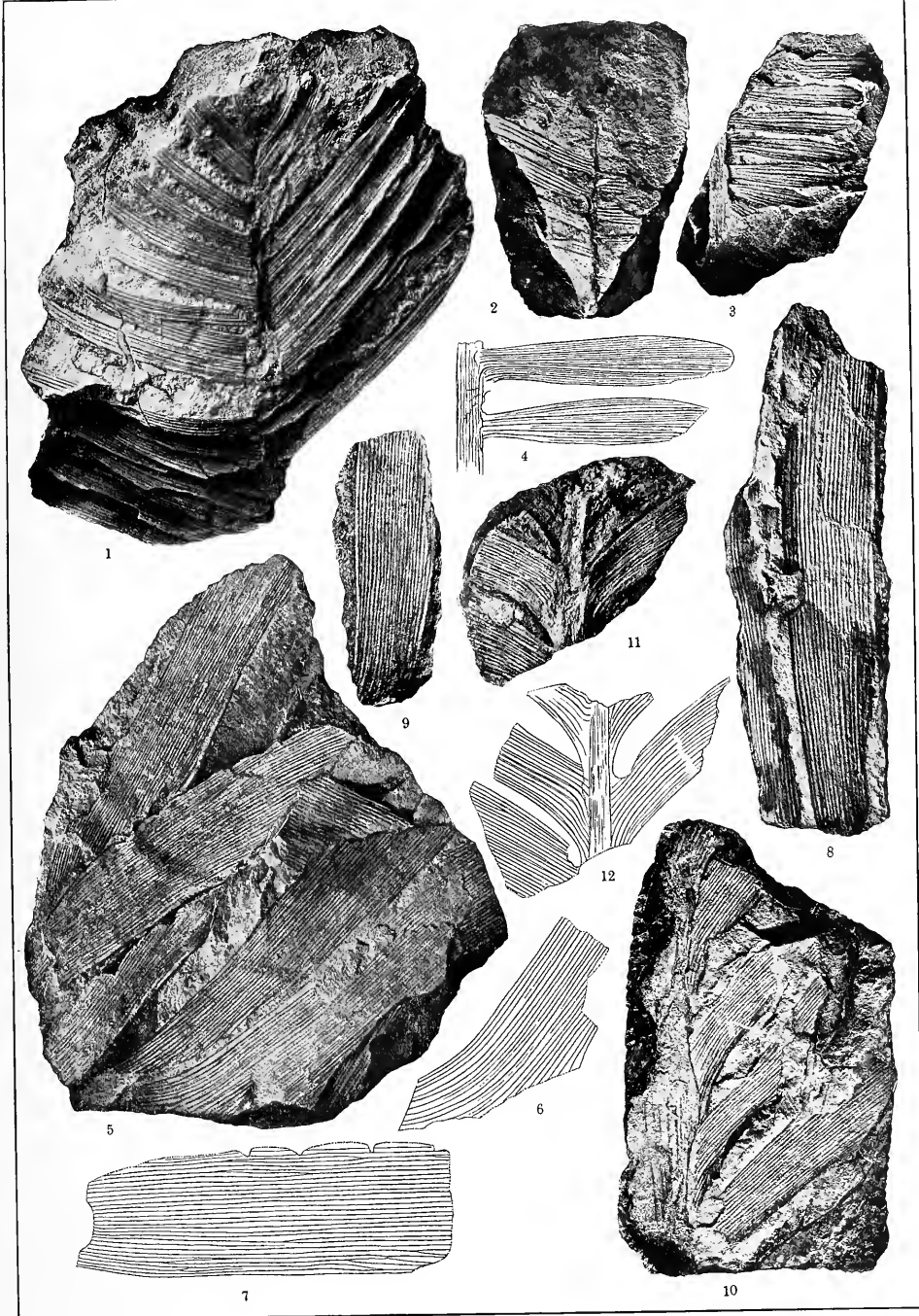
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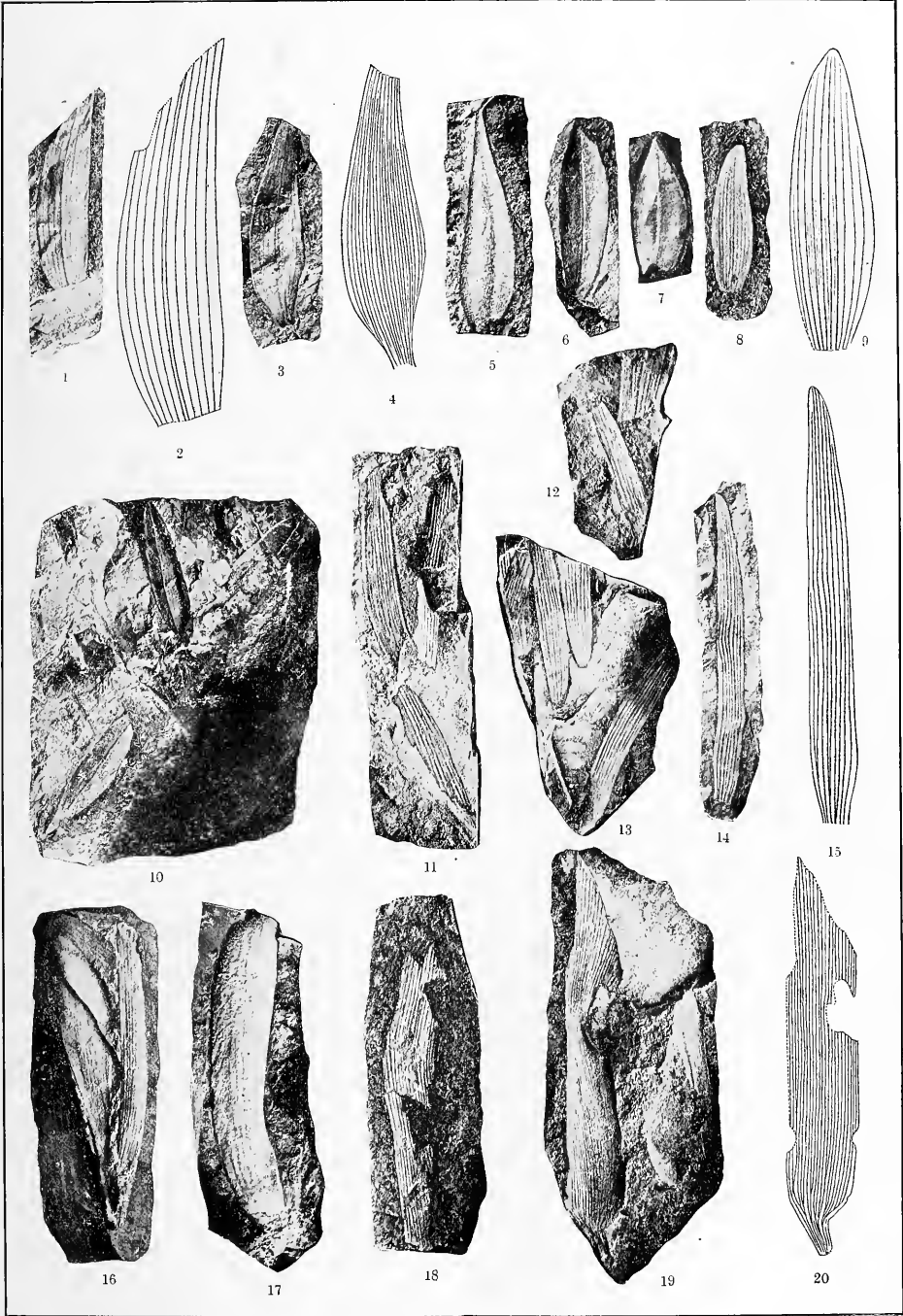
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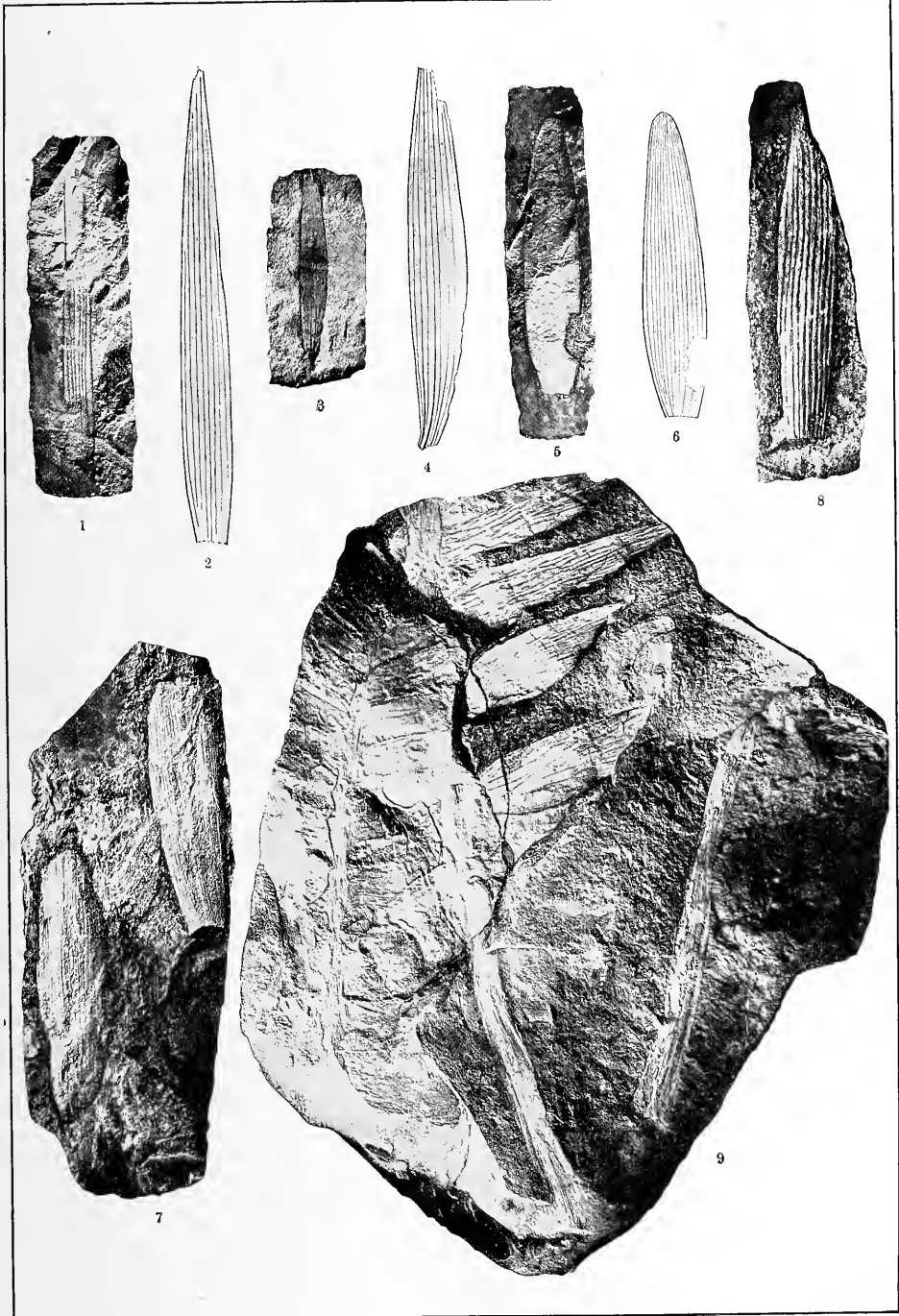
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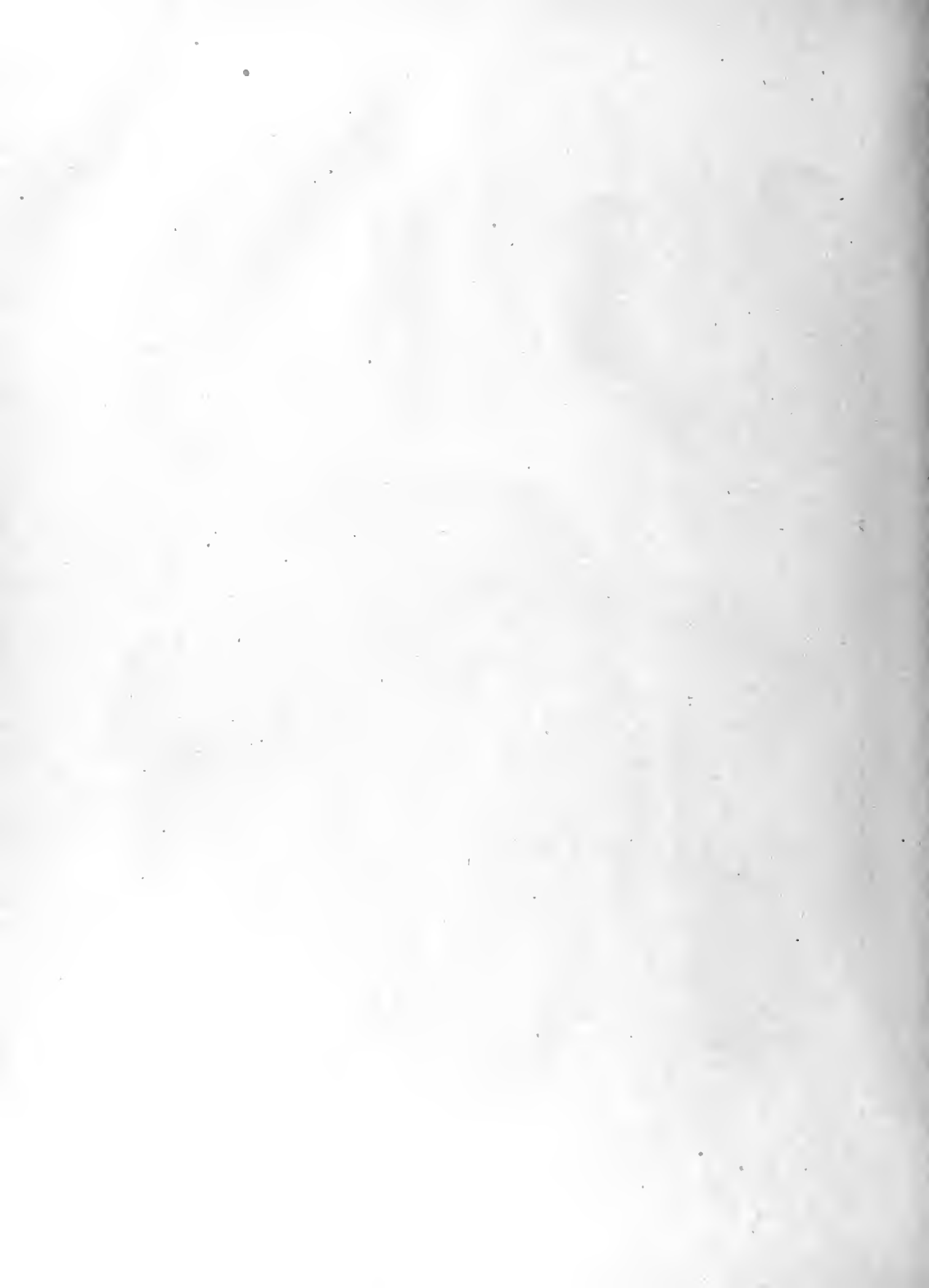
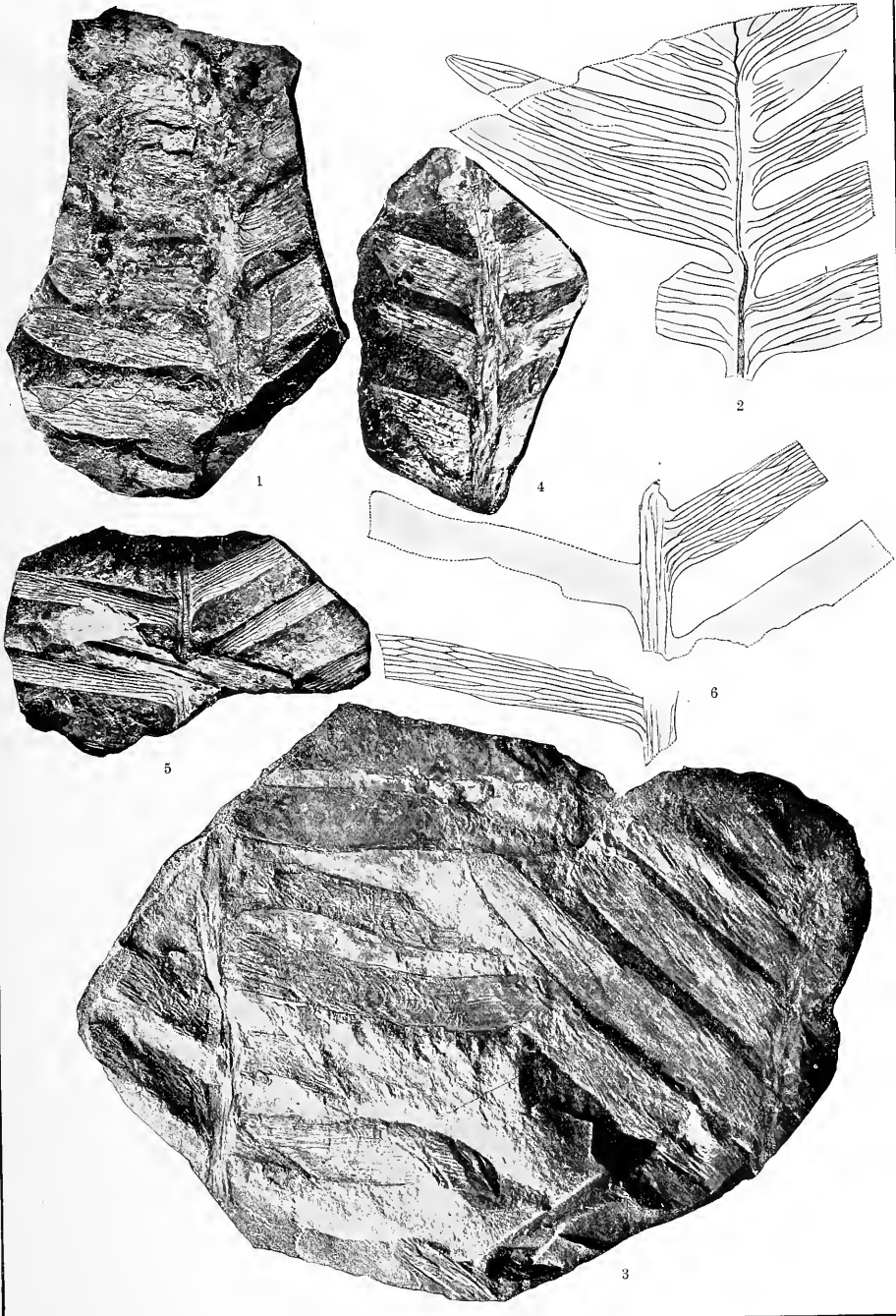


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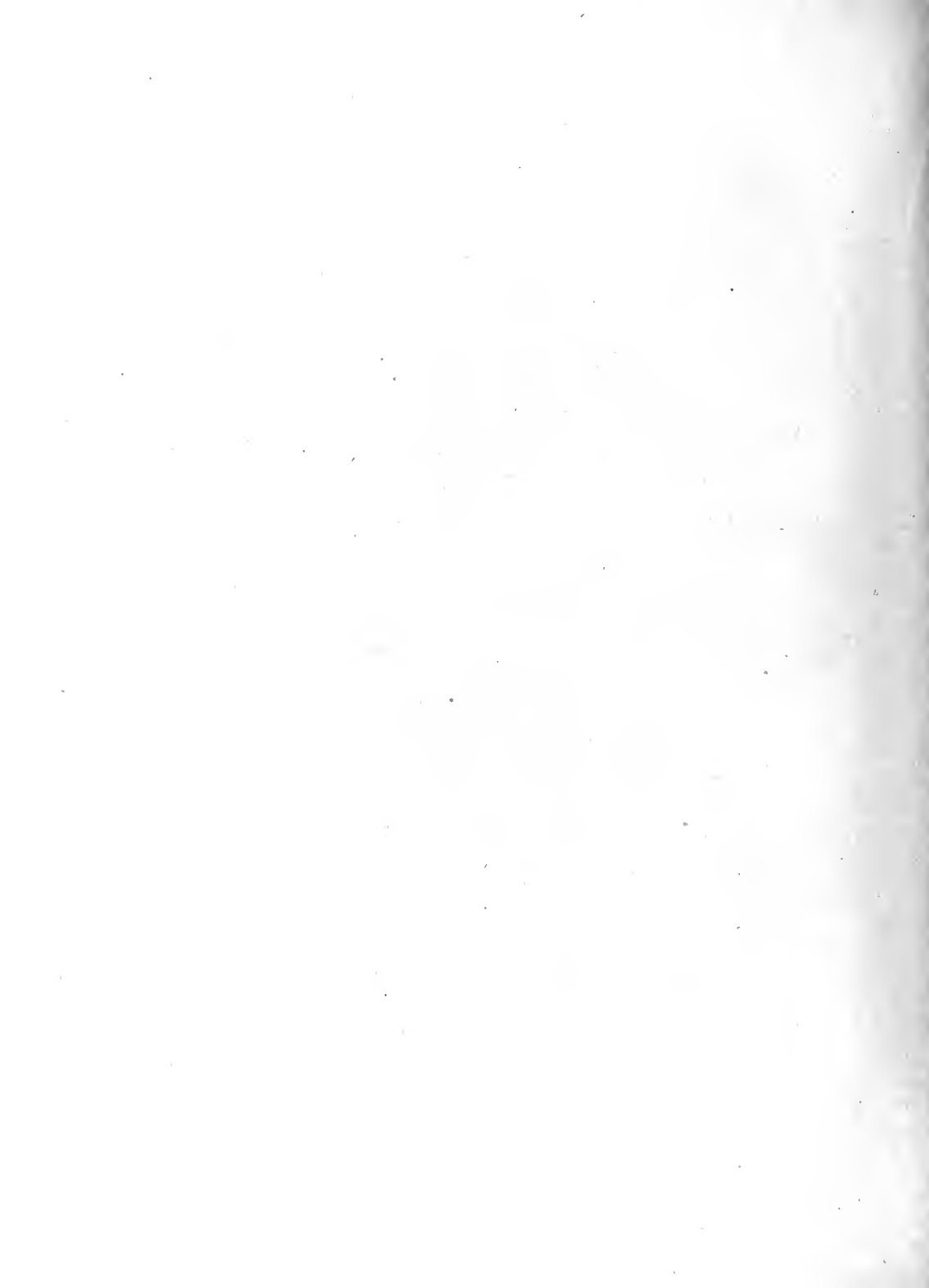
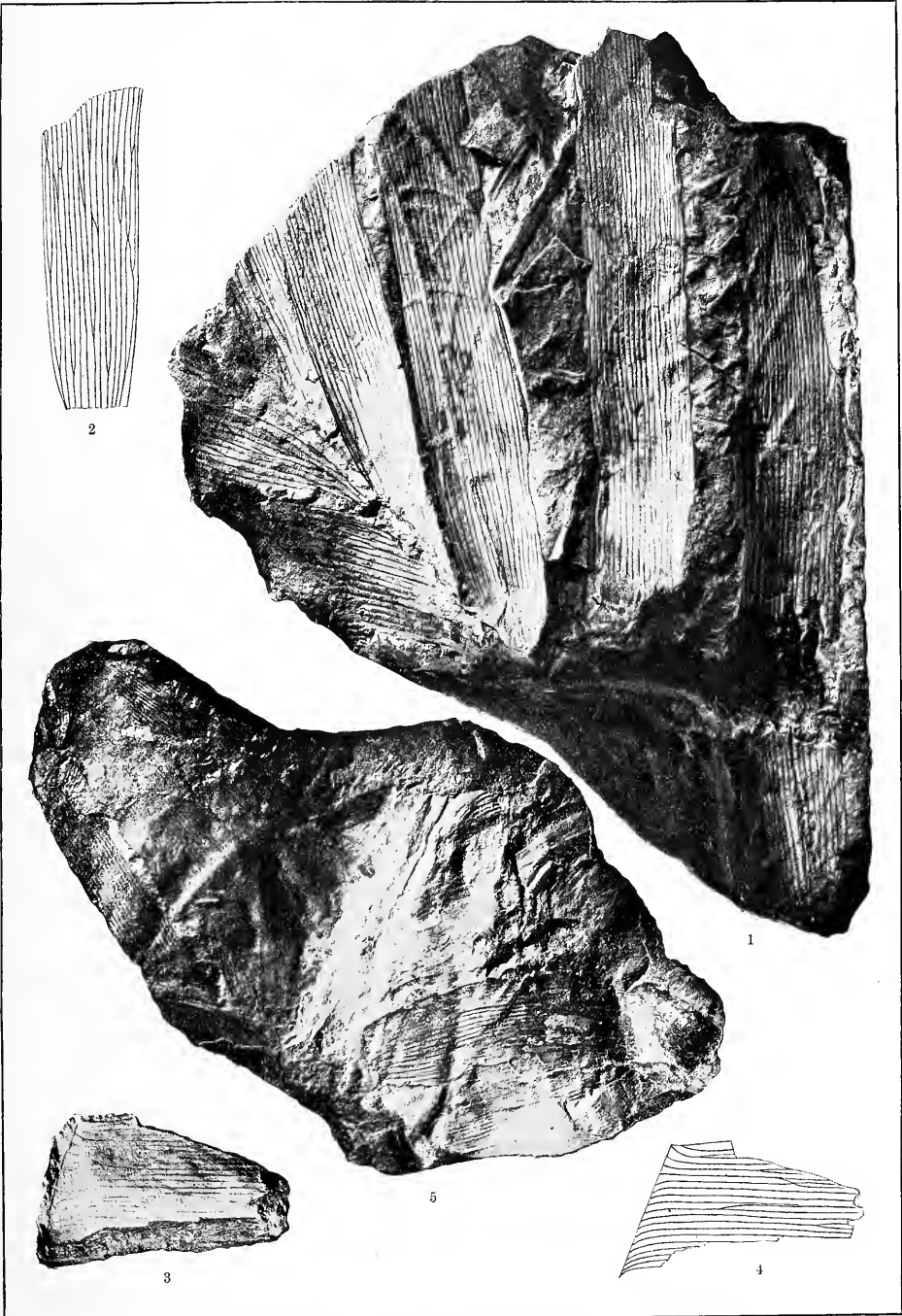


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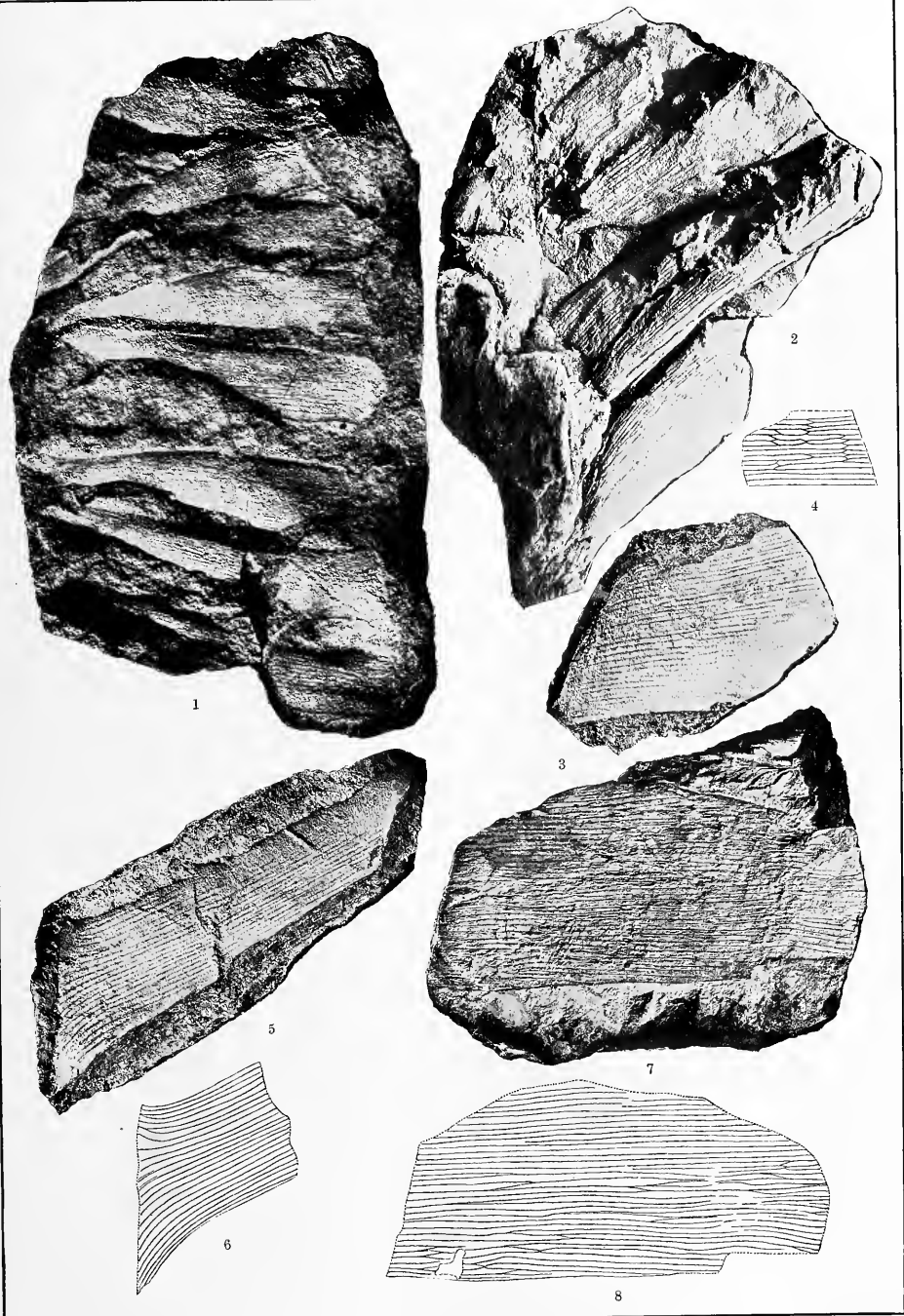


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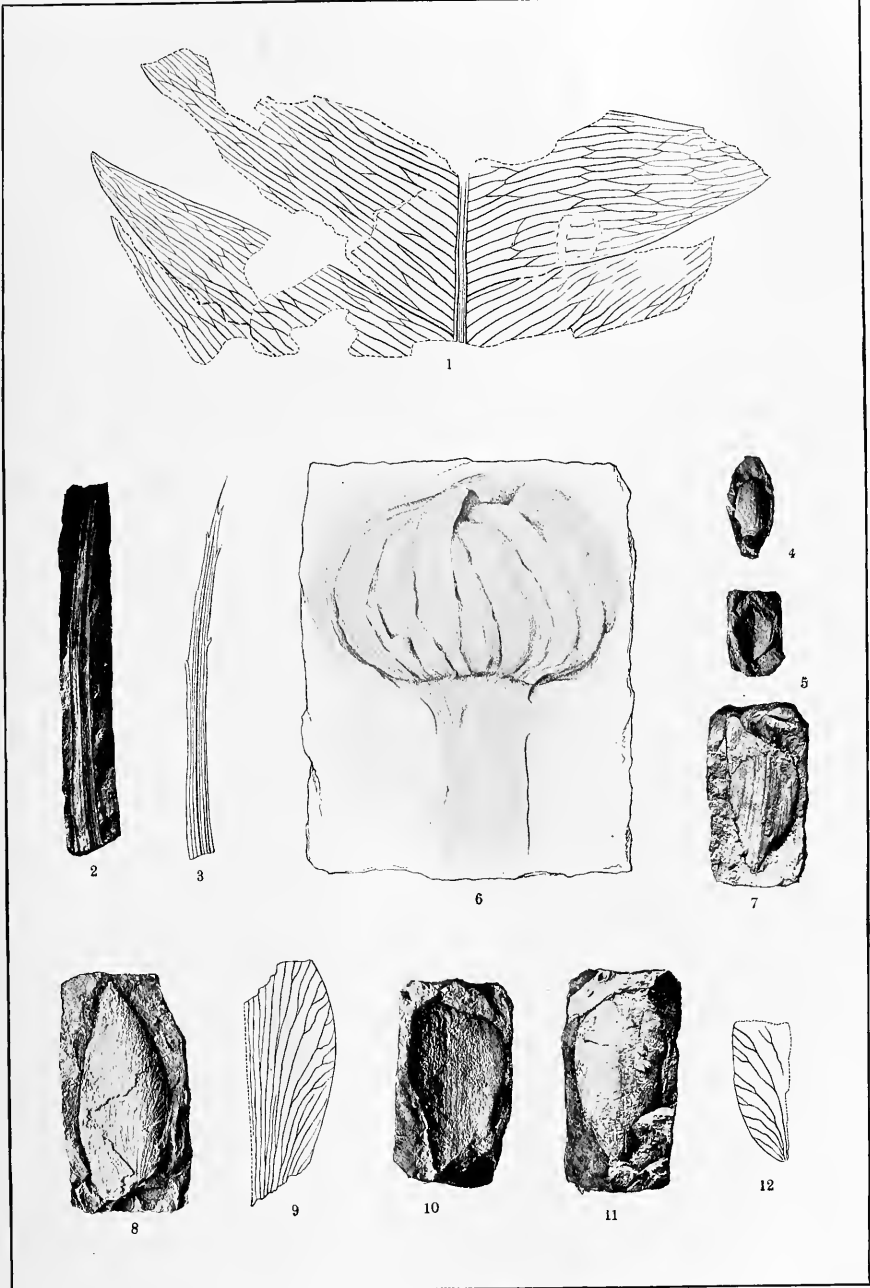


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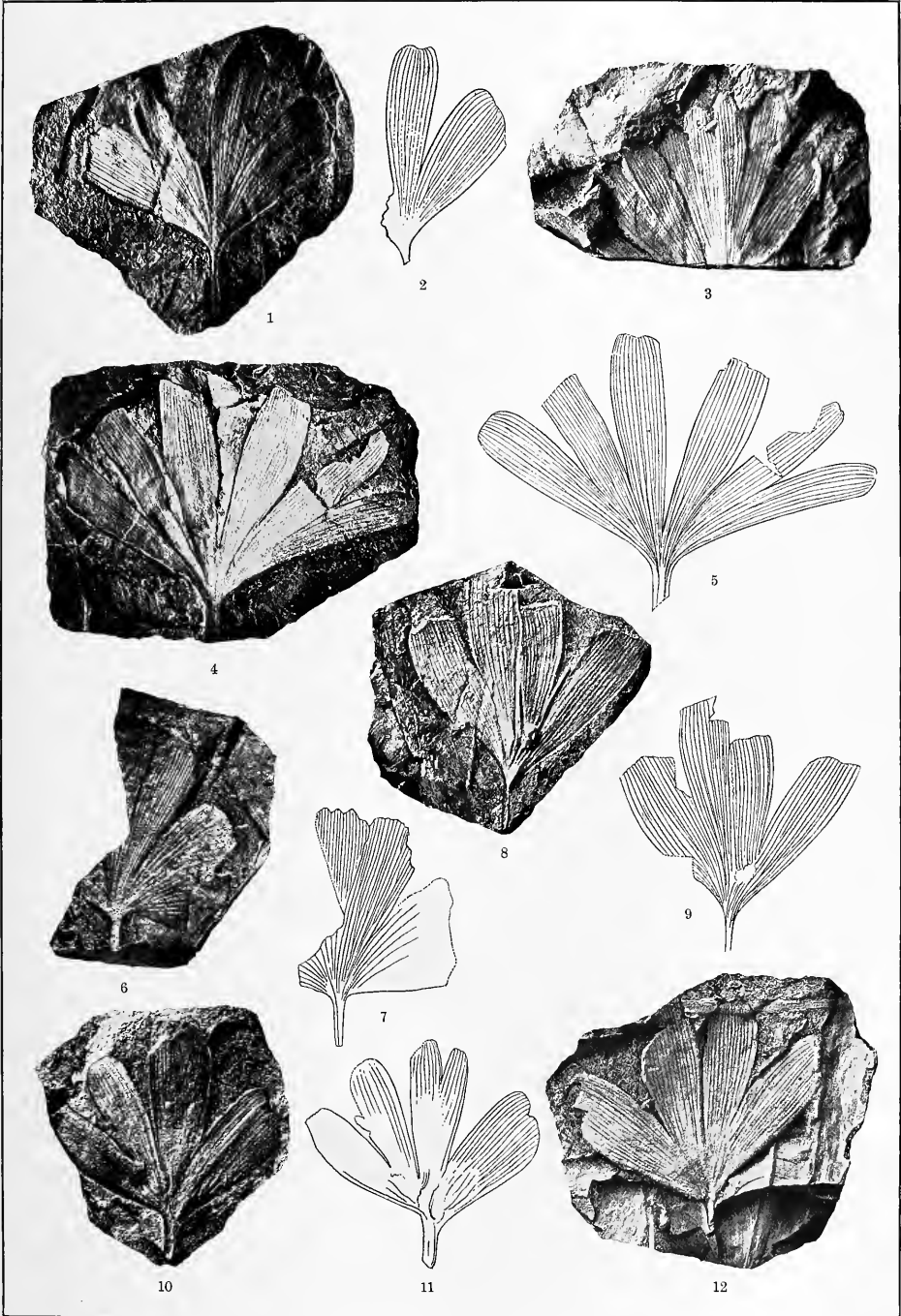
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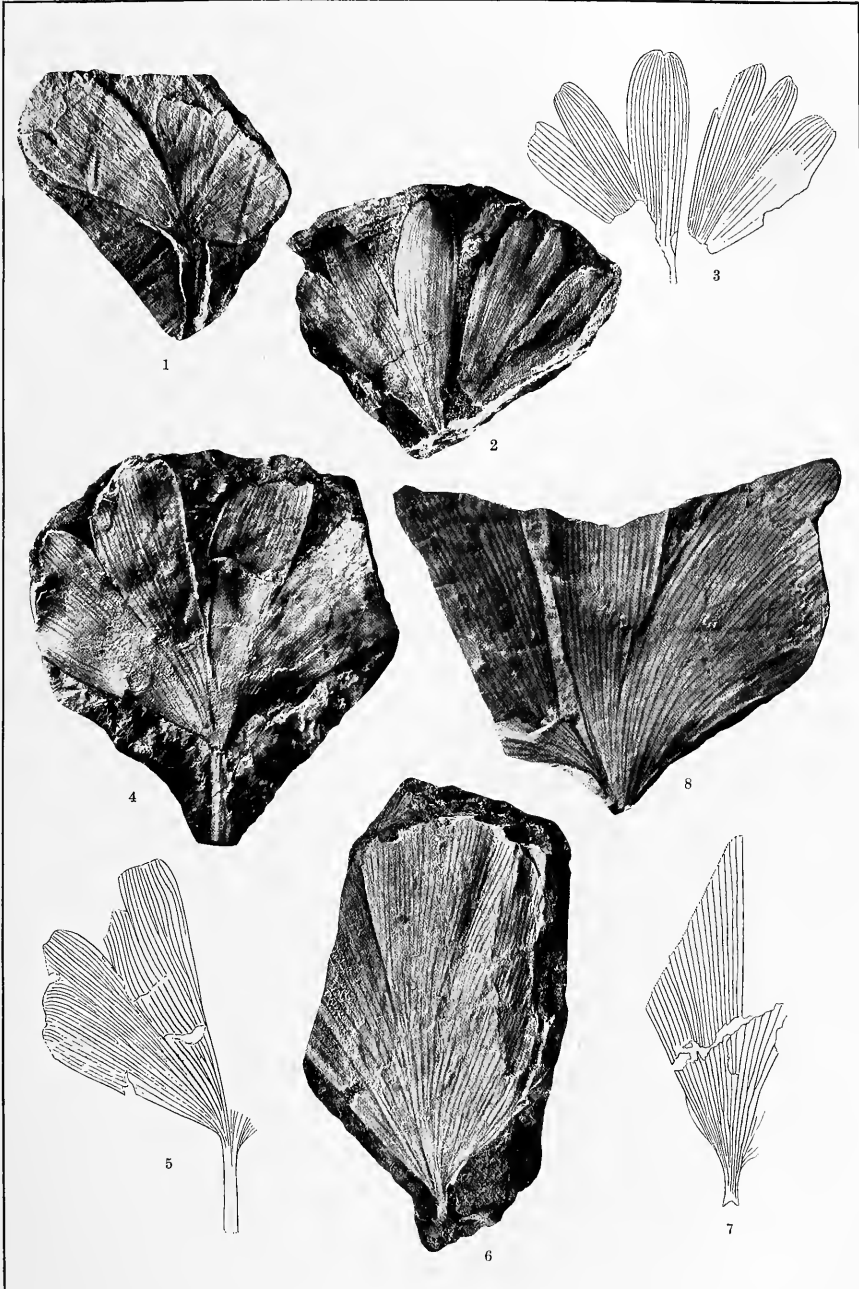
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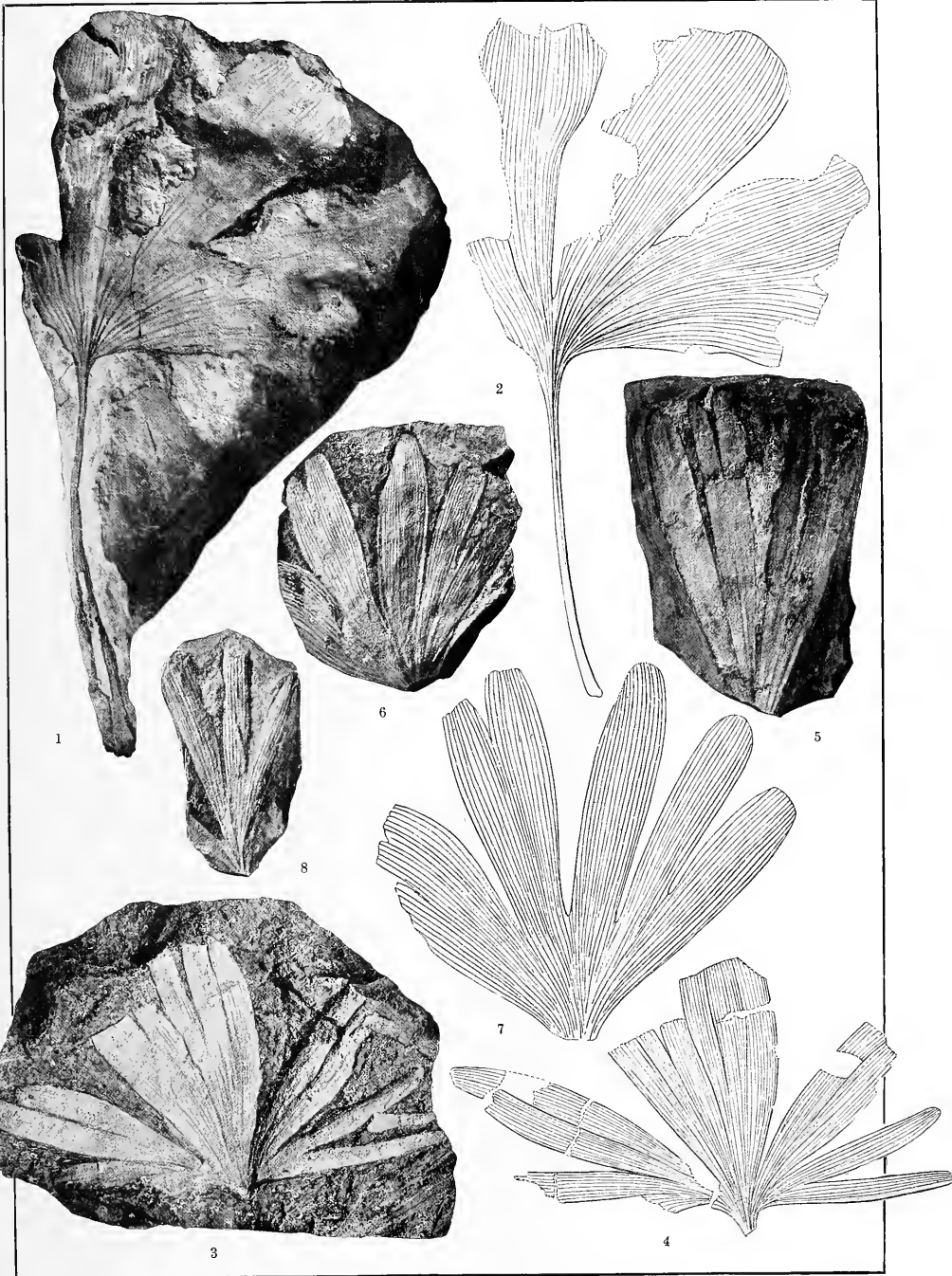
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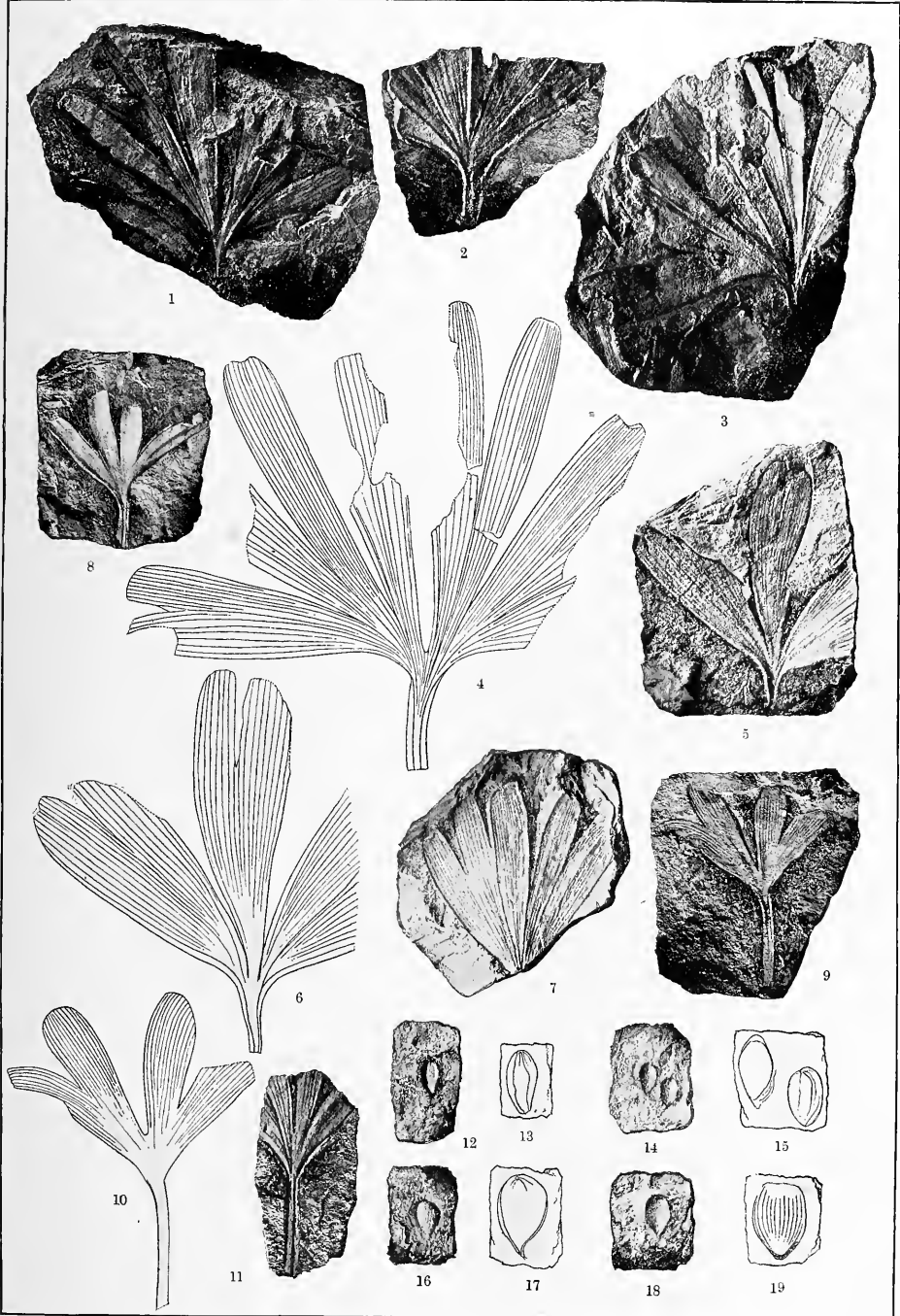
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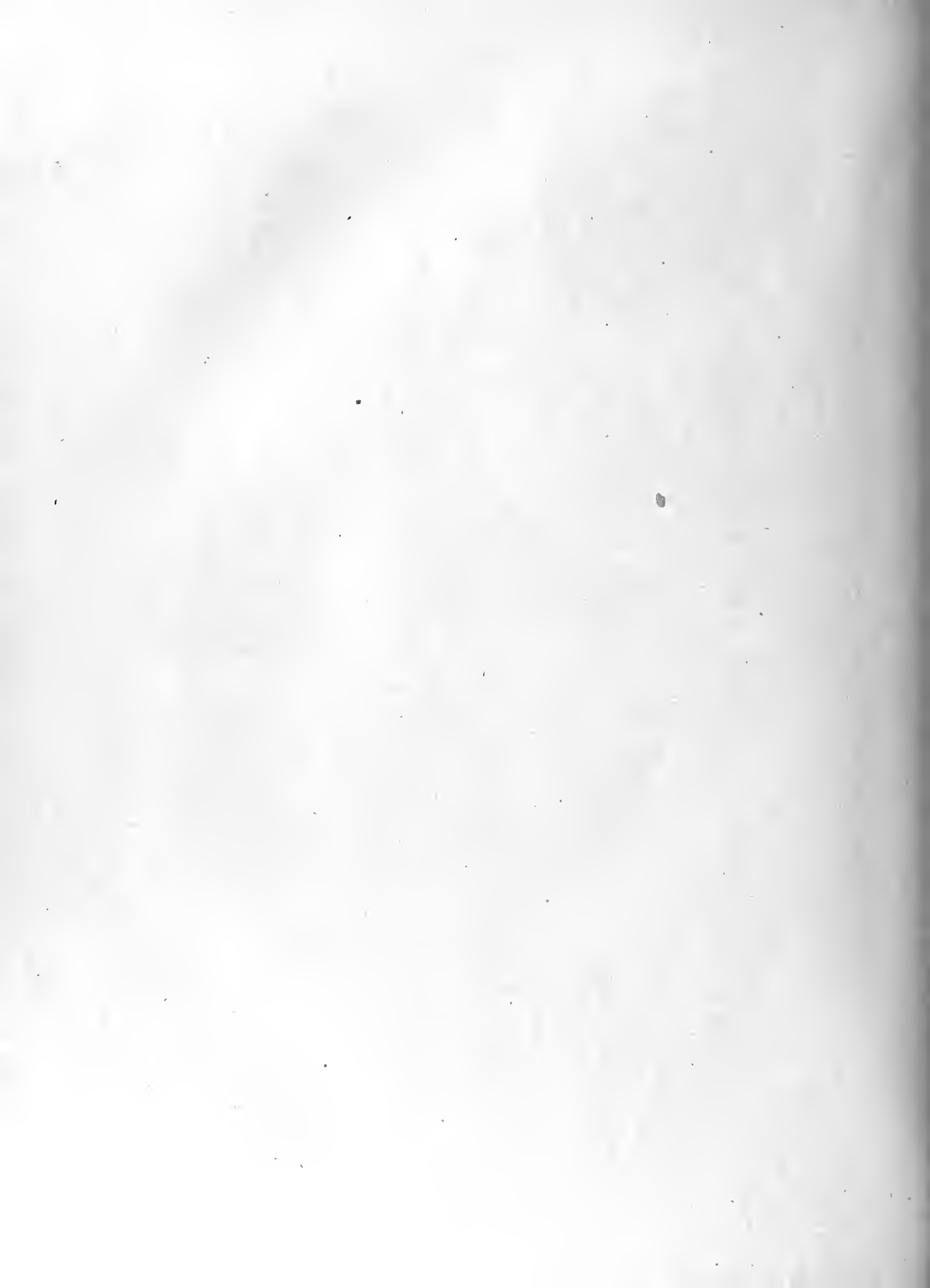
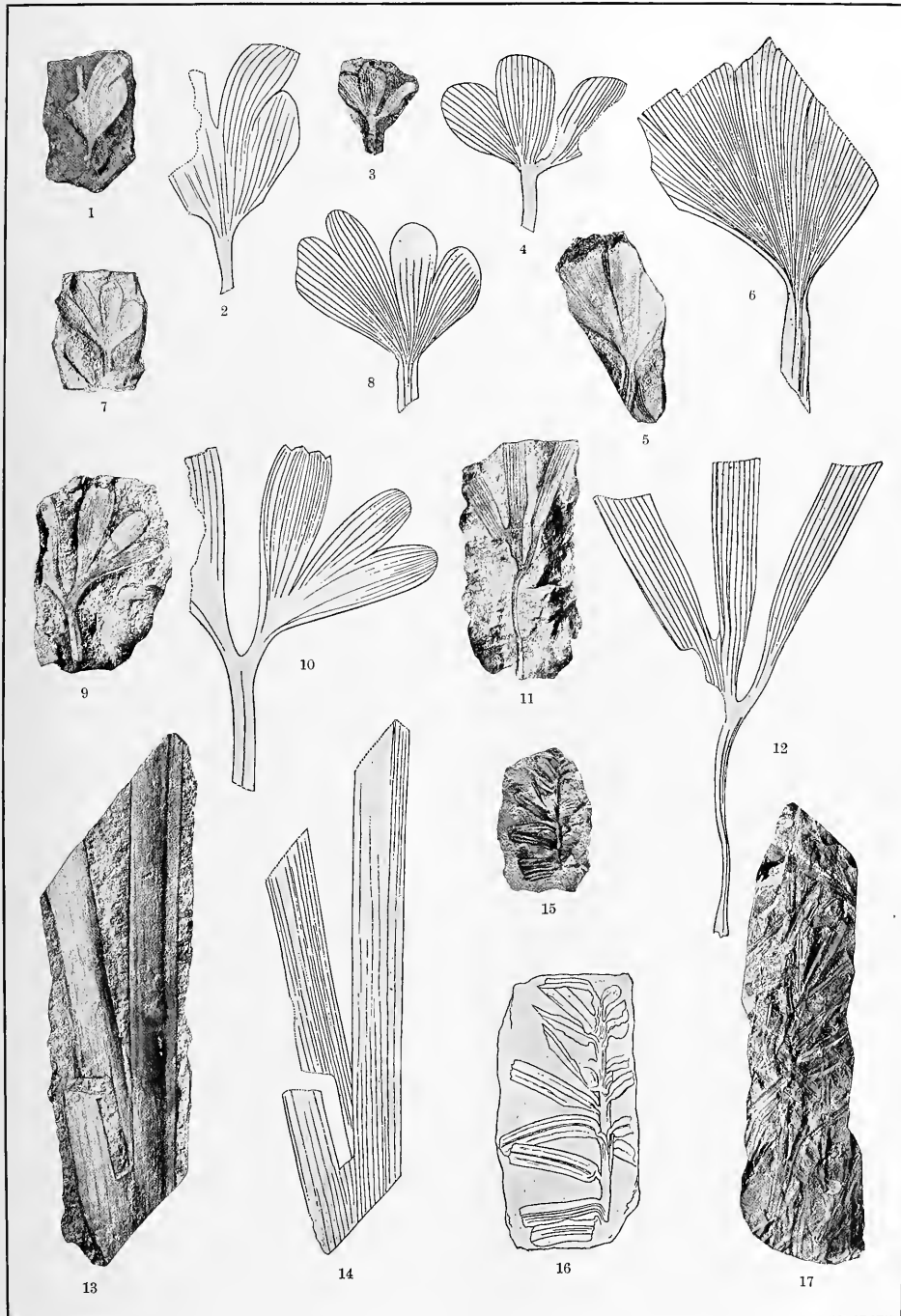


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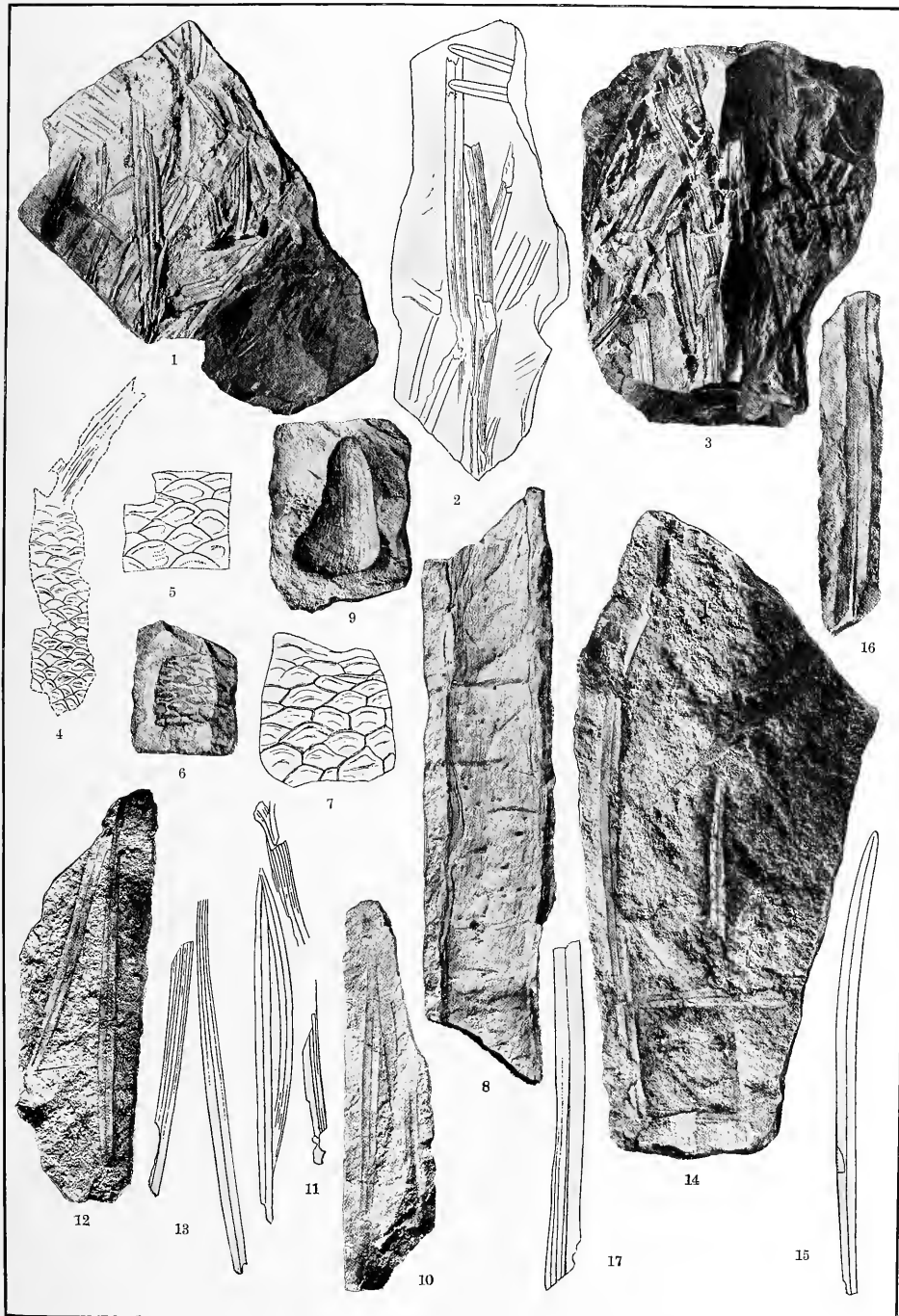
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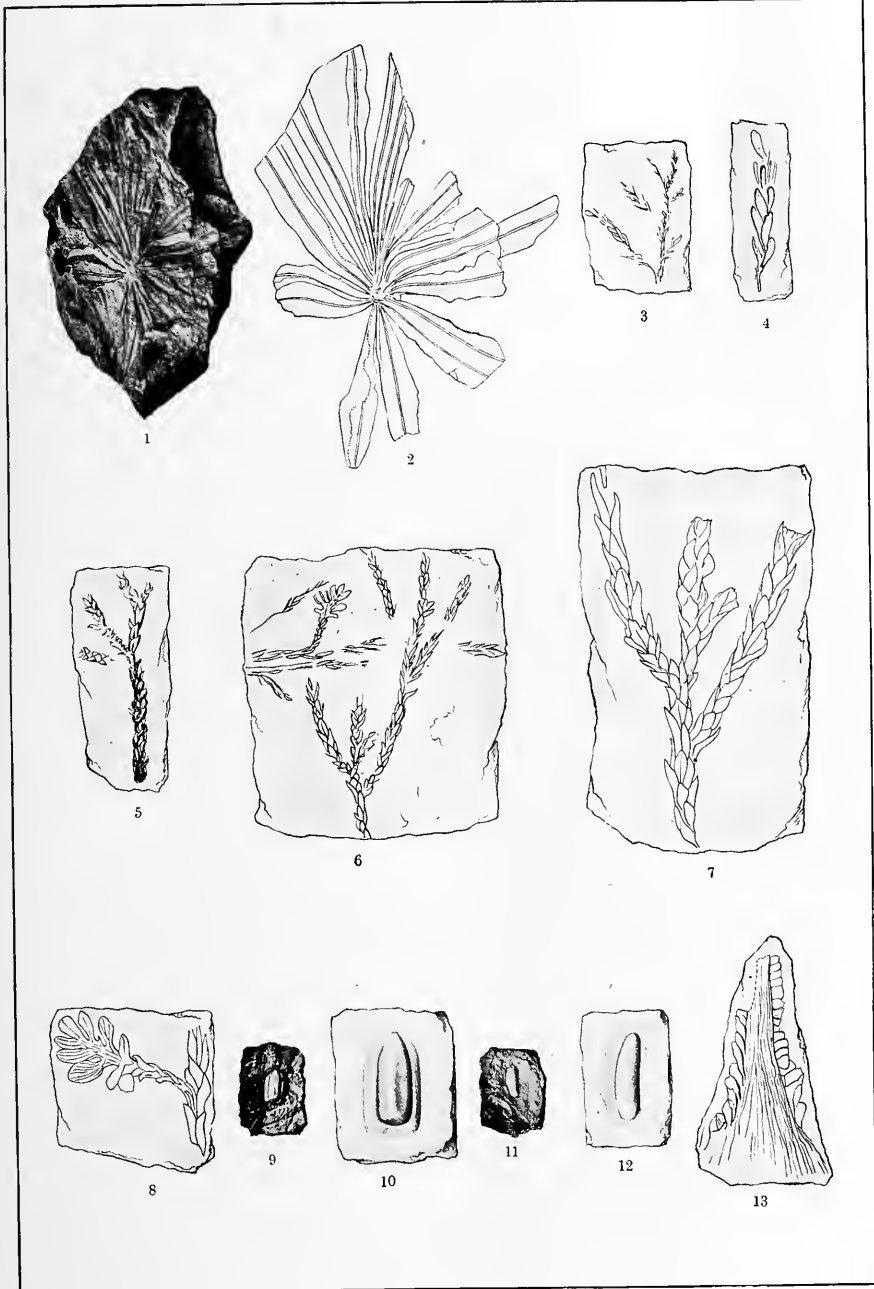
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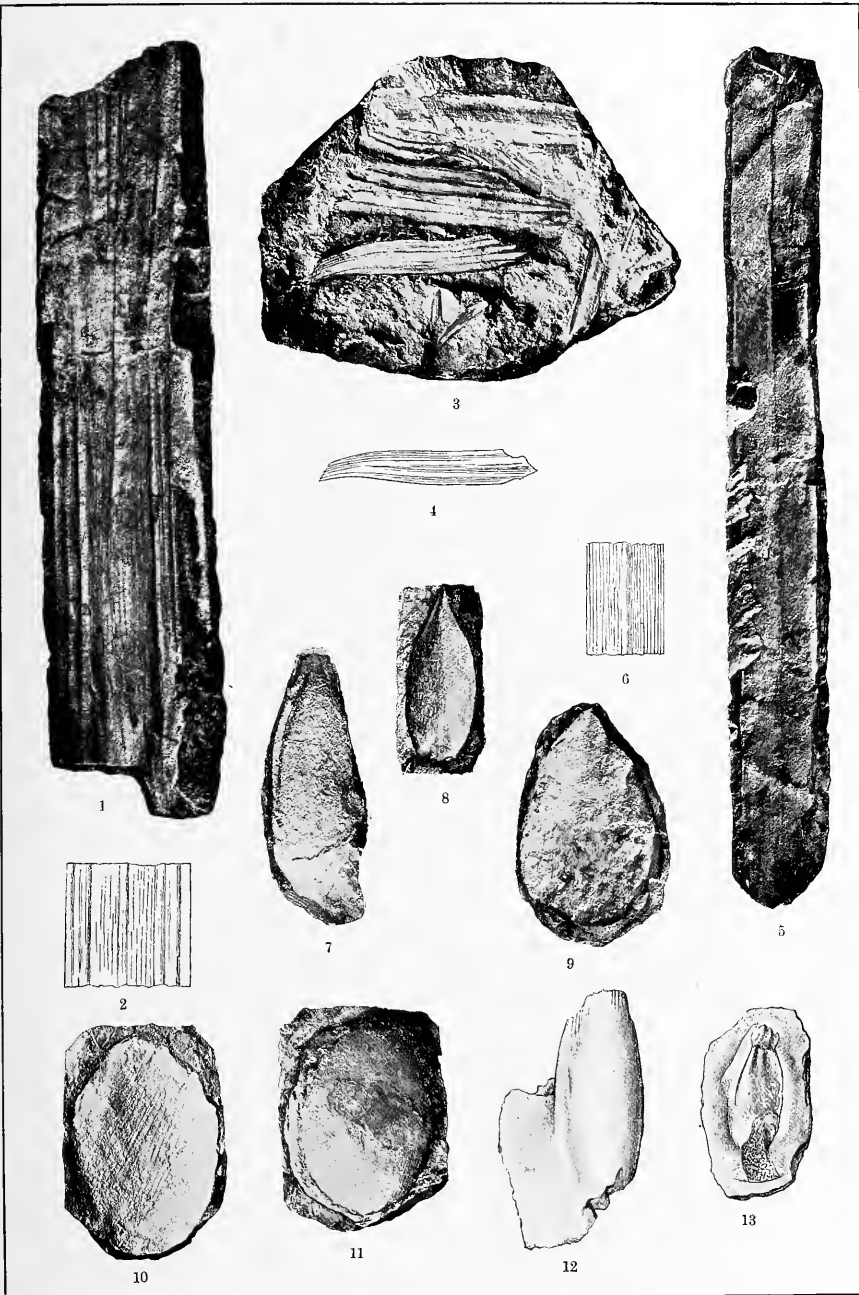


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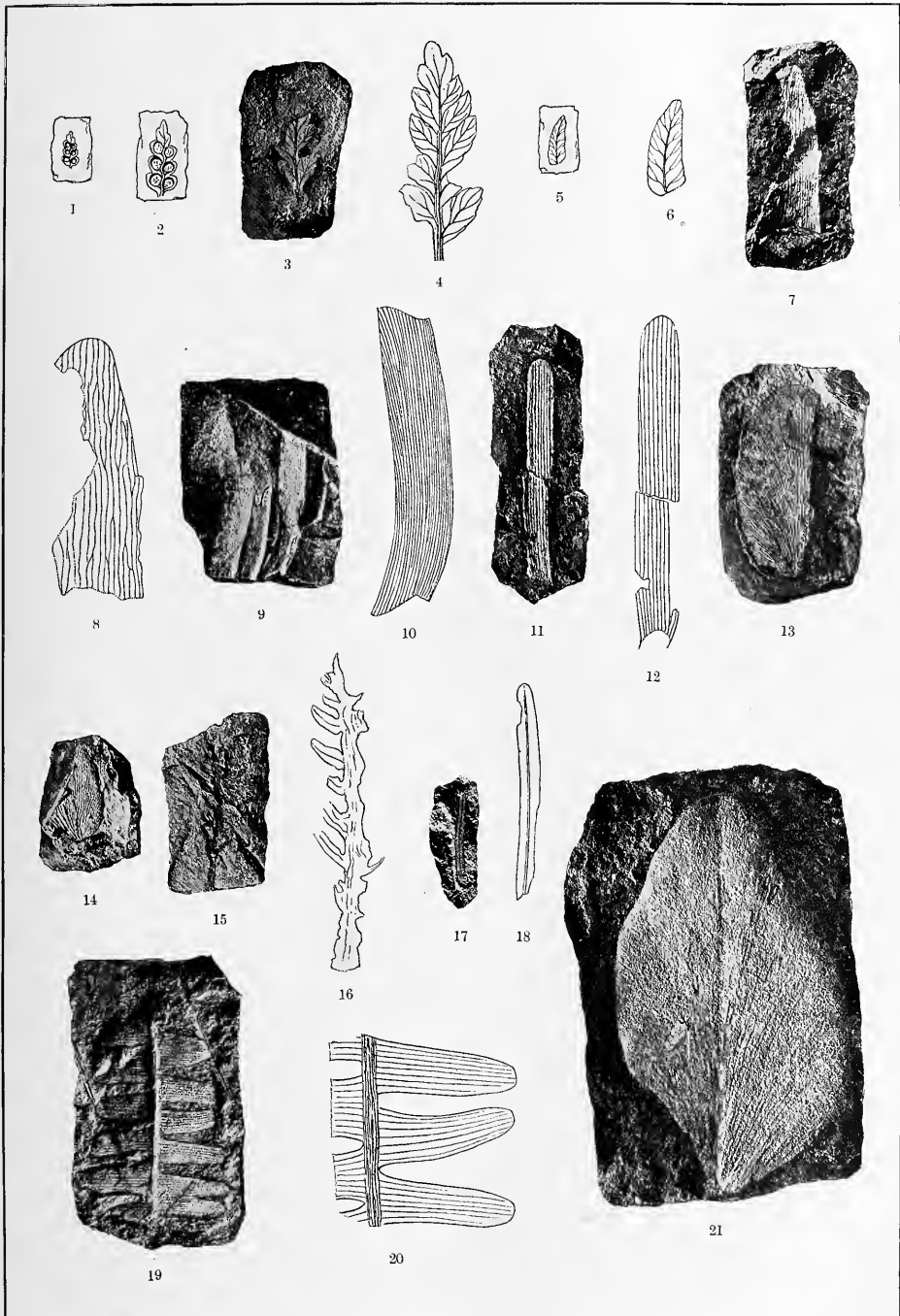


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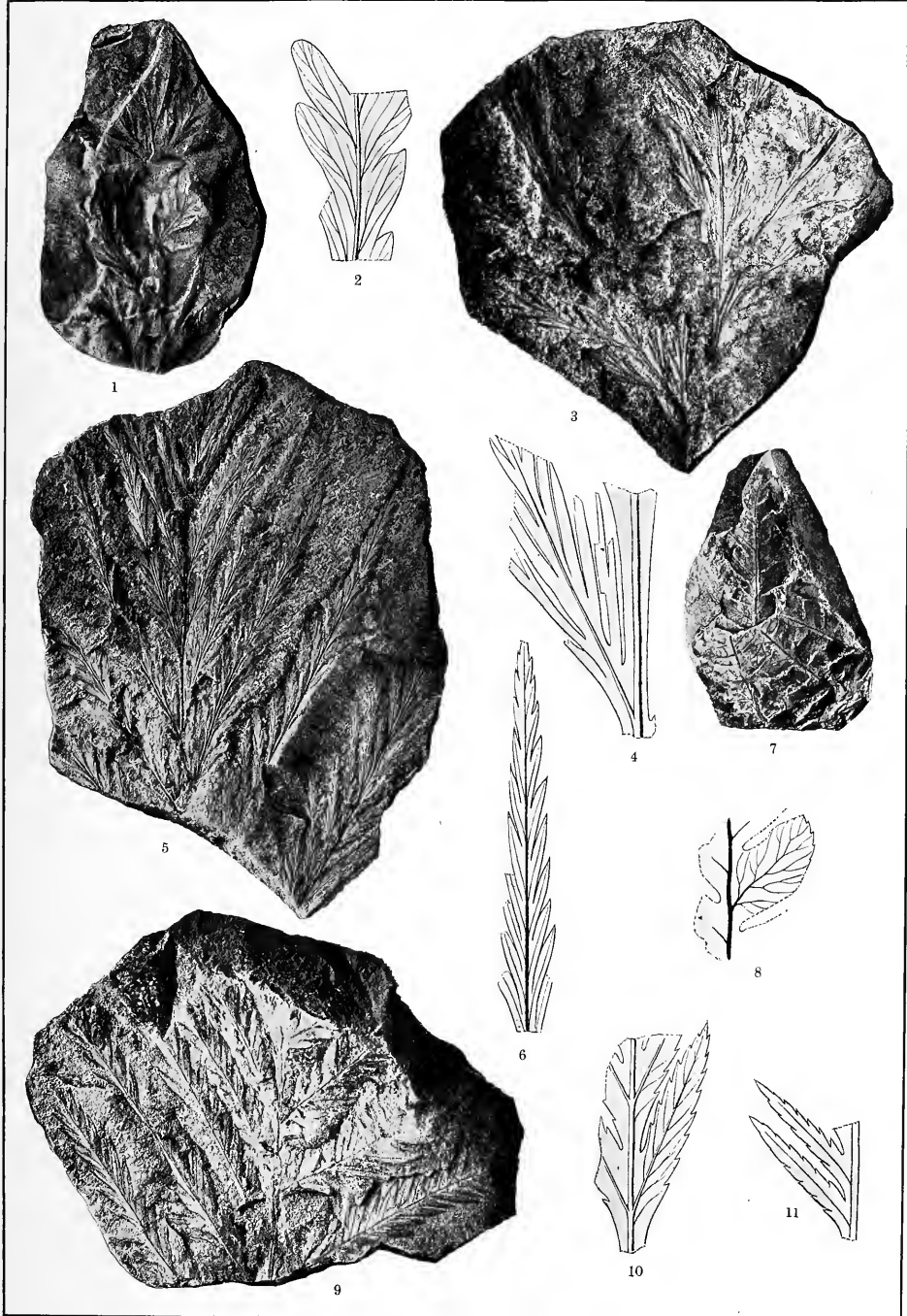


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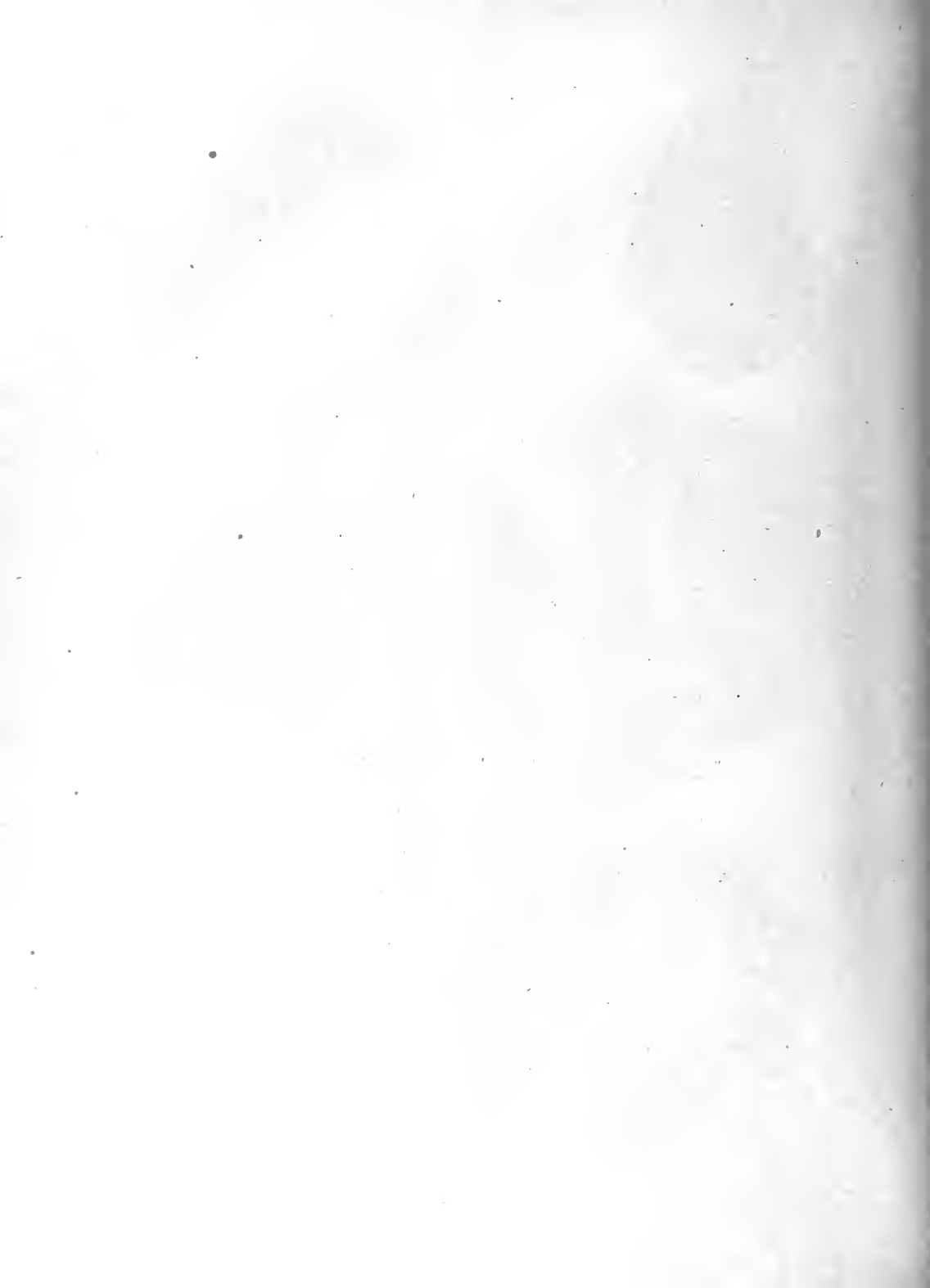
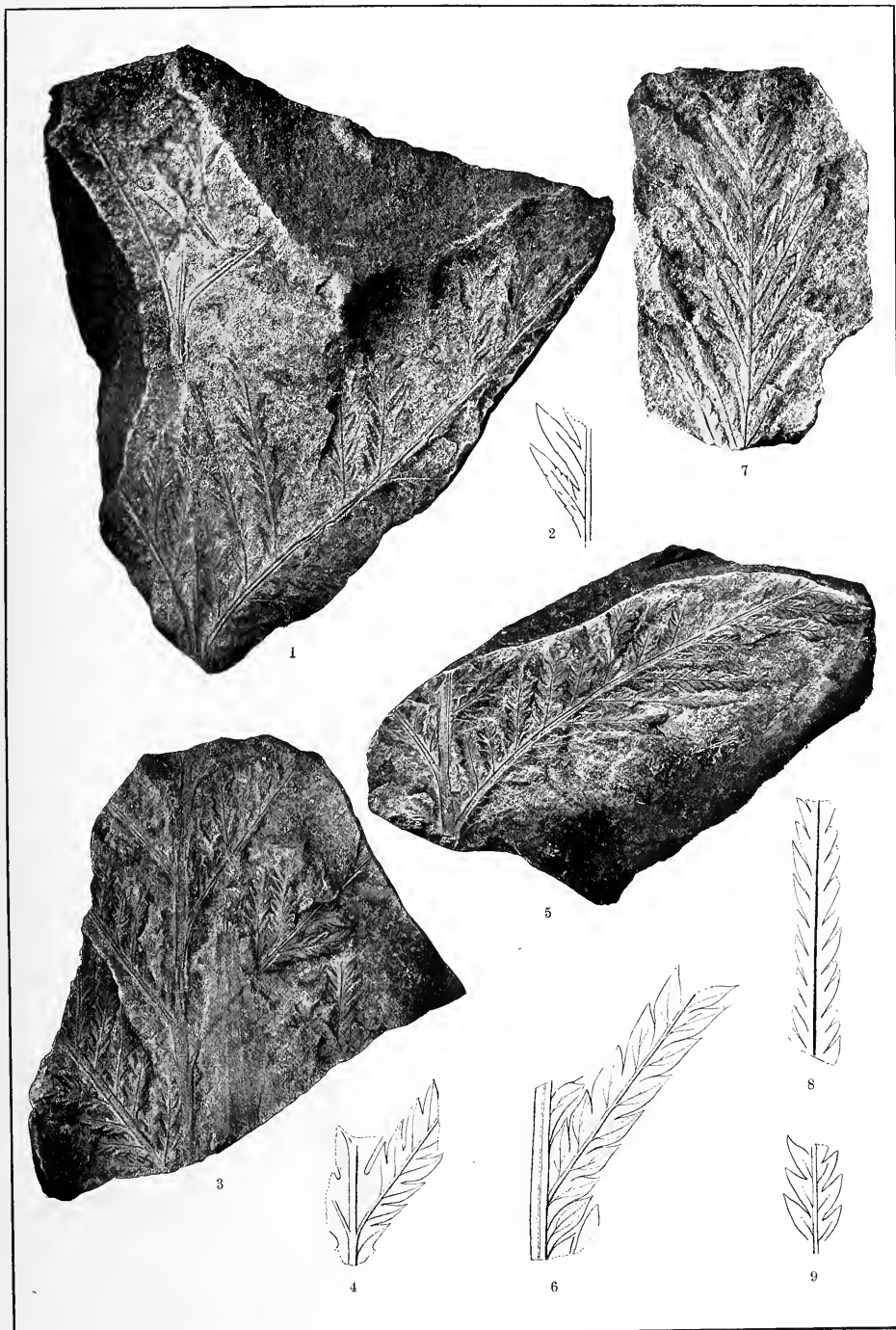


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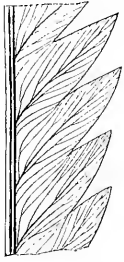
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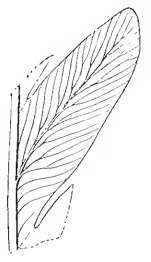
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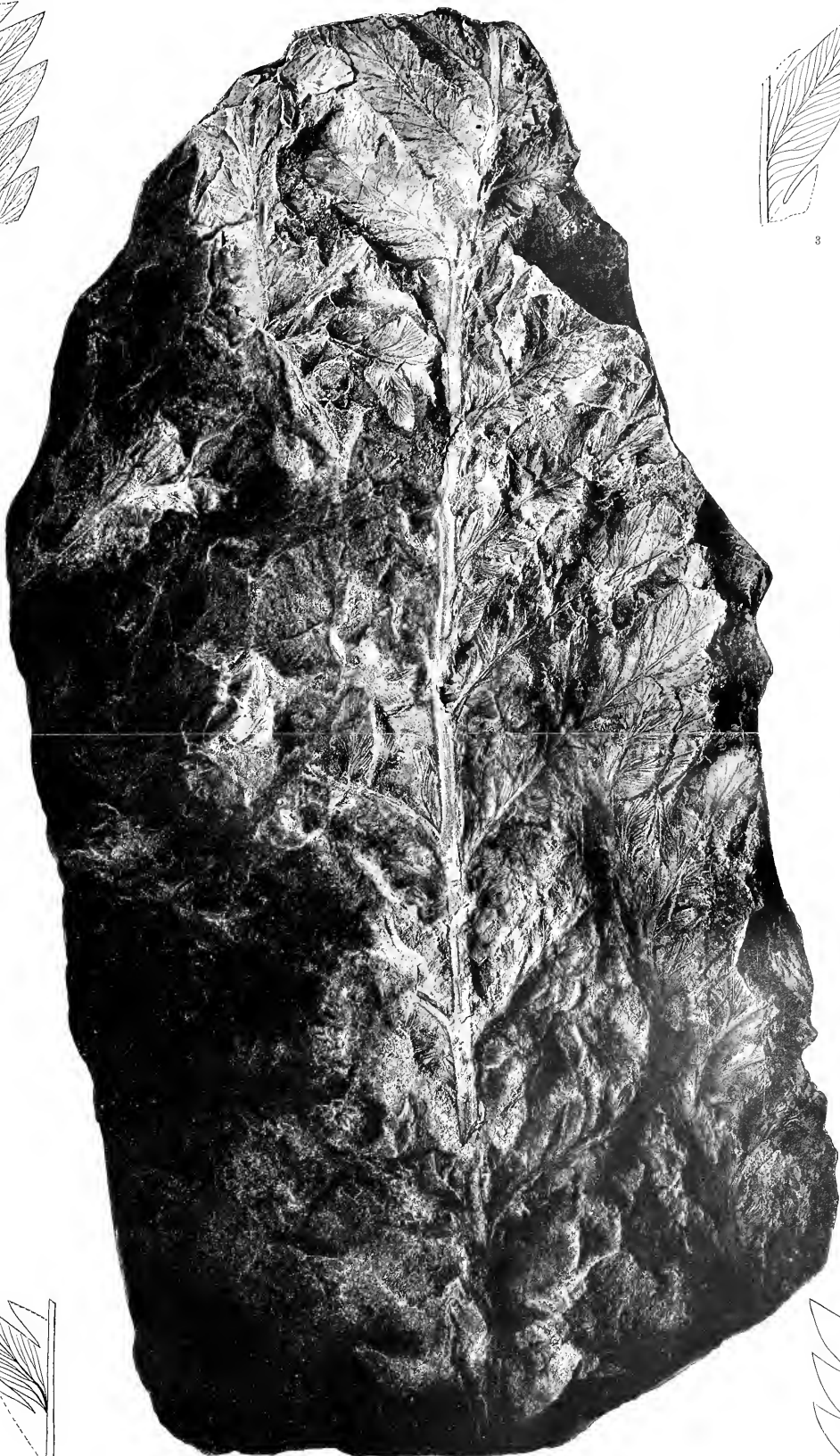
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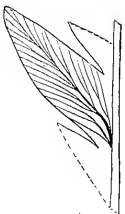
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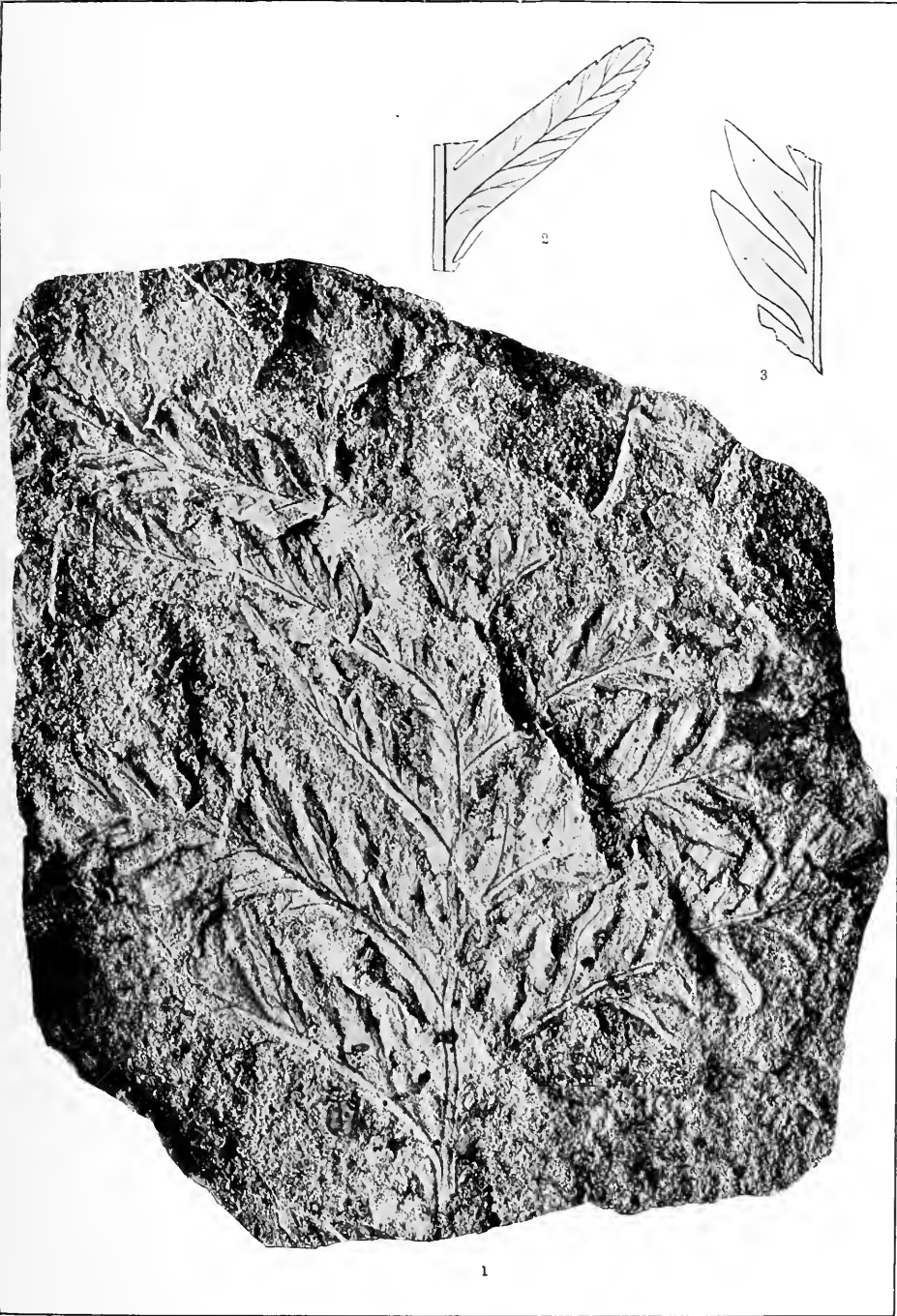


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1



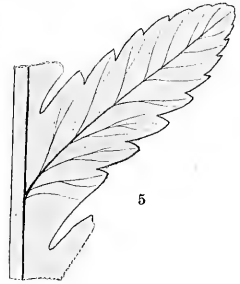
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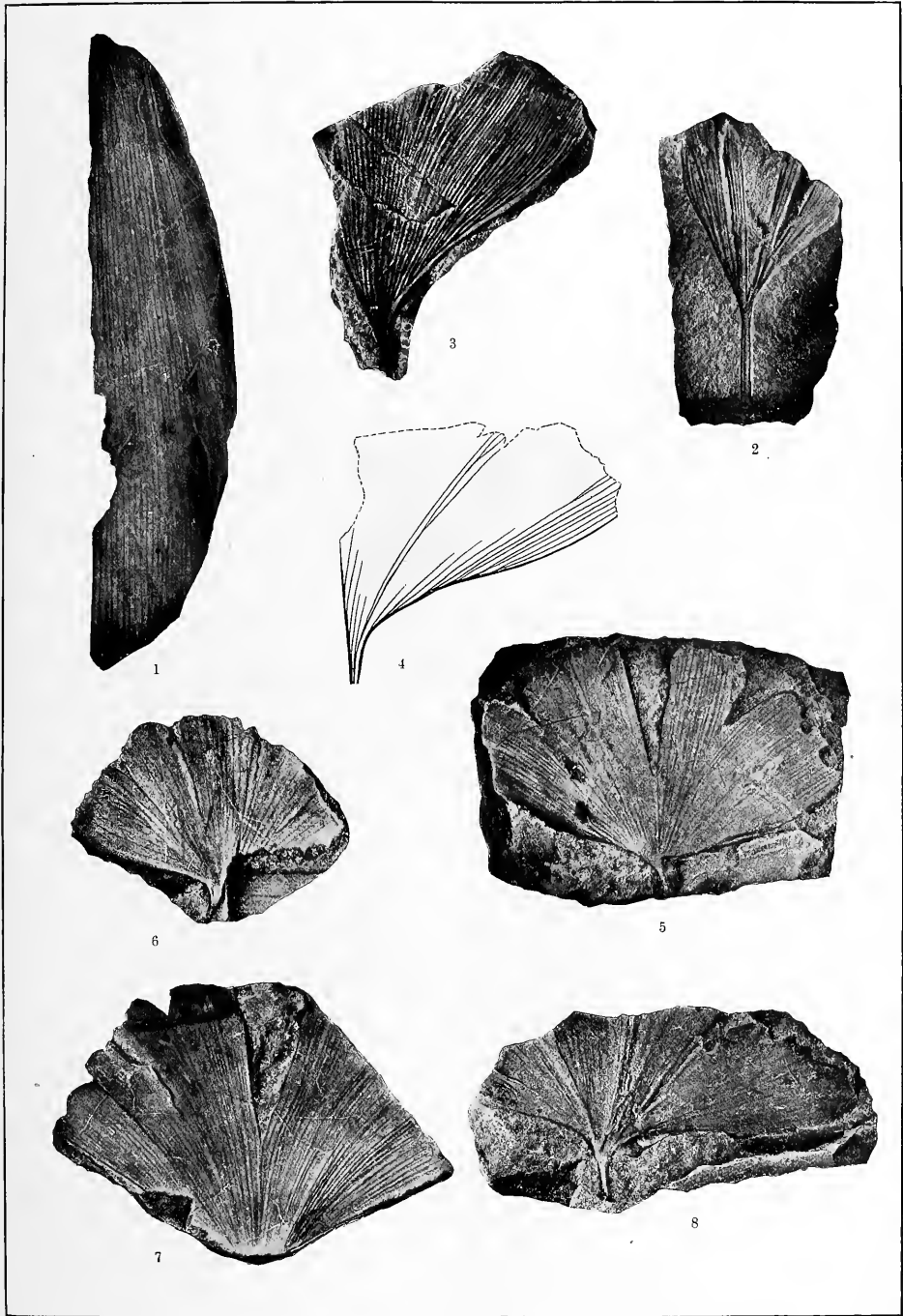
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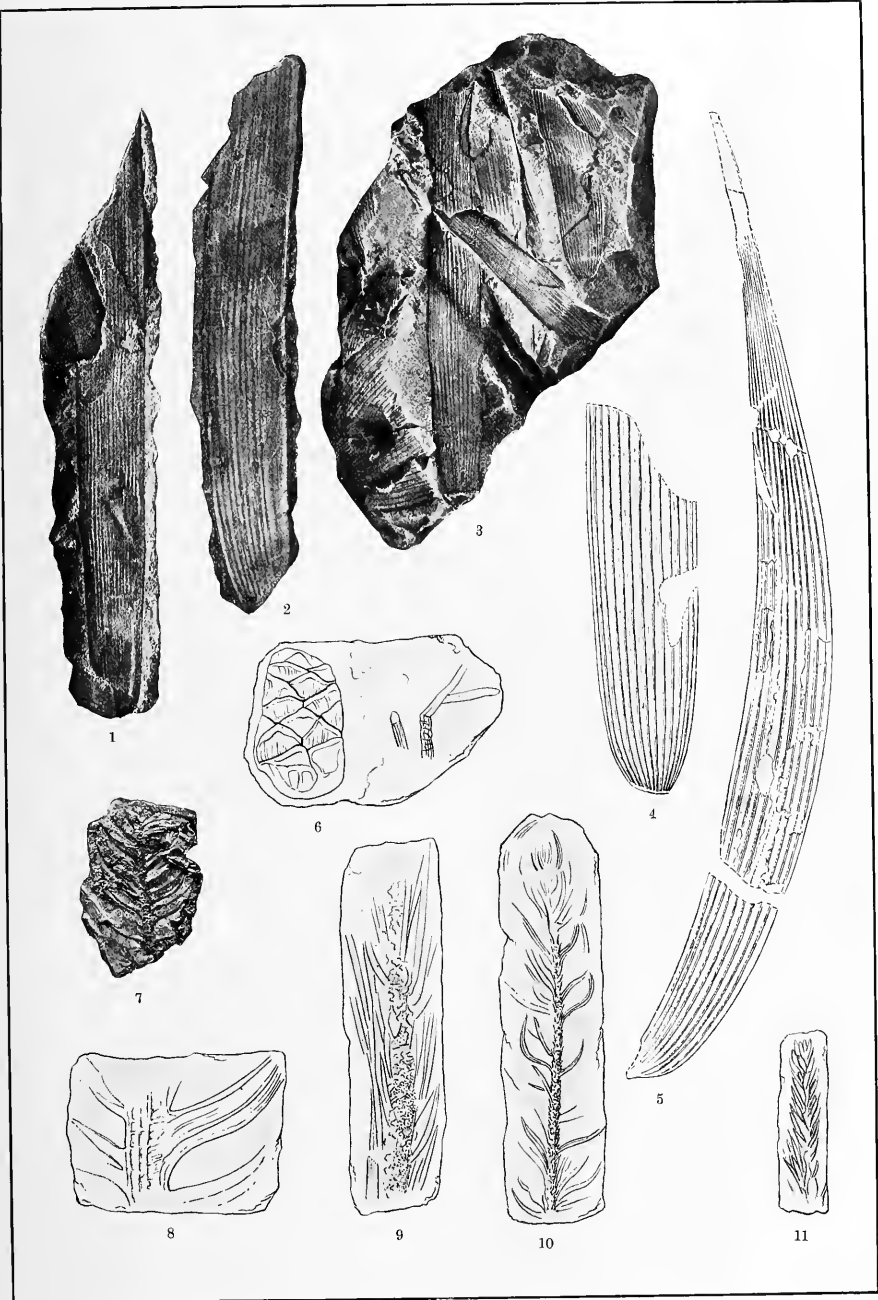


JURASSO-CRETACEOUS CYCADS AND GINGKOACEÆ FROM CAPE LISBURNE, ALASKA.

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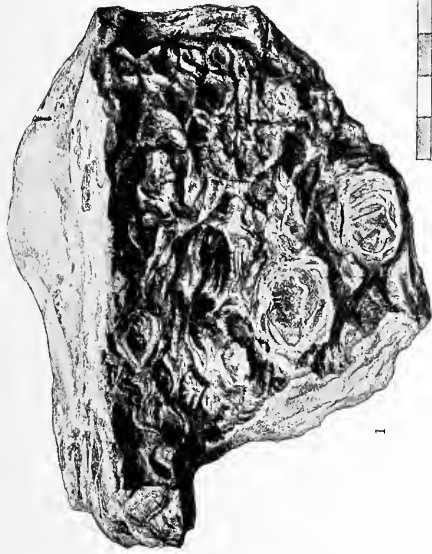


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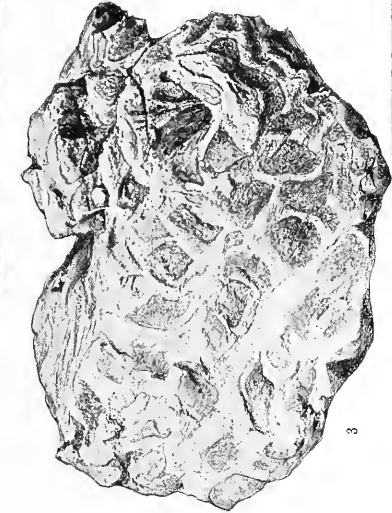
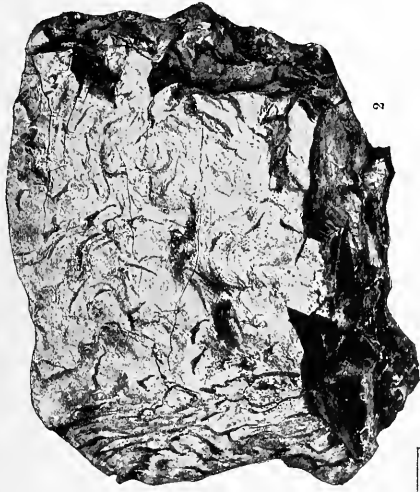
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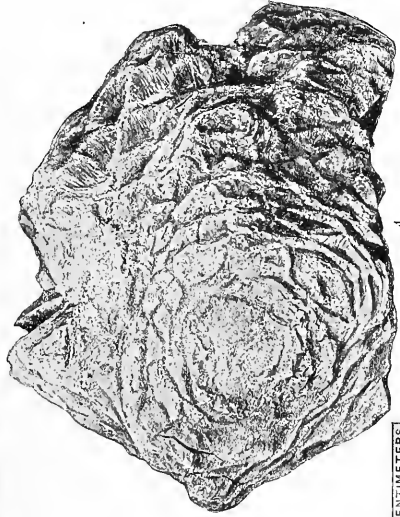
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CENTIMETERS



CENTIMETERS



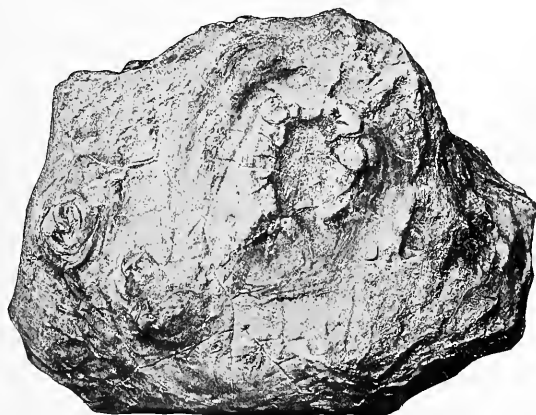
JURASSIC CYCADS FROM WYOMING.

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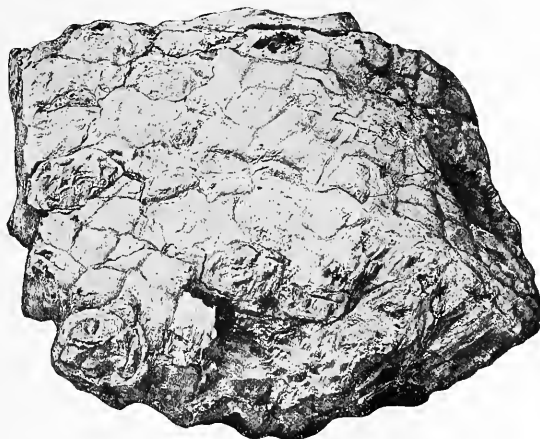
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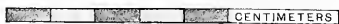
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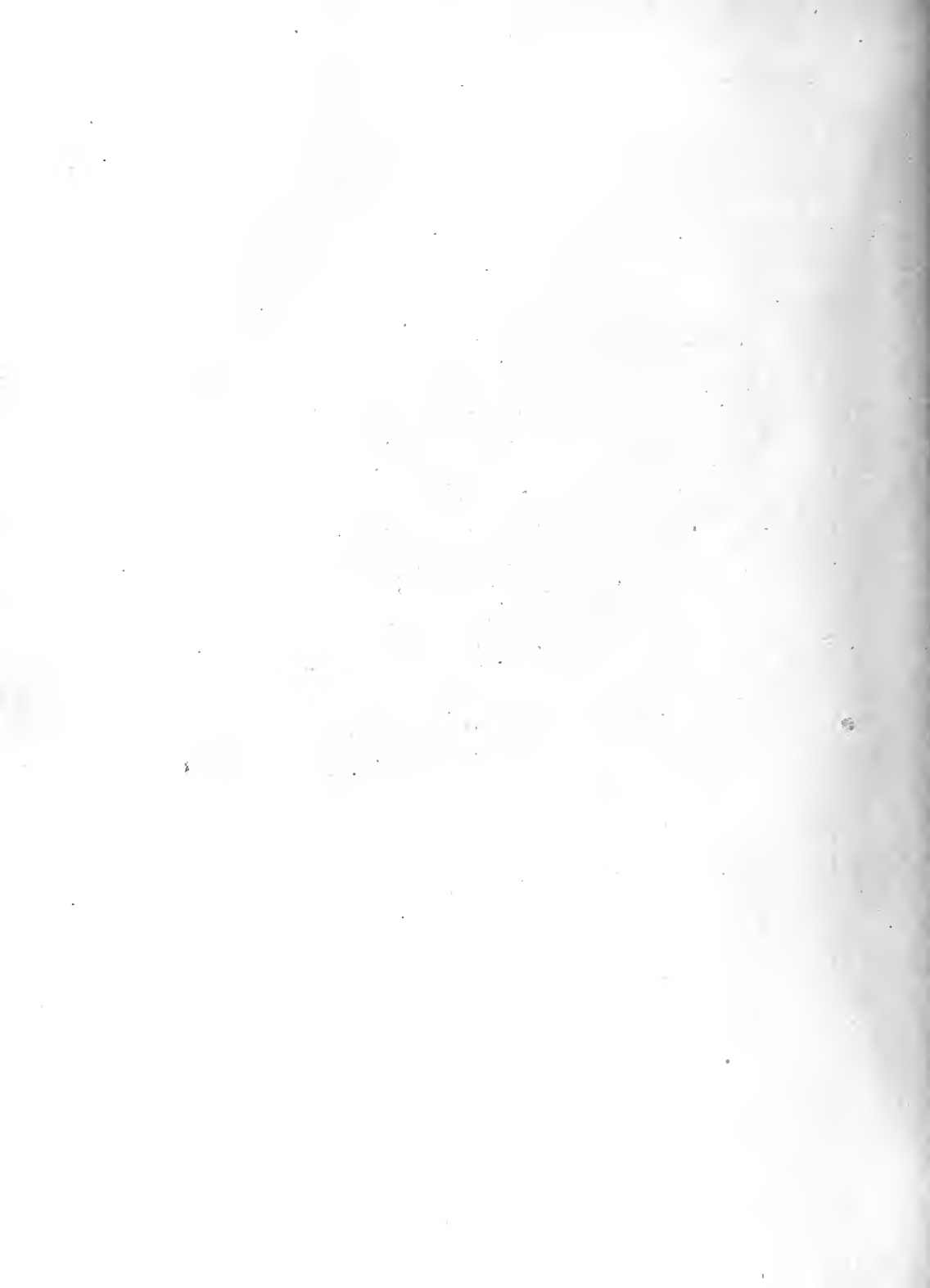


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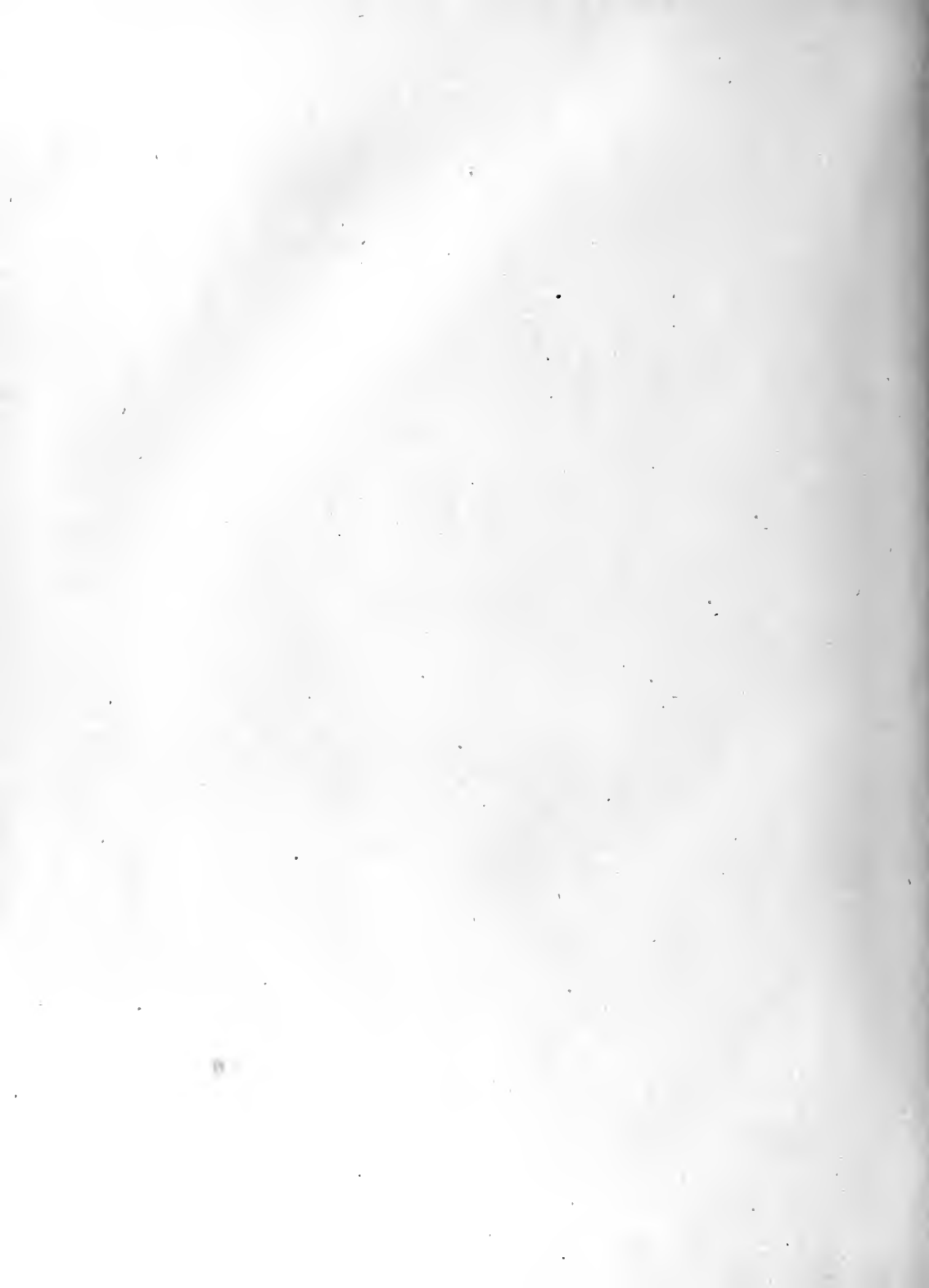
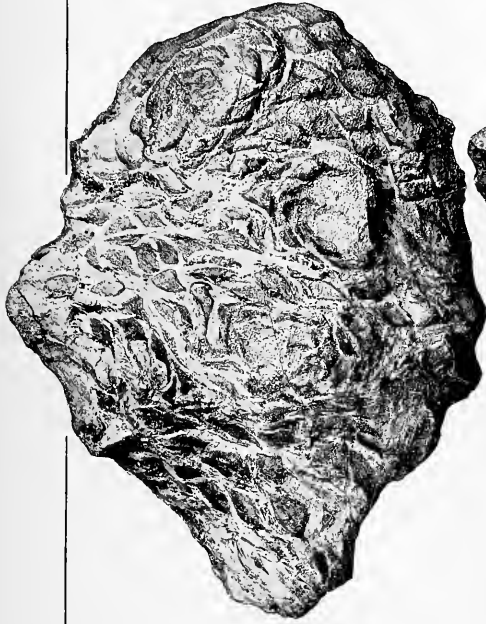


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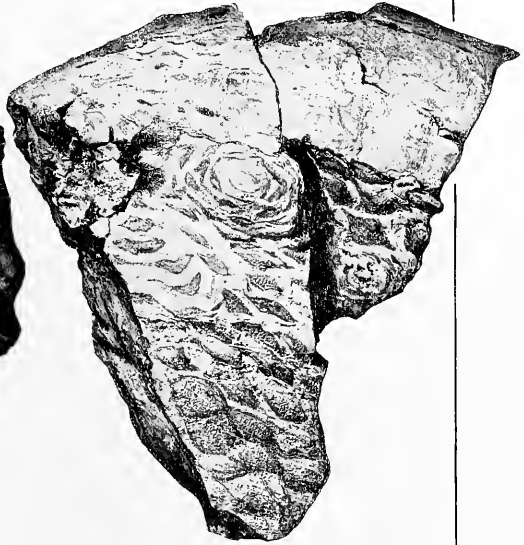
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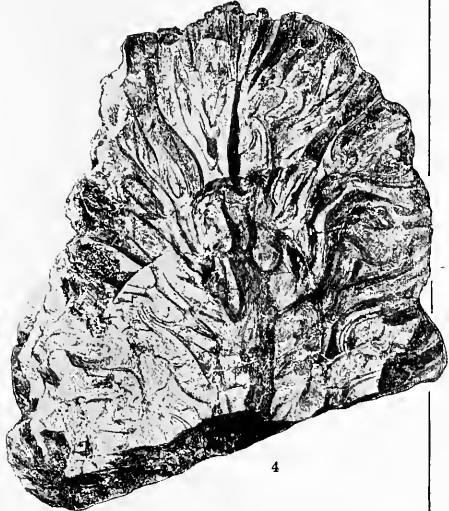
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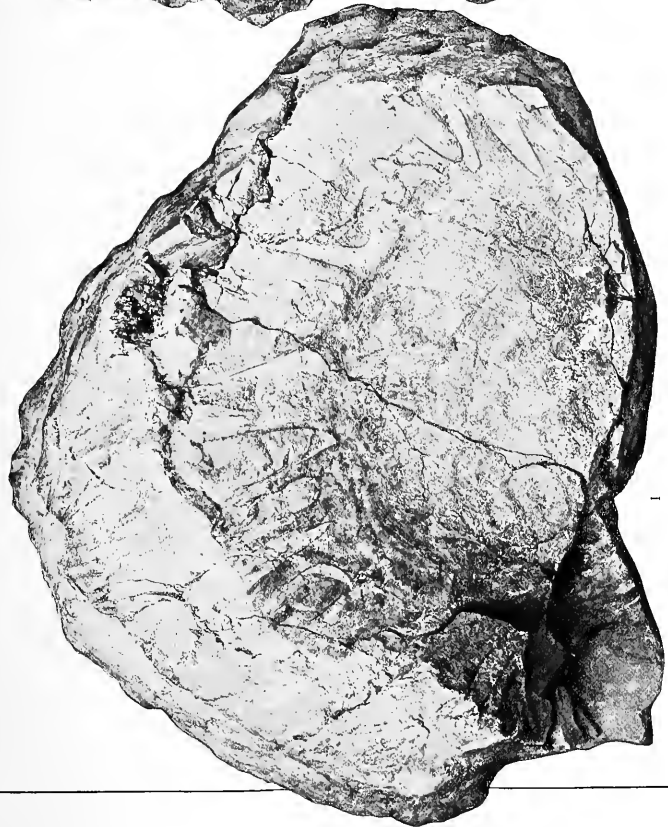
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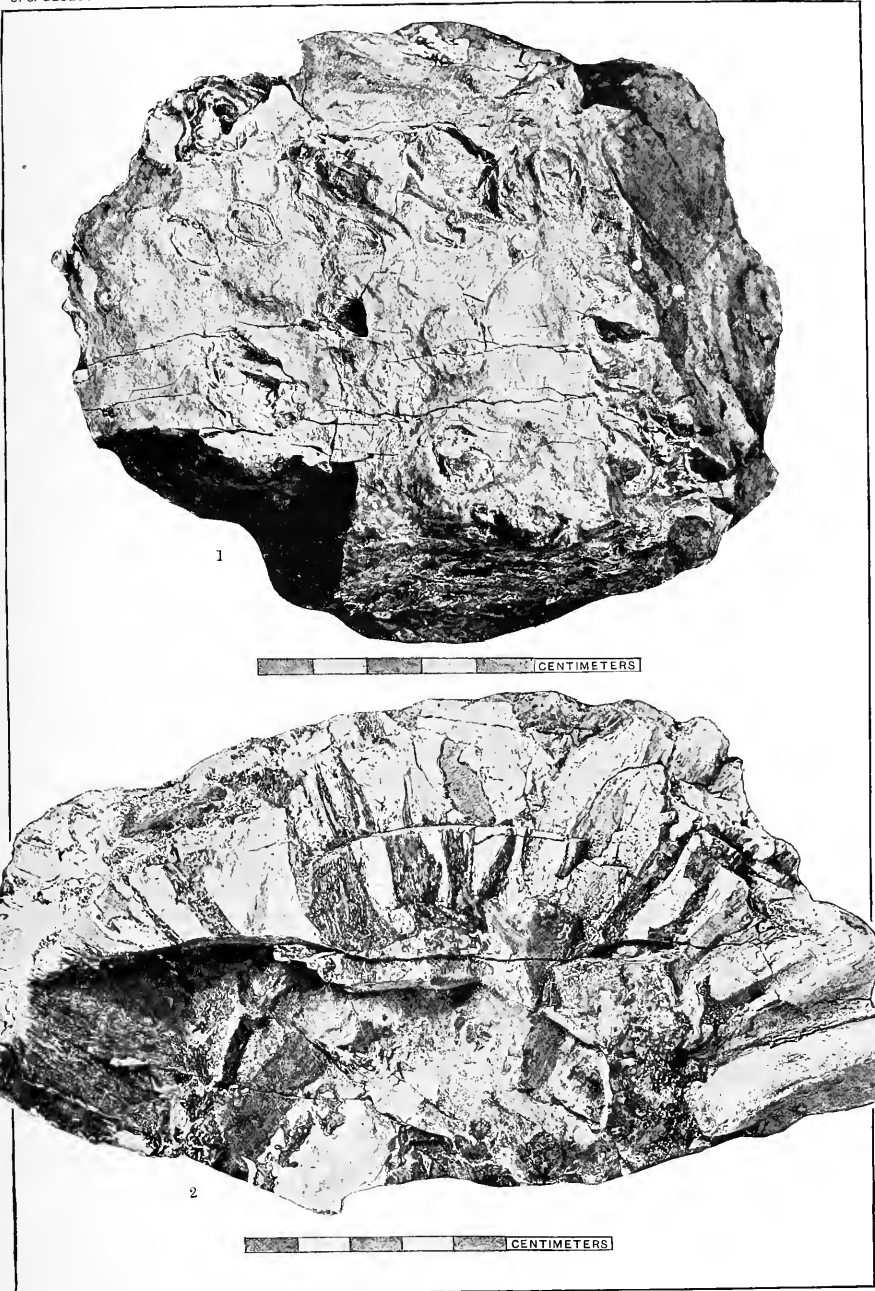
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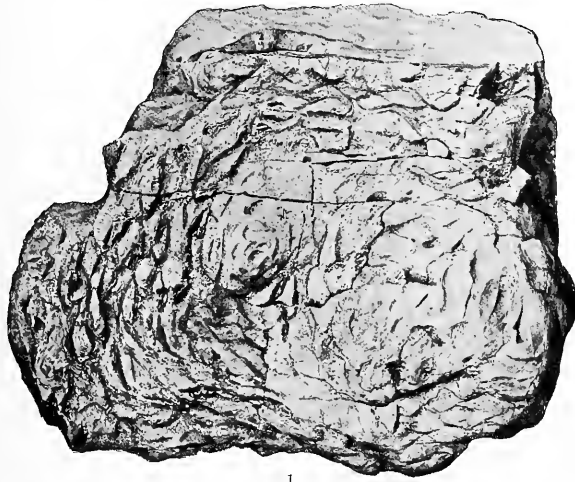
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JURASSIC CYCADS FROM WYOMING.

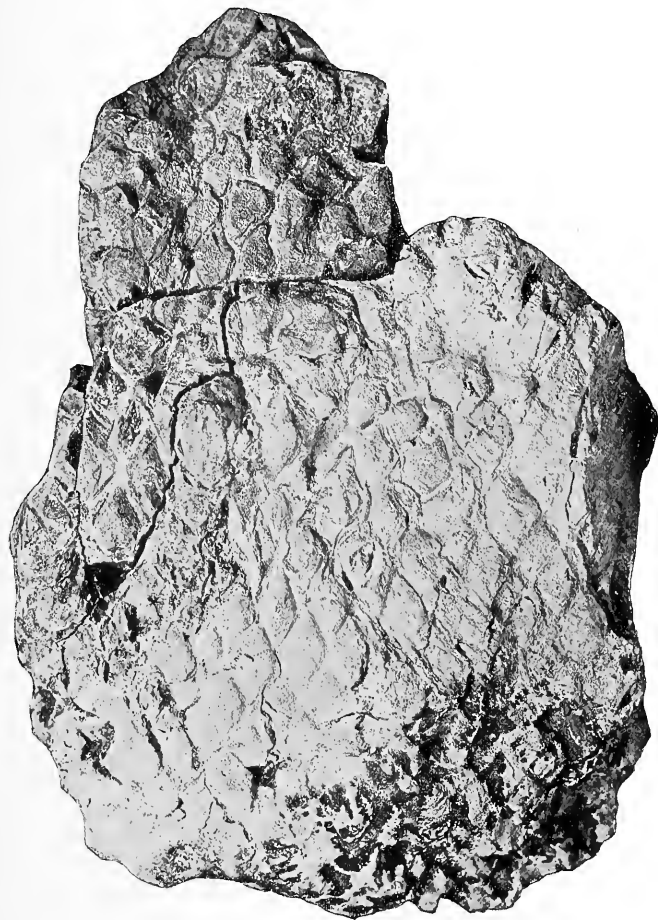


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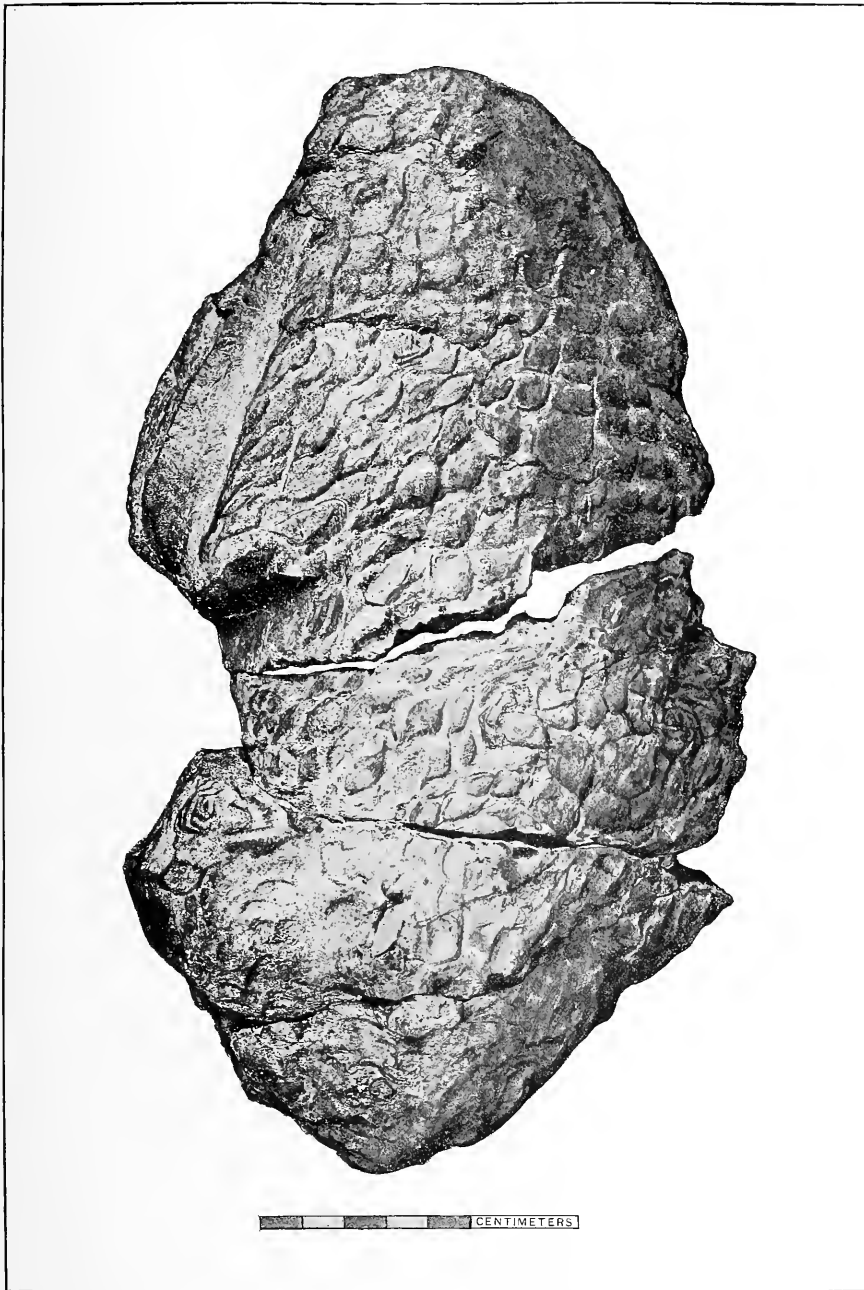
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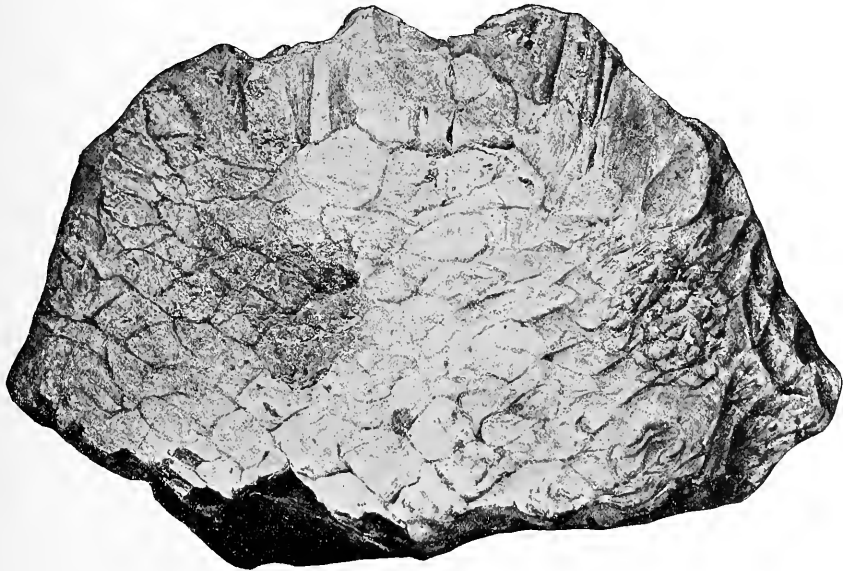
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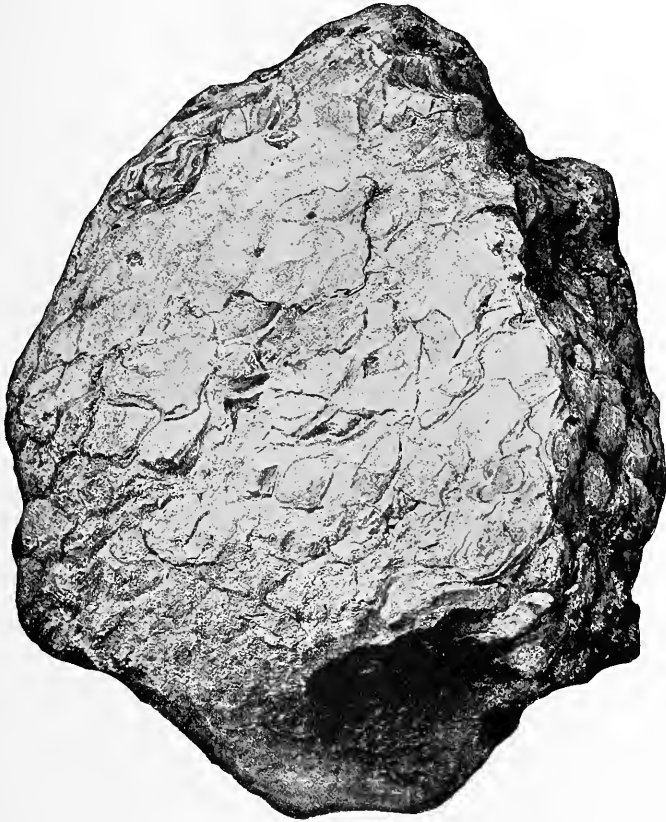
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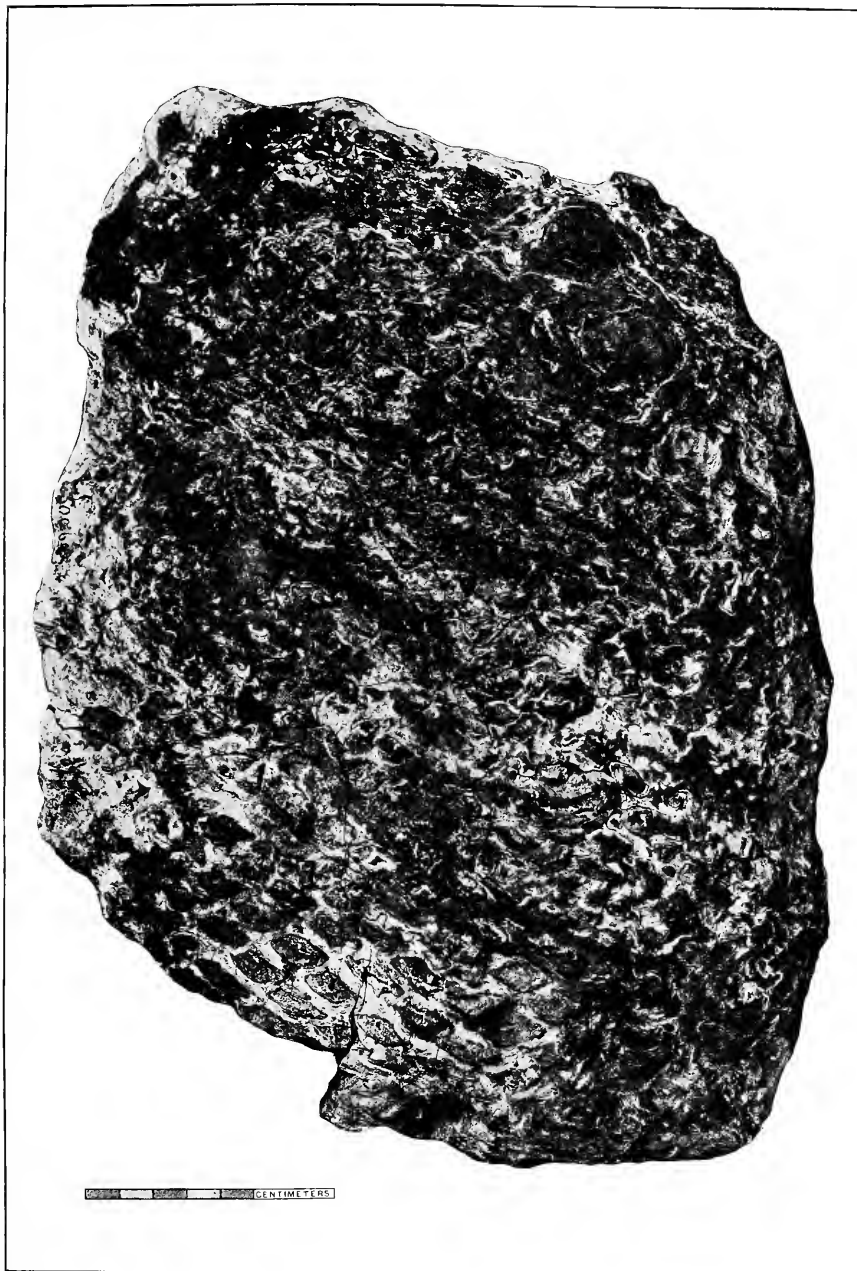
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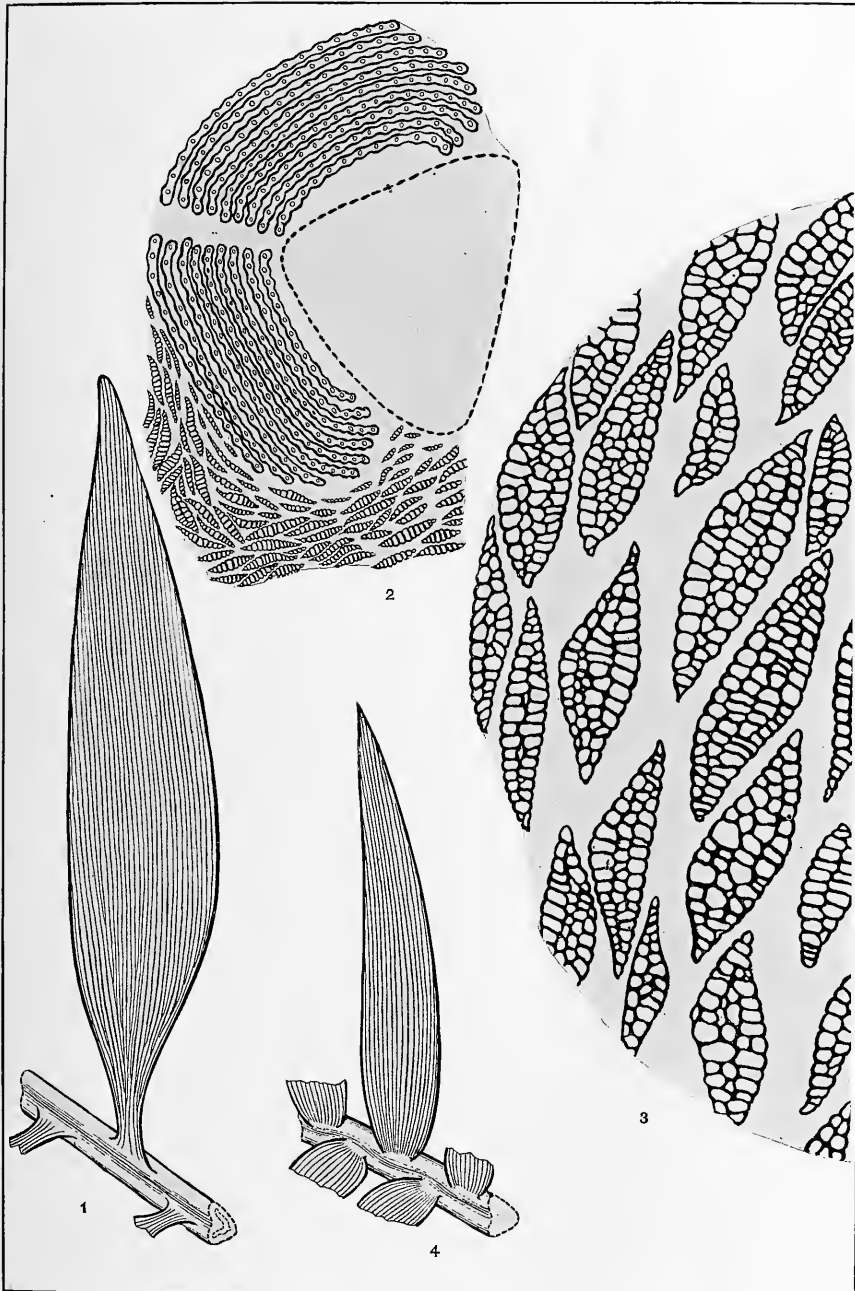
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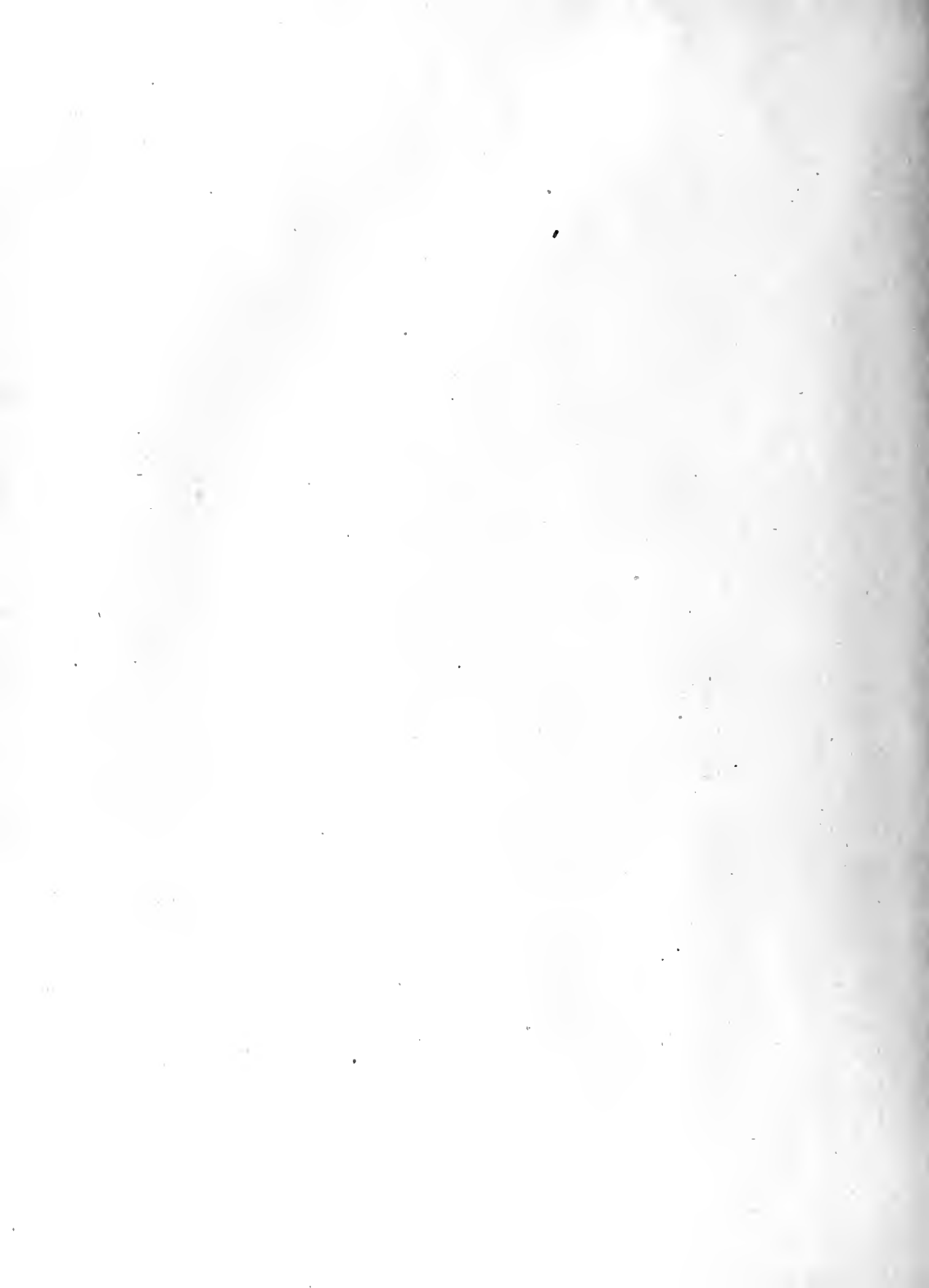


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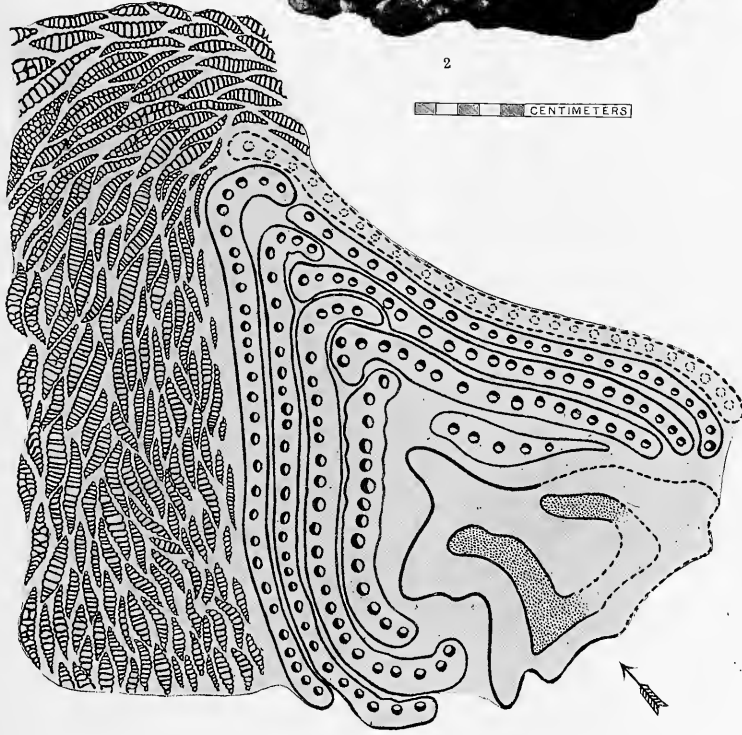
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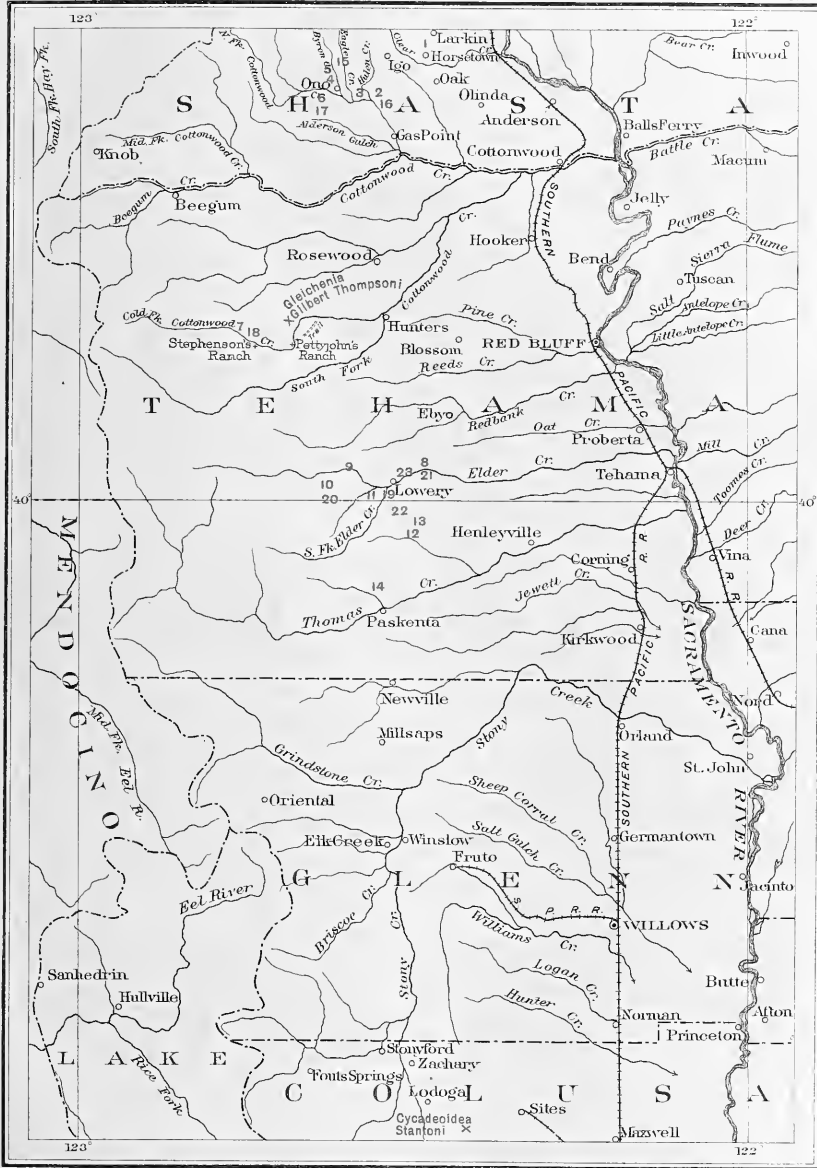
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SKETCH MAP SHOWING FOSSIL LOCALITIES OF THE SHASTA FORMATION
NORTHERN CALIFORNIA

Scale 0 10 20 30 miles

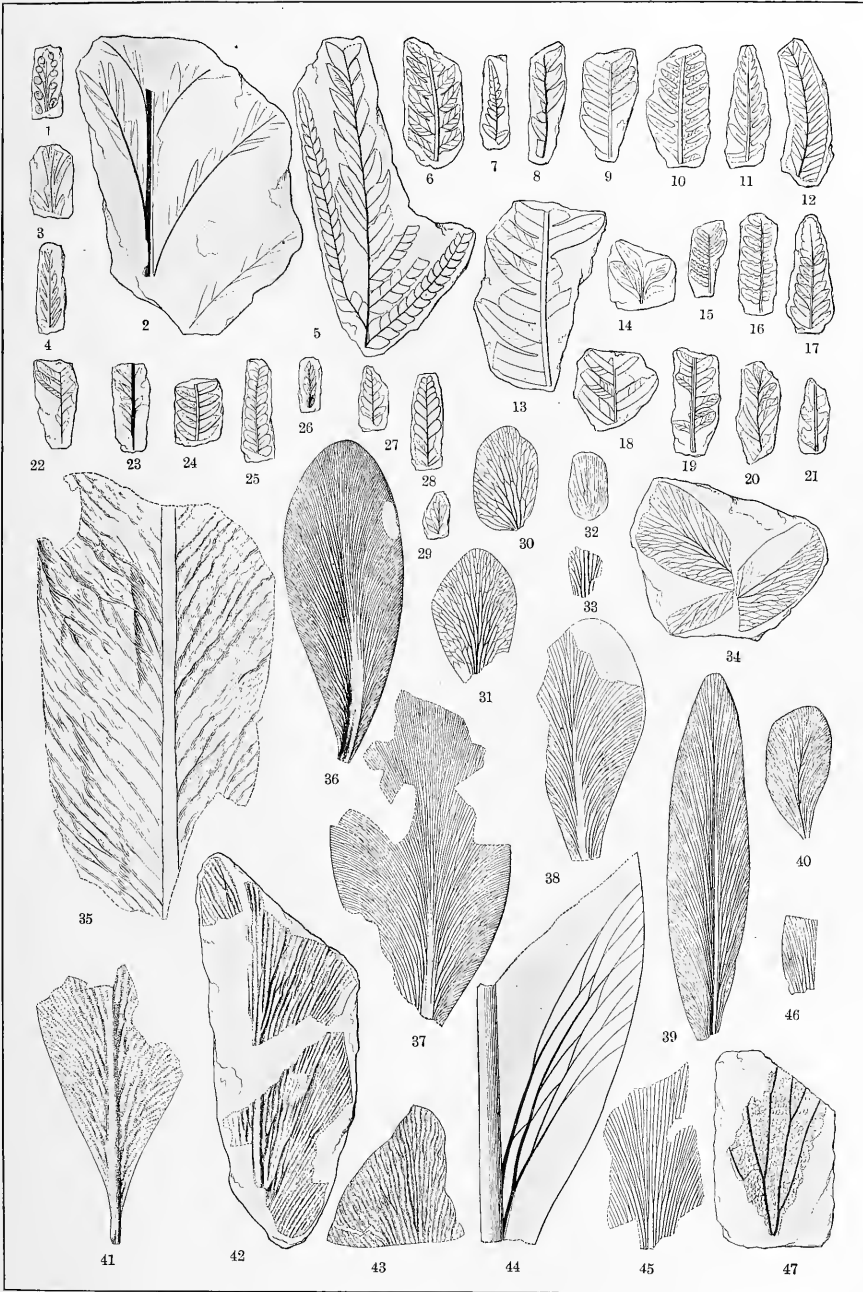
A. HODGE & CO. BALTIMORE

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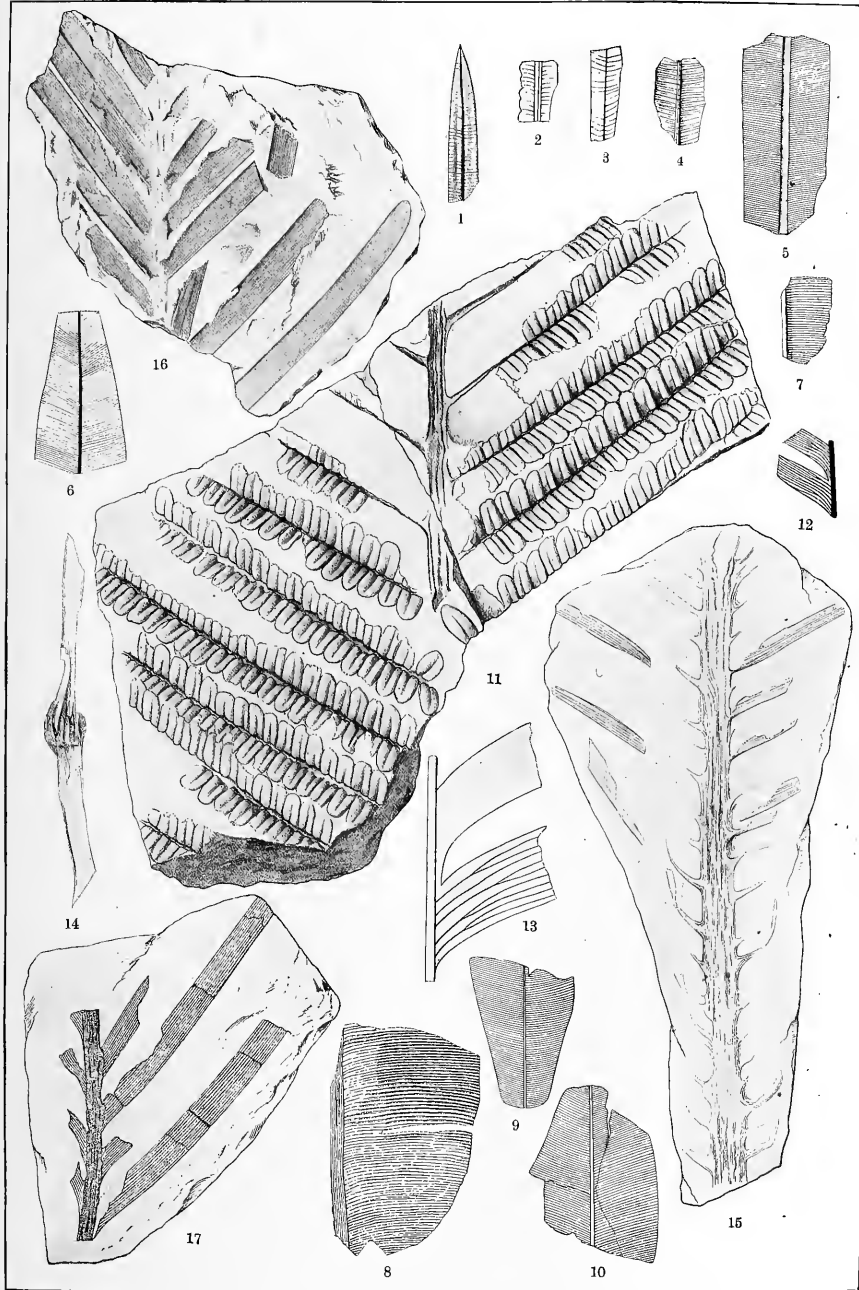
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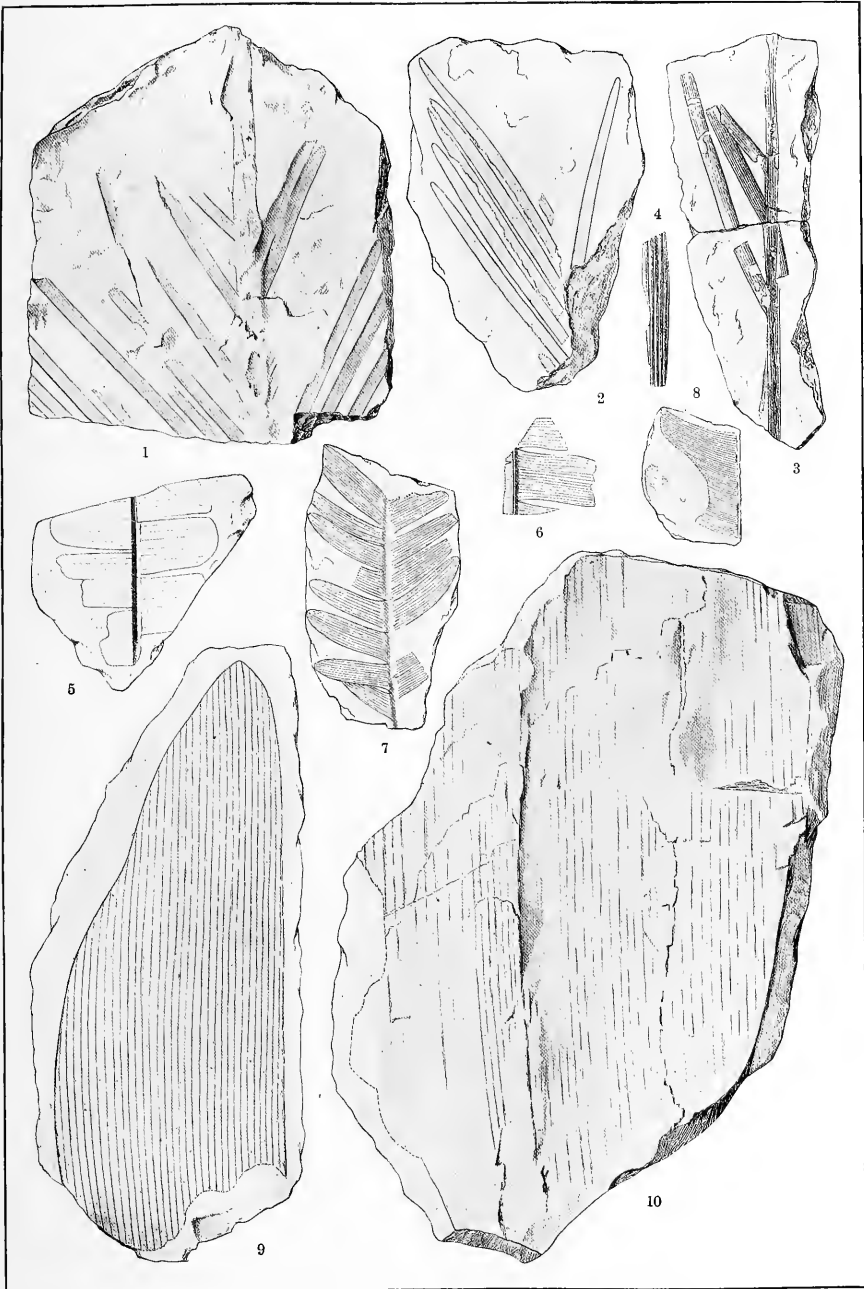
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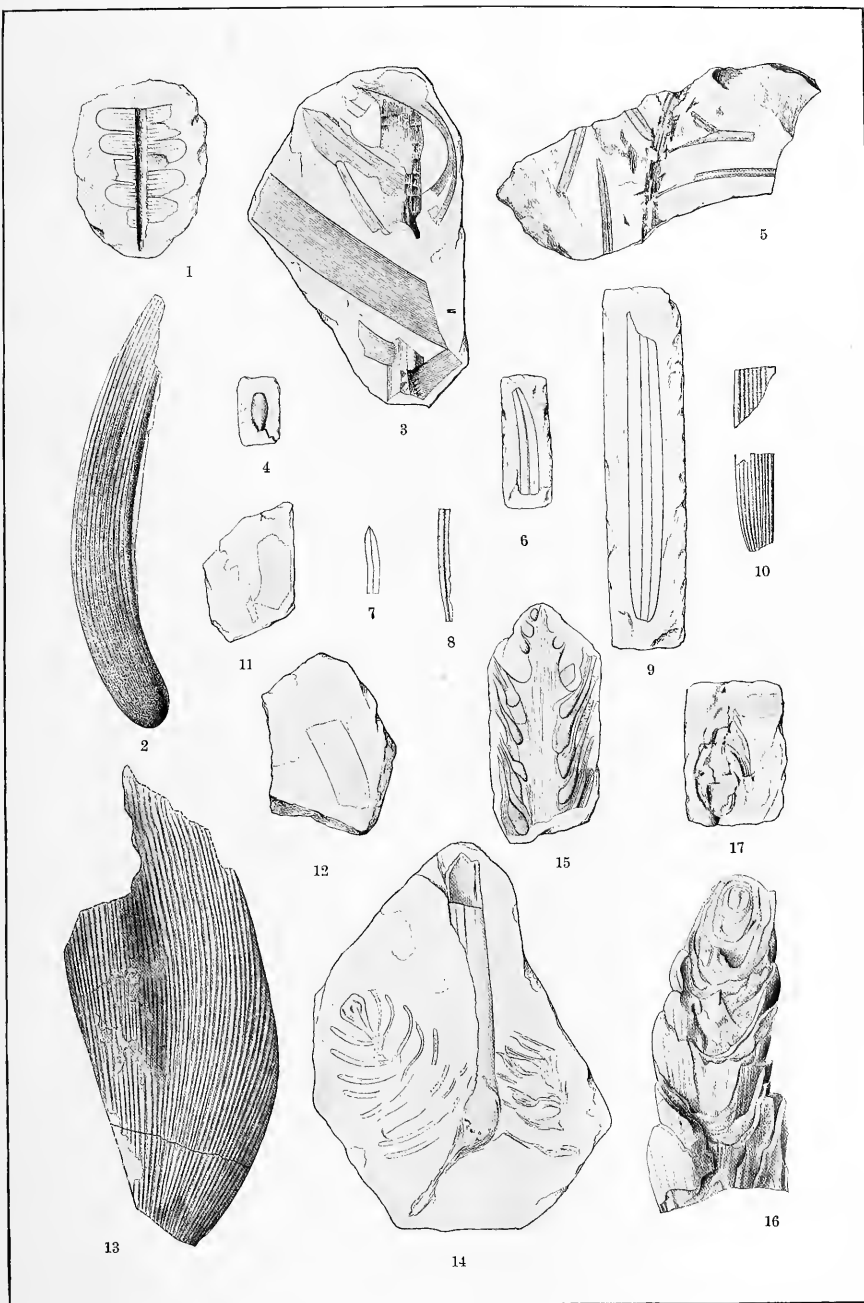
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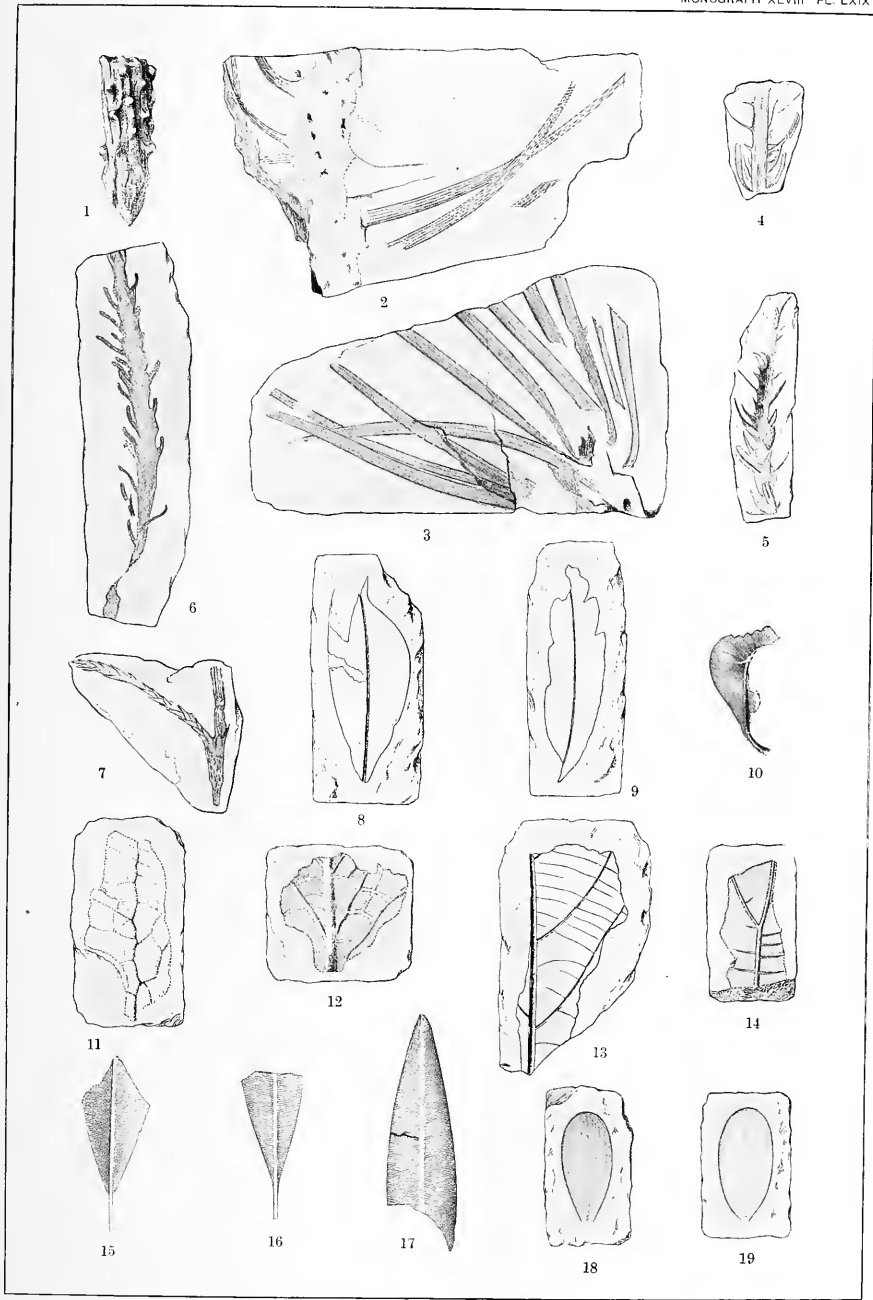


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PLATE LXIX.

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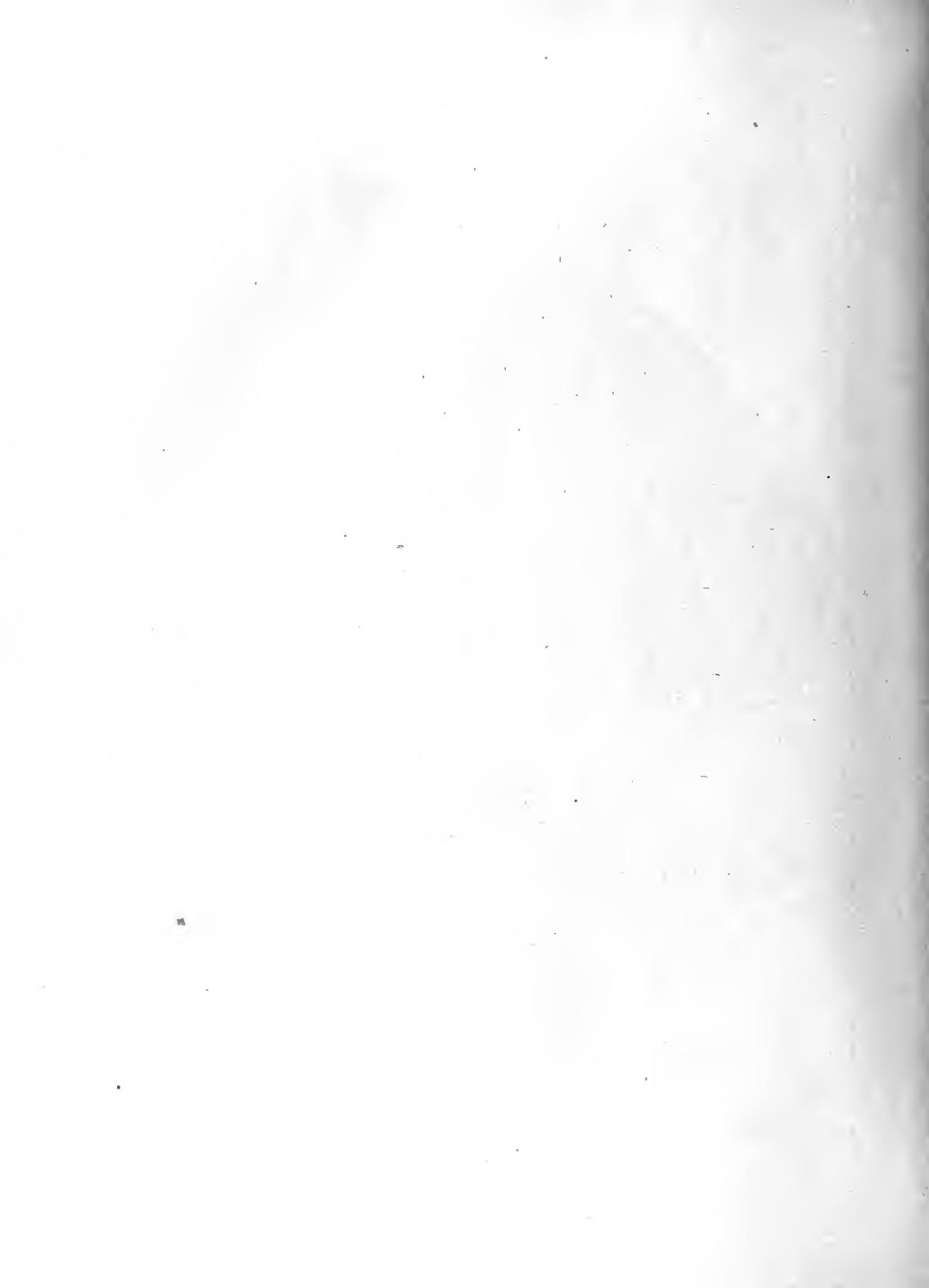
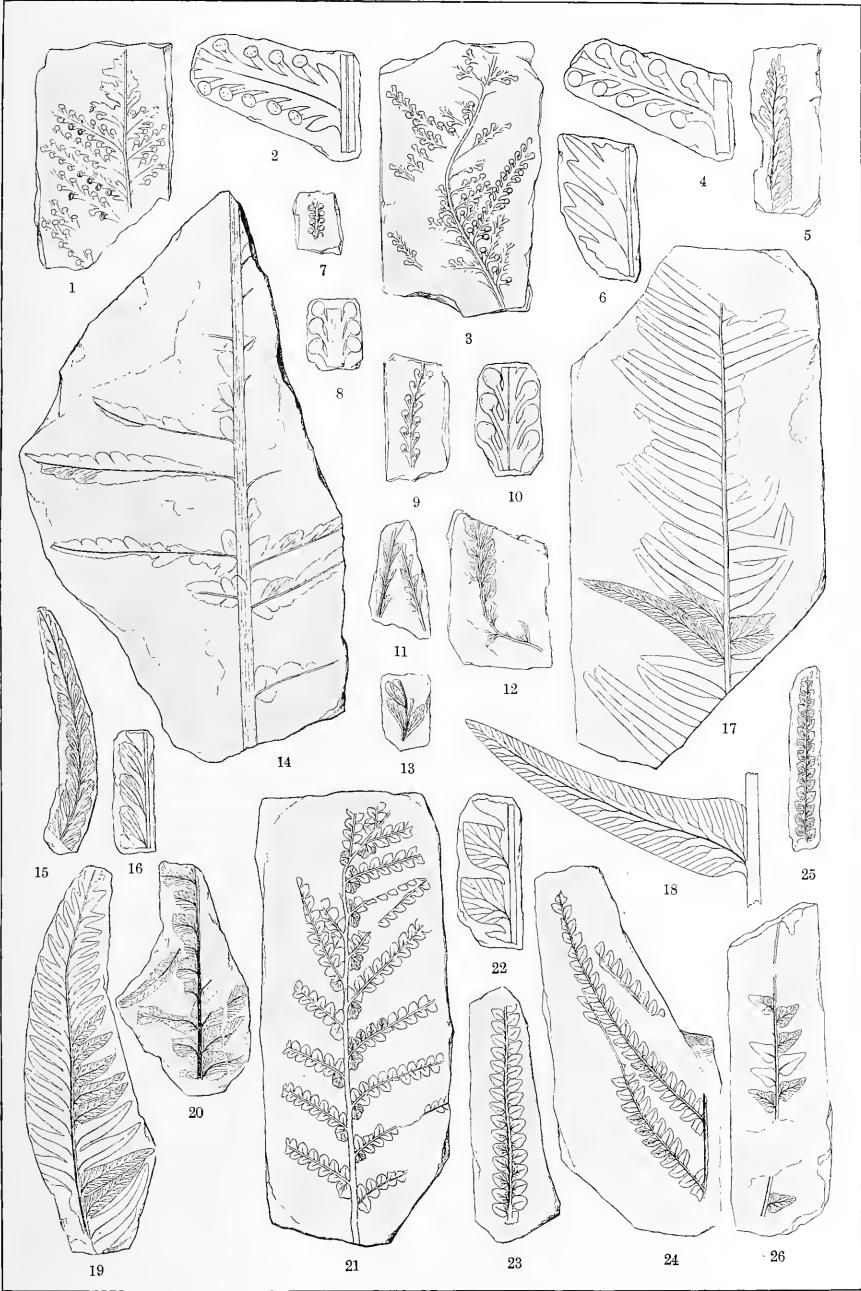


PLATE LXXI.

PLATE LXXI.

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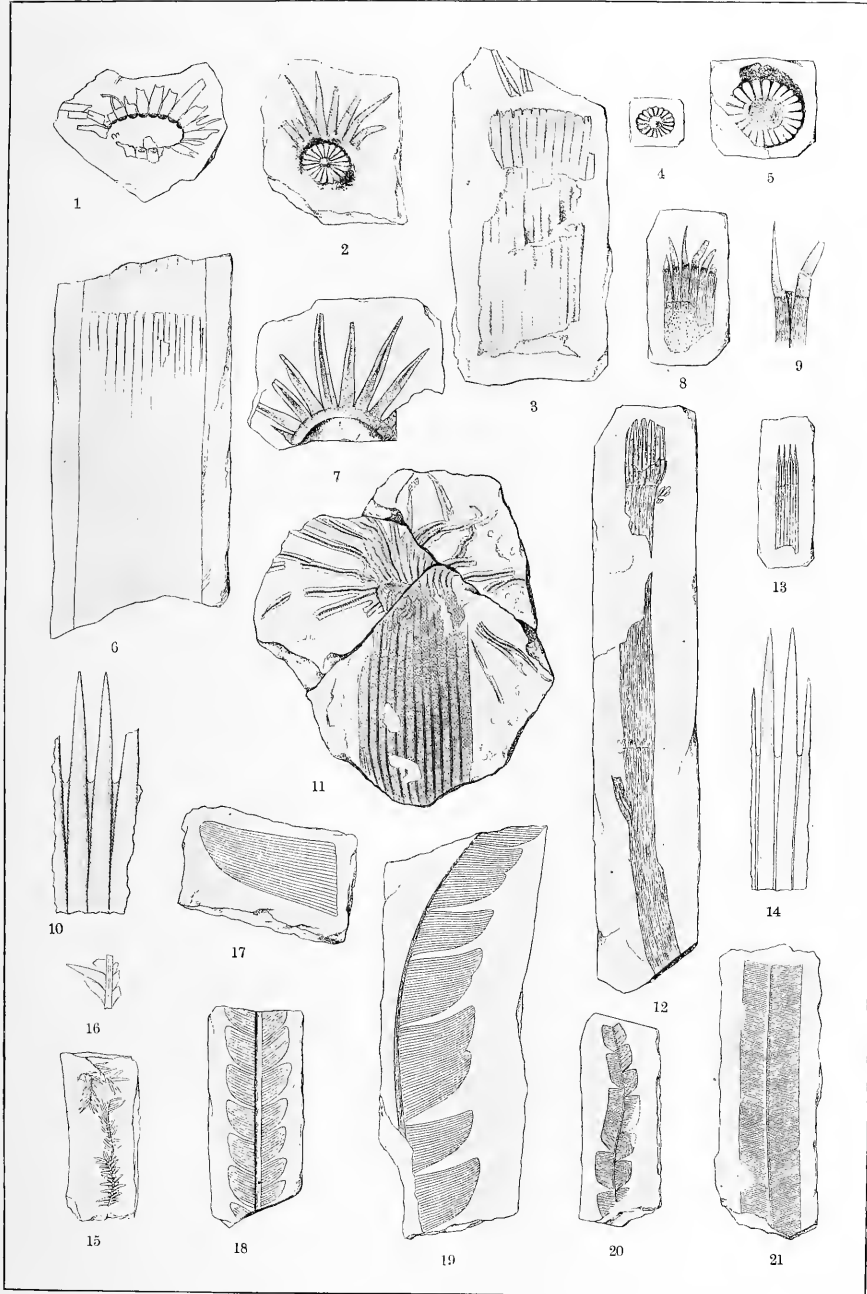
FERNS FROM THE KOOTANIE FORMATION OF MONTANA.

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EQUISETA AND CYCADS FROM THE KOOTANIE FORMATION OF MONTANA.

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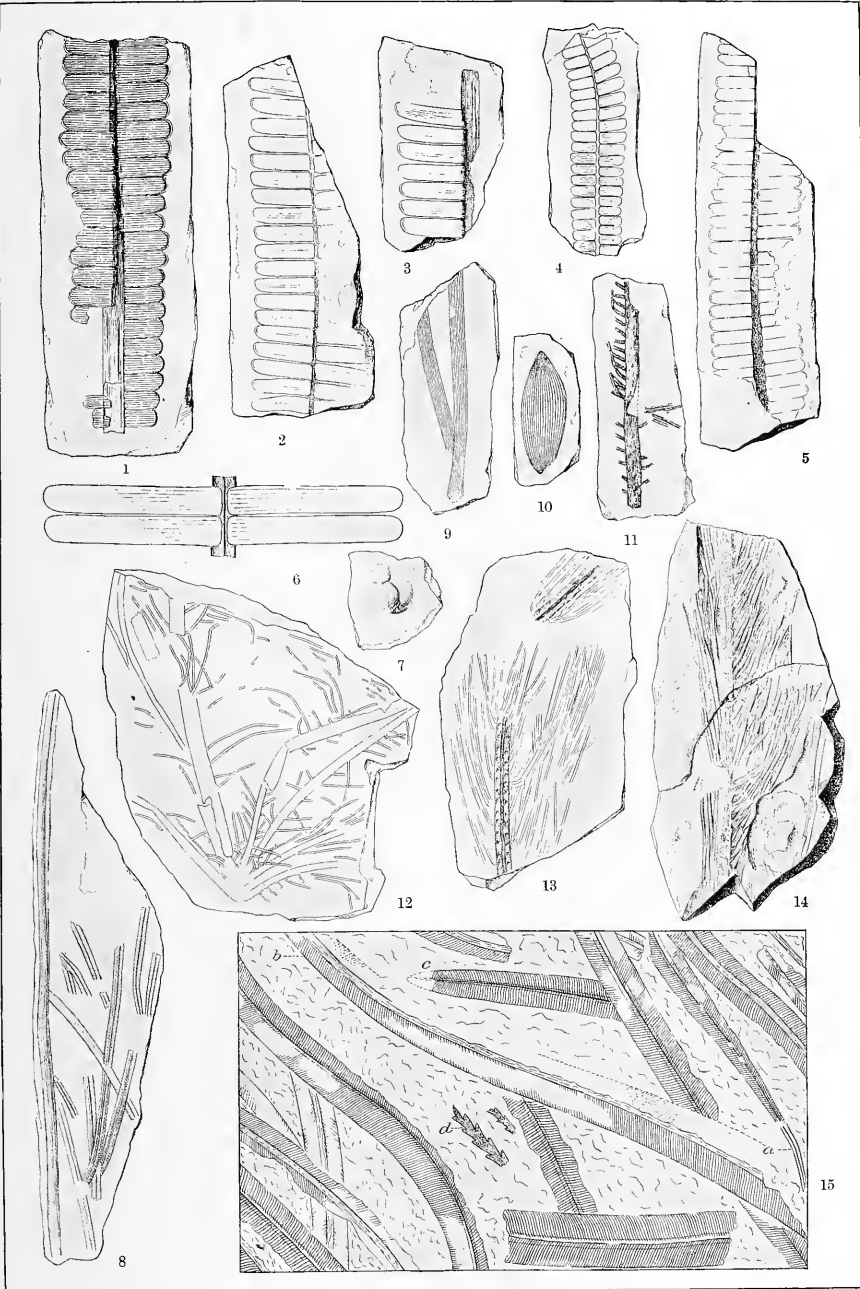
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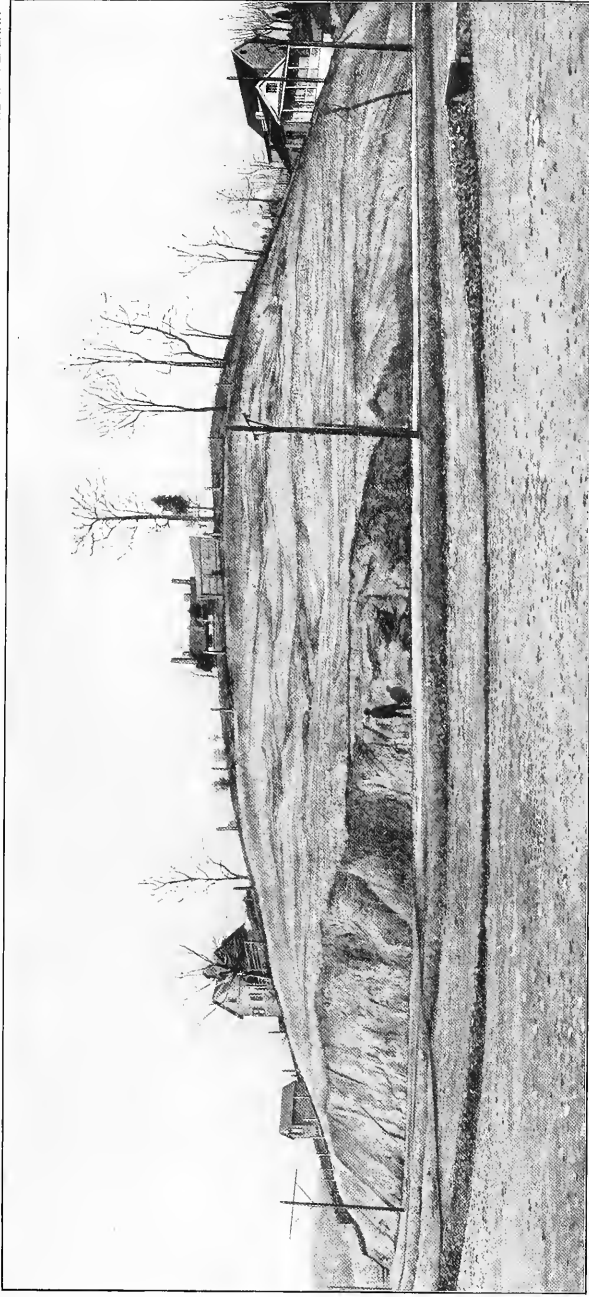


CYCADS AND CONIFERS FROM THE KOOTANIE FORMATION OF MONTANA AND THE LAKOTA FORMATION OF SOUTH DAKOTA.

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PLATE LXXIV.

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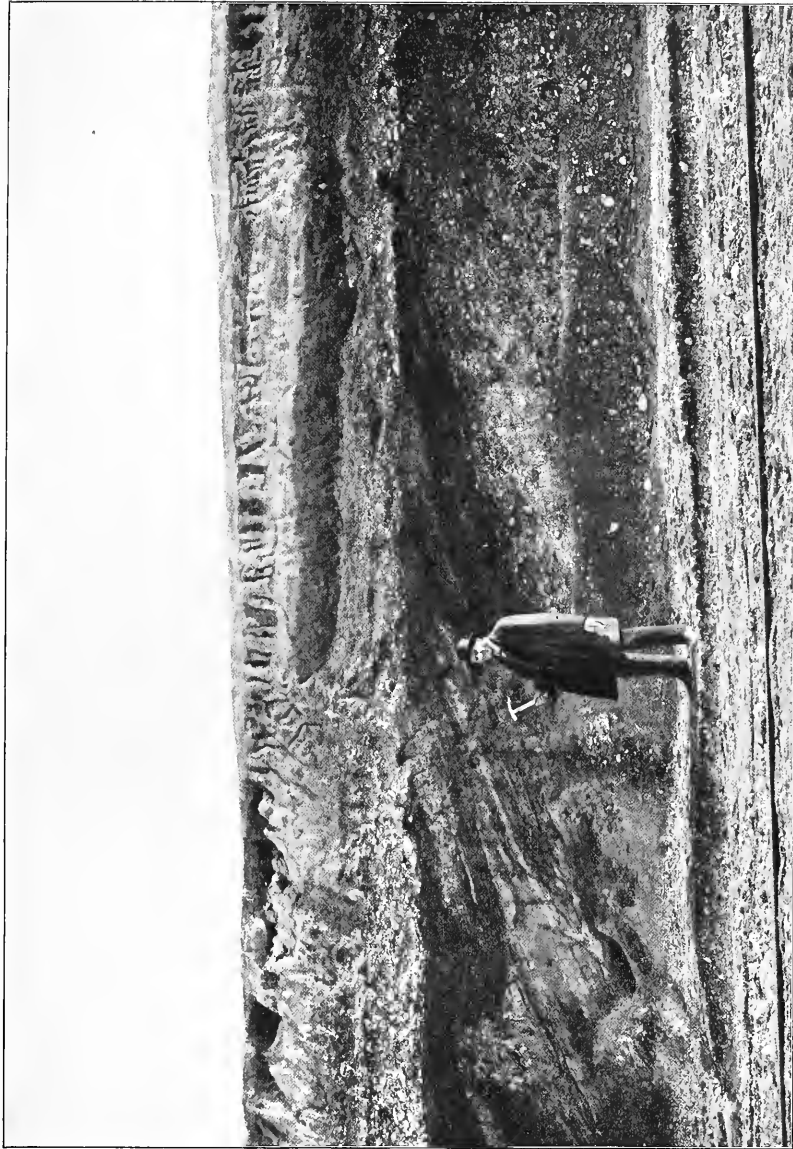


EXPOSURE OF THE POTOMAC FORMATION ON ONTARIO AVENUE, WASHINGTON, D. C.

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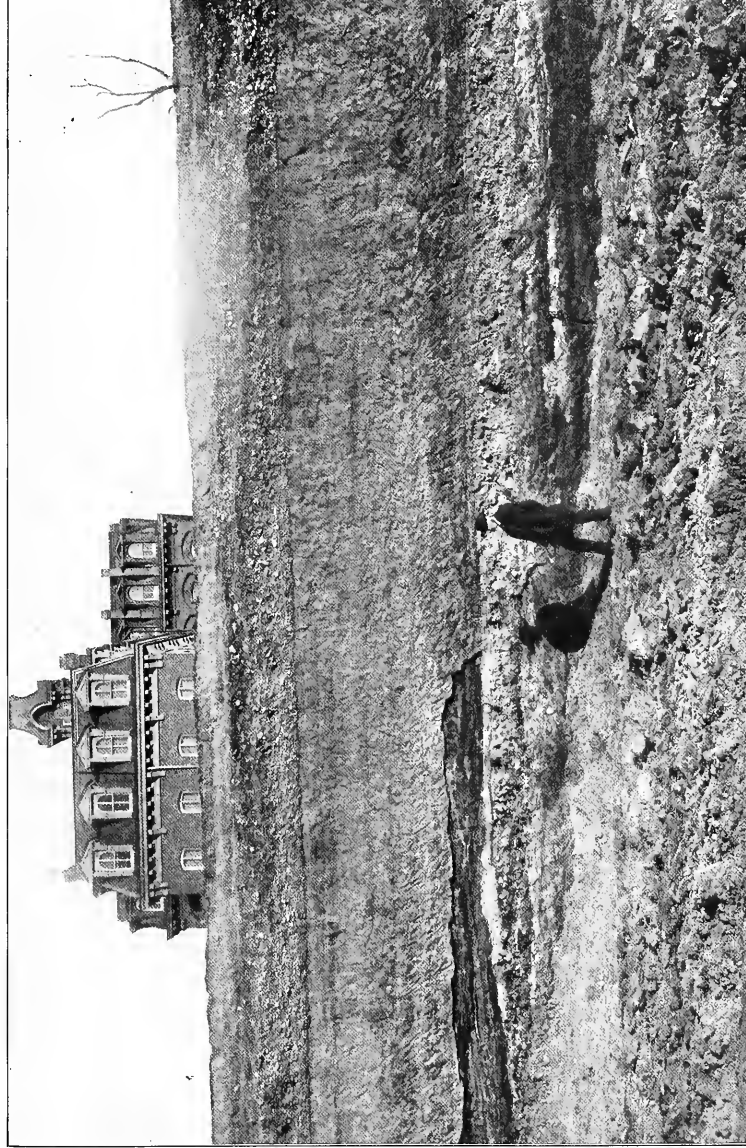
EXPOSURE OF THE POTOMAC FORMATION ON KANSAS AVENUE, WASHINGTON, D. C.



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PLATE LXXVI.

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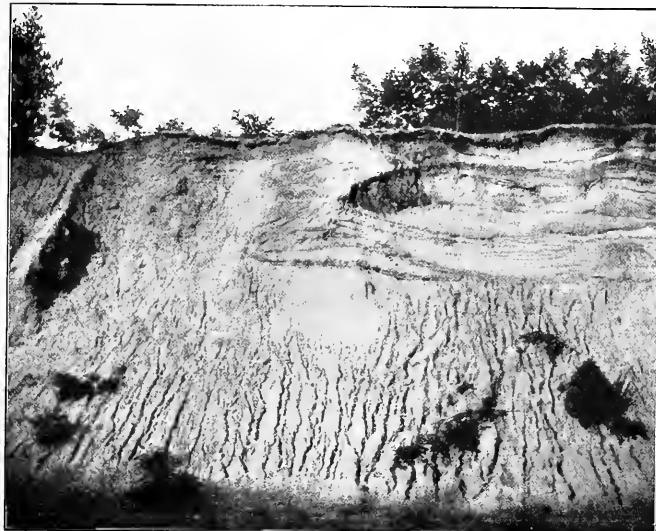
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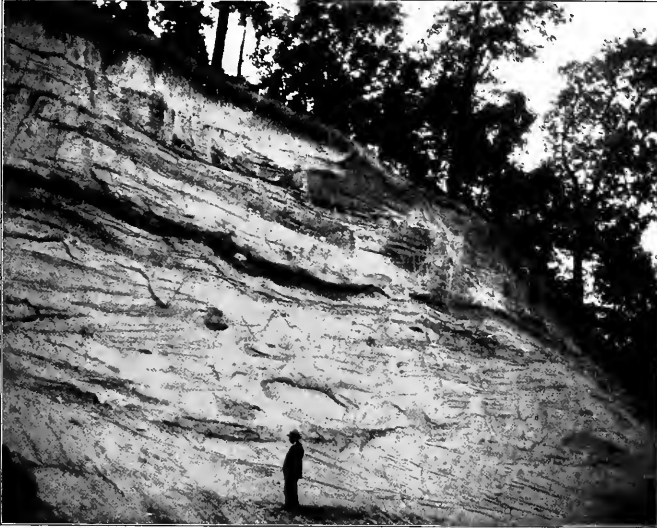
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EXPOSURES OF THE POTOMAC FORMATION AT TERRA COTTA, D. C.

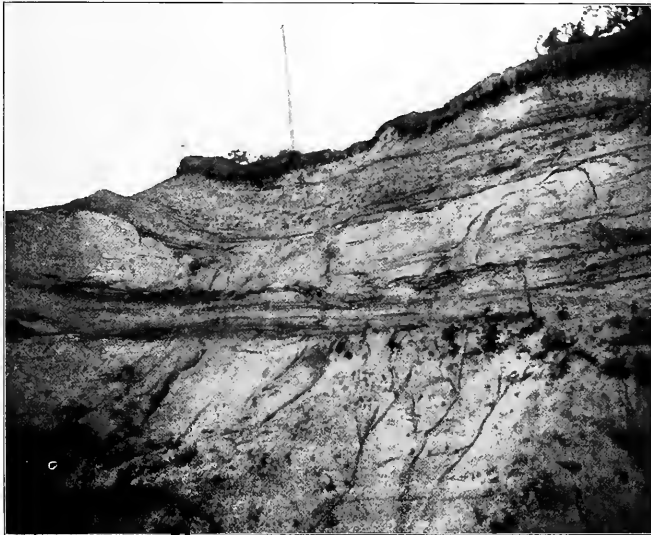
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PLATE LXXVIII.

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EXPOSURES OF THE POTOMAC FORMATION AT FREESTONE, VA.

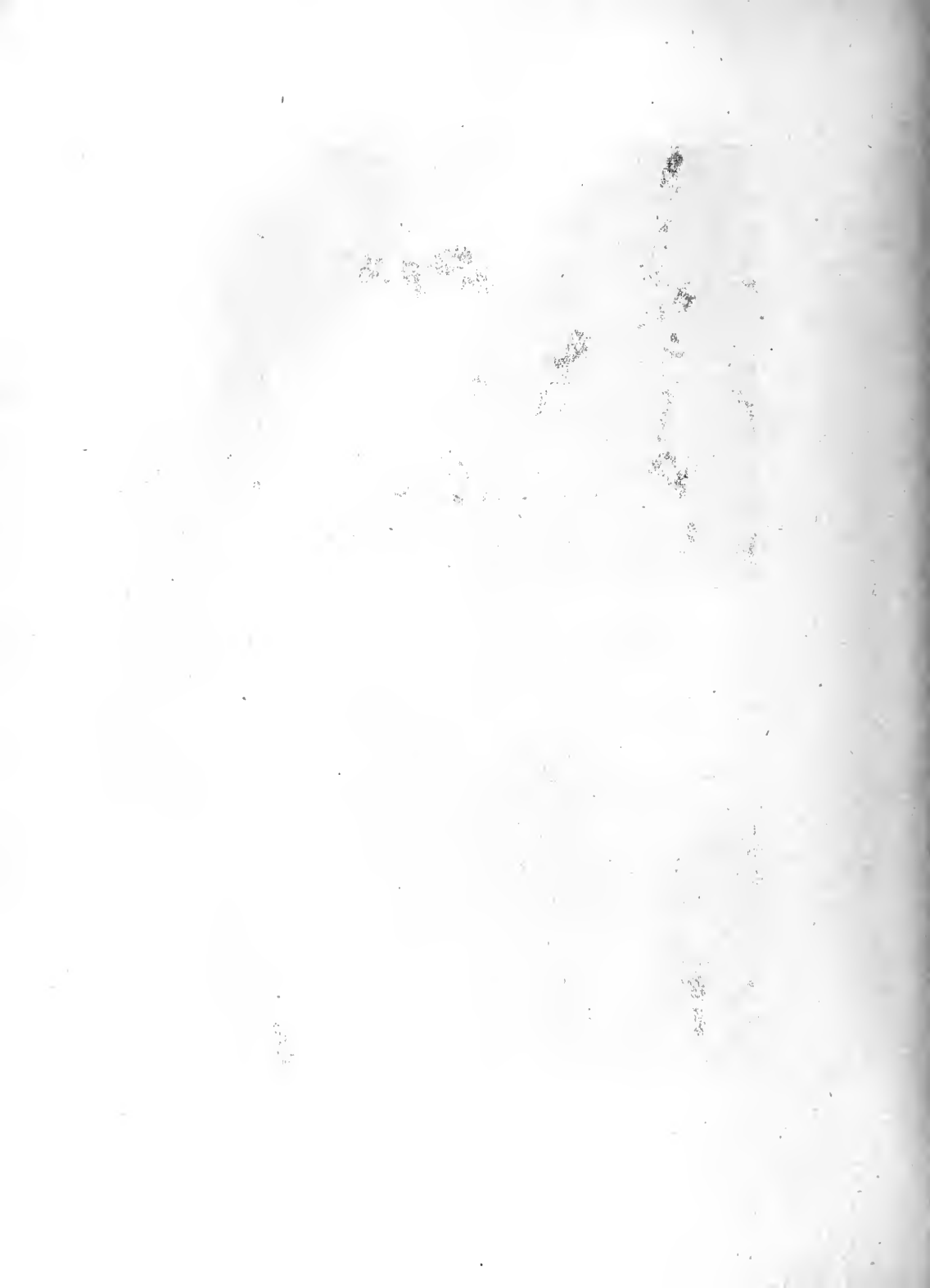


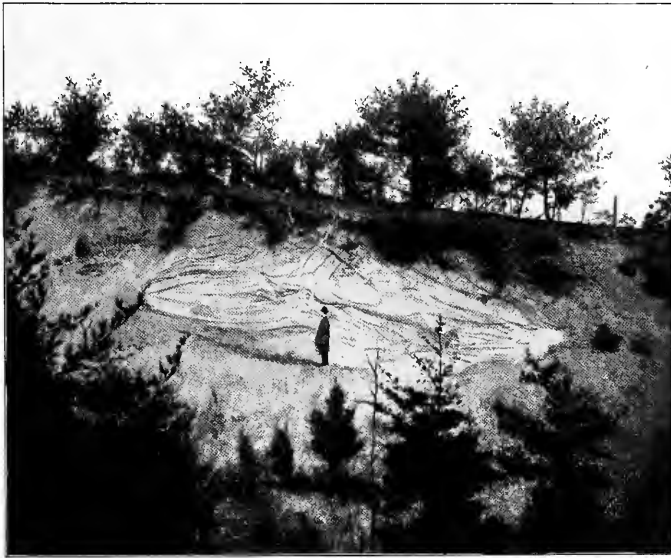
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EXPOSURES OF THE POTOMAC FORMATION ON BACK LICK RUN, VIRGINIA.

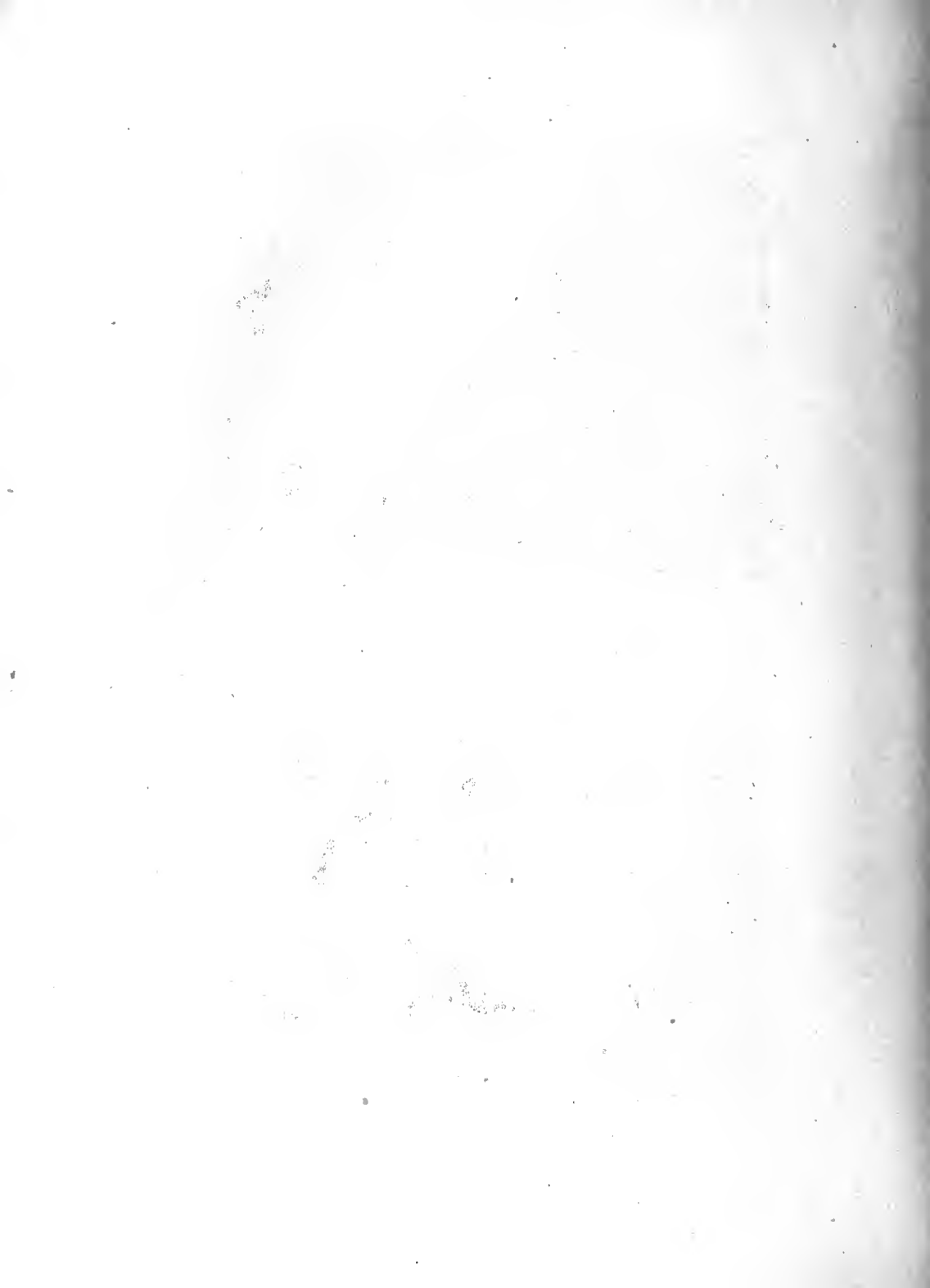
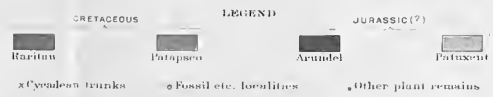
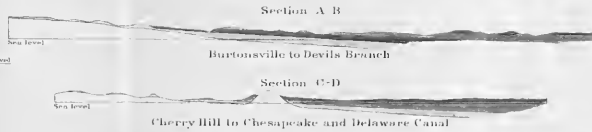


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PLATE LXXX.

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MAP
SHOWING THE AREAL DISTRIBUTION OF
THE FORMATIONS
OF THE
POTOMAC GROUP
IN
MARYLAND
BY ARTHUR HEDBORN

Scale 0 5 10 miles

From the Maryland Geological Survey
Was. Hartshorn, Chief
State Geologist

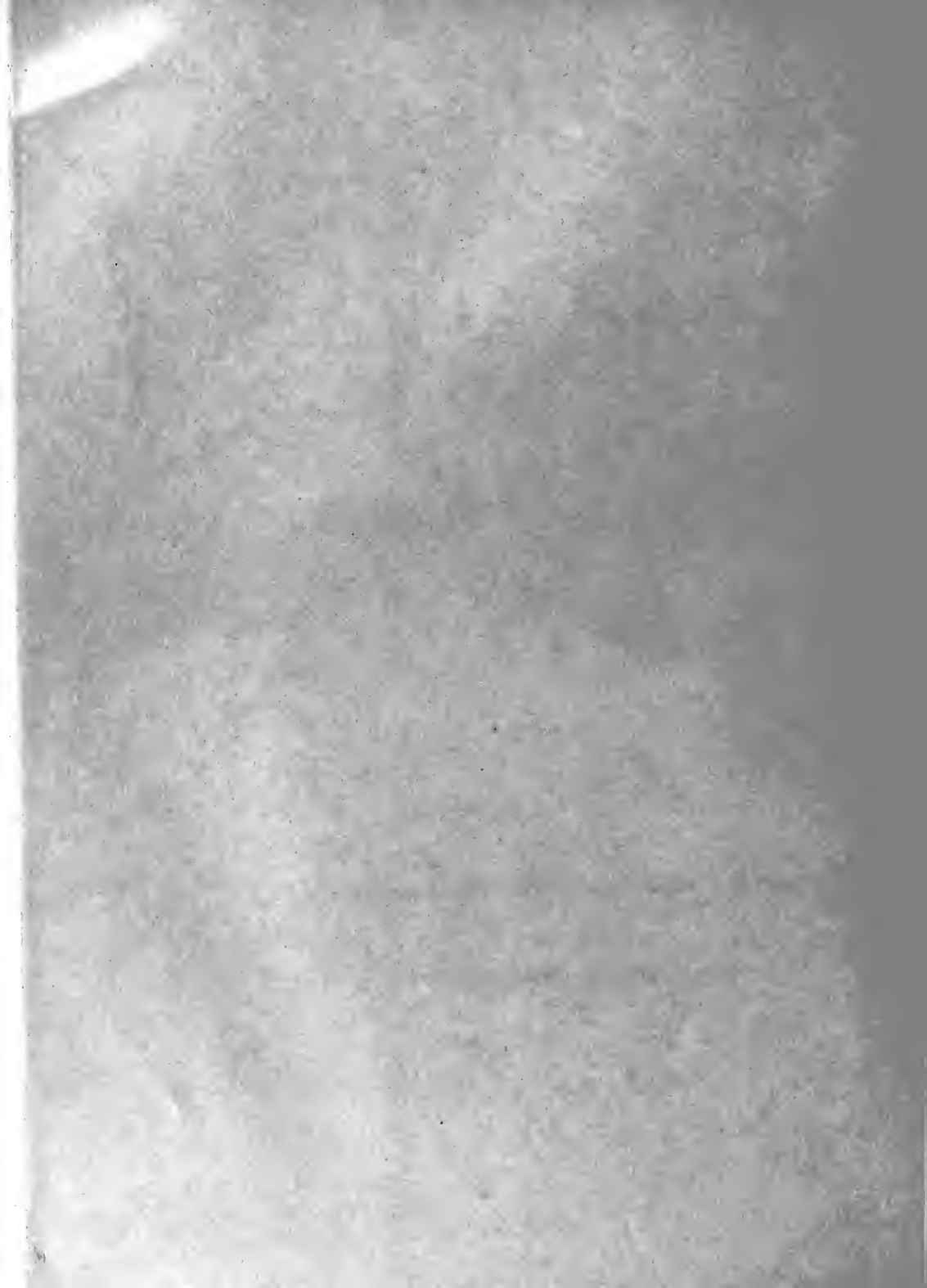
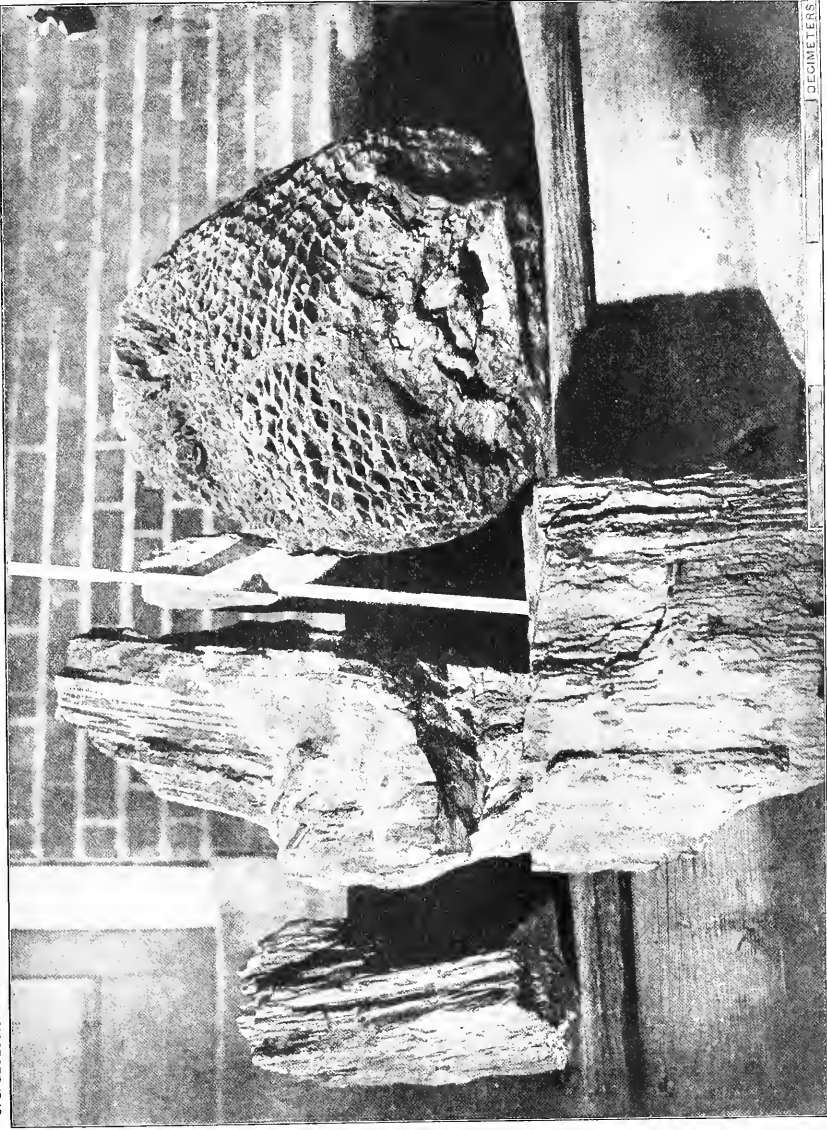


PLATE LXXXI.

PLATE LXXXI.

MARYLAND POTOMAC CYCADS.

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CYCAD TRUNK AND SILICIFIED WOOD FROM THE POTOMAC FORMATION OF MARYLAND.

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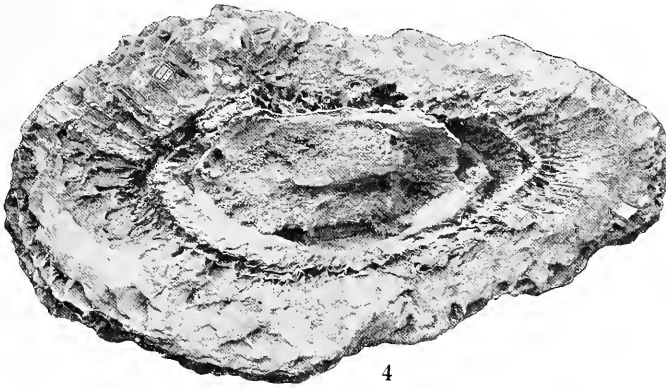
TRUNK OF CYCAD EARLY DISCOVERED IN THE POTOMAC FORMATION OF MARYLAND.

PLATE LXXXIII.

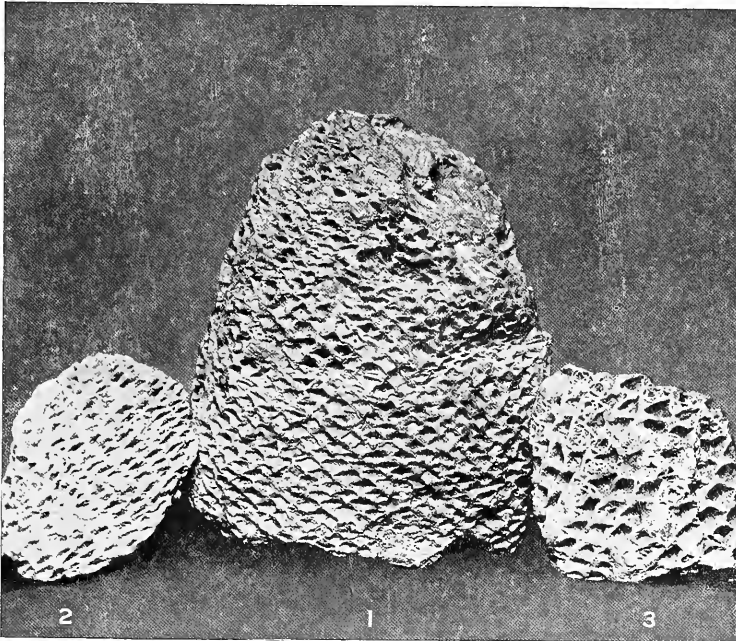
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MARYLAND POTOMAC CYCADS.

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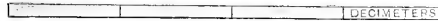
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TRUNKS OF CYCADS EARLY DISCOVERED IN THE POTOMAC FORMATION OF MARYLAND.

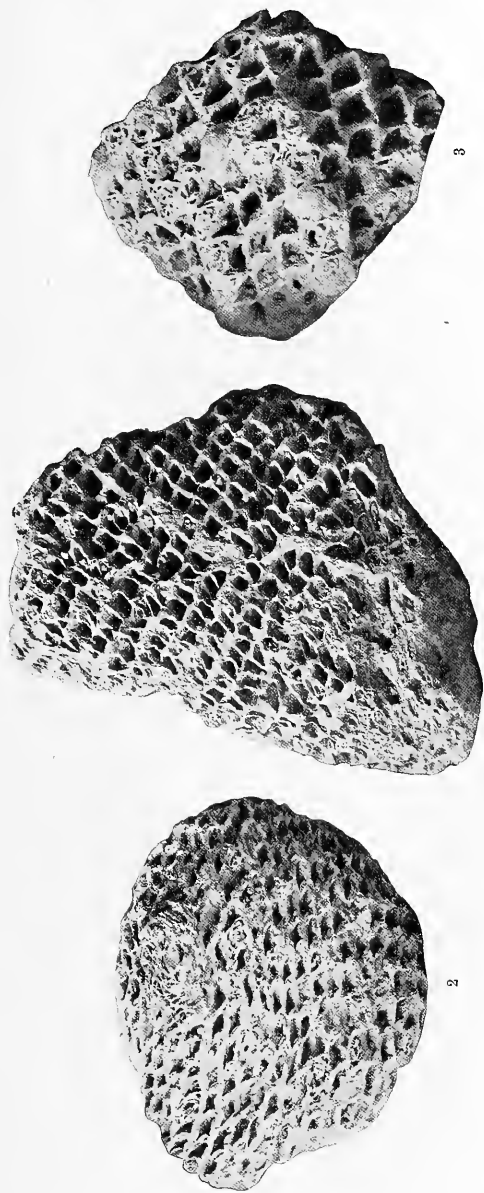
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PLATE LXXXIV.

MARYLAND POTOMAC CYCADS.

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TRUNKS OF CYCADS EARLY DISCOVERED IN THE POTOMAC FORMATION OF MARYLAND.



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PLATE LXXXV.

MARYLAND POTOMAC CYCADS.

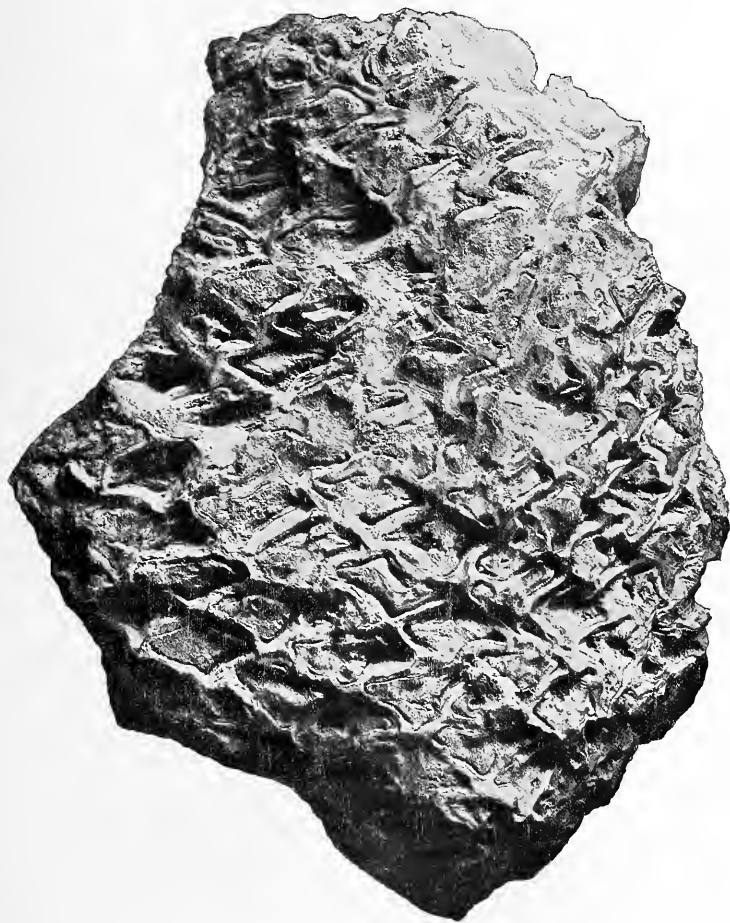
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(For historical account see p. 409.)



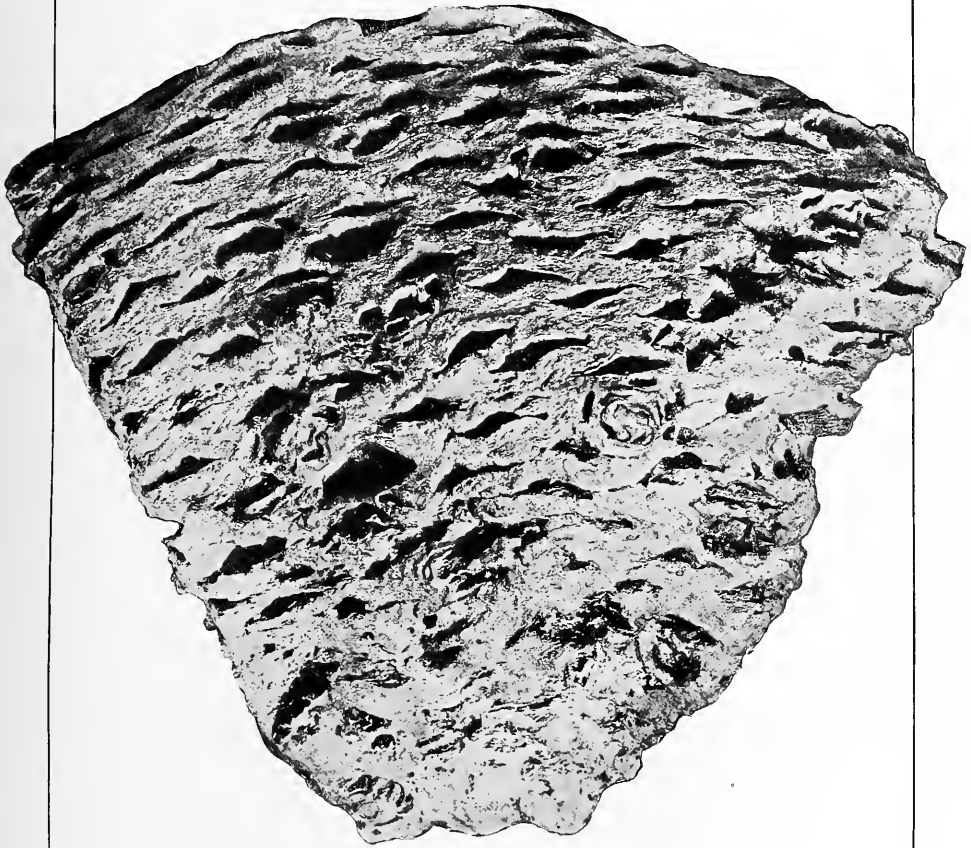
TRUNK OF CYCAD EARLY DISCOVERED IN THE POTOMAC FORMATION OF MARYLAND.

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MARYLAND POTOMAC CYCADS.

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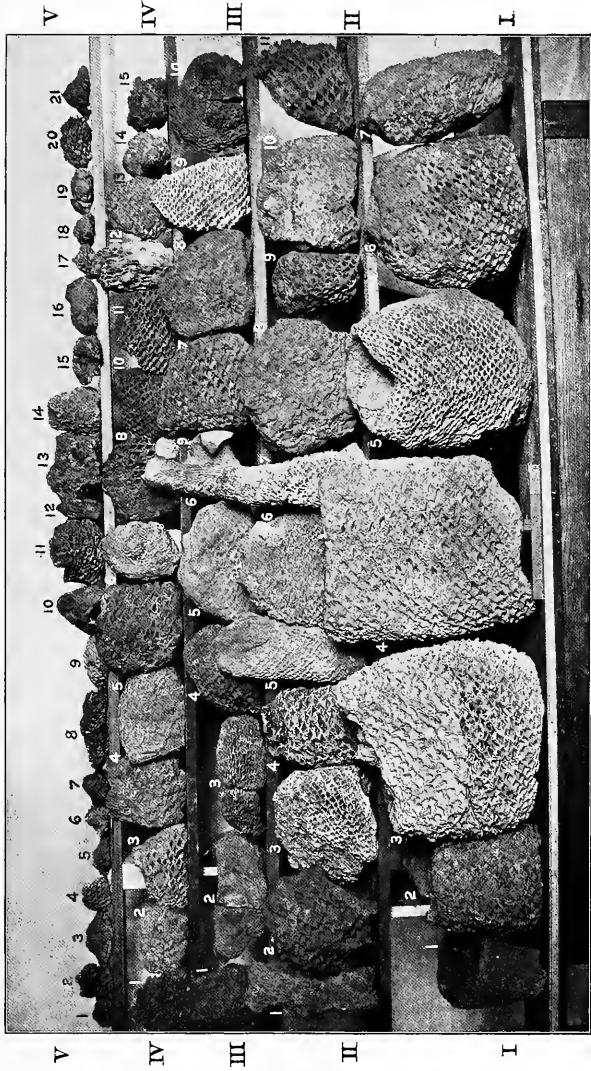
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PLATE LXXXVII.

MARYLAND POTOMAC CYCADS.

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GROUP OF CYCADS IN THE MUSEUM OF THE WOMAN'S COLLEGE OF BALTIMORE.

PLATE LXXXVIII.

PLATE LXXXVIII.

MARYLAND POTOMAC CYCADS.

CYCADEOIDEA MARYLANDICA (Font.) Cap. & Solms.

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View of the Link trunk, No. 1481, of the museum of the Woman's College of Baltimore, restored to its place in the Link Gulch, near Arbutus, Maryland, also showing the exposure as seen from the west side, looking across the gulch.....

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LINK GULCH WITH THE LINK CYCAD IN PLACE.

PLATE LXXXIX.

PLATE LXXXIX.

MARYLAND POTOMAC CYCADS.

GROUP OF CYCADS IN THE MUSEUM OF THE WOMAN'S COLLEGE OF BALTIMORE.

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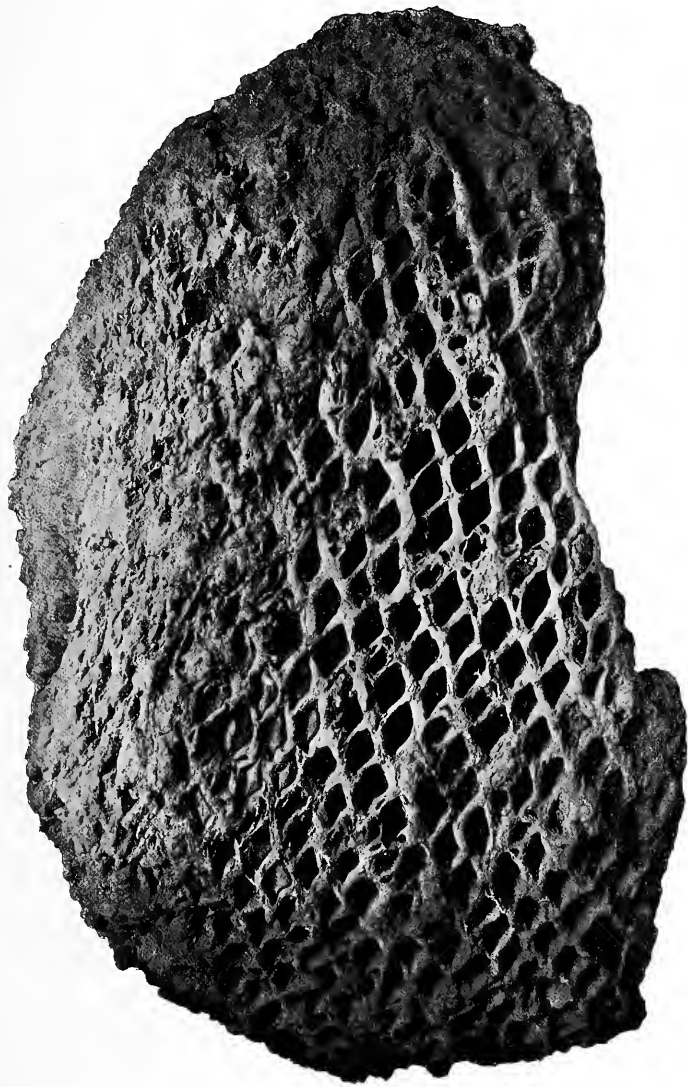
GROUP OF CYCADS IN THE MUSEUM OF THE WOMAN'S COLLEGE OF BALTIMORE.

PLATE XC.

PLATE XC.

MARYLAND POTOMAC CYCADS.

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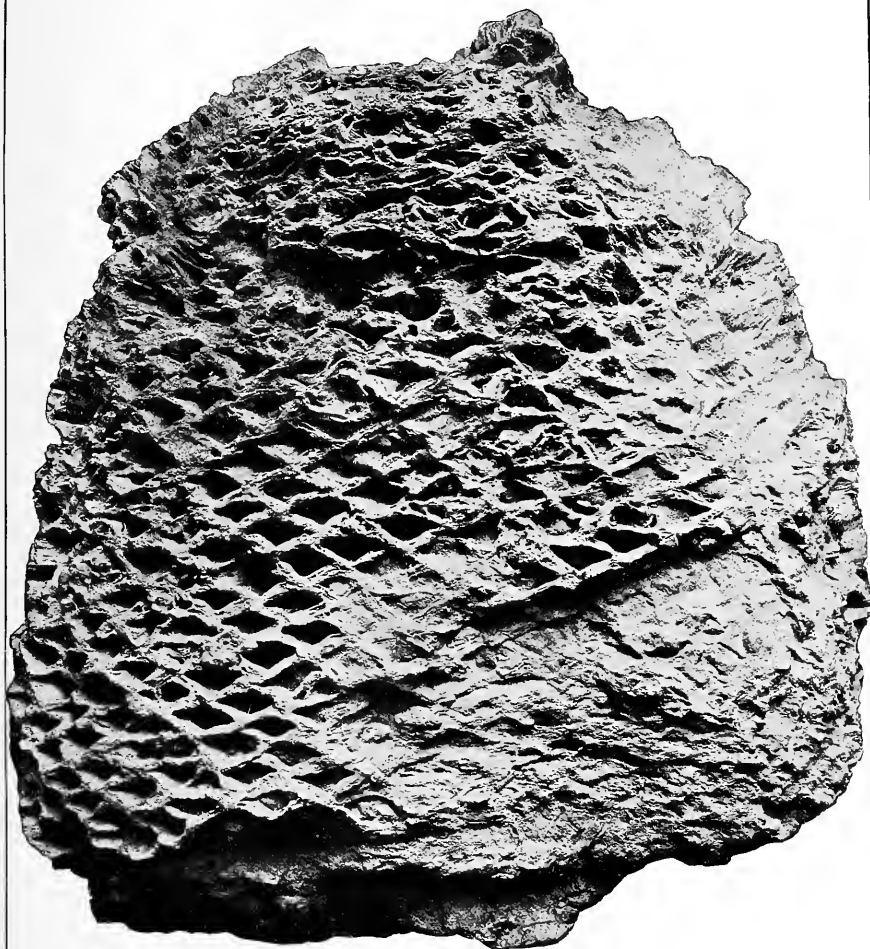
CYCADEOIDEA MARYLANDICA.

PLATE XCI.

PLATE XCI.

MARYLAND POTOMAC CYCADS.

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CYCADEOIDEA MARYLANDICA.

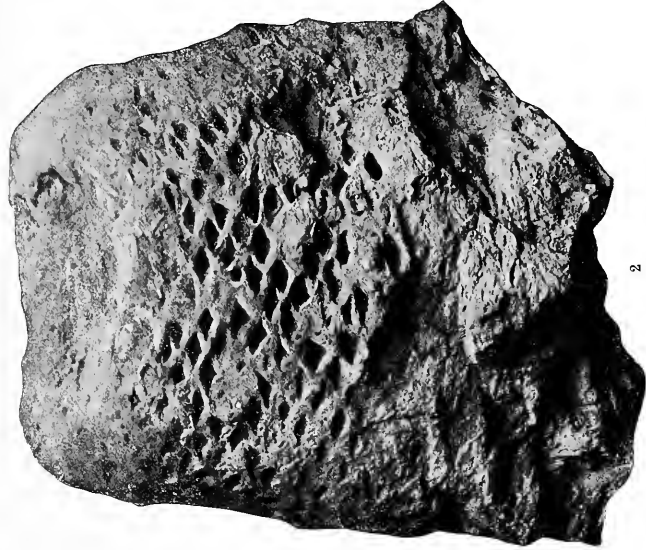
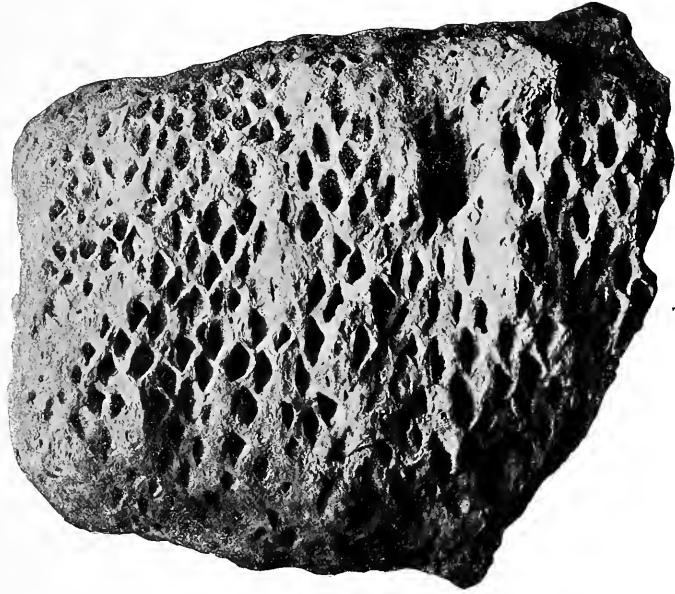


PLATE XCII.

PLATE XCII.

MARYLAND POTOMAC CYCADS.

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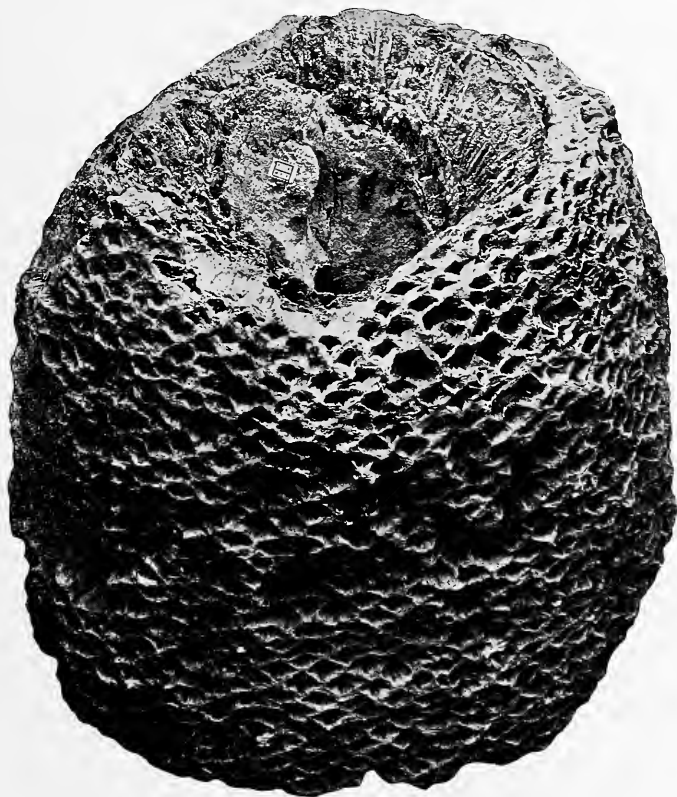
CYCADEOIDEA MARYLANDICA.

PLATE XCIII.

PLATE XCIII.

MARYLAND POTOMAC CYCADS.

The R. T. Donaldson trunk, No. 1, CYCADEOIDEA TYSONIANA Ward, No. 1472, of the Woman's College of Baltimore..... Page. 433



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CYCADEOIDEA TYSONIANA.

PLATE XCIV.

PLATE XCIV.

MARYLAND POTOMAC CYCADS.

CYCADEOIDEA MCGEEANA Ward.

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The Clark trunk, otherwise known as the "insect nest," consisting of Nos. 1659 and 1659a of the museum of the Woman's College of Baltimore.....

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CYCADEOIDEA MCGEEANA.

PLATE XCV.

PLATE XCV.

MARYLAND POTOMAC CYCADS.

CYCADEOIDEA FONTAINEANA Ward.

View of the top of the Turner trunk or "Chicken trough," No. 3046 of the museum of the Woman's College of Baltimore, showing the deep cavity or "crow's nest" used as a receptacle for water for domestic fowls

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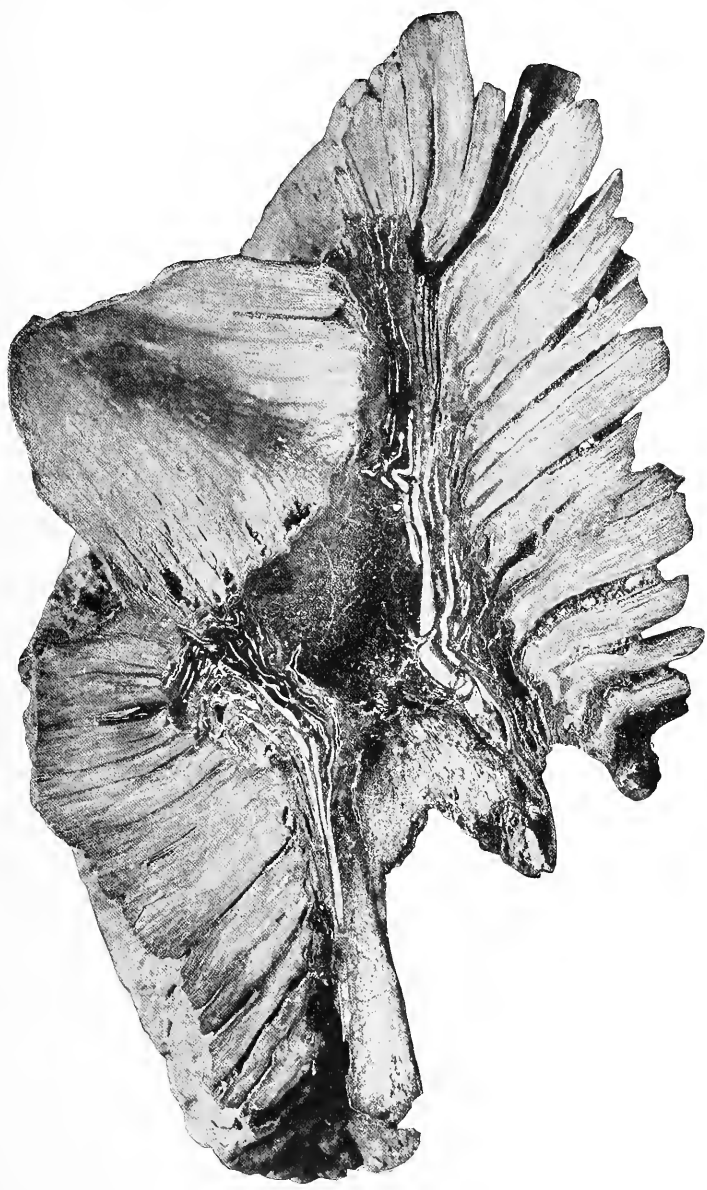
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PLATE XCVI.

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CYCADEOIDEA FONTAINEANA.

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PLATE XCVII.

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CENTIMETERS



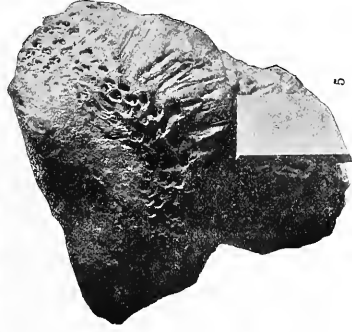
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CENTIMETERS



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CENTIMETERS

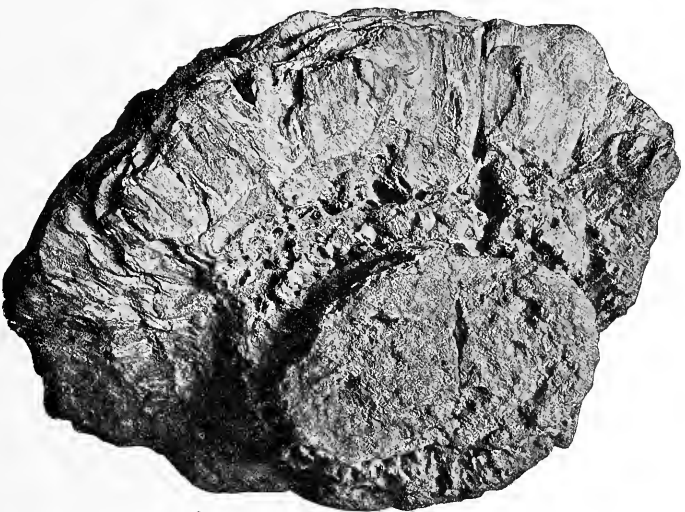
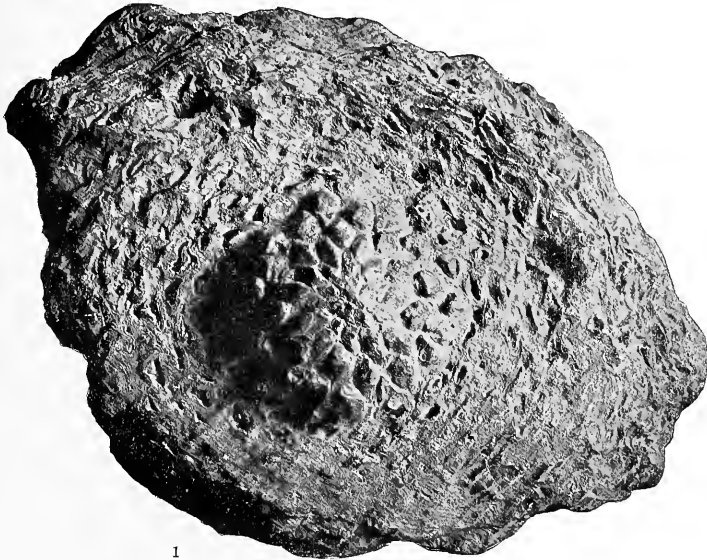
CYCADEOIDEA FONTAINEANA.

PLATE XCVIII.

PLATE XCVIII.

MARYLAND POTOMAC CYCADS..

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CYCADEOIDEA FONTAINEANA.

PLATE XCIX.

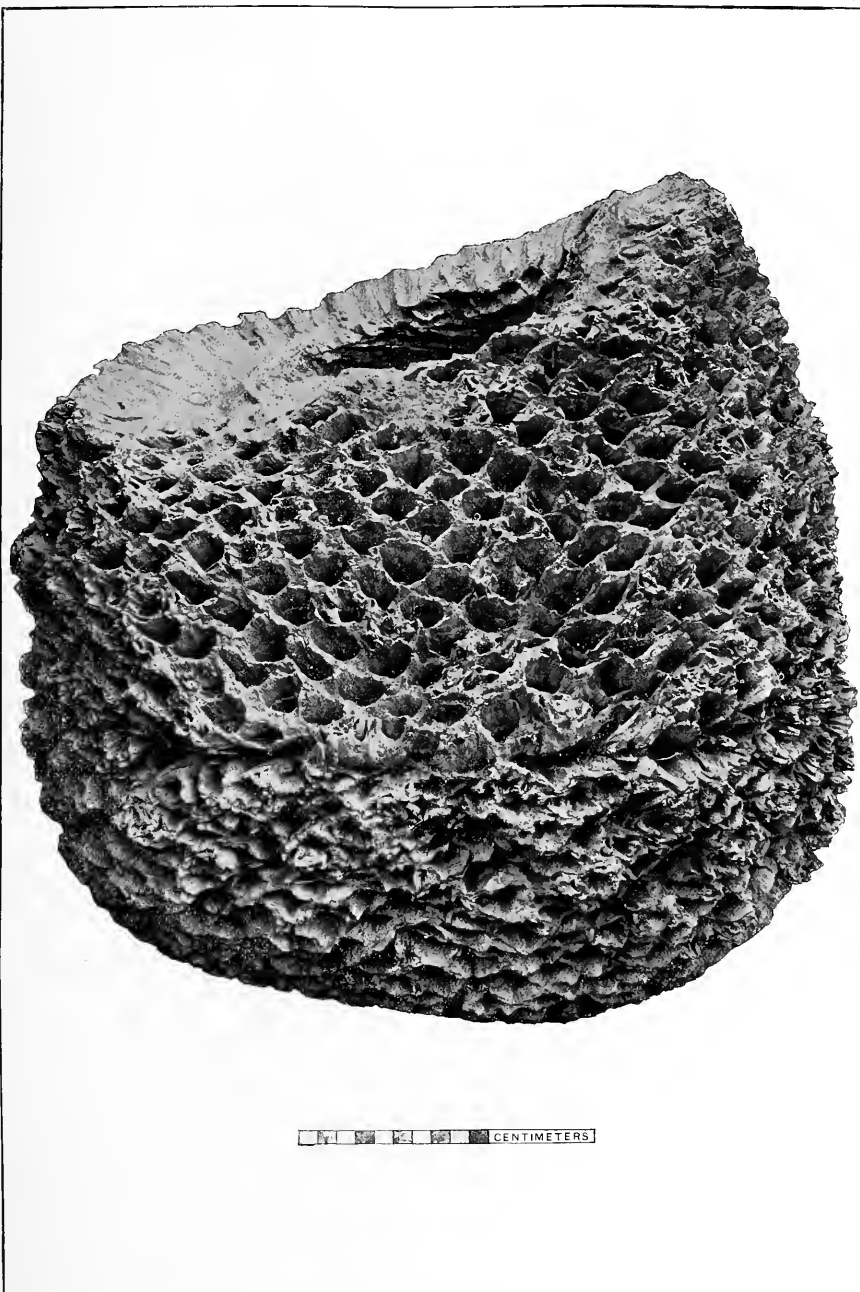
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MARYLAND POTOMAC CYCADS.

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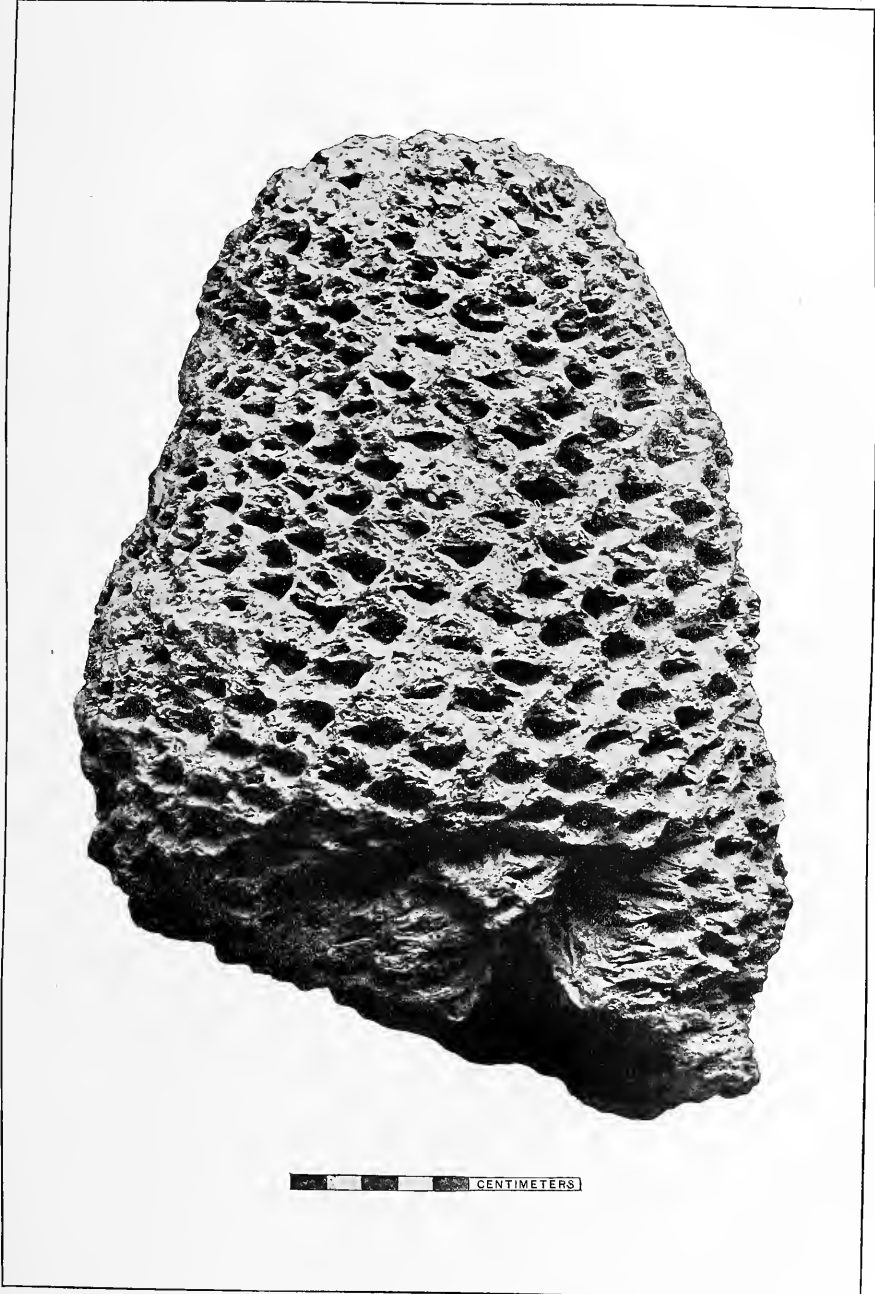
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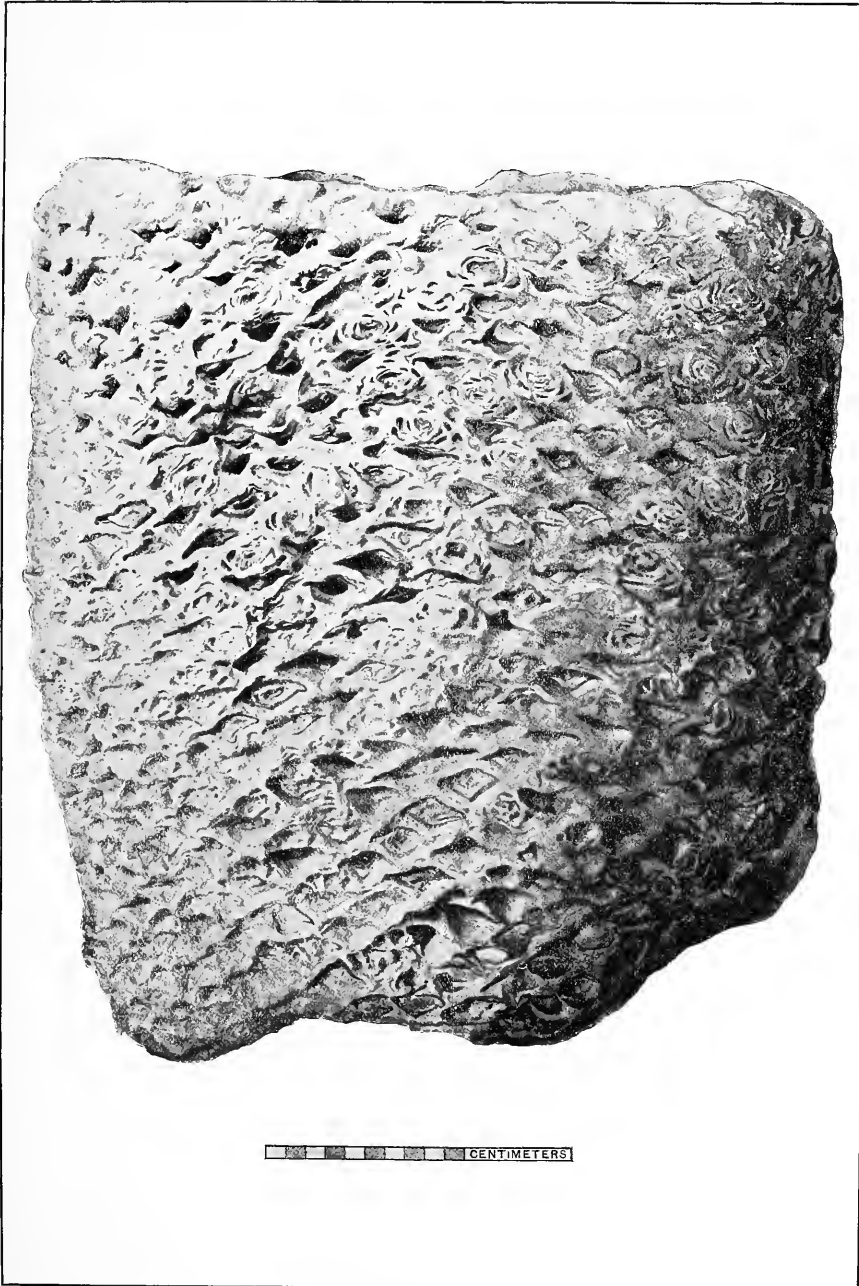
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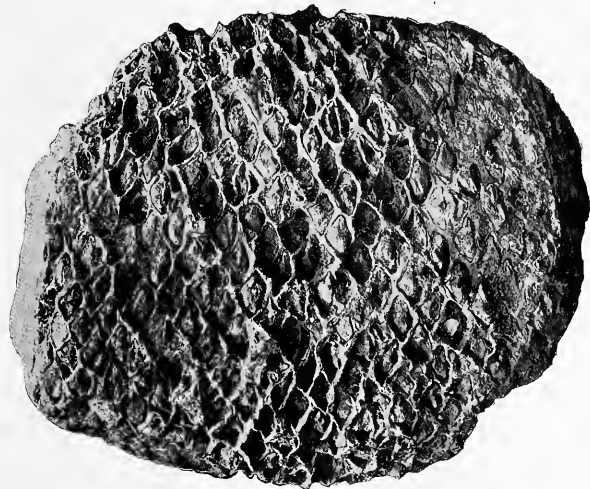
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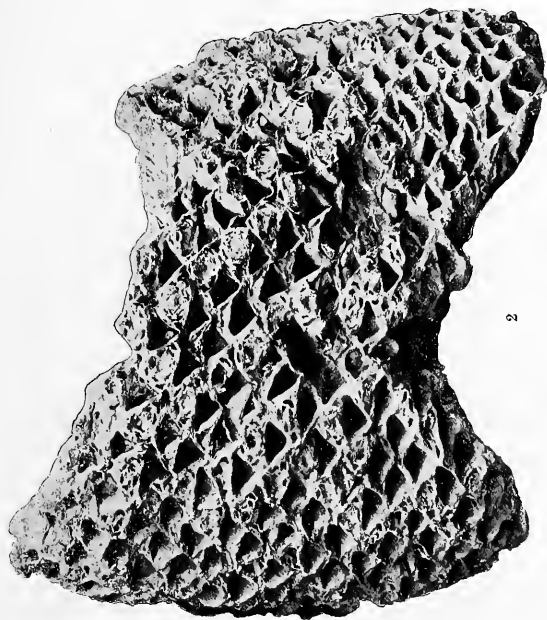
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DECIMETERS

CYCADEOIDEA BIBBINSI.

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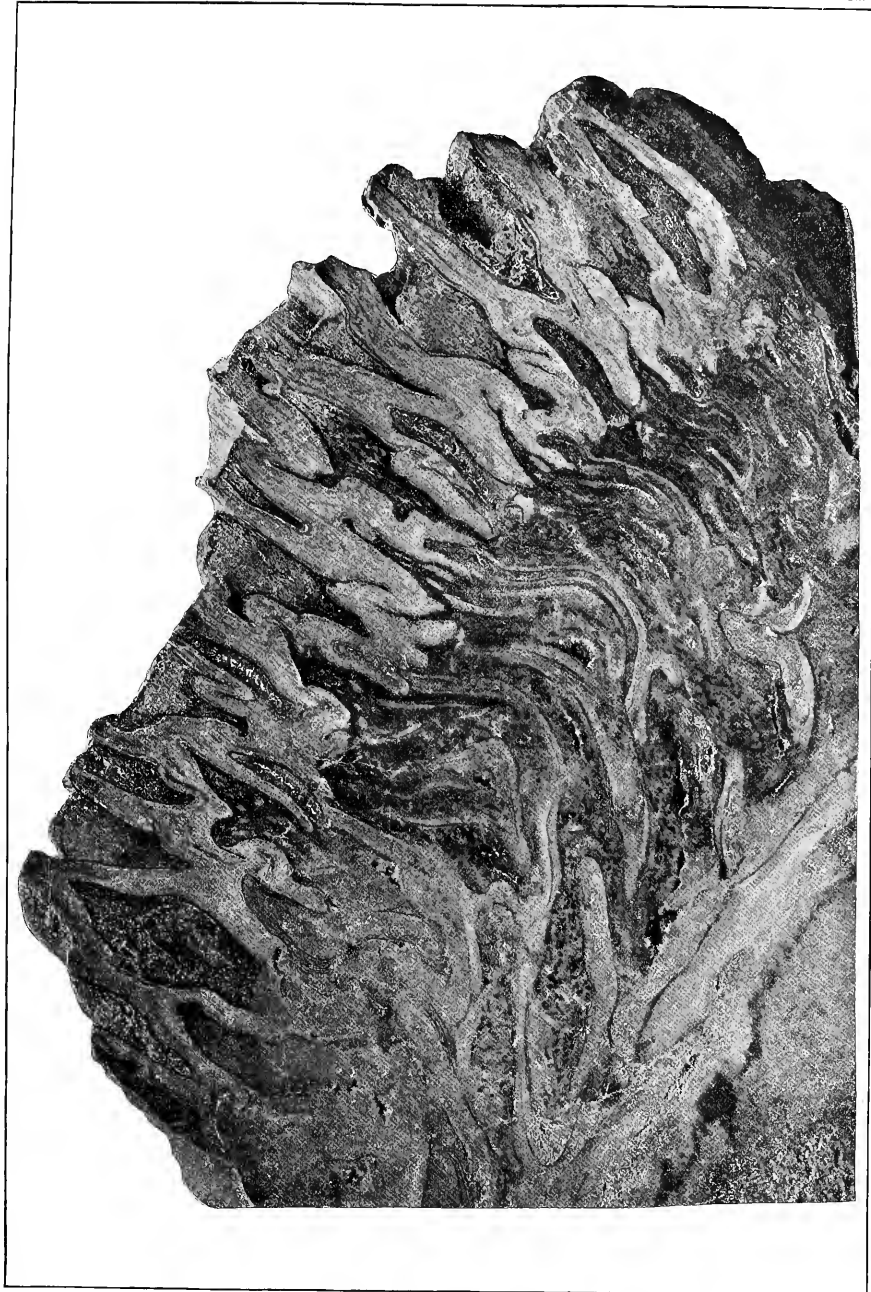
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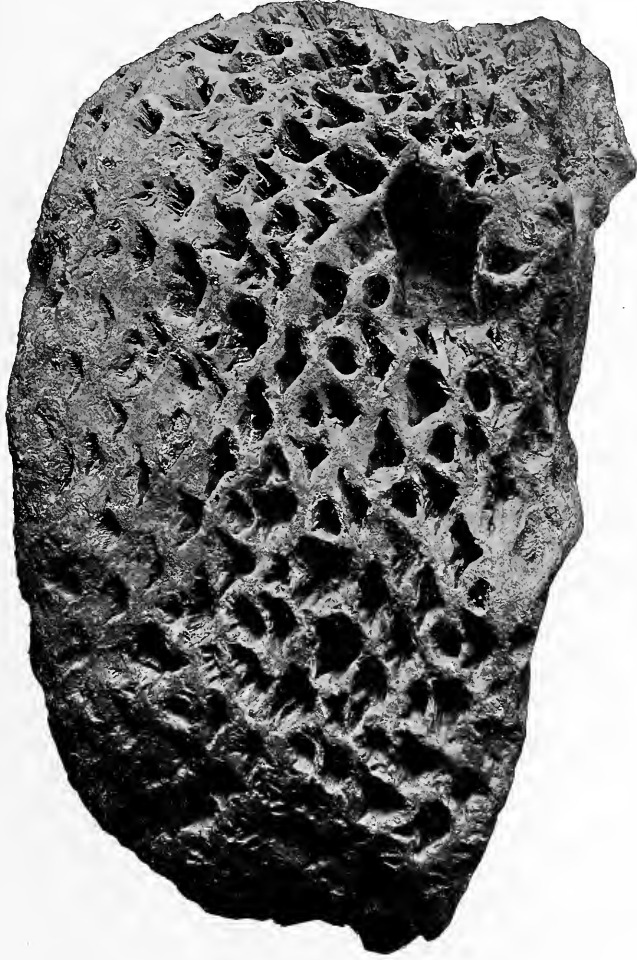
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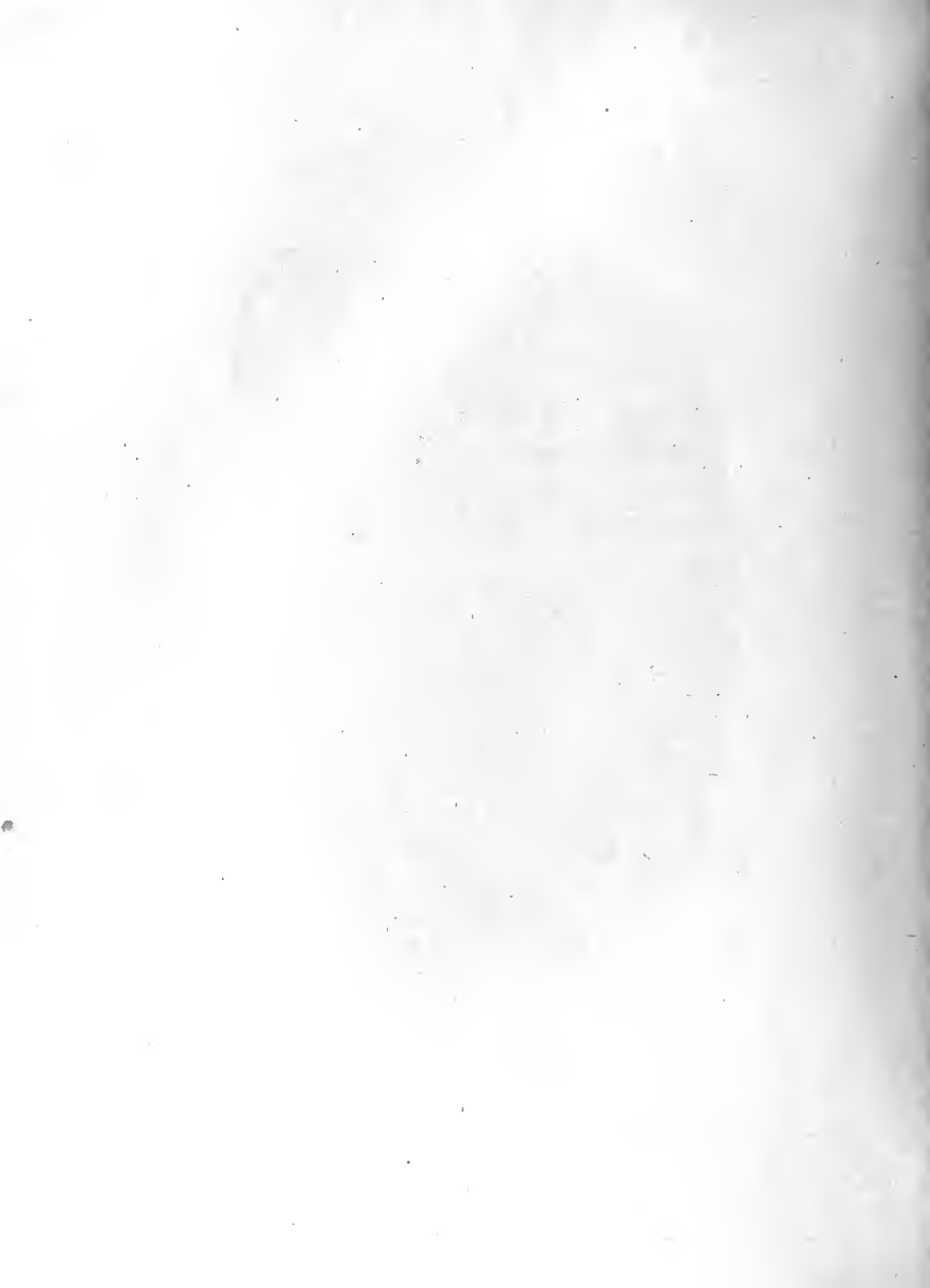
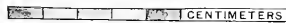
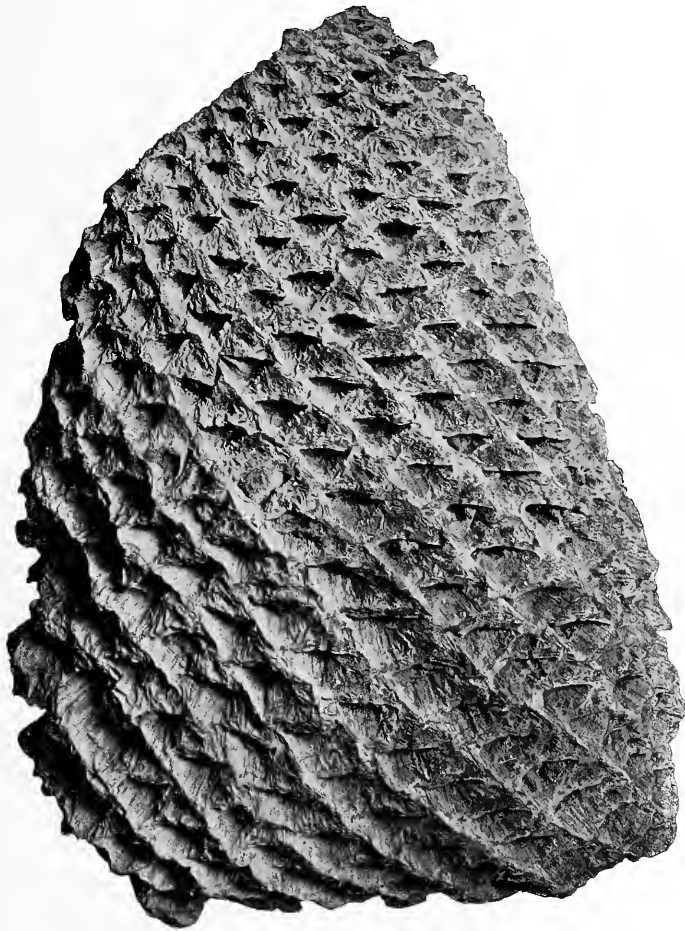


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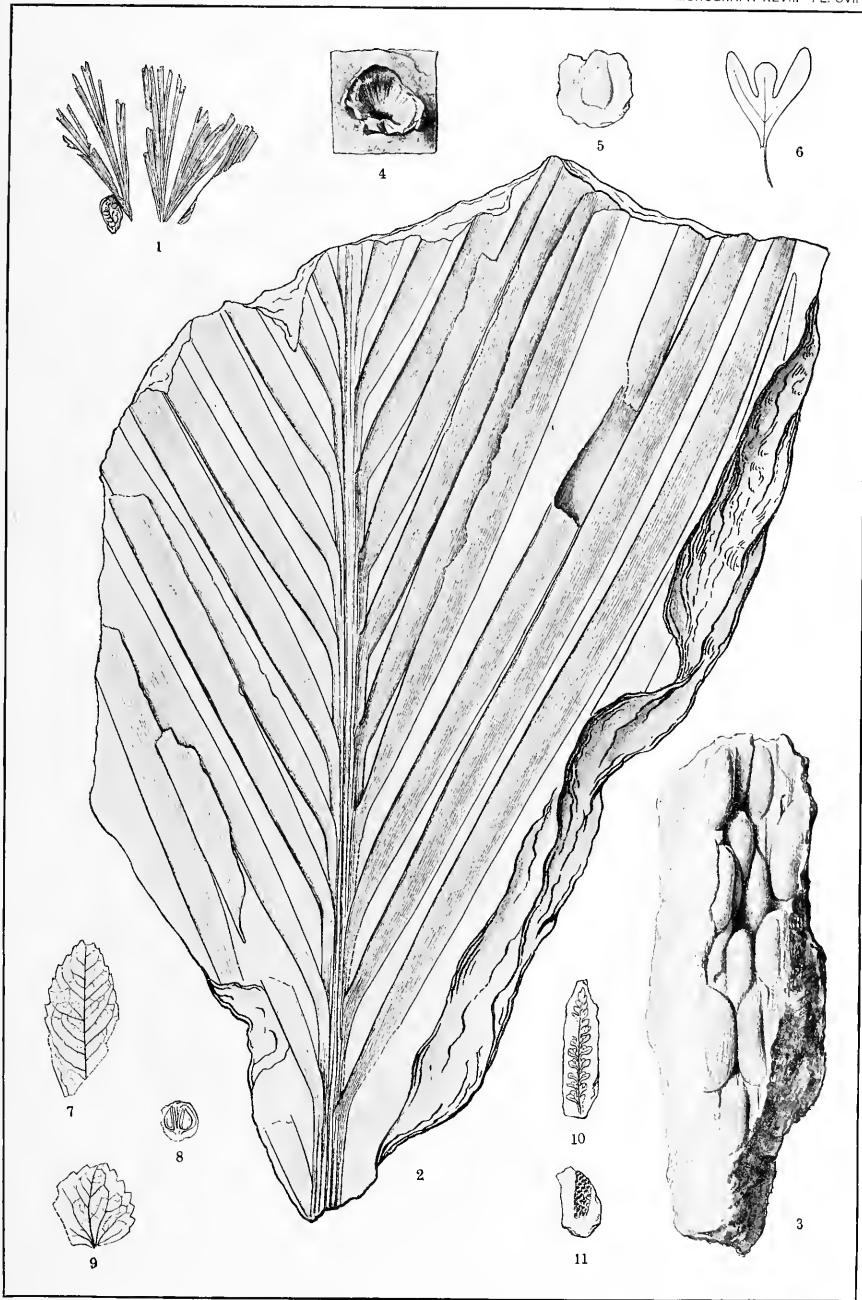
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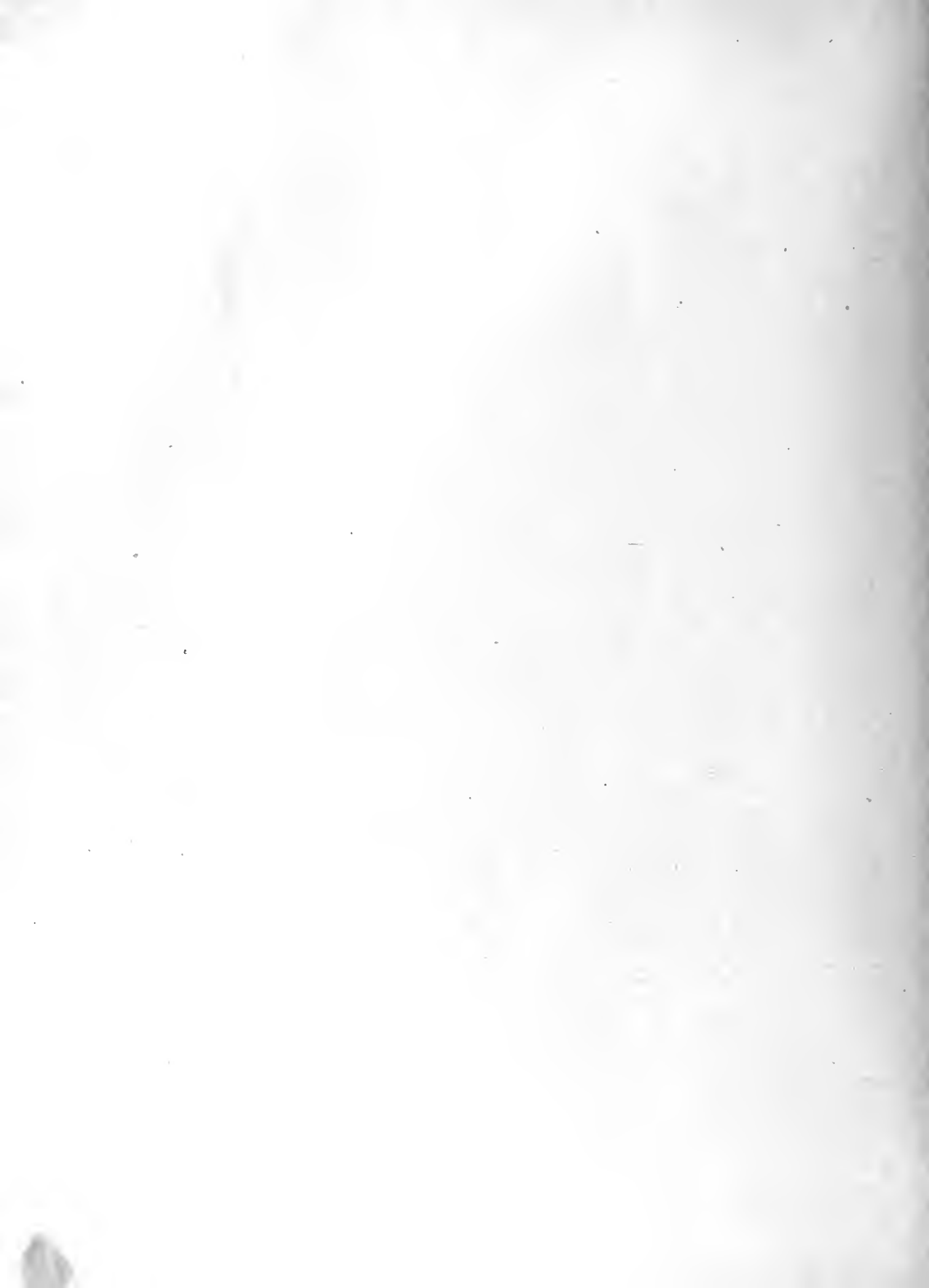
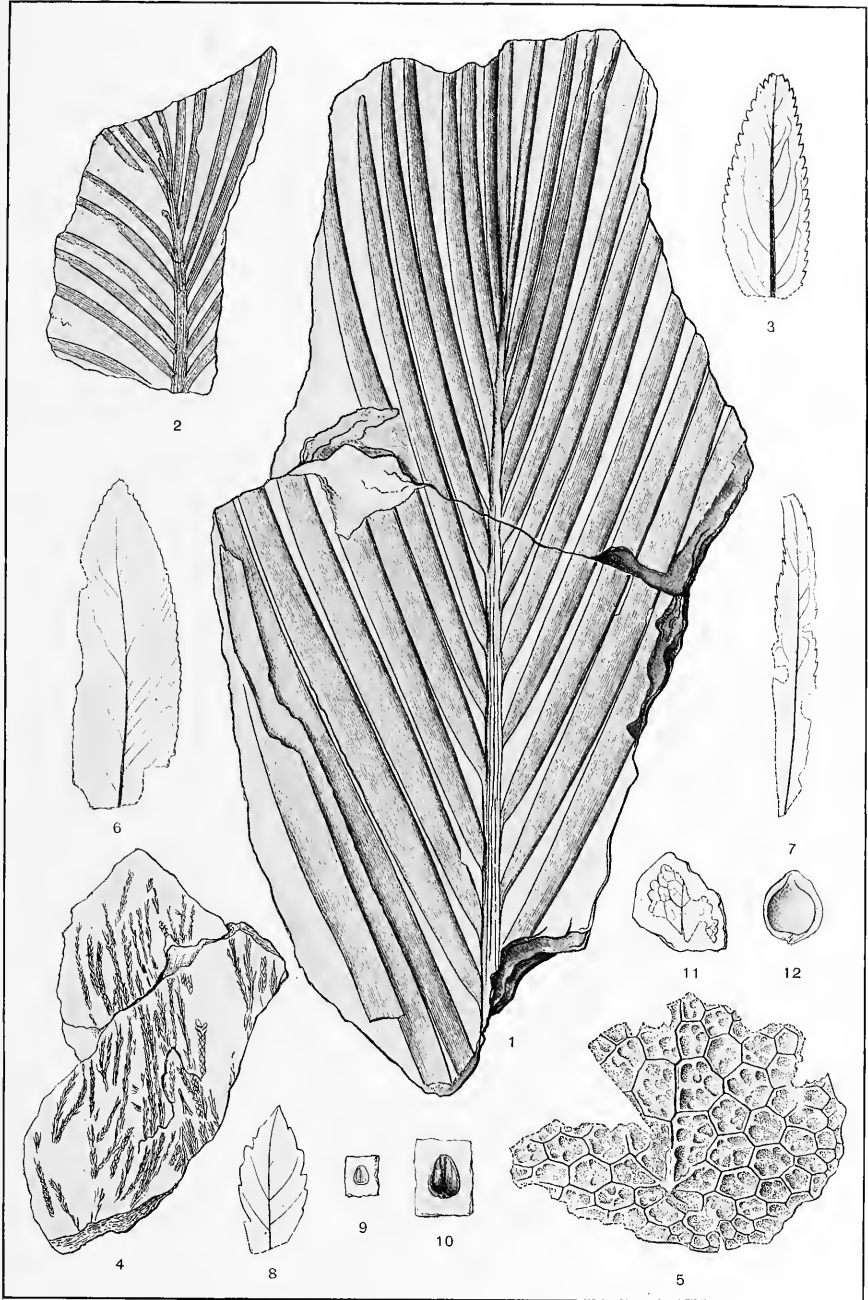


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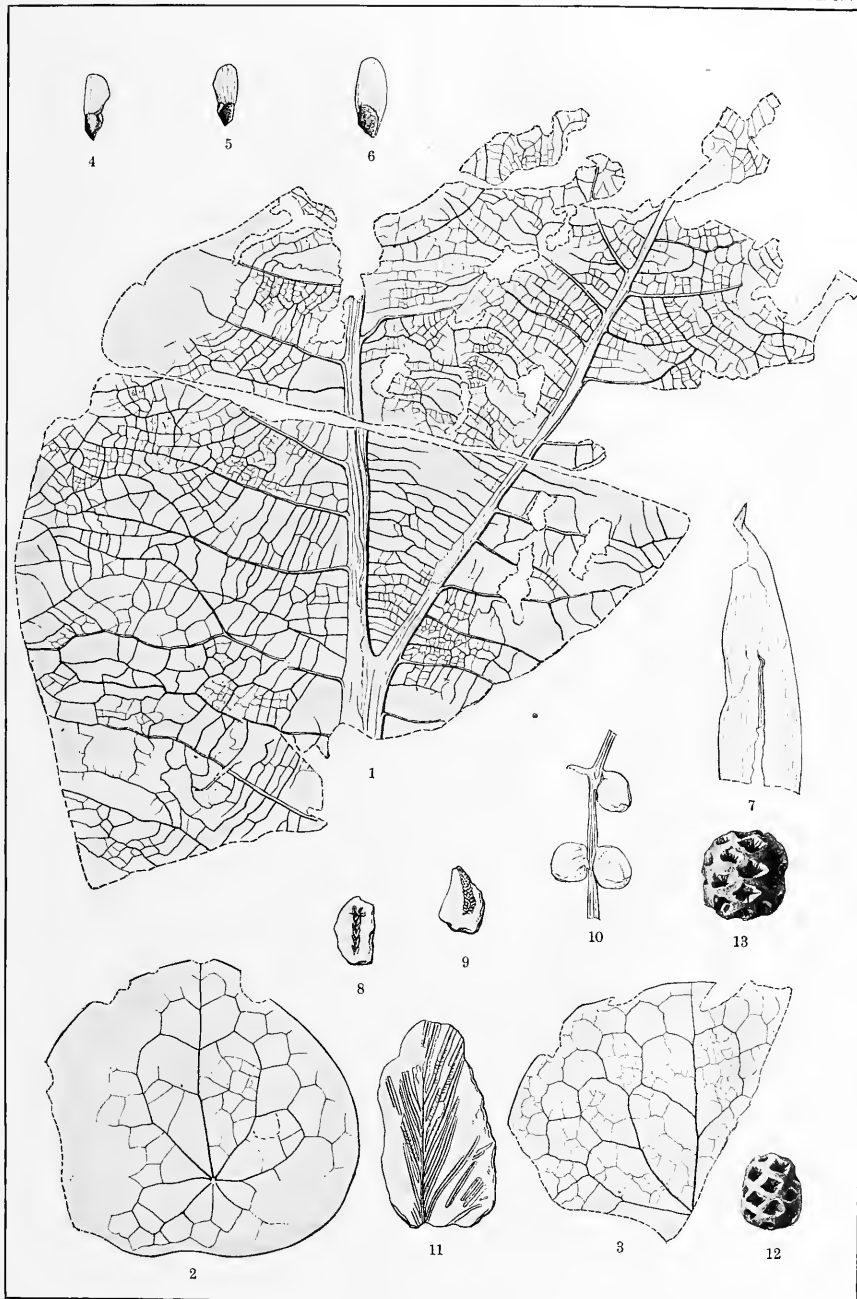
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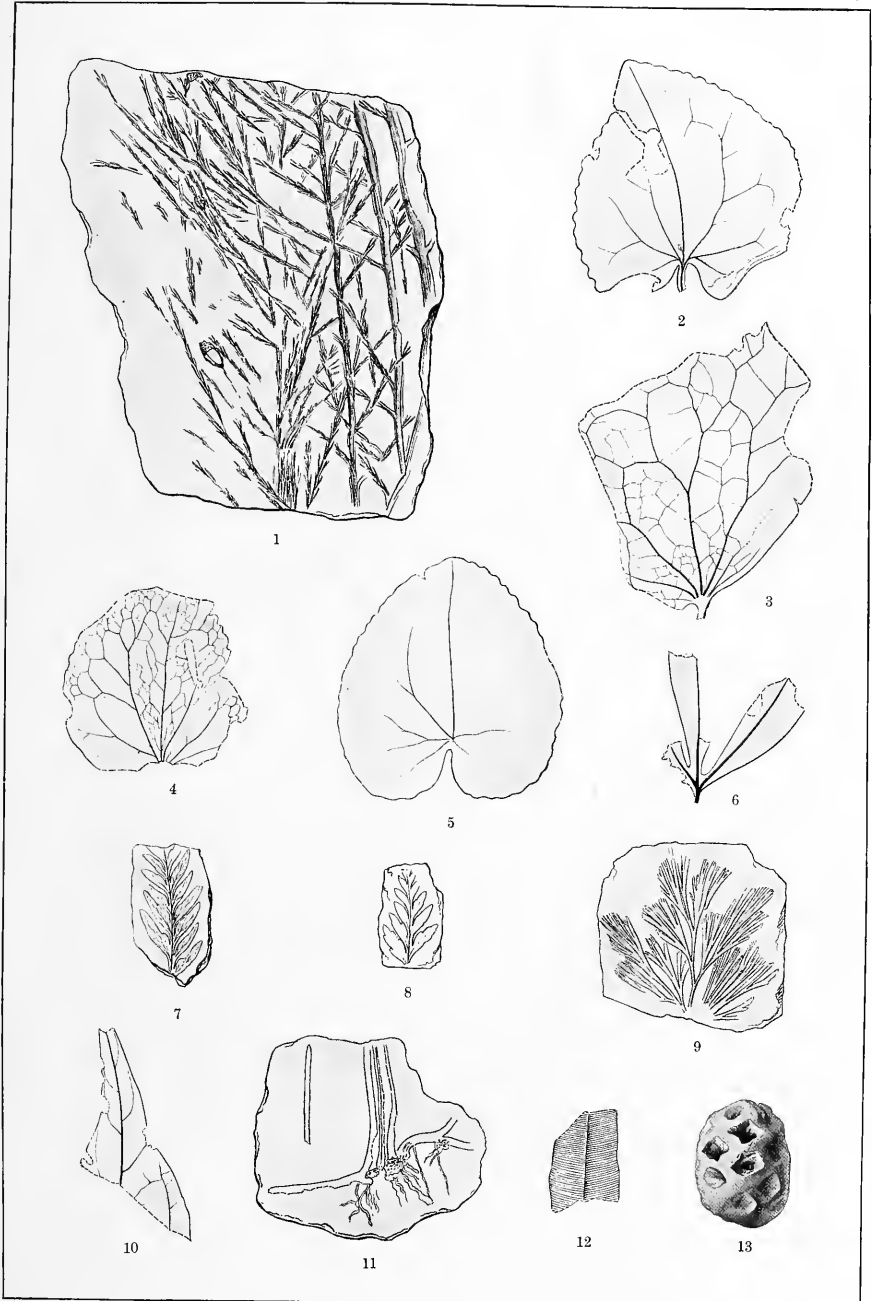


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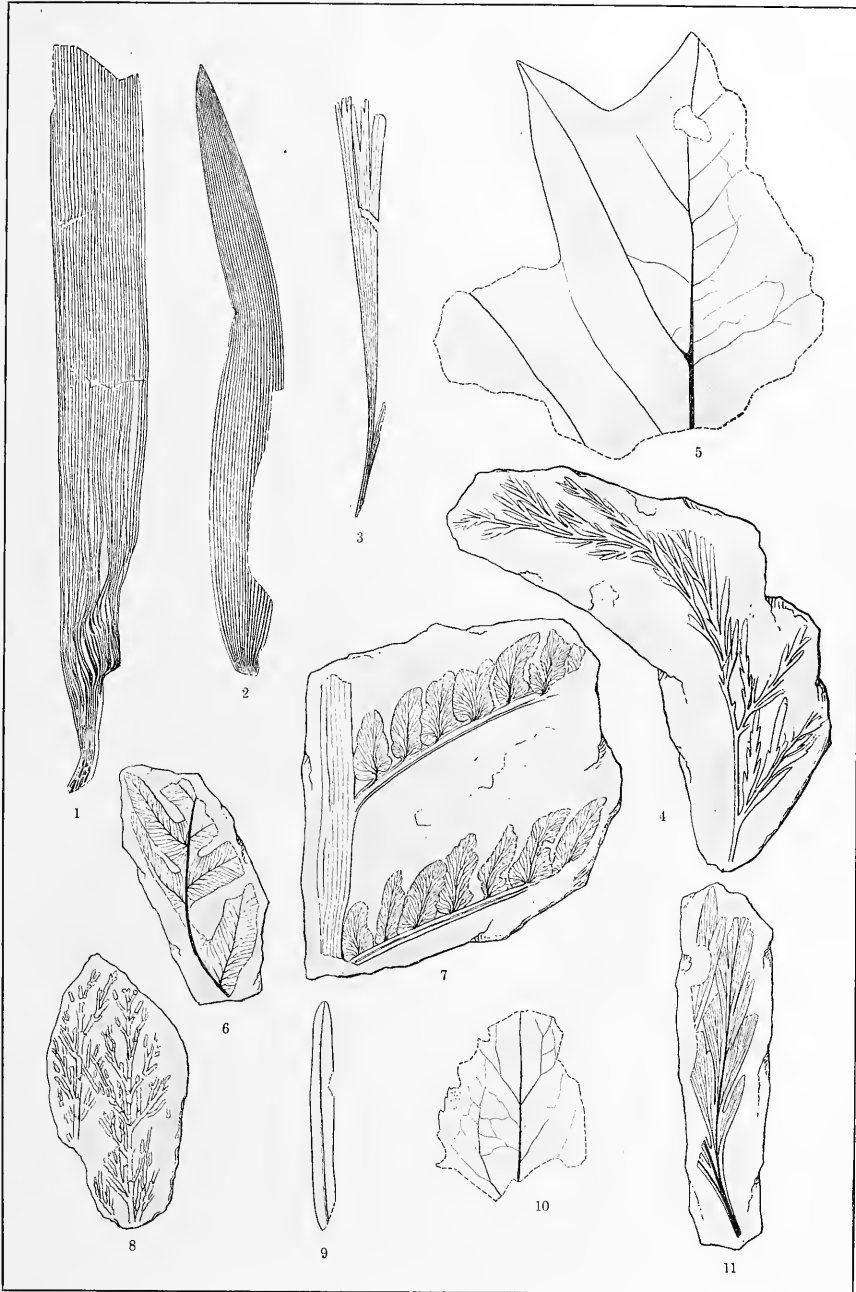
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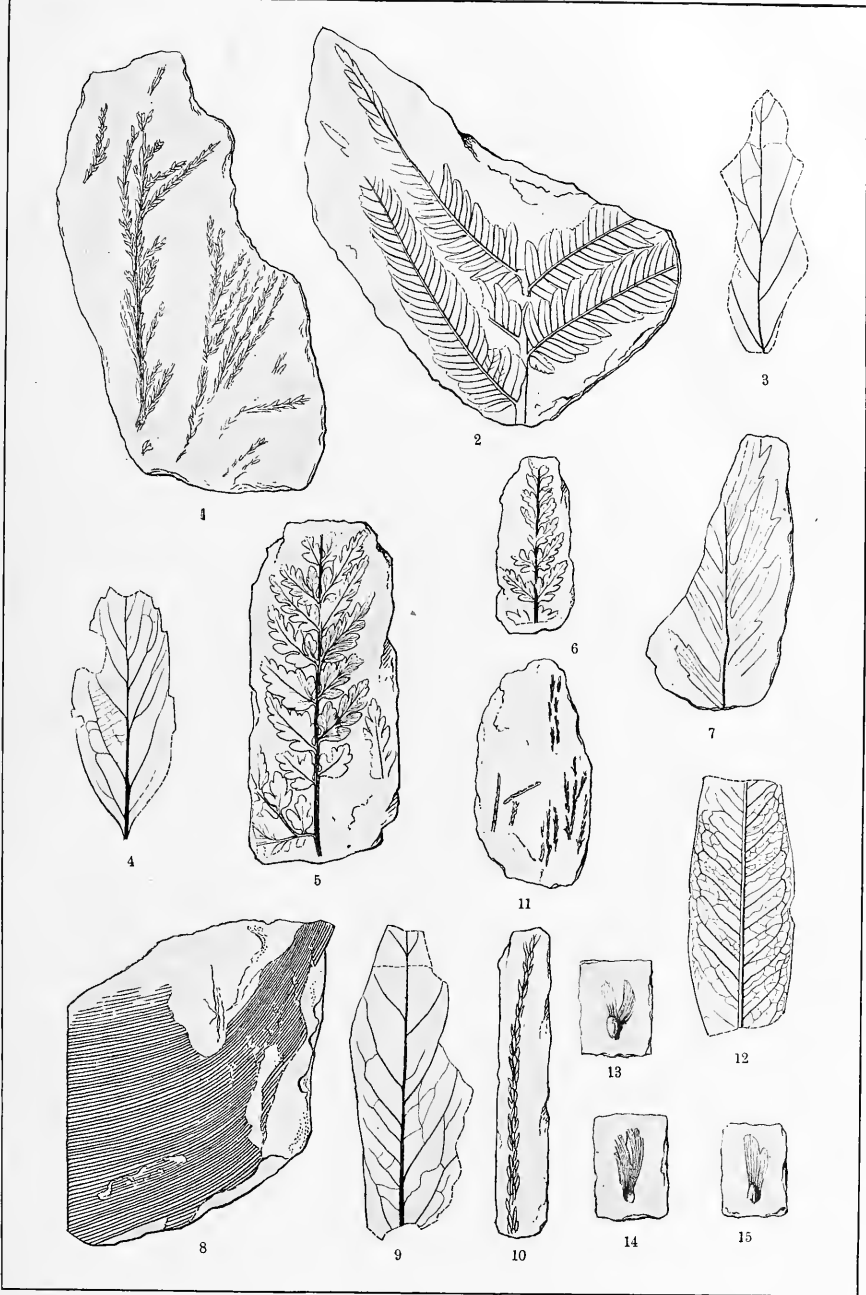
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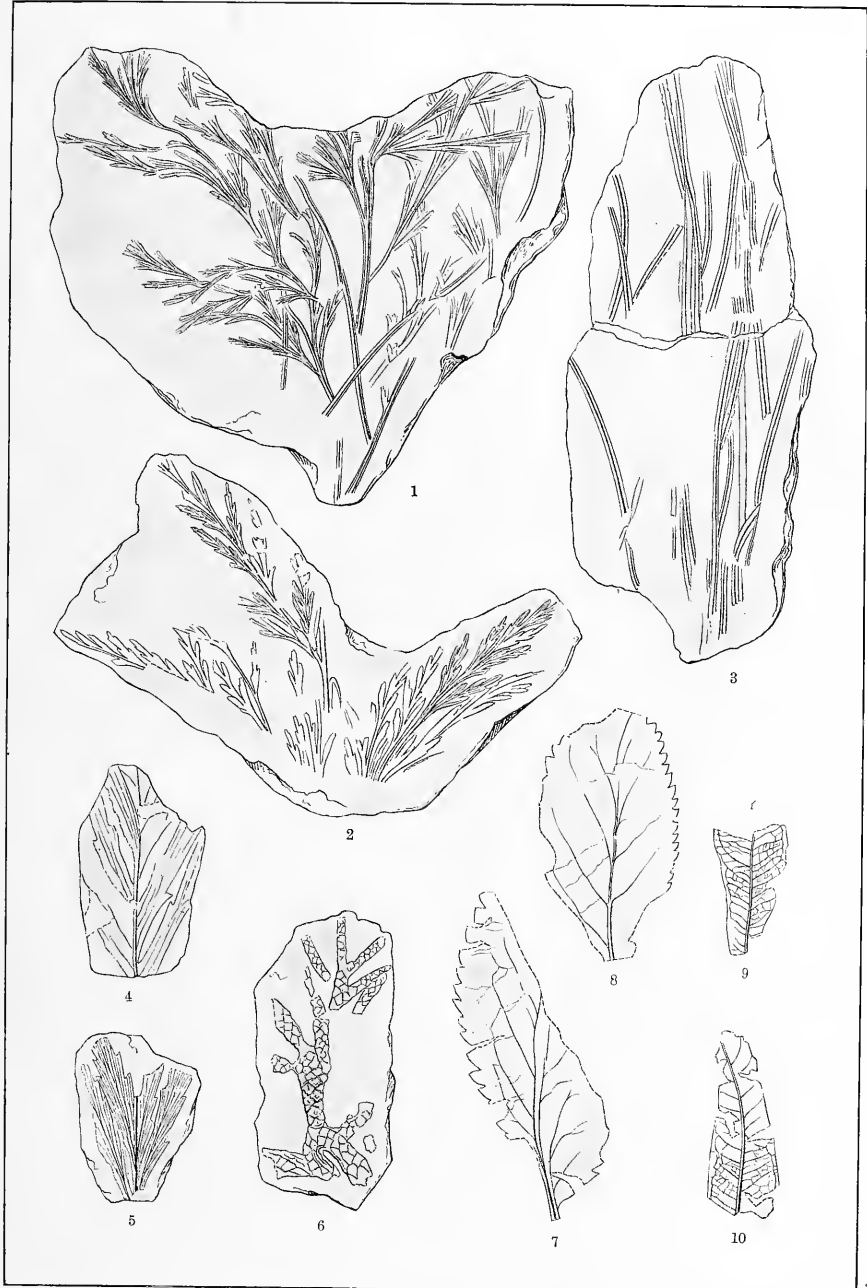
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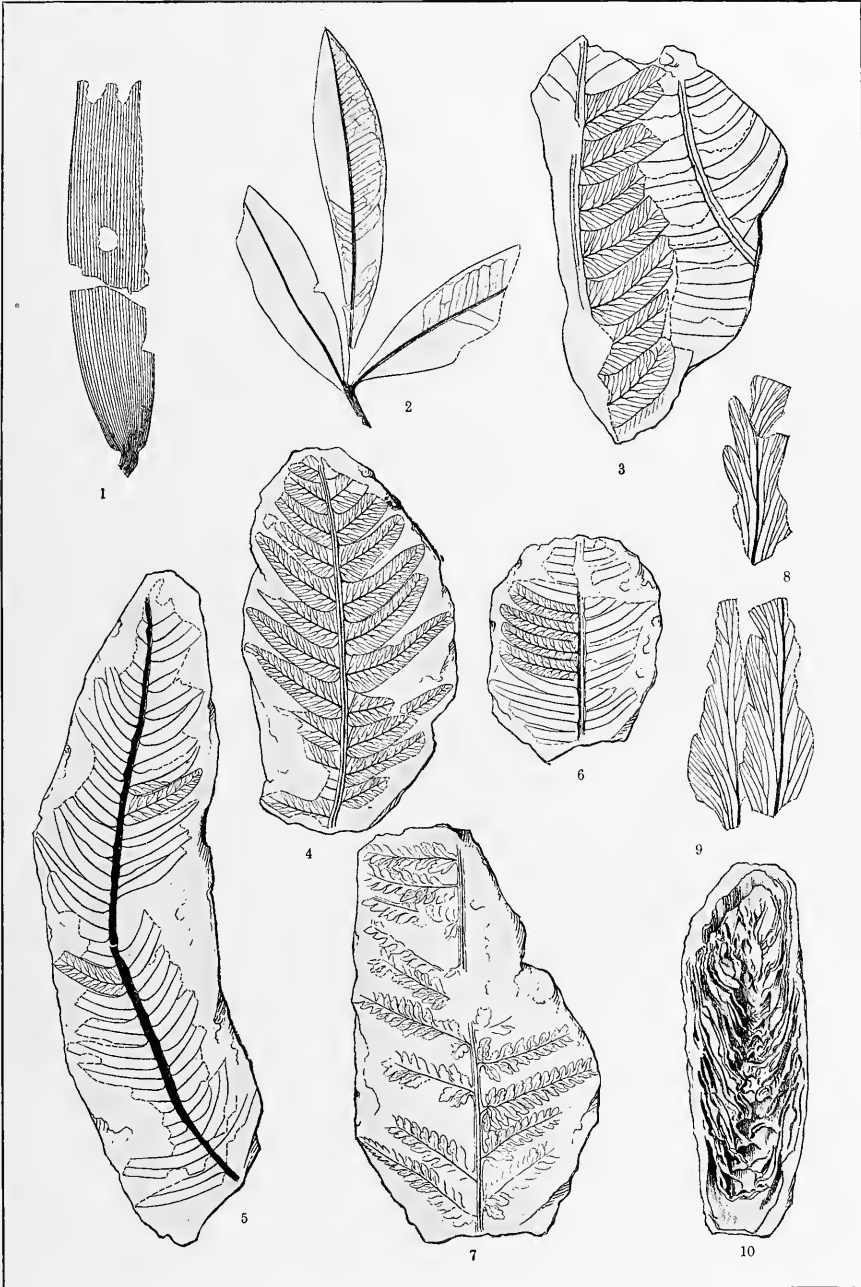
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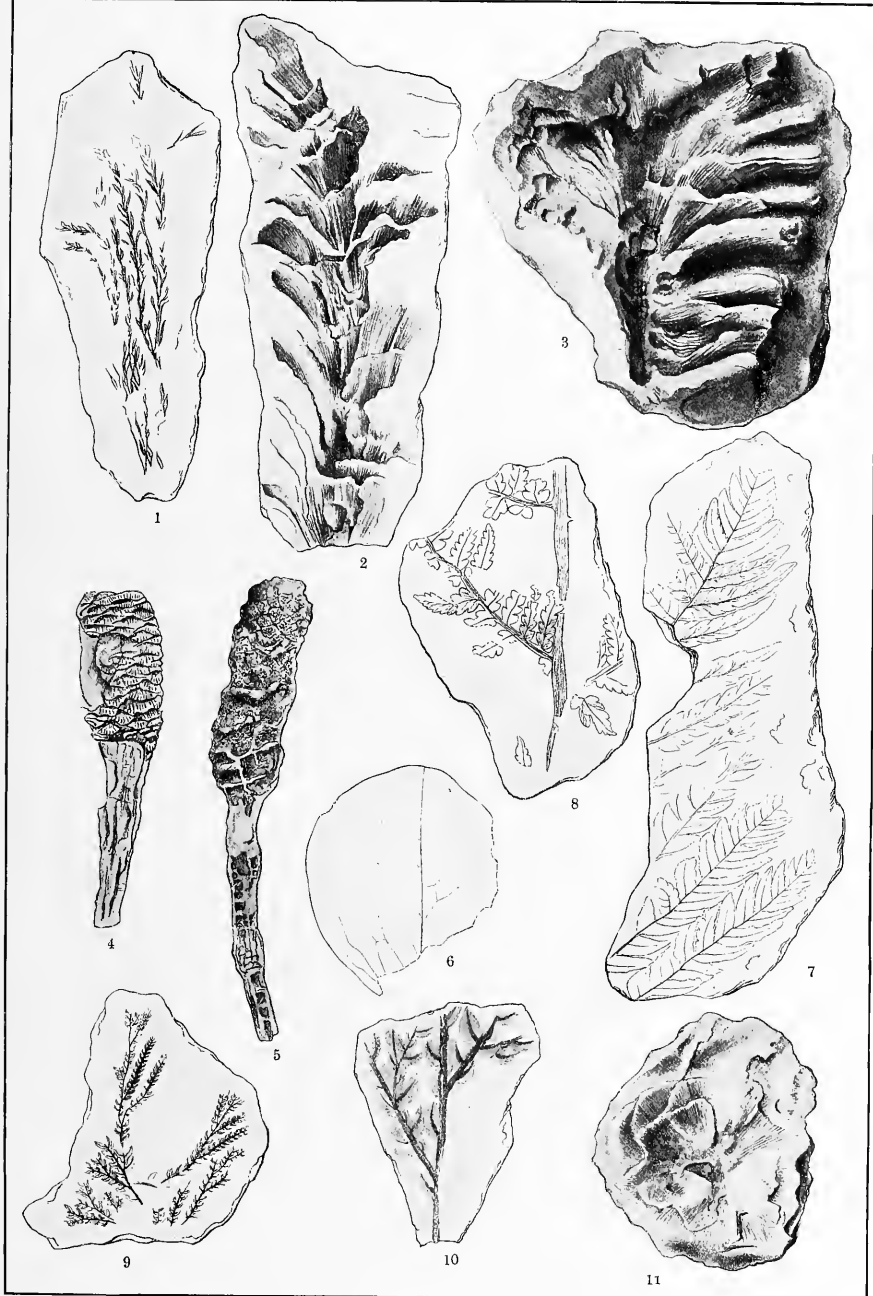
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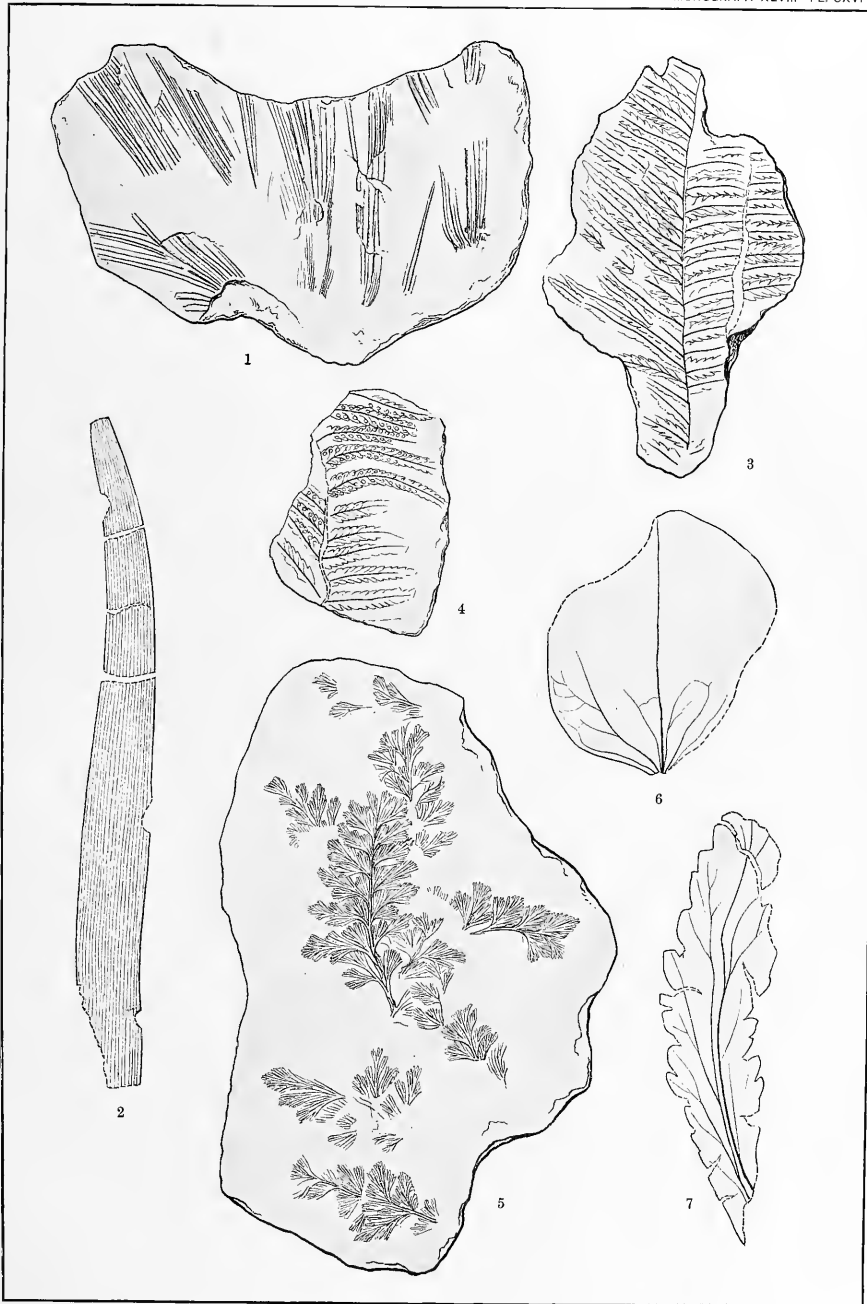
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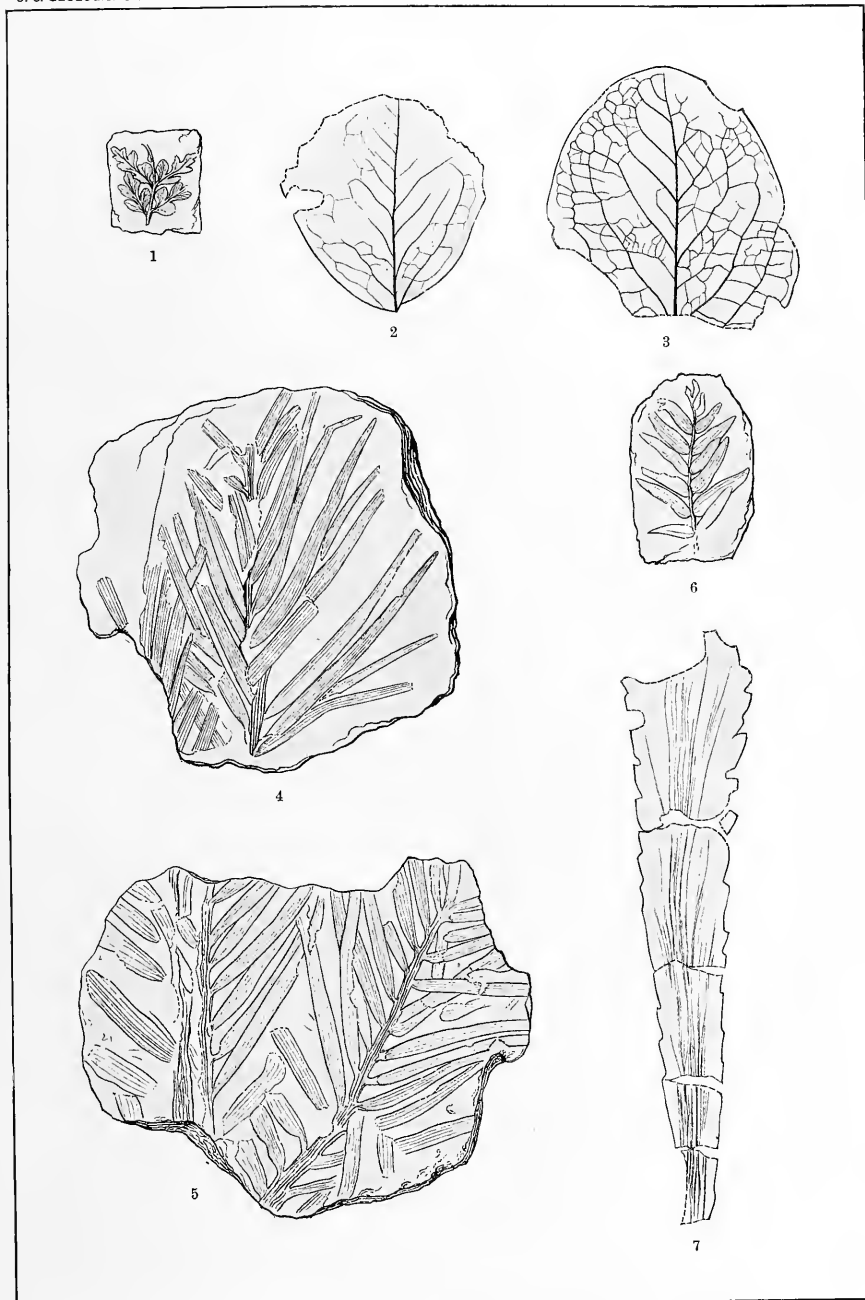
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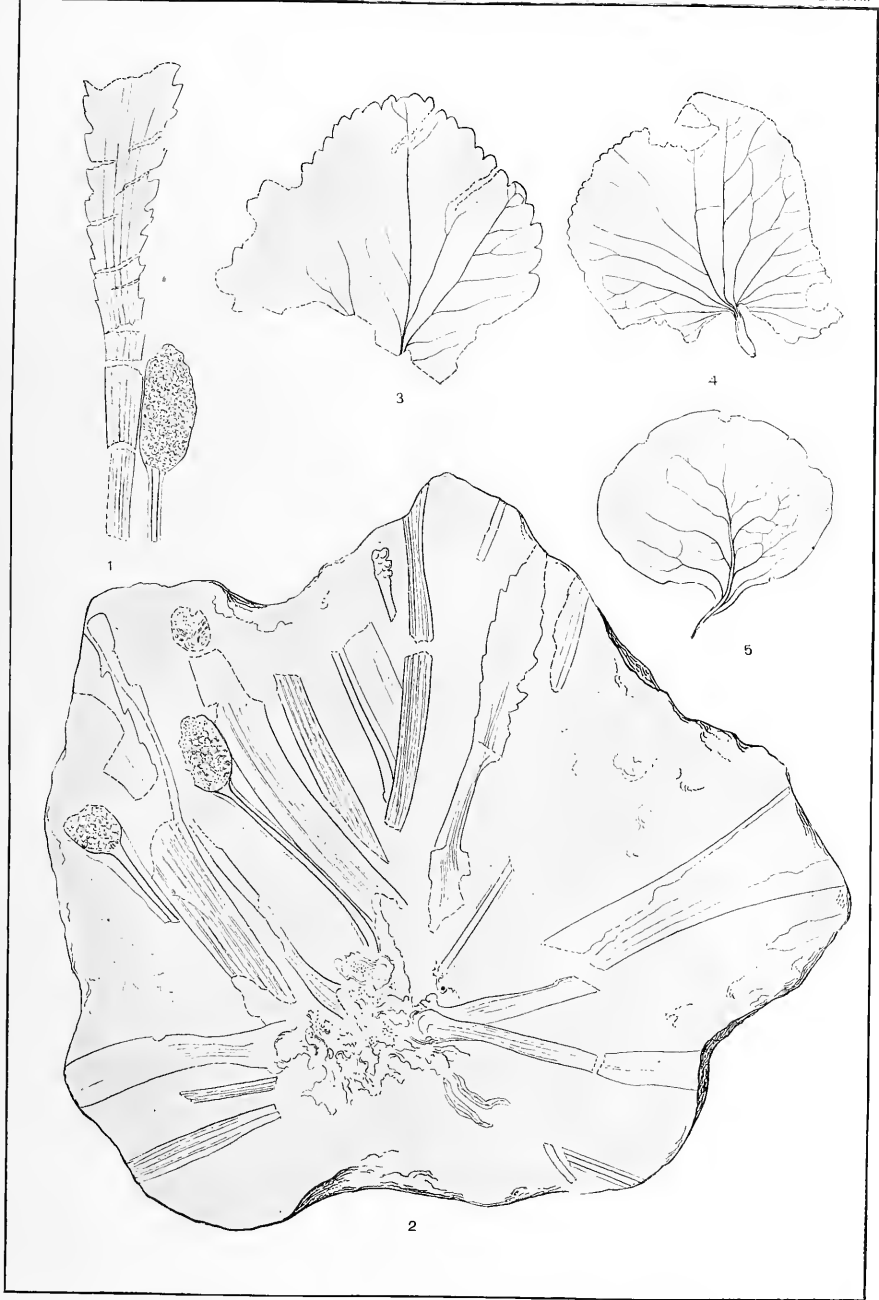
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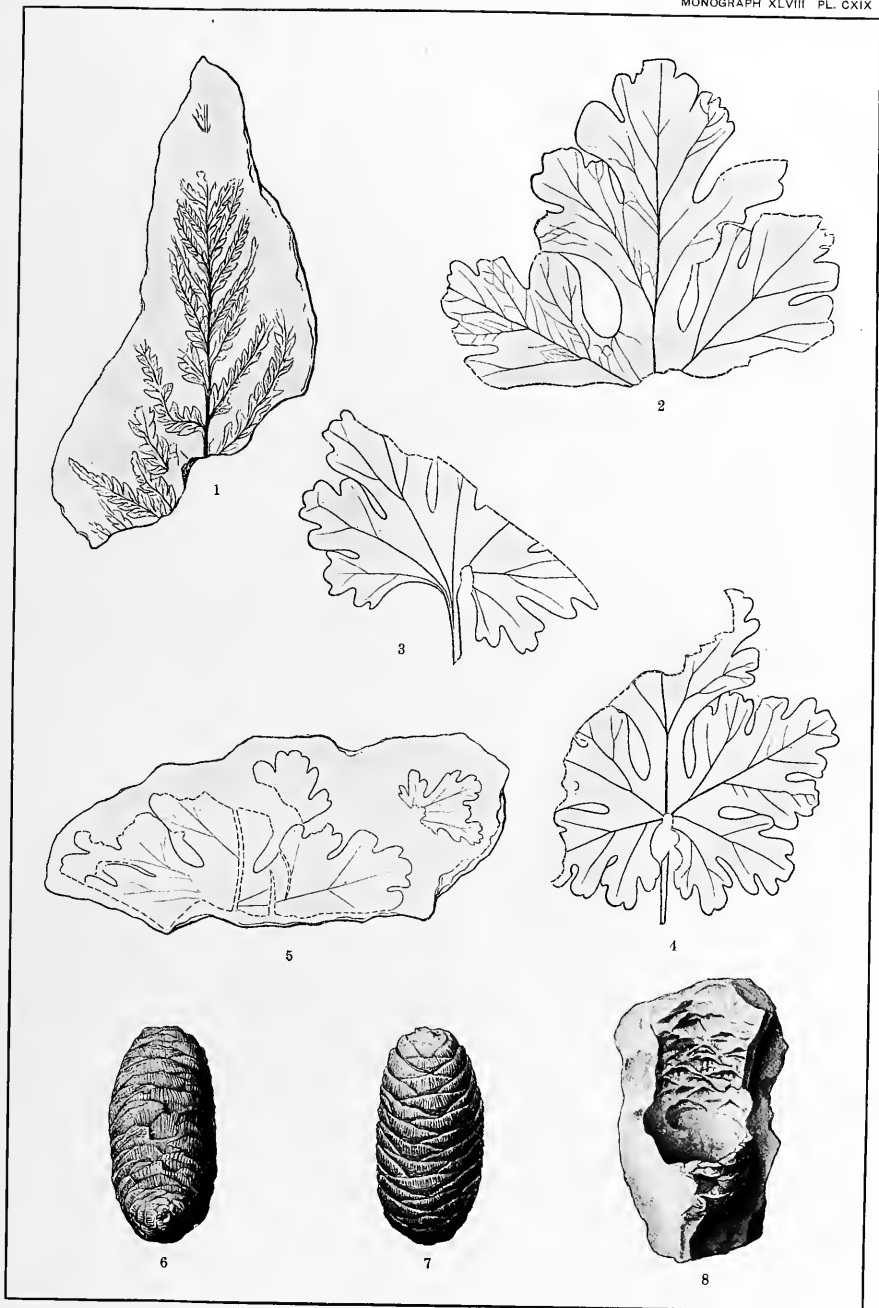
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