

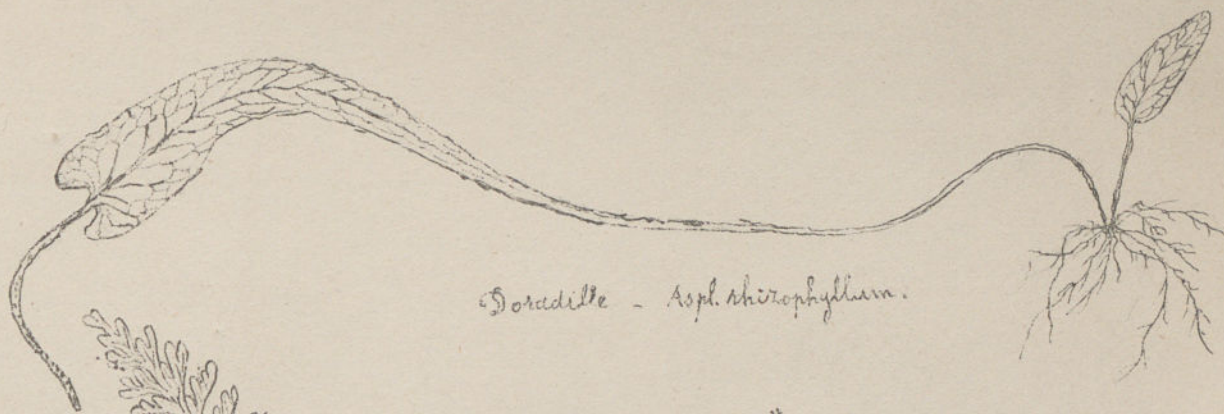
À Monsieur A. Dumont.

Membre de l'Institut

Directeur de l'enseignement supérieur

Hommage respectueux

B. Stenault



Doradille - Aspl. thirophyllum.

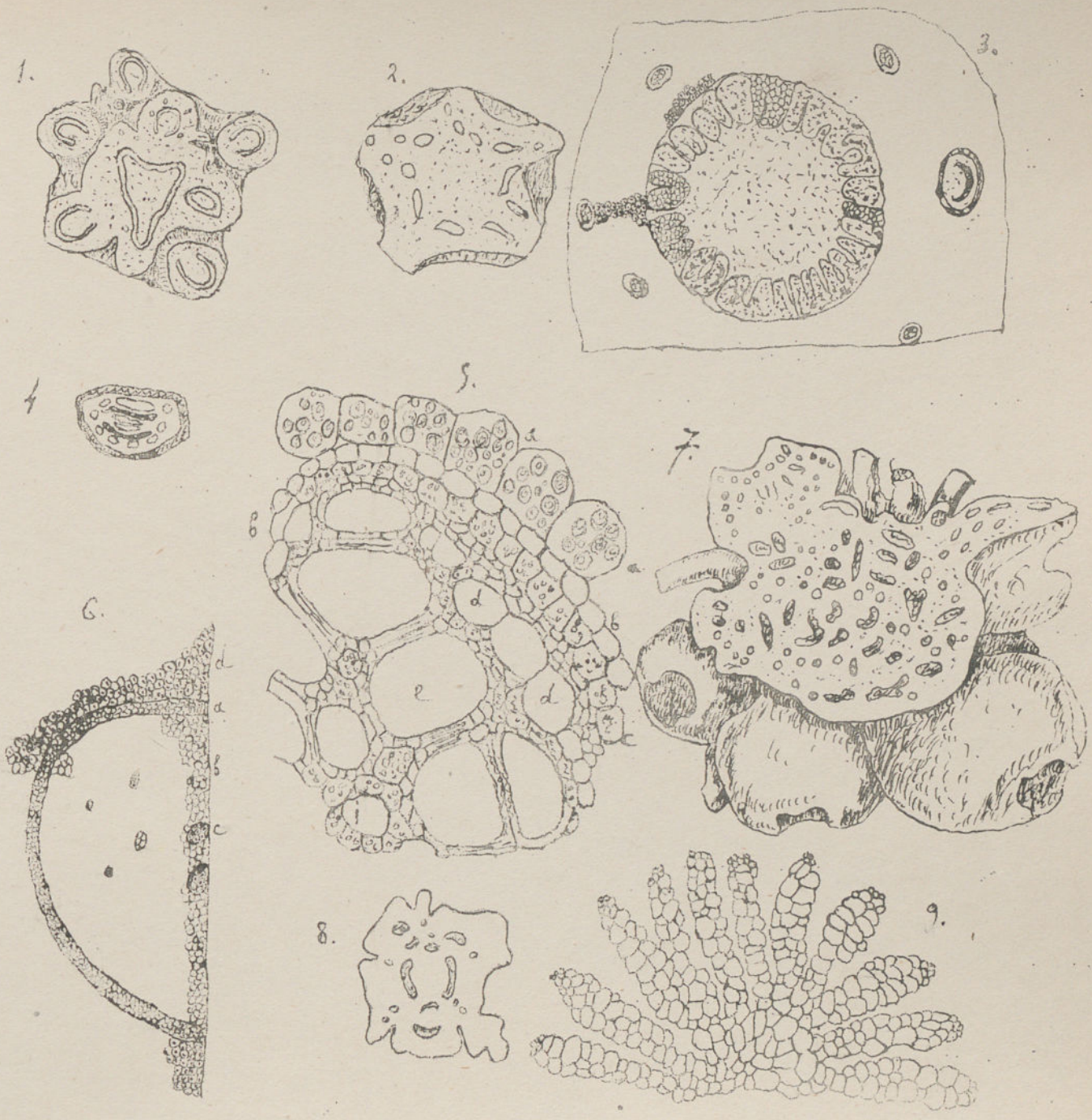


Hymenophyllum Eumbridgense.



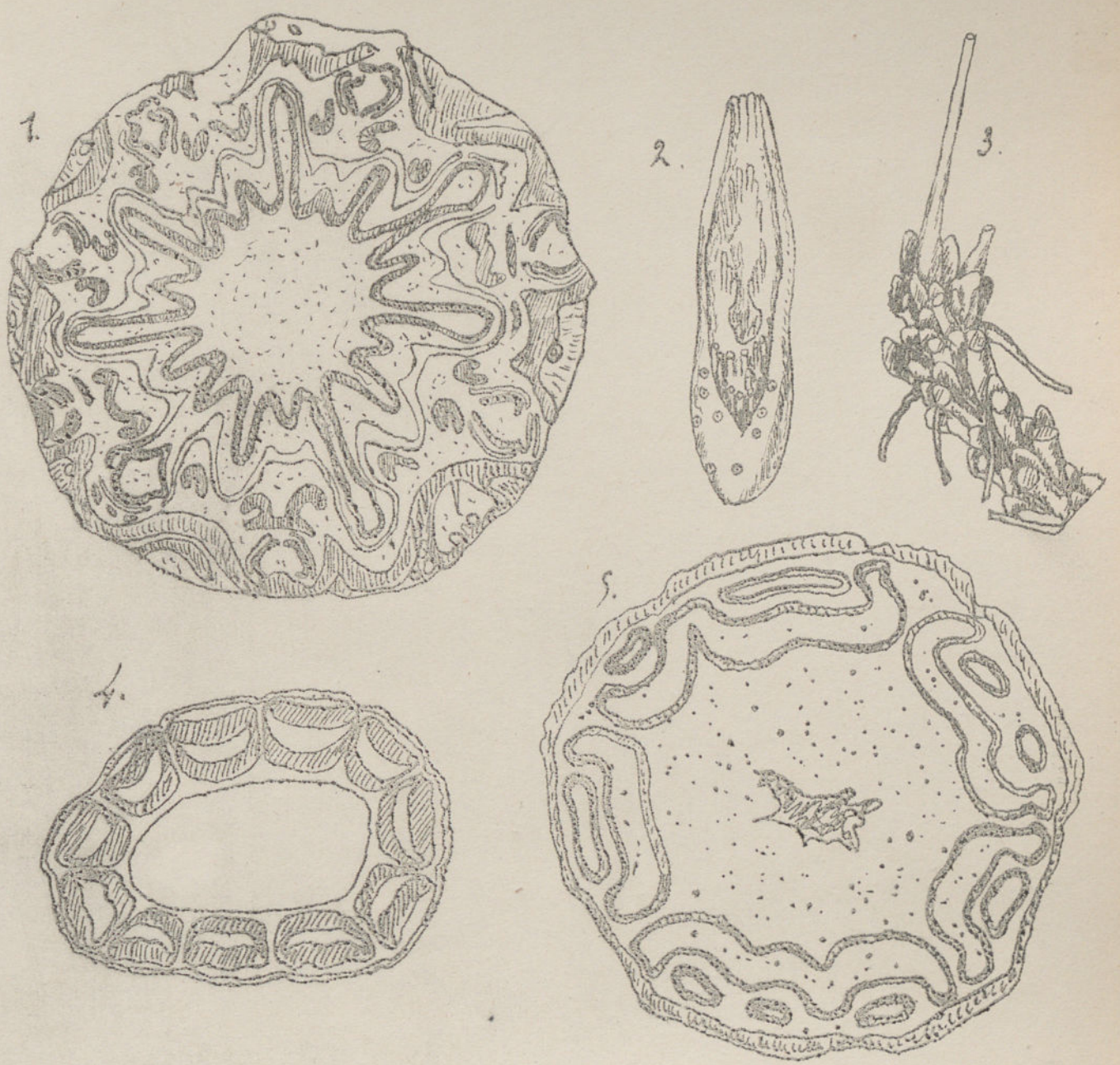
Alsophila.

Fougères vivantes



Fougères vivantes.

- 1. *Stelis Plumieri*. 2. *Aspidium filix mas*. 3. *Osmunda regalis*, 4. *Pteris aquilina*
- 5. *Stelis aquilina*, 7. *Angiopteris*, 6. *Trichomanes Przewii*, 8. *Danaea nodosa*.
- 9. *Faisseau vasculaire de racine d'Angiopteris*.



Fougères vivantes.

1 Balantium, 2 Dicksonia, 3 Danaea elliptica,

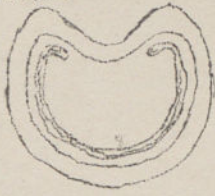
4 Cyathea glauca, 5, Cyathea horrida.



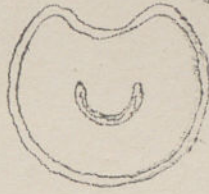
Fougères vivantes.

Bulbe d'Angiopteris (coupe longitudinale).

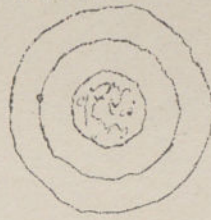
Anemia.



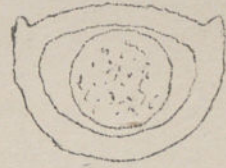
Anemia adiantifolia.



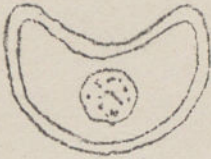
Mohria.



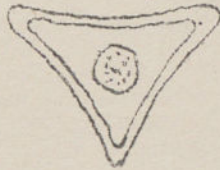
Lygodium.



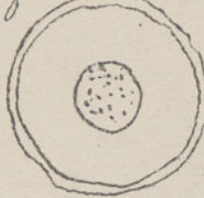
Trichomanes.



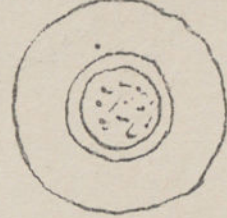
Trichomanes plumosum.



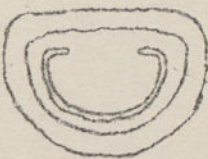
Hymenophyllum.



Gleichenia.



Loxoma.



Alsophila.



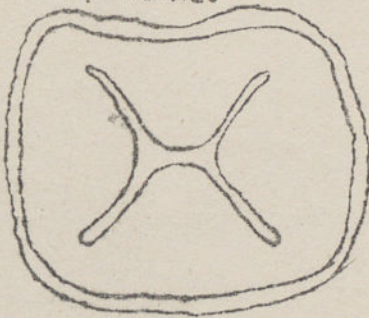
Cyathea.



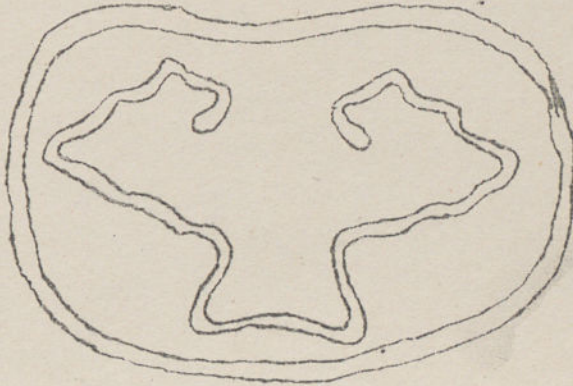
Hemitelia.



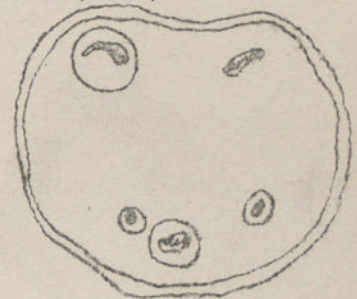
Asplenium.



Dicksonia.

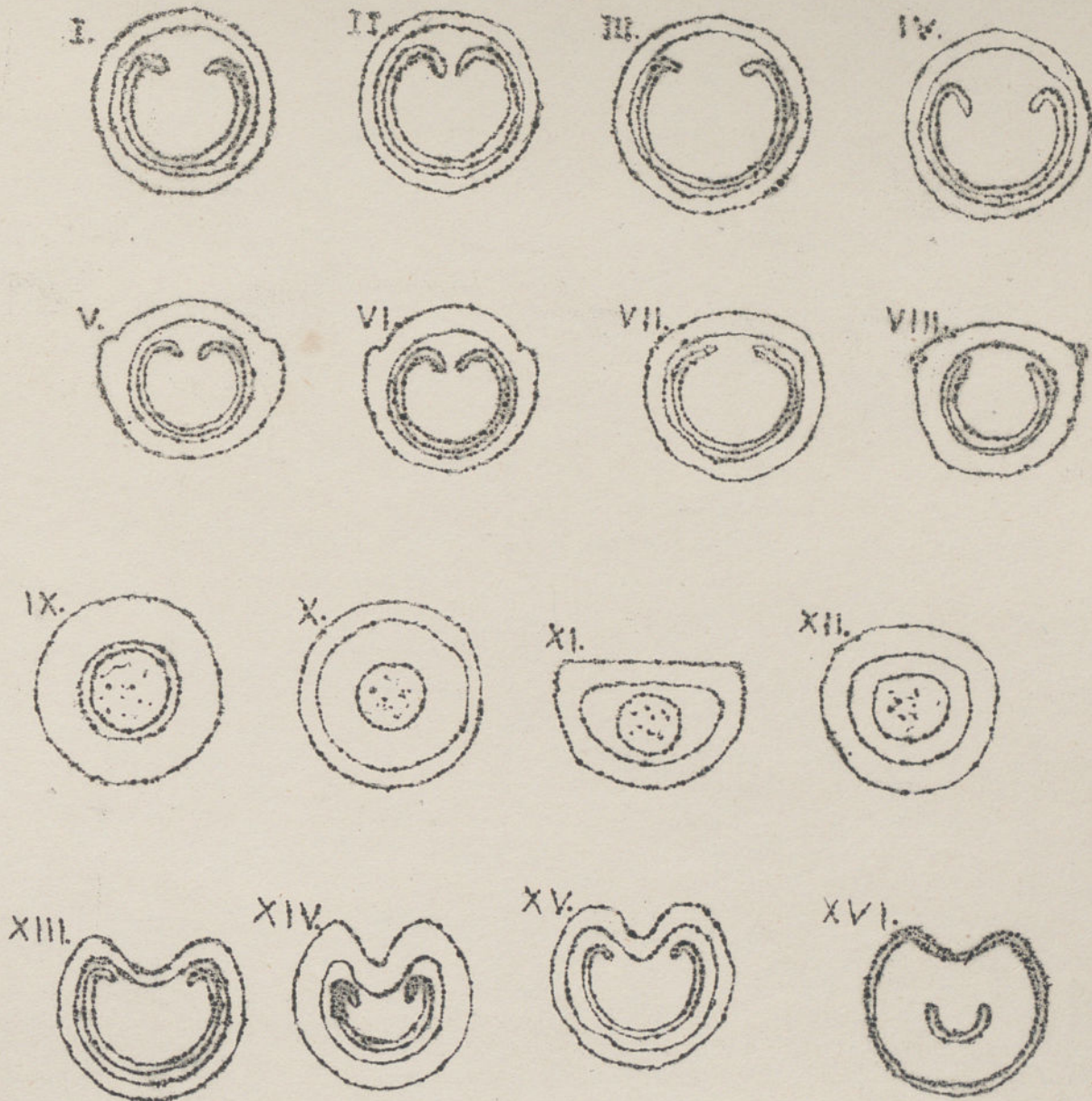


Nephrolepis.



Fougères vivantes.

Coups transversals de pétioles.



Fougères vivantes — coupes transversales de pétioles.

1. *Osmunda regalis*, 2. *O. Spectabilis*, 3. *O. palustris*, 4. *O. Capensis*, 5. *Plenasium banksiaefolium*.

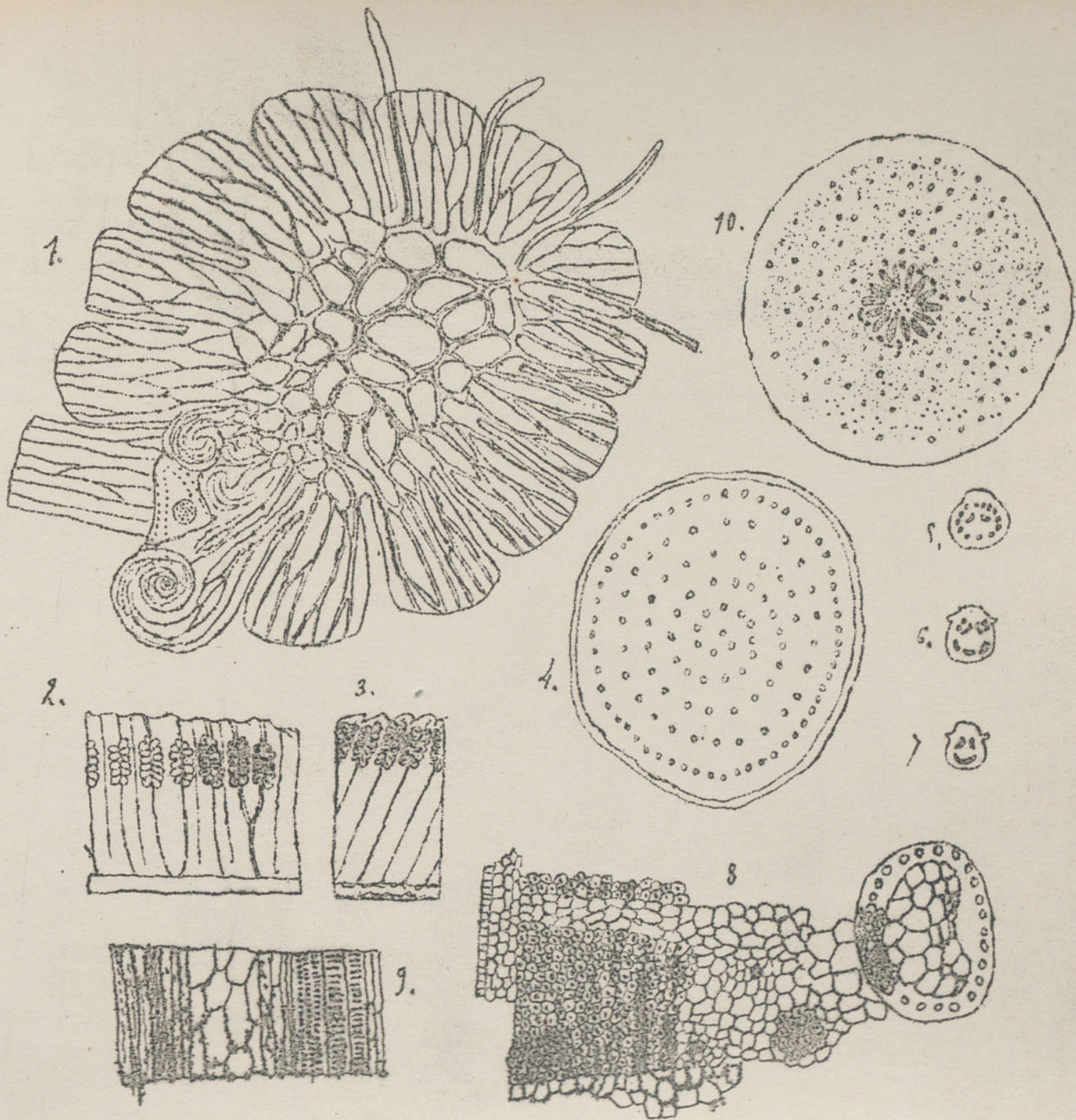
6. *P. bromeliæfolium*, 7. *Eodea africana*, 8. *Leptopteris Hymenophylloides*, 9. *Schizaea spectabilis* L.

10. *S. tenella*, 11. *S. fistulosa*, 12. *S. bifida*, 13. *Anemia cicutaria*, 14. *A. tenuifolia*, 15. *A. Gardneriana*, 16. *A. adiantifolia* ..



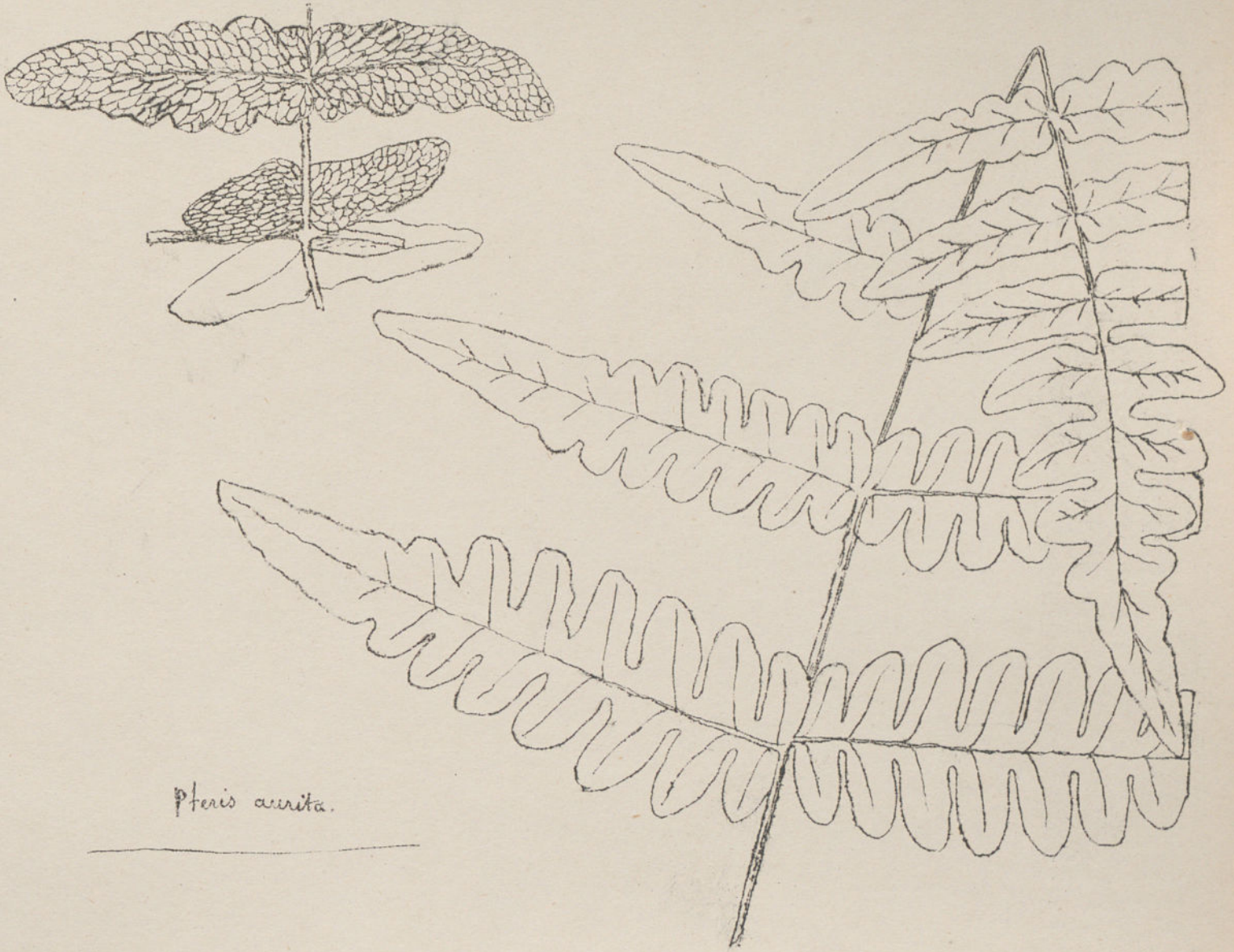
Fougères vivantes. — coupes transversales de pétioles.

- 1, *Marattia*, 2 *M. frascinea*, 3 *M. Salicifolia*, 4 *M. dregeana*, 5, 6 *M. pellucida*, 7 *D. alata*, 8 *Gymnotheca*
 9. *gymnotheca Raddiana*, 10 *Stibasia Douglairii* 11. *Eupodium Kauffessii*. 12 *Angiopteris erecta*, 13 *A. angustifolia*.
 14. *A. crassipes*, 15 *A. latifolia*, 16 *A. macrophylla*, 17 *Psilodochea salicifolia*, 18 *Danaea elliptica*, 19 *D. selloviana*.



Sougères vivantes.

1, coupe transversale d'un bulbe d'*Angiopteris*, 2, 3. Portion de feuille d'*Angiopteris* fructifiée,
 4. coupe de pétiole 5, 6, 7 Coupe de rachis, 8, coupe transversale grossie de pétiole, 9 coupe longitudinale.



Pteris aurita.

Fougères vivantes.

Portion de fronde et pinnules de *pteris aurita.*



Fougères vivantes.

1. Sporangie de *Gleichenia*, 2. de *Schizaea*, 3. d'*Osmonde*, 4. de *Loxosoma*, 5. de *Polypodium*
 6. de *Trichomanes*, 7. de *Marattia*, 8. soredium de *Marattia*, 9, 10. de *Kaulfussia*, 11. de *Ceratopteris*
 12. d'*Hymenophyllum*, 13. frimule de *Polypodium*, 14. d'*Asplenium*, 15, 16. d'*Angiopteris*.



Henitelia capensis.



Cyathea elegans.



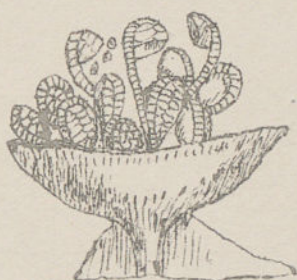
Thyrsopteris elegans.



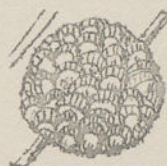
Adiantum pectinatum.



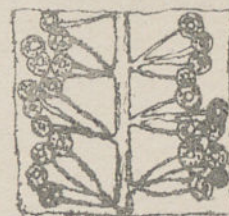
Cibotium macrocarpum.



Deparia prolifera.



Cremataria horrida.



Cyatheacées.

Fougères vivantes.

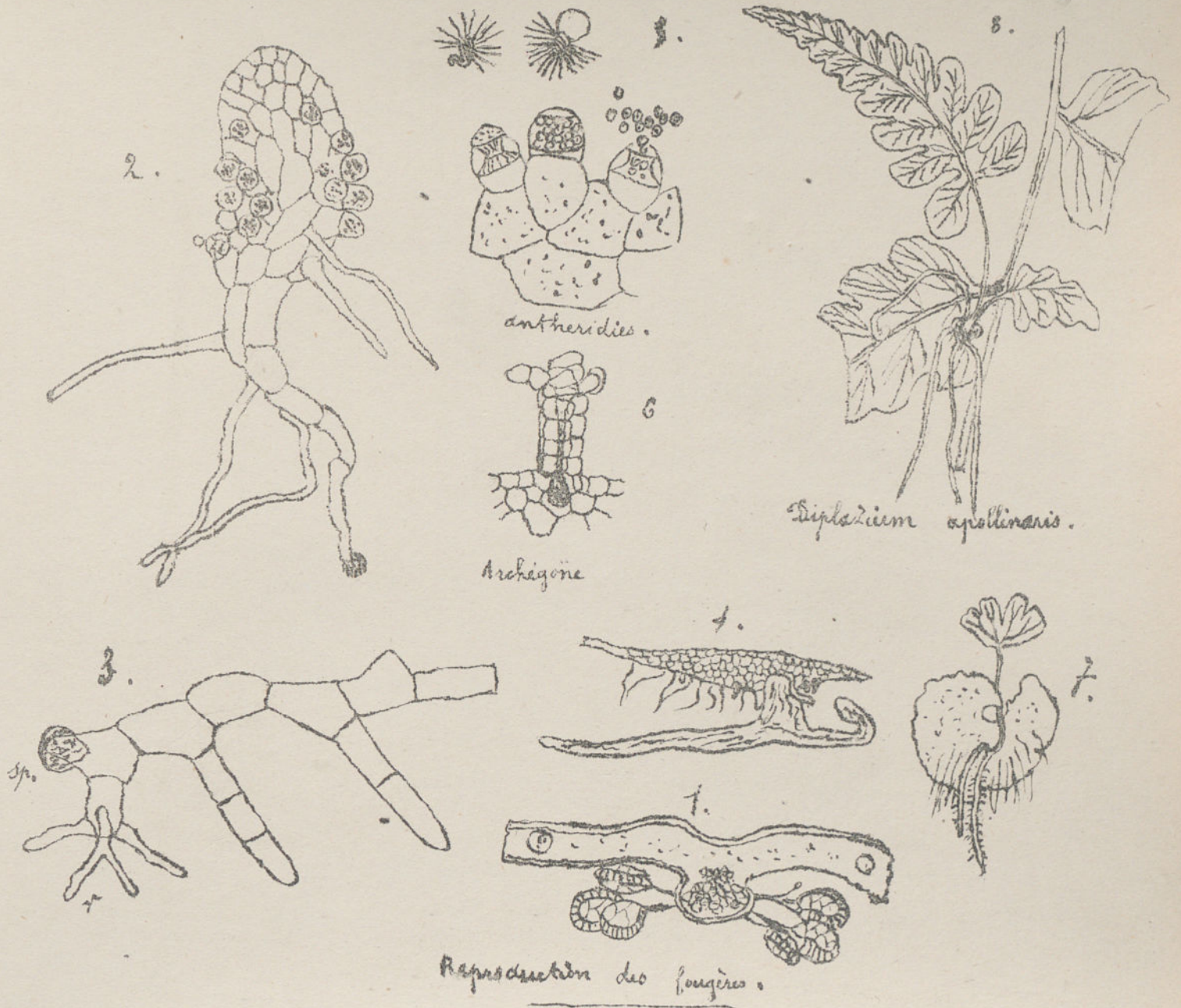
Disposition des sori dans la famille des Cyathéacées.



Fougères vivantes disposition des sors sur les pinnules

1 Pinnules de Gleichenia, 2 Dosmonde royale, 3, Coda africana 4, de Lygodium

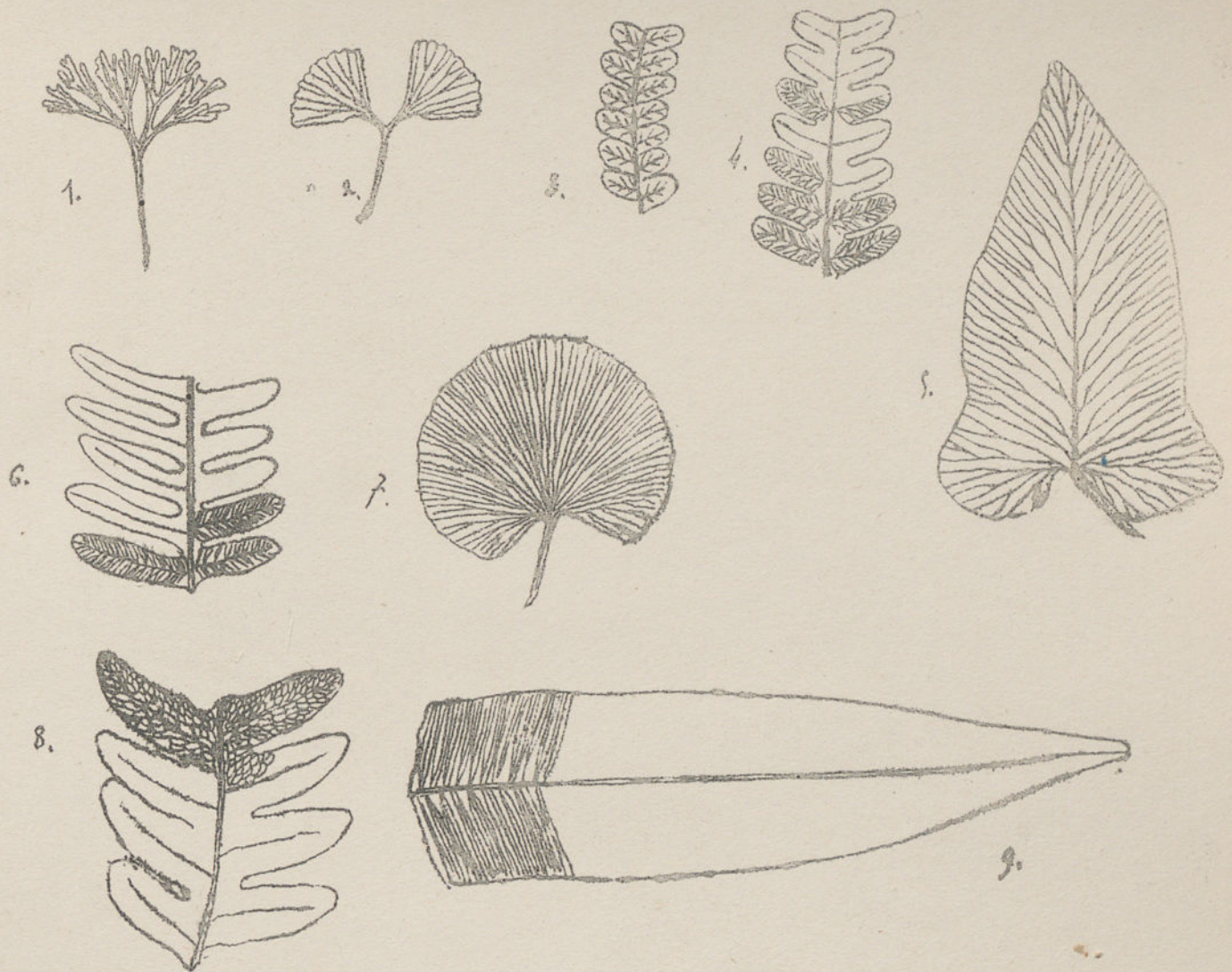
5 D. Mohria, 6 D. Hichomanes, 7, D'hymenophyllum, 8, A.g D. Loxsoma.



Fougères vivantes. — fructifications, et reproduction.

1. Sores d'Adiantum, 2. Prothalle de polypodiaceé, 3. prothalle d'Hymenophyllum, 4. Germination

d'un spore, 5. Antheridies, 6. archigone, 7. jeune fougère, 8. propagule développée sur une pinnule.



Fougères vivantes. - Variation.

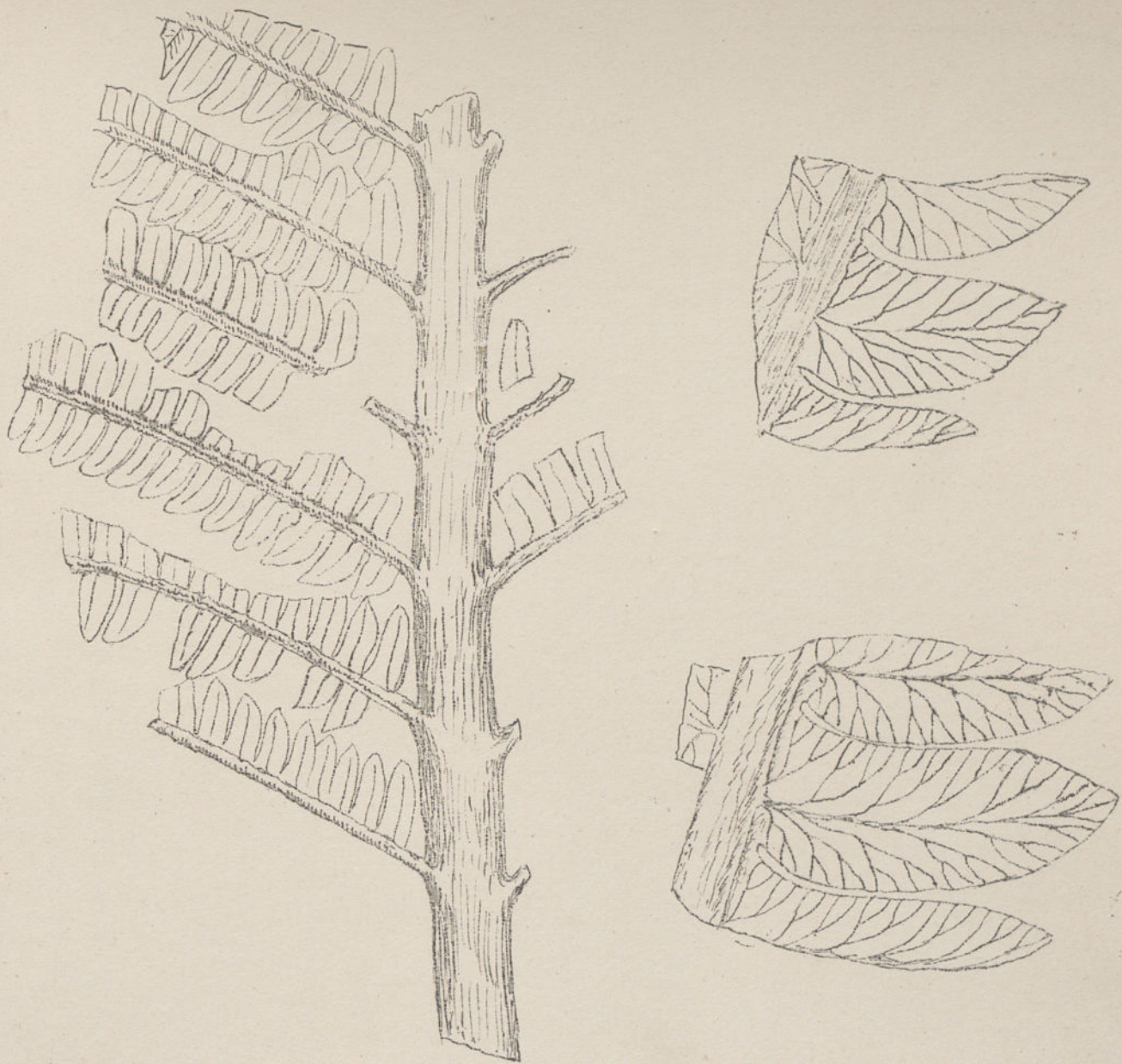
1' Variation de *Trichomanes*, 2 d'*Acrostichum*, 3 de *Polypodium moniliformis*, 4 de *Cyathea arborea*,
 5 de *Scolopendrium*, 6 de *Pteris Smithiana*, fig 7 d'*Adiantum reniforme*, fig 8 de *Pteris communis*, 9 d'*Oleandra*.



Fougies vivantes.

fig. 1. *Kauffussia korthalsii*, fig. 2. portion de feuille fructifère, grossie; 3 Sore grossi

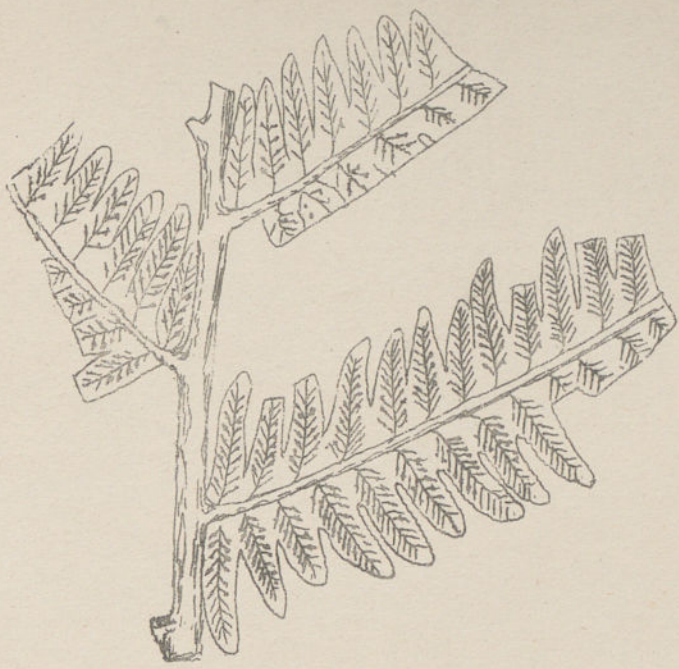
fig. 4, 5, 6 Sore coupé transversalement et longitudinalement fig. 7 une spore grossie.



Cladophlebis Withbyensis.

Fougères fossiles du terrain jurassique

Asplénies - *Asplenium Withbyense* - pinnules montrant la nervature.



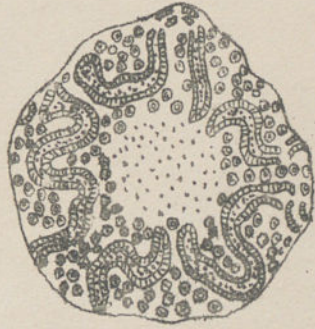
Alsophila thelypteroides.



Cyathea debilis.



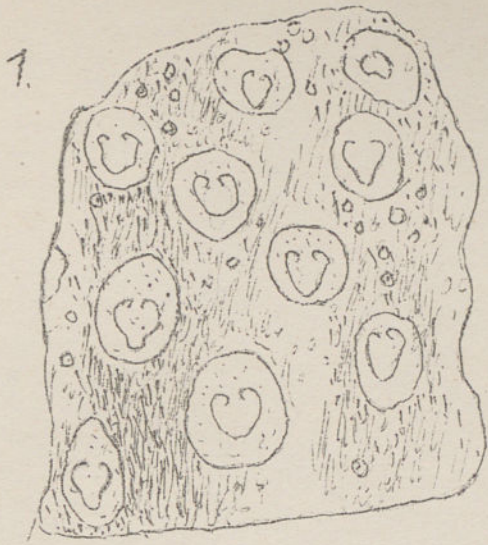
Cyathea plenasiaformis.



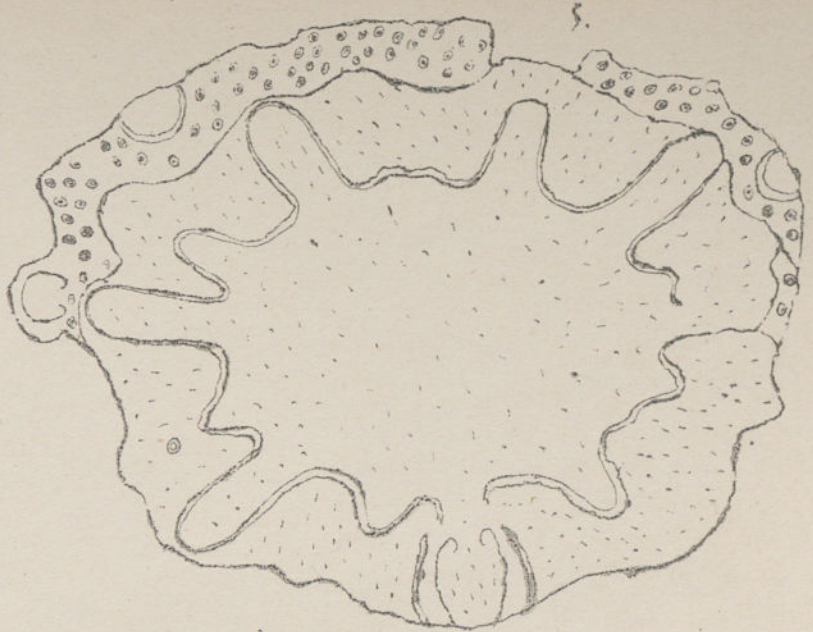
Cyathea cottaana.

Fougères fossiles du terrain Eocène et de la craie

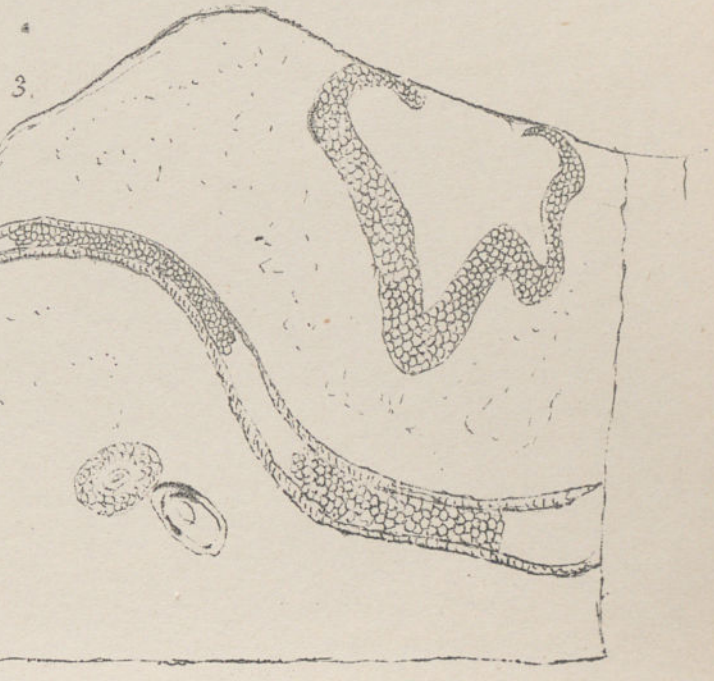
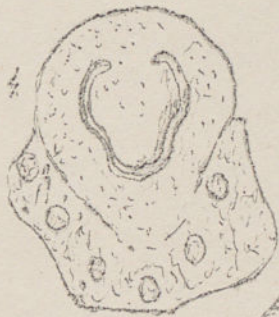
Cyathiacées ~ Frondes, pinnules et troncs.



Protopteris Cretacea.



Protopteris Bravaisieri.



Dicksonia antarctica.

Fougères fossiles du terrain crétacé.

Dicksonies - Sections transversales de troncs, et cicatrices laissés à la surface

par la chute des feuilles.



Dicksonia sapotana.



Dicksonia clavipes.



Phymatopteris Mackleani.



fronde fertile.



fronde jeune.



protopteris punctata.

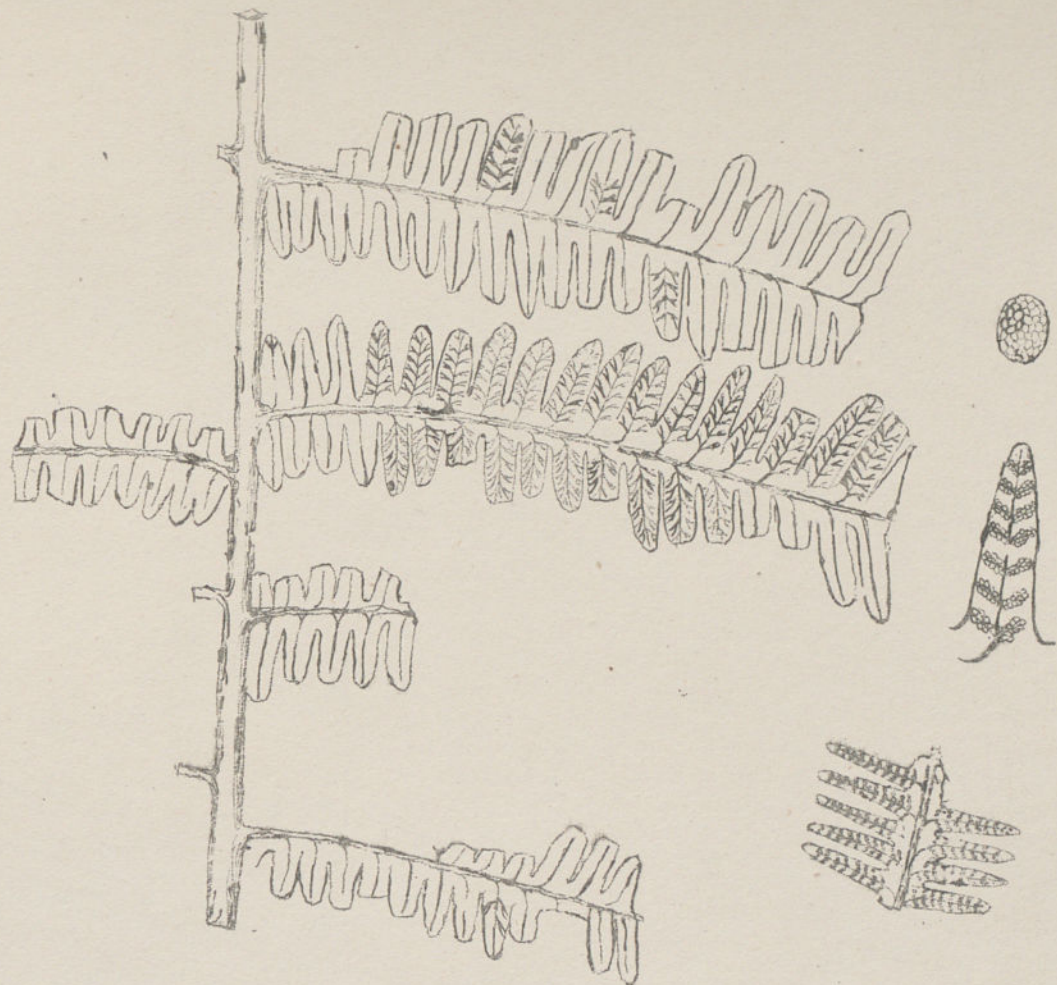


Fodea africana



Fougères fossiles. Du terrain crétacé

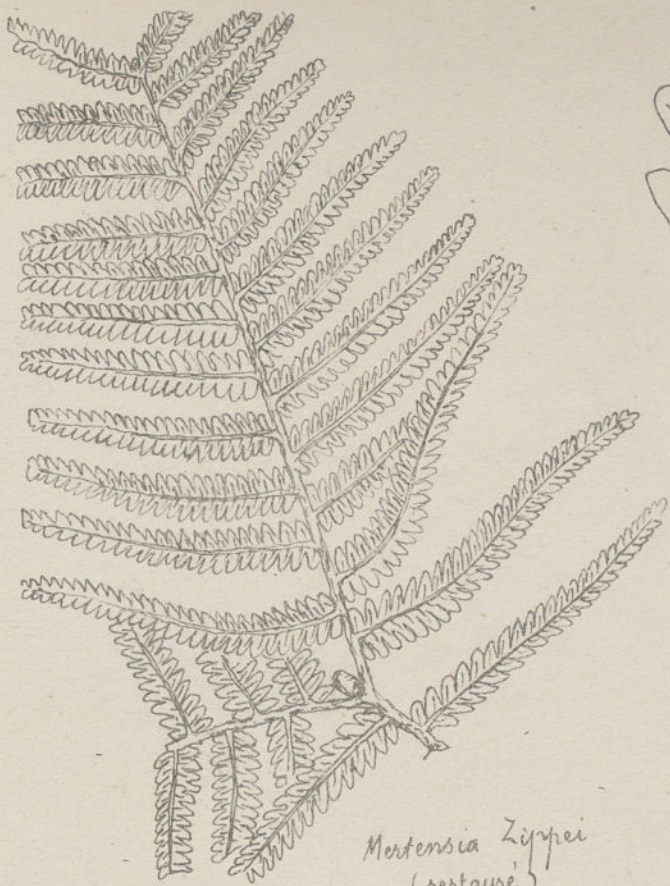
frondes fructifères de Cyathiacées et d'Osmondacées.



Codea australis.

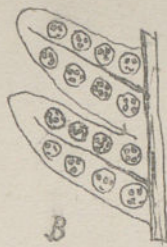
Fougères fossiles du Lias et de l'oolithe.

Portion de fronde et pinnules fructifères de *Codea australis.*



Mertensia Zippelii
(restauré)

A



B



1



2

Lygodium Gaudini



3



4

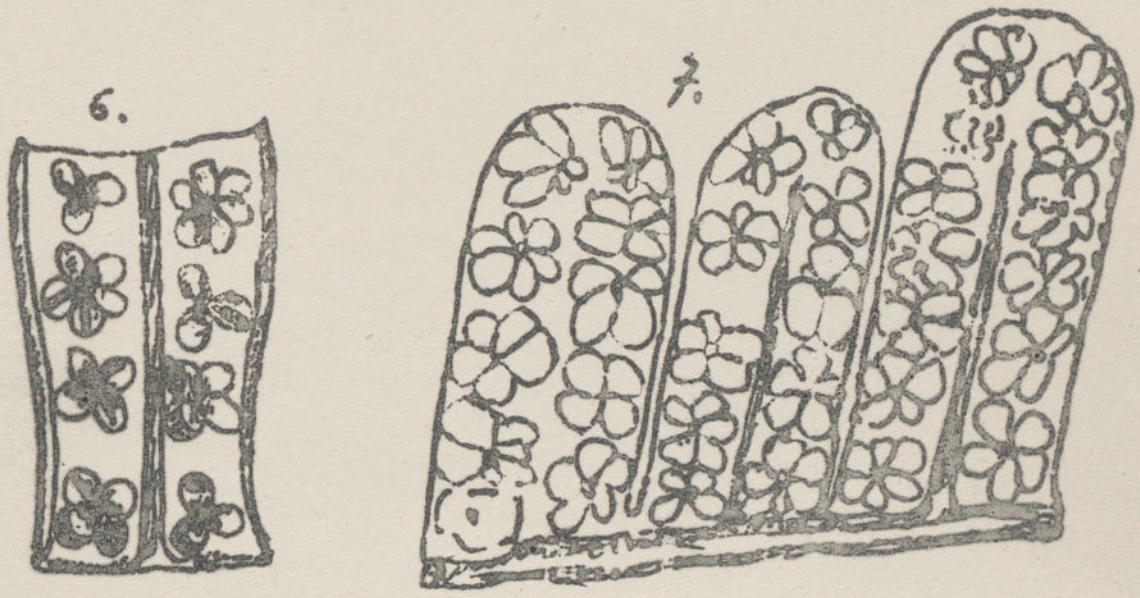


5

Fougères fossiles du terrain crétacé.

Schizaeacées - A - B. Fronde de *Mertensia* avec bulbille

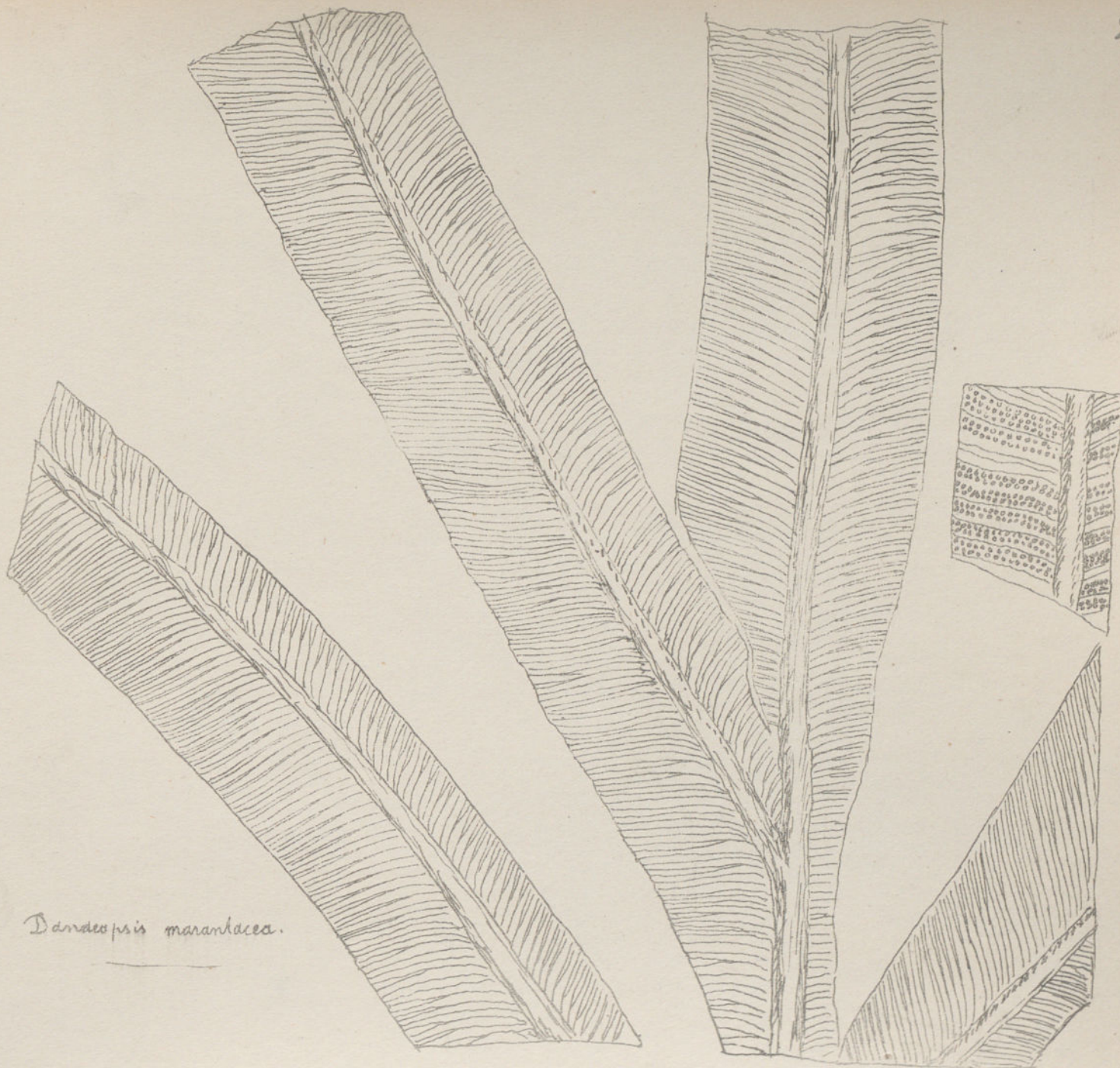
1 à 5 pinnules et fructifications de *Lygodiées* fossiles.



Fougères fossiles du terrain houiller.

1 à 5 Schizariacée fossile, *Senftenbergia elyans*.

6 à 7 Gleicheniacée fossile, *Hawlea pulcherrima*.



Danaeopsis marantacea.

Fougères fossiles du terrain jurassique.

Marattiacé - portion de fronde de *Danaea marantacea*.



Hymenophyllum Weissii.

Marattia Münsteri

Fougères fossiles du trias et du terrain houiller.

Marattiacées - Hymenophyllacées. portion de frondes, et fructifications.



Clathropteris platyphylla. *Dietyophyllum*.

Fougères fossiles du trias et du Lias.

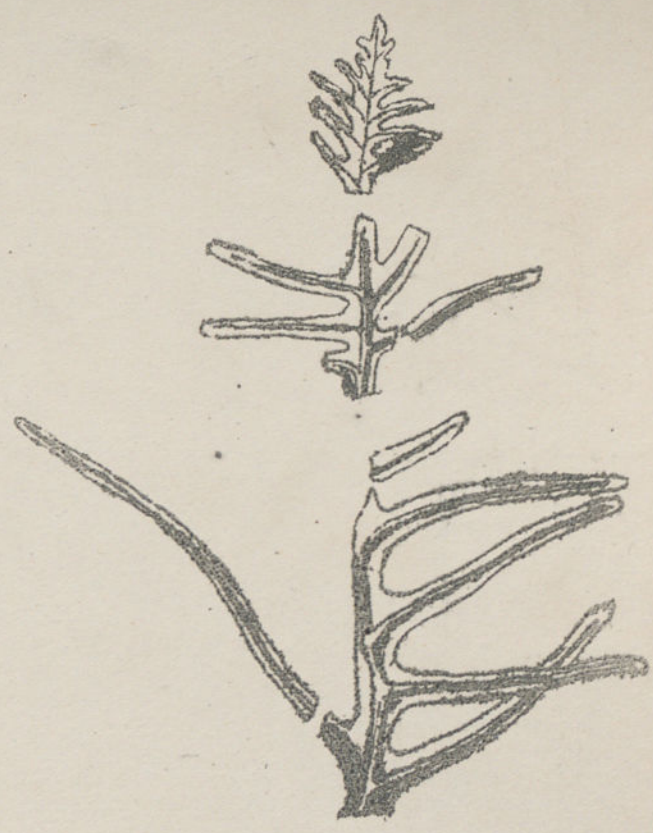
Polypodiacées (Drynariées) - portions de frondes - Sores, Sporangies et spores.



Thaummatopteris.

Fougères fossiles, du Trias et du Liás.

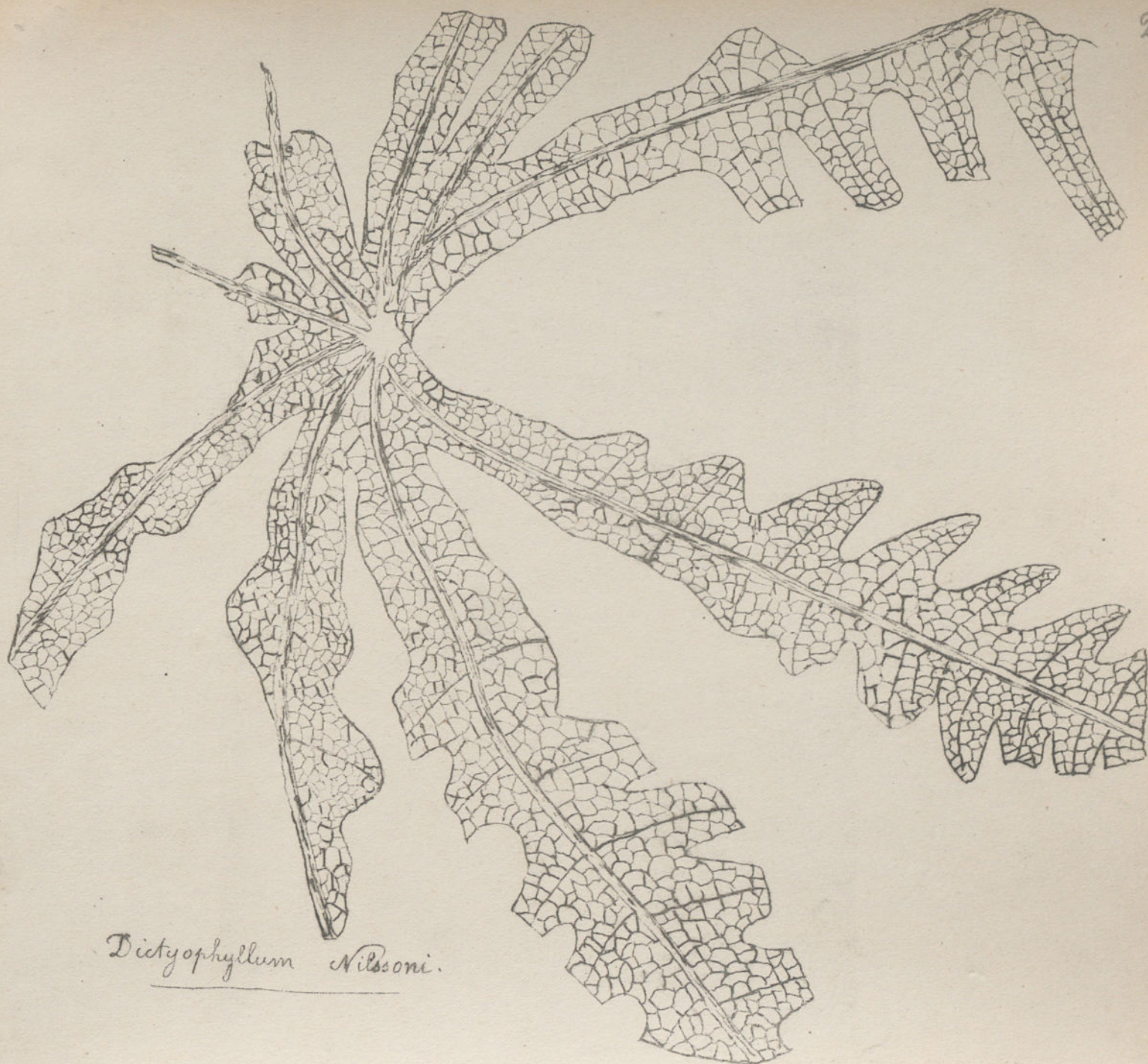
Dietyophyllum - portion de frondes, sors, et spore.



Thaumatopteris

Fougères fossiles du Erias.

Stroble et tronc de Dictyophyllum



Dictyophyllum Nilsoni.

Fougères fossiles du trias.

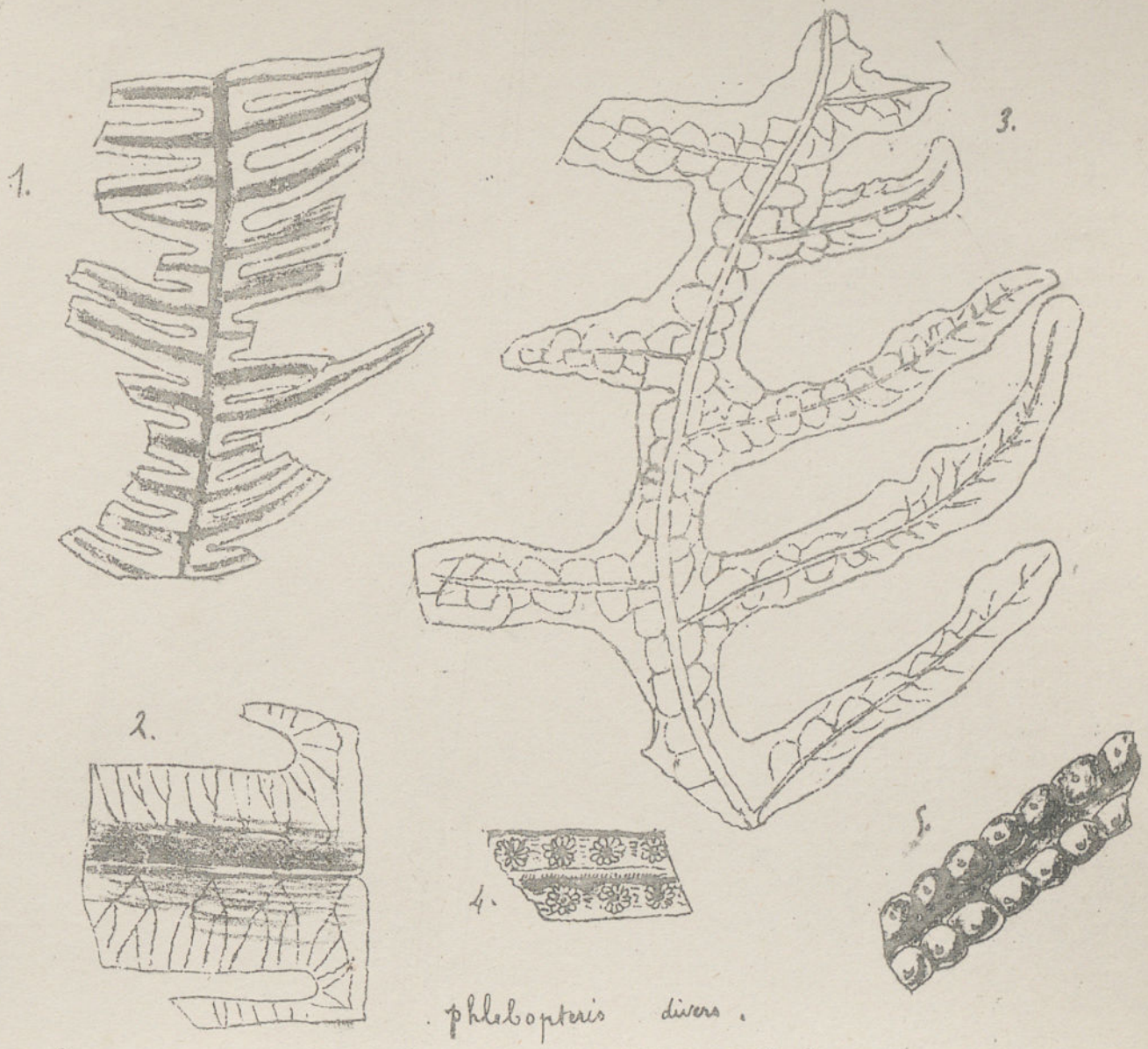
Portion de fronde - le 2^m réseau des nervures n'a pas été figuré.



Saccoparis braunii.

Fougères fossiles du trias et du Liás.

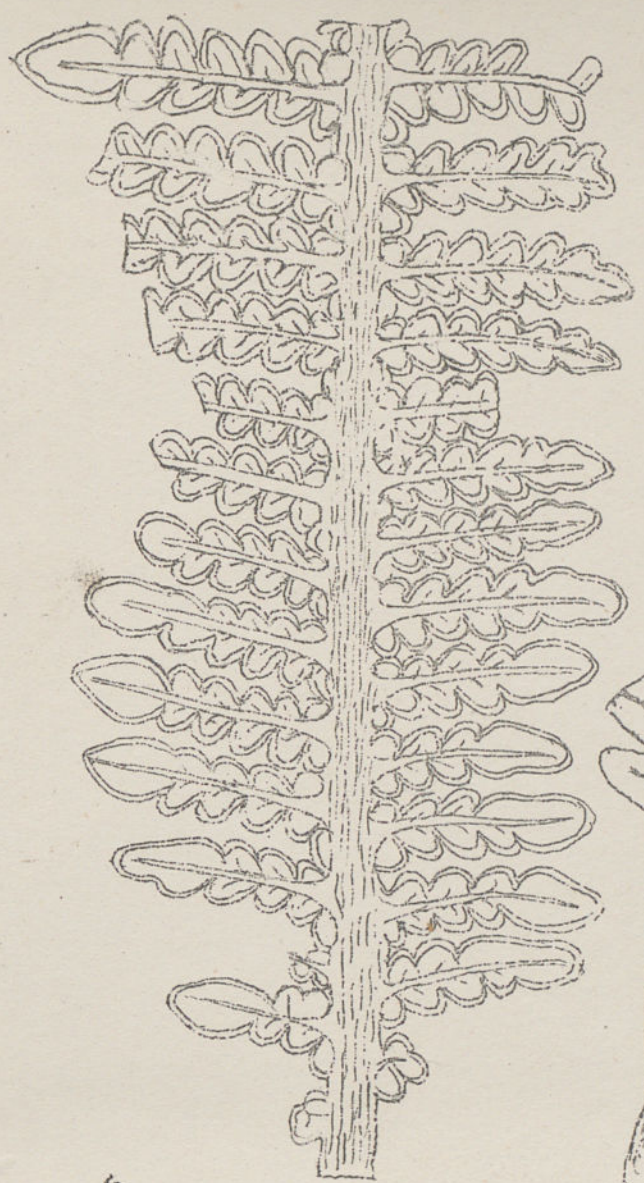
Portion de fronde, pinnules avec sa nervation - Spore composée de 5 sporanges.



phlebopteris divers.

Fougères fossiles du trias.

Dicotylidium - frondes - pinnules avec la nervature - fructifications.



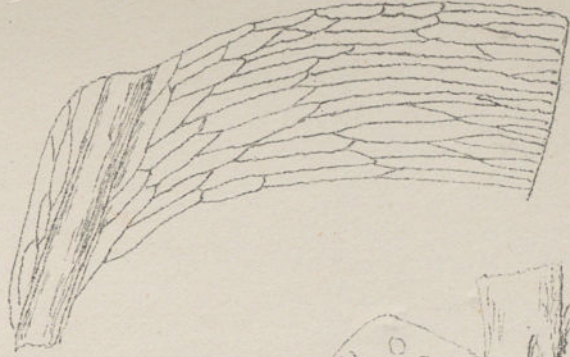
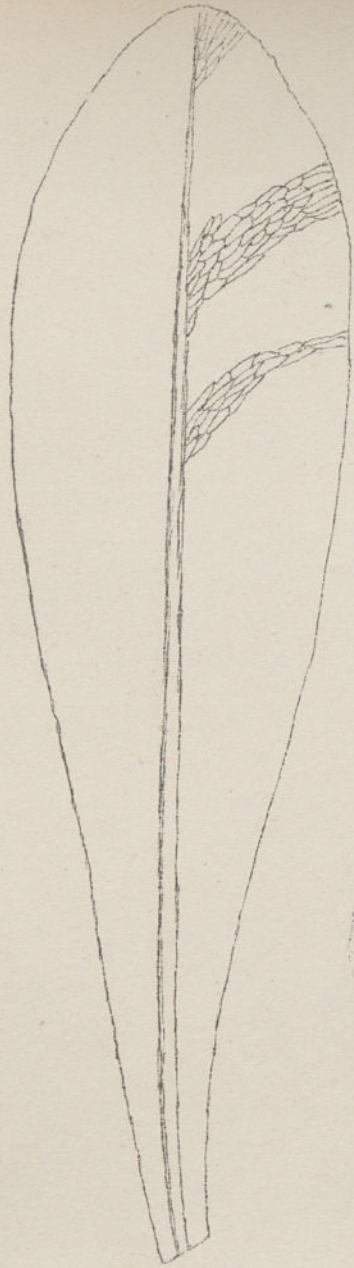
Lomatopteris Burgondica.



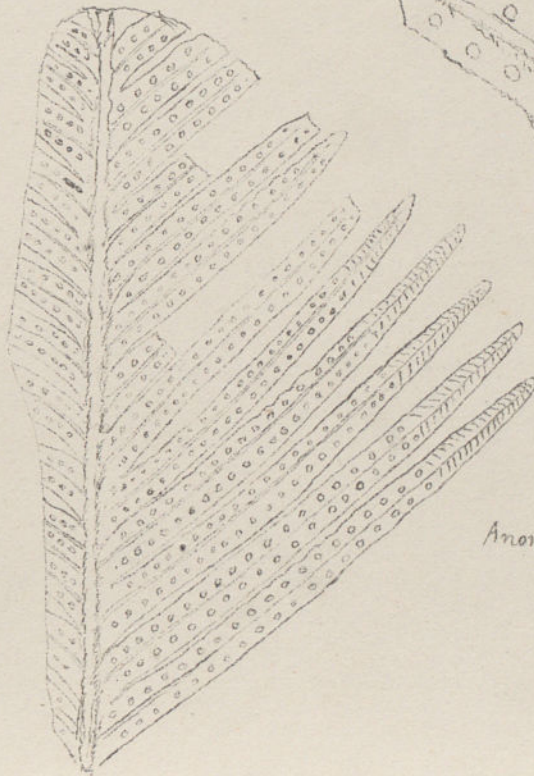
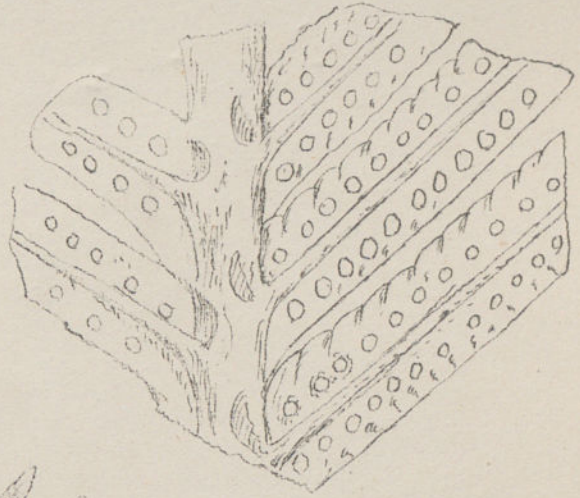
Lomatopteris jurensis.

Fougères fossiles. de l'oolithe.

Frondes de *Lomatopteris* avec l'oulet marginal.



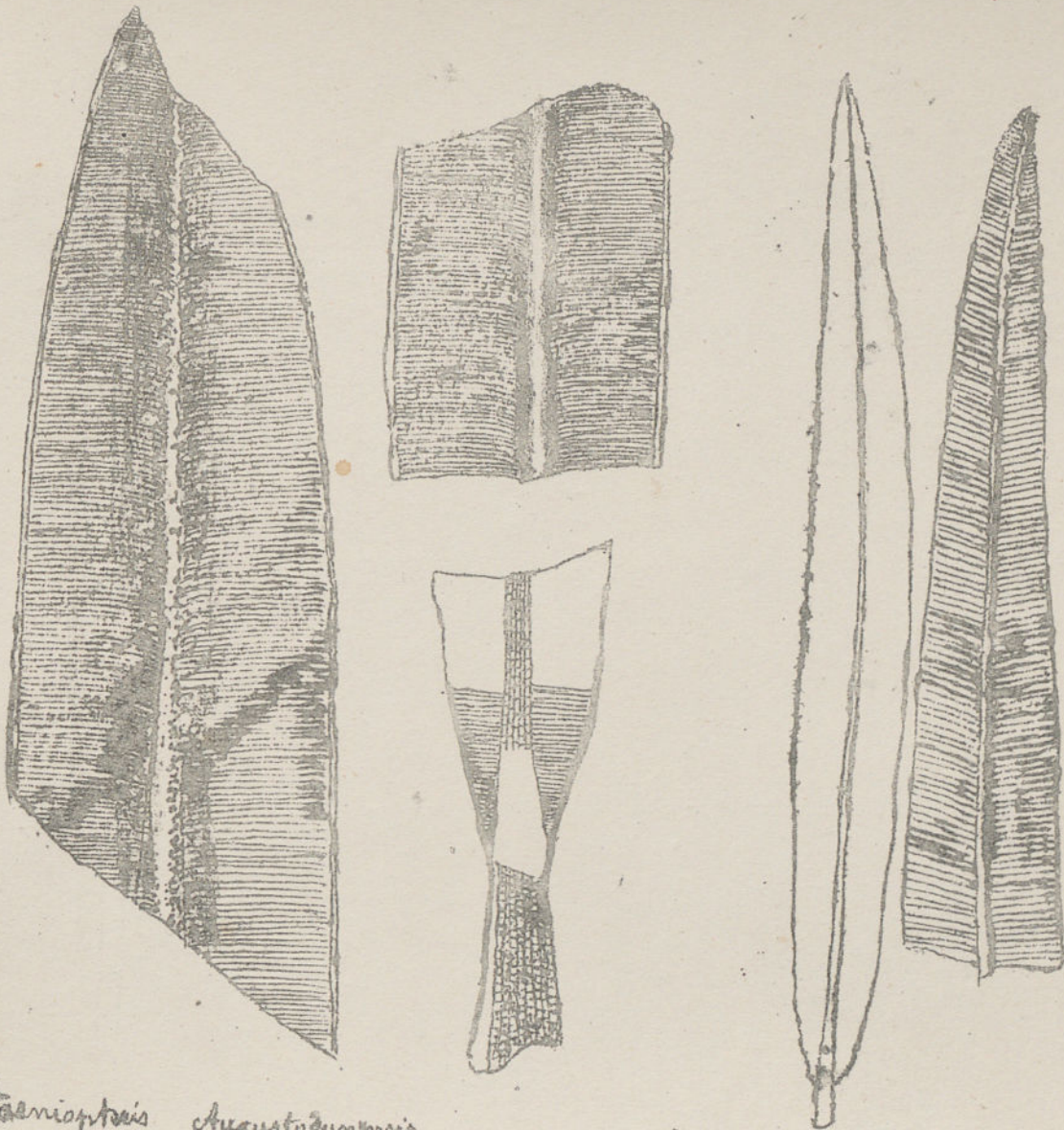
Glossopteris Browniana.



Anomopteris Moougottii.

Fougères fossiles de l'oolithe et du trias.

Frondes stériles, et frondes fructifères du Lias.



Caenopteris Augustodunensis.

Caen. transiensis.

Fougères fossiles du trias et du Lias

Portions de frondes de *Caenopteris* du Lias.



Callipteris conferta.

Fougères fossiles du terrain permien.

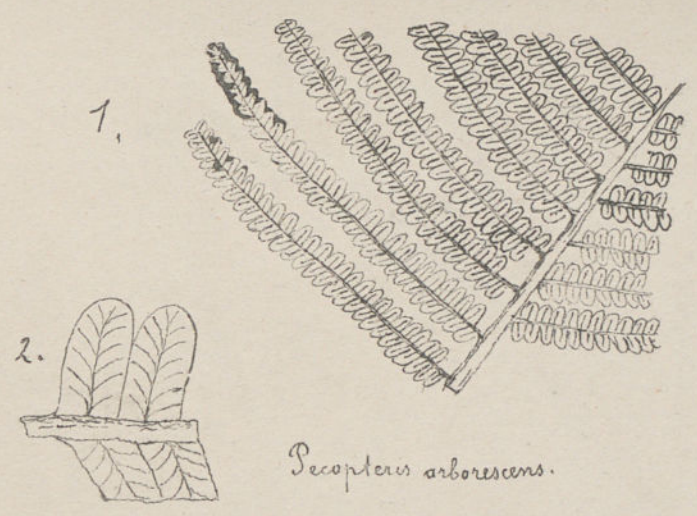
Callipteris, fougères caractéristiques du terrain permien.



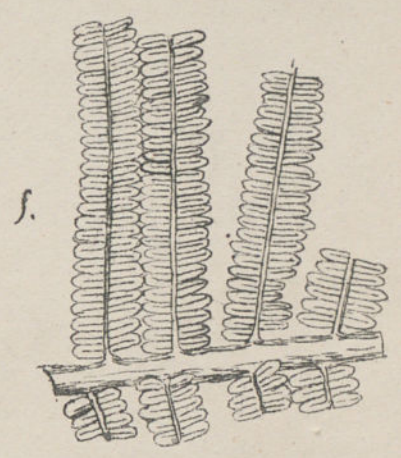
Callipteris sinuata.

Fougères fossiles du terrain permien.

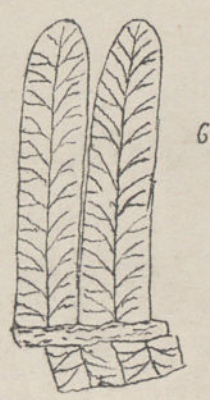
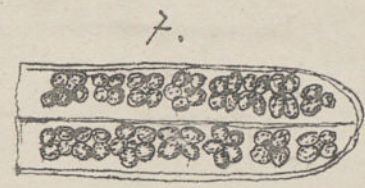
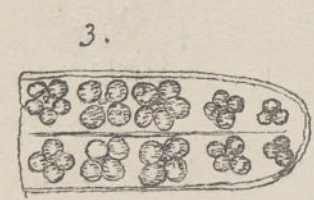
Portion de fronde et pinnules avec la nervature, terrain permien.



Pecopteris arborescens.



Pecopteris cyathea.

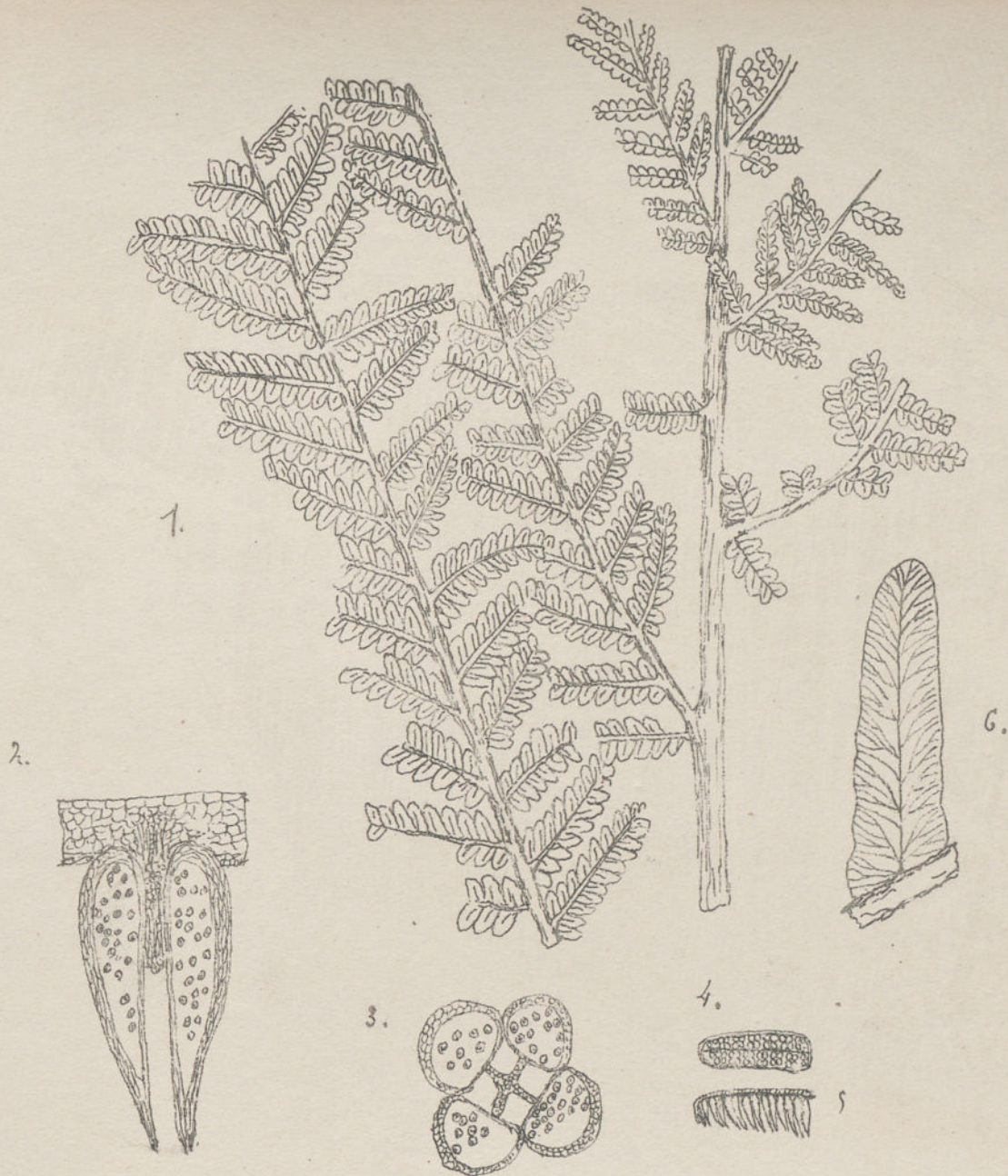


Pecopteris Candolleana.

Fougères fossiles du terrain houiller supérieur.

Frondes diverses de Pecopteris, et pinnules fructifères.

5, 7, 9 Fructifications vues en dessus, 4 Sporangies vus de côté.

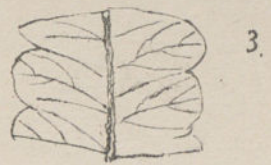
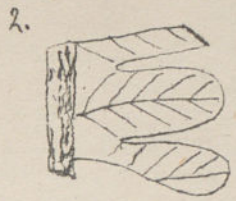
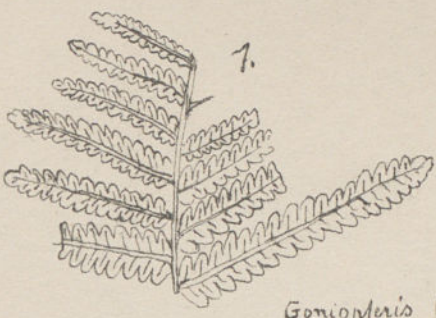


Pecopteris polymorpha.

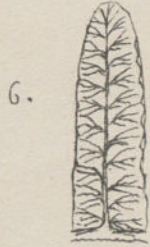
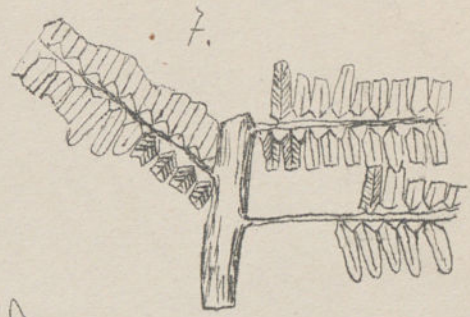
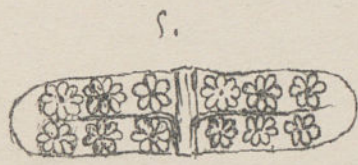
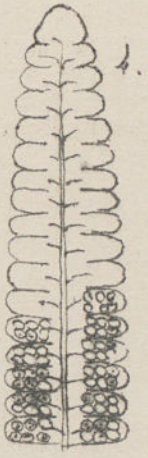
Souffles fossiles du terrain houiller supérieur.

1 Fronde fertile - 4, 5 pinnules vues de face et latéralement.

2 et 3 Sores grossis pour montrer les détails d'organisation.



Goniopteris (Pecopteris) unita.

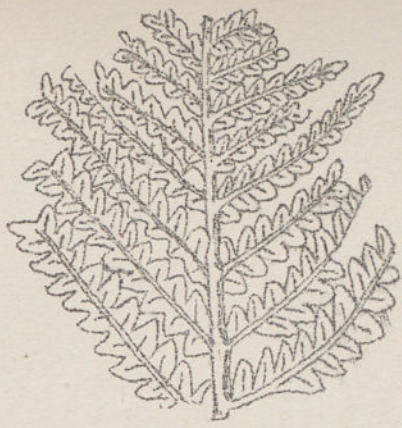


Goniopteris (Pecopteris) arguta.

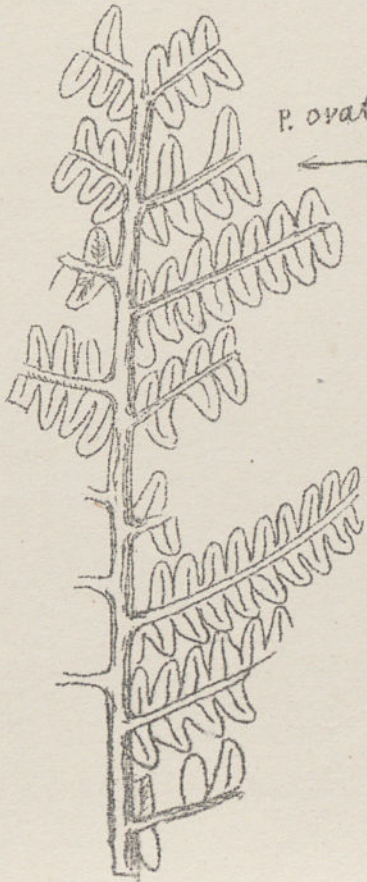
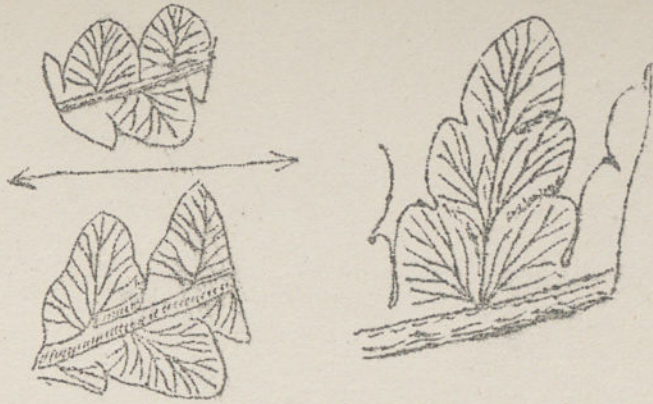
Fougères fossiles du terrain houiller supérieur et moyen.

1, 2, 3, Portions de frondes stériles - 4, 5, Pinnules portant des sôres à leur partie inférieure.

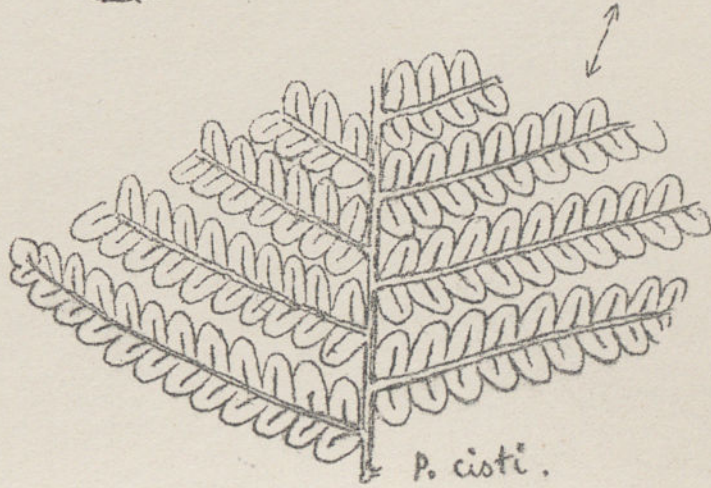
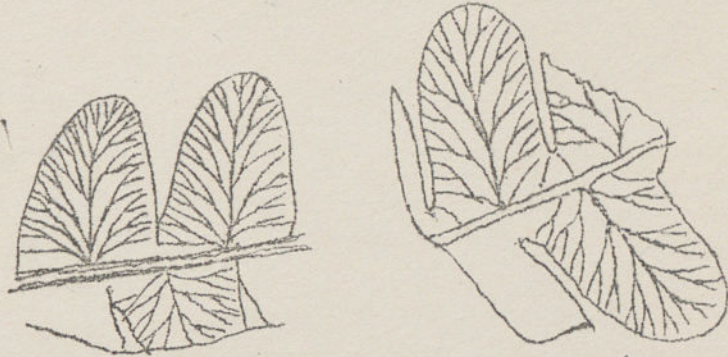
rappelant les sôres des *Kaulfussia* vivants.



P. pluckenetii



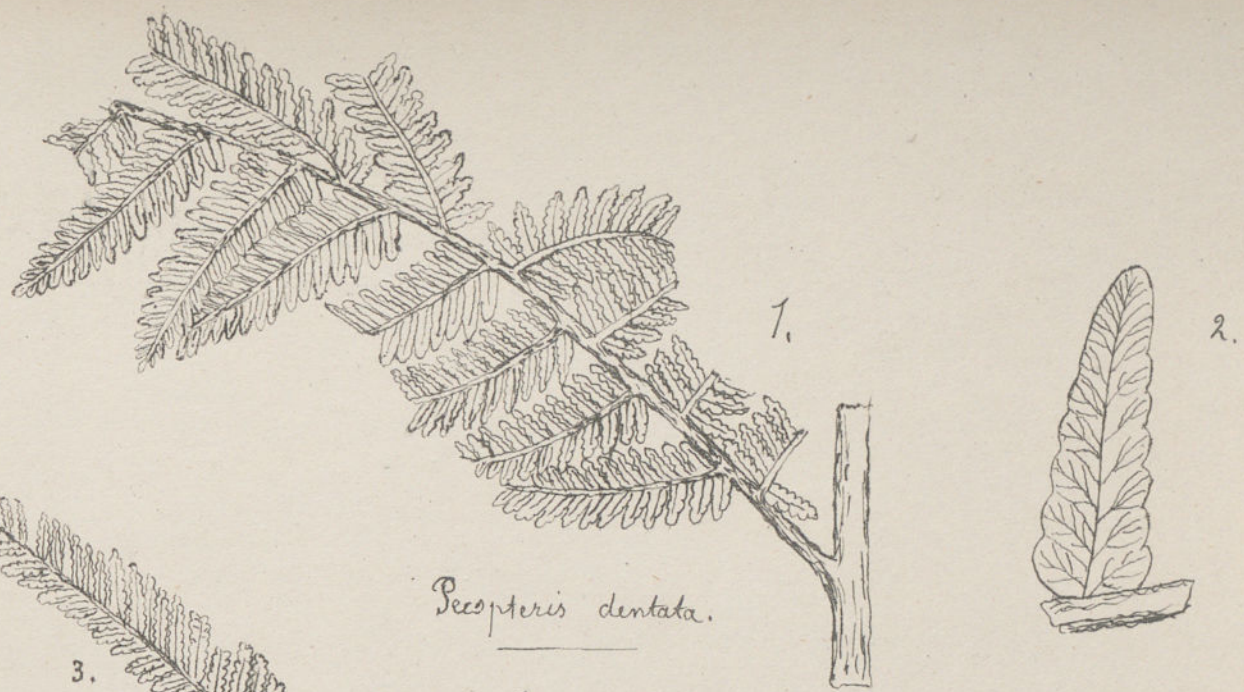
P. ovata



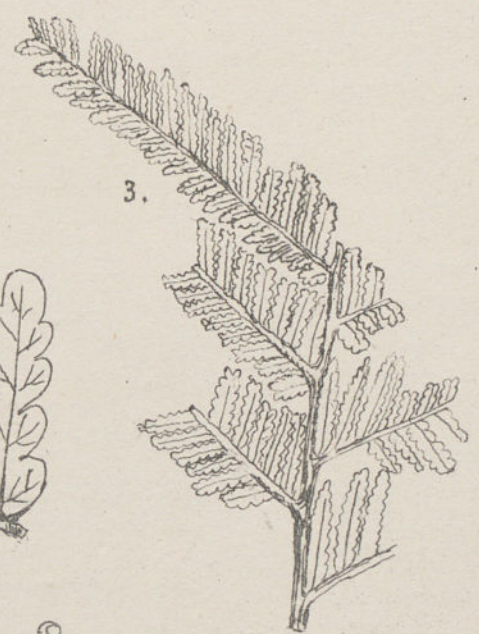
P. cisti.

Fougères fossiles du terrain houiller supérieur et moyen.

Portions de frondes de divers peopteris, et de Callipteridium.



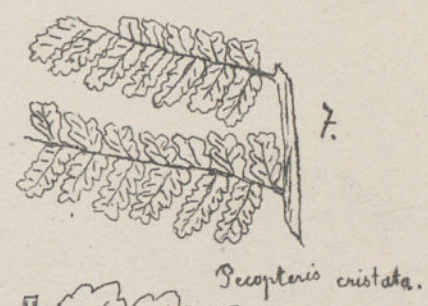
Pecopteris dentata.



Pecopteris Biotii.



Pecopteris sphenopteroides.

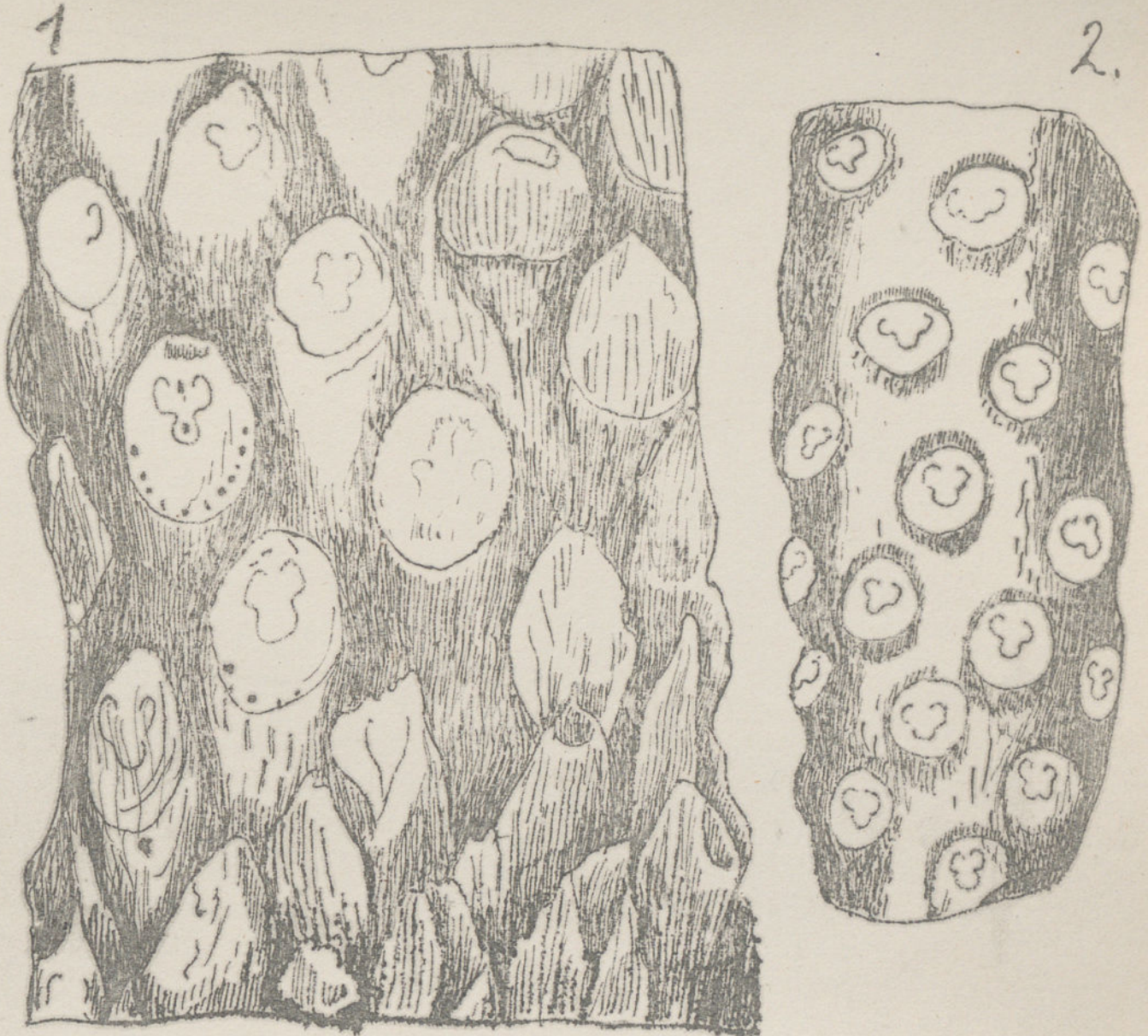


Pecopteris cristata.

Fougères fossiles du terrain houiller moëno.

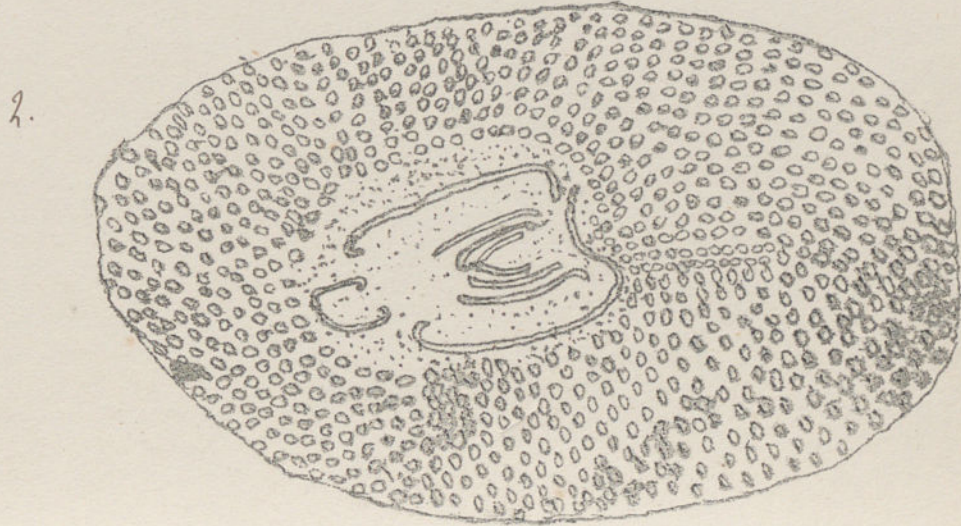
Pecopteris sphenopteroides, 1, 2, 3, 4, 1. Frondes stériles, 5, 6. frondes fructifères

6. Sporange.



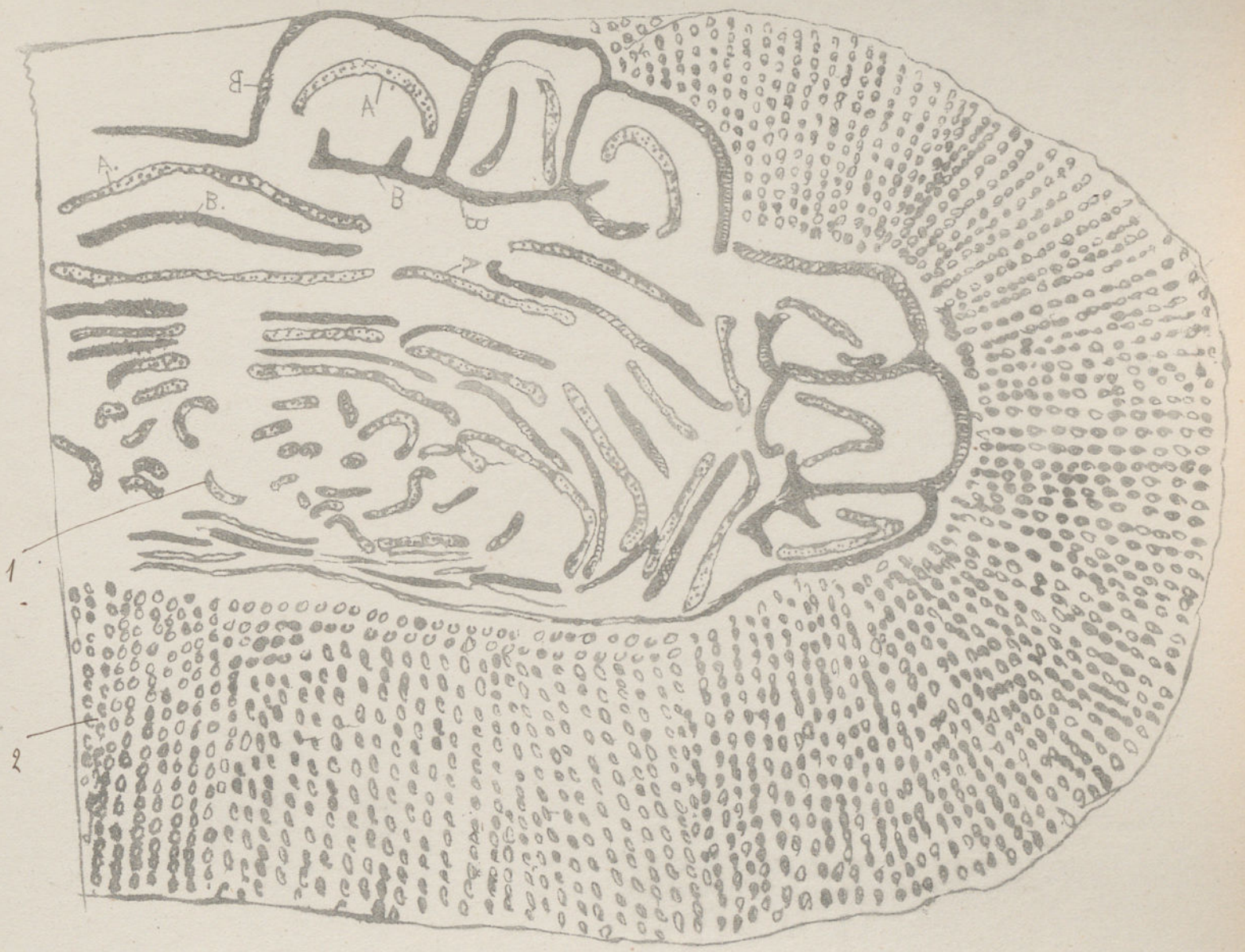
Fougères fossiles. Troncs avec cicatrices foliaires.

1. *Protopteris Sternbergii*, 2. *Protopteris Singeri*.



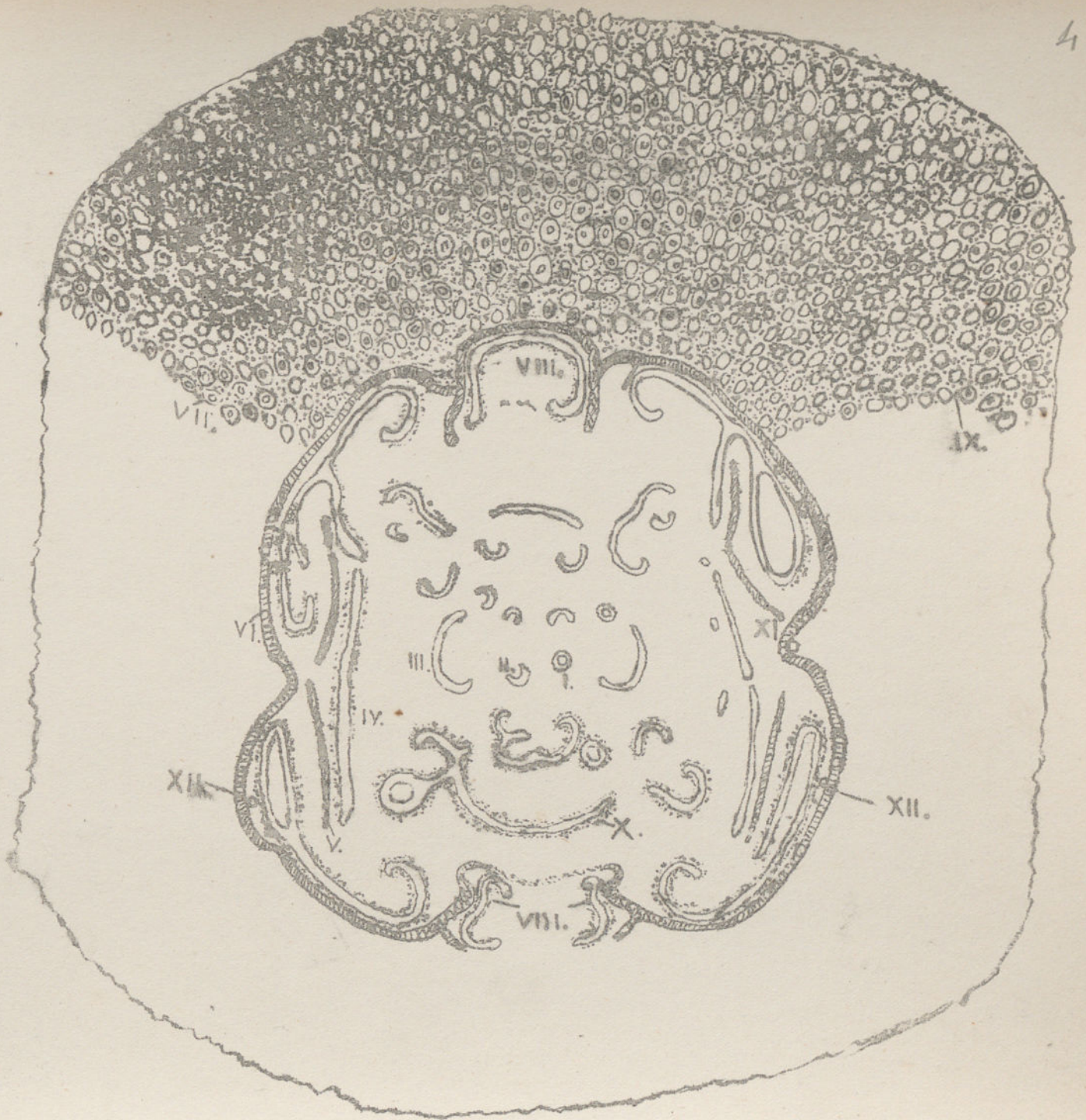
Troncs de Fougères fossiles coupés transversalement. terrain houiller supérieur.

1. *Psaronius infartus* — 2. *Psaronius musaeformis*.



Écorce de souche fossile du terrain houiller supérieur.

Praronius bibractensis. 1, faisceaux ligneux, 2, canaux adventifs intracorticaux.



Érone de Fougères fossile du terrain houiller supérieur.

Psaronius Brasiliensis, X faisceaux ligneux, XII, gaine sclérénchymateuse

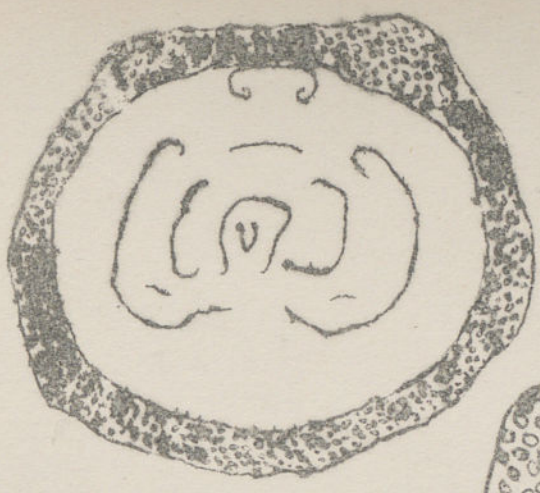
VII, IX racines adventives.



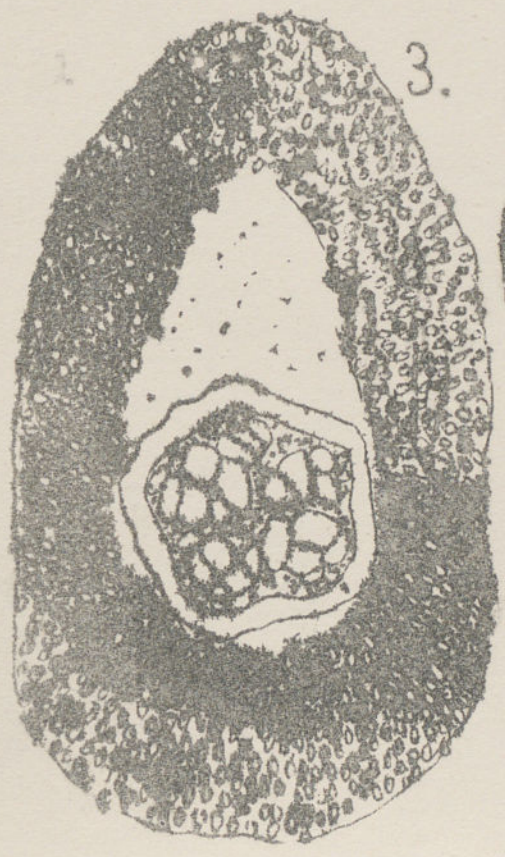
Écrans de Fougères fossiles du terrain houiller supérieur.

1. *Psaronius Desmolei* à différents âges.

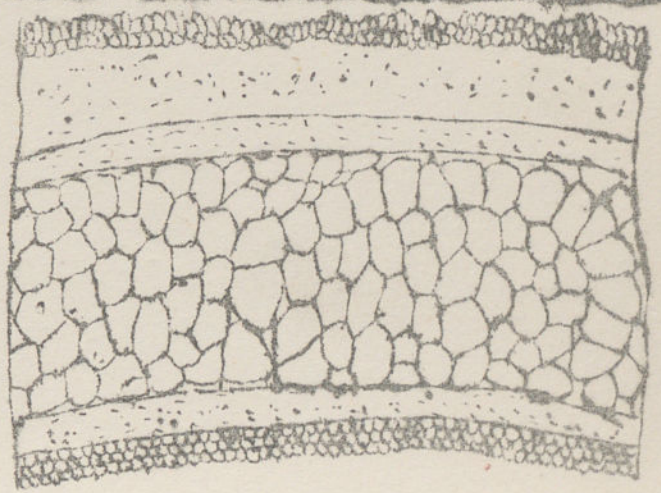
1



3.

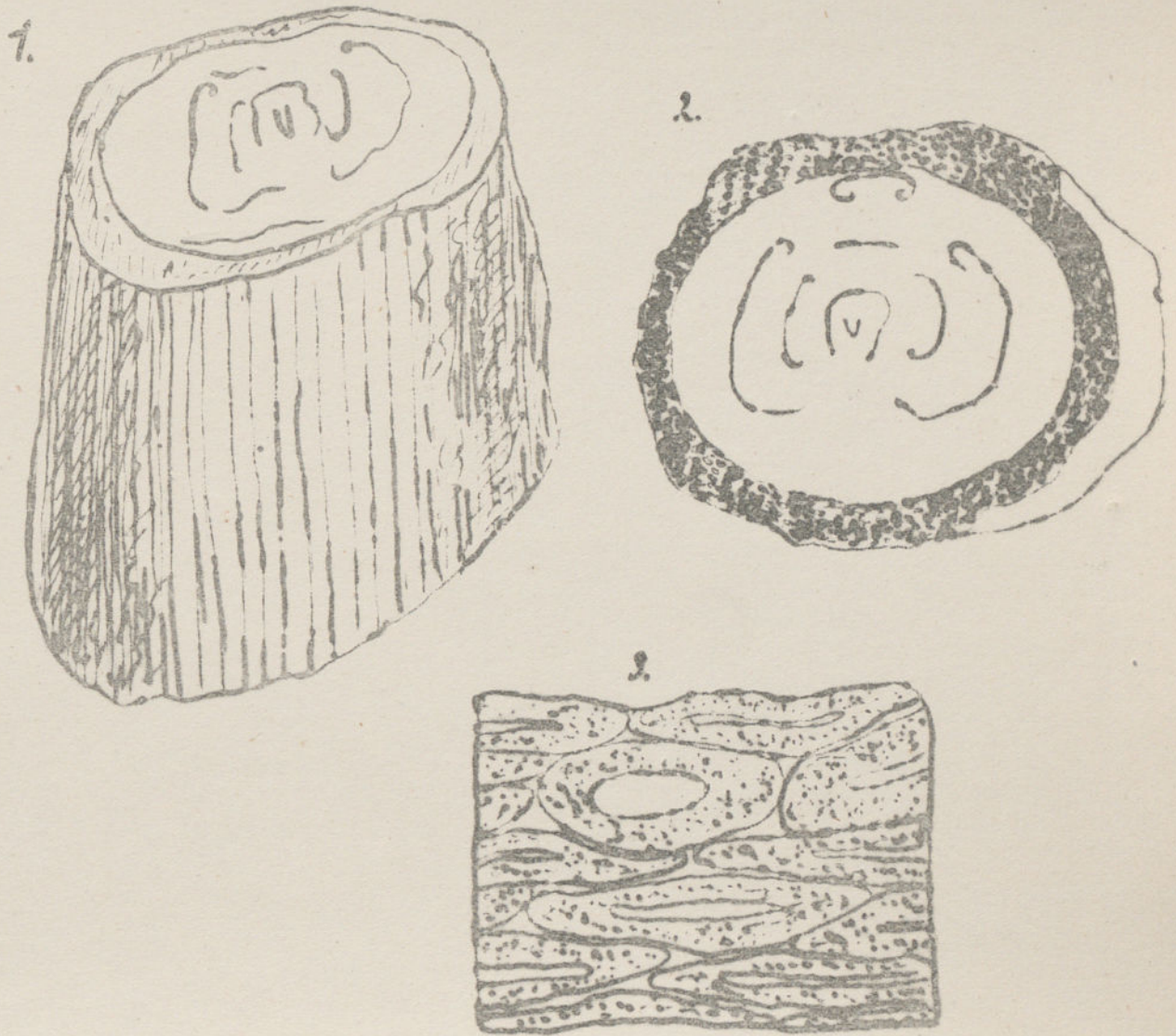


4.



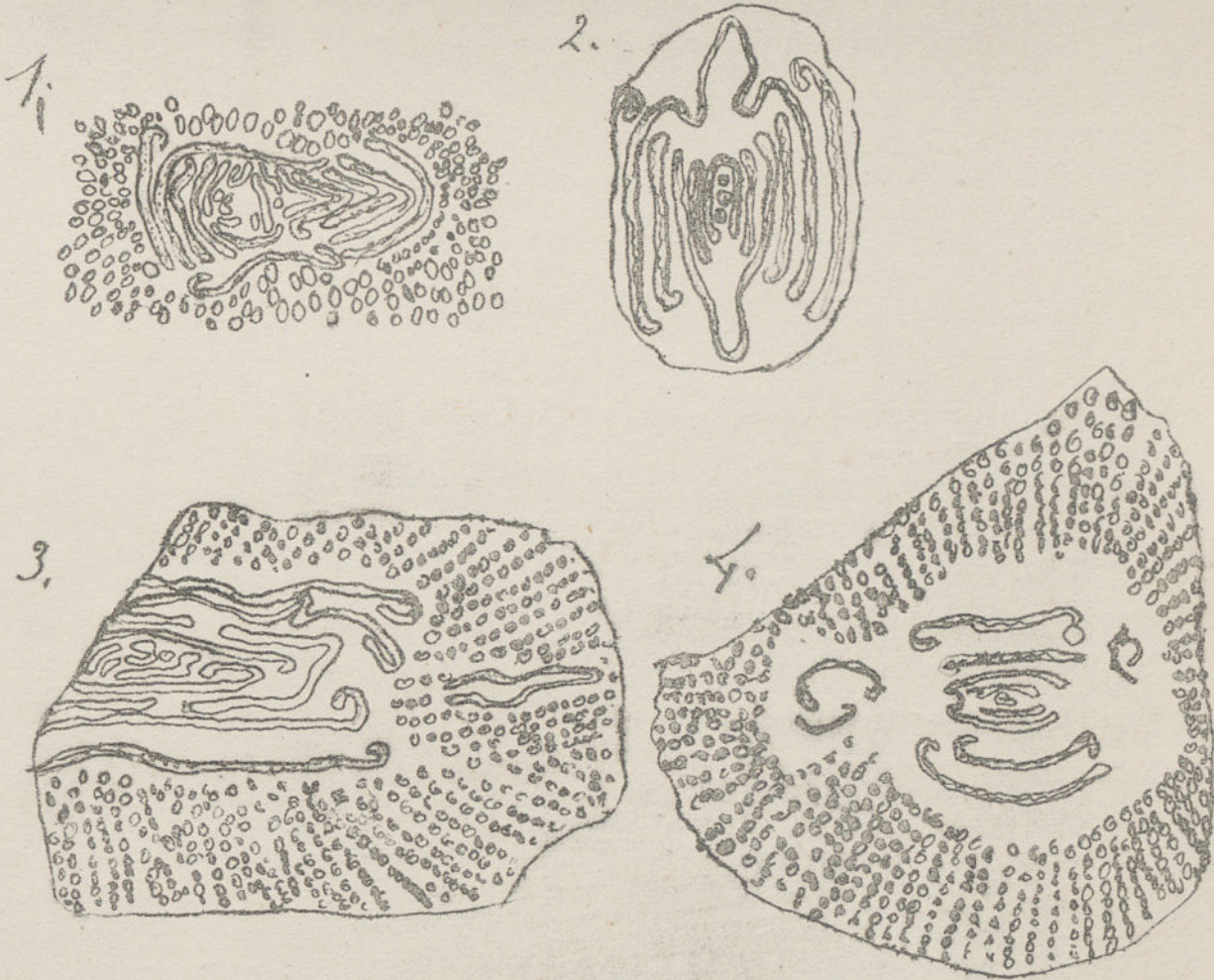
Études de Fougères fossiles coupés transversalement, du terrain houilles supérieures.

1 *Baronius carbonifer*, 2 *Bo. helmintholithus*, 3. racine grossie, 4 portion d. faisceau ligneux



Étapes de Fougères fossiles du terrain houiller supérieur.

1. *Psaronius musaeformis*, 2. *Ps. carbonifer*, 3. Coupe de racines adventives.



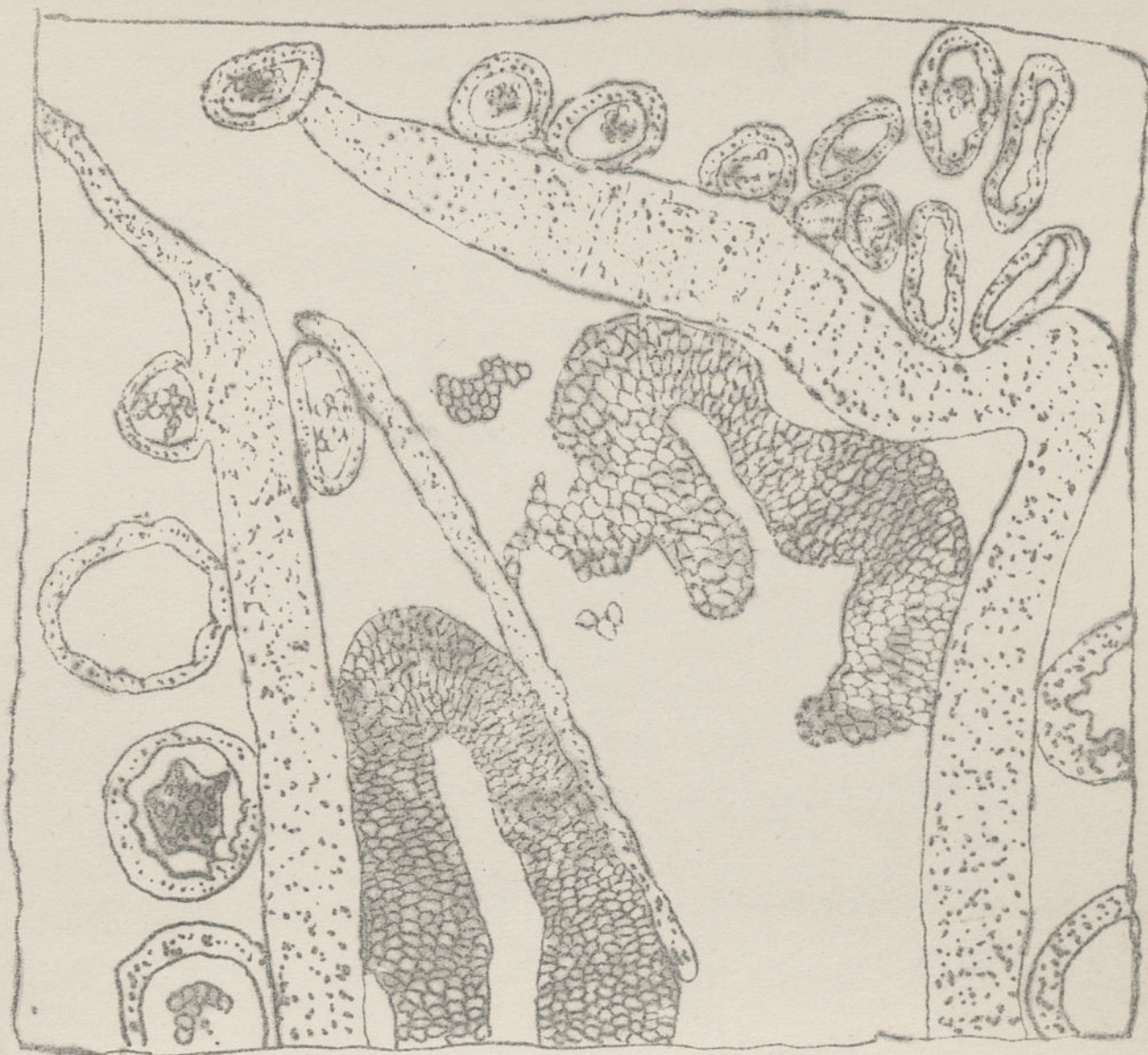
Frondes de Fougères fossiles du terrain houiller supérieur.

1 *Psaronius plicatus*, 2 ps. *Ungeri*, 3 ps. *plicatus*, 4 ps. *simplex*.



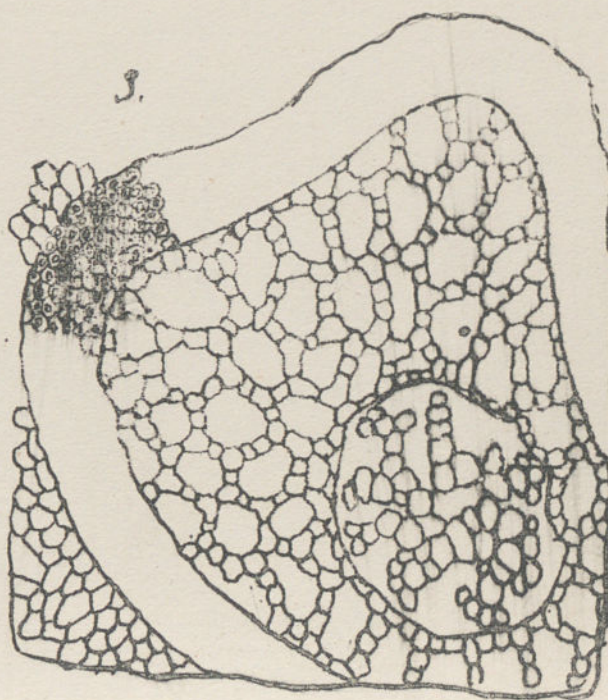
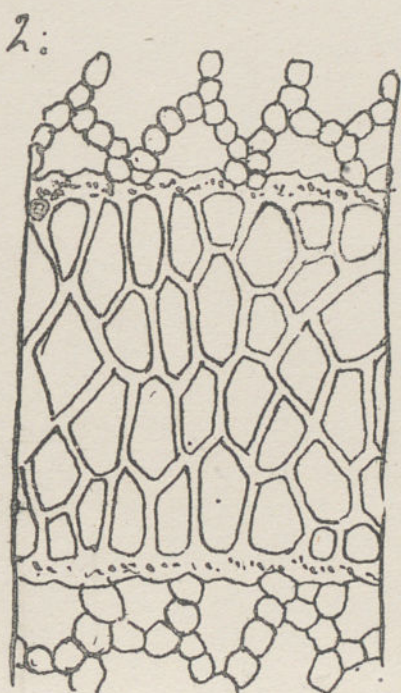
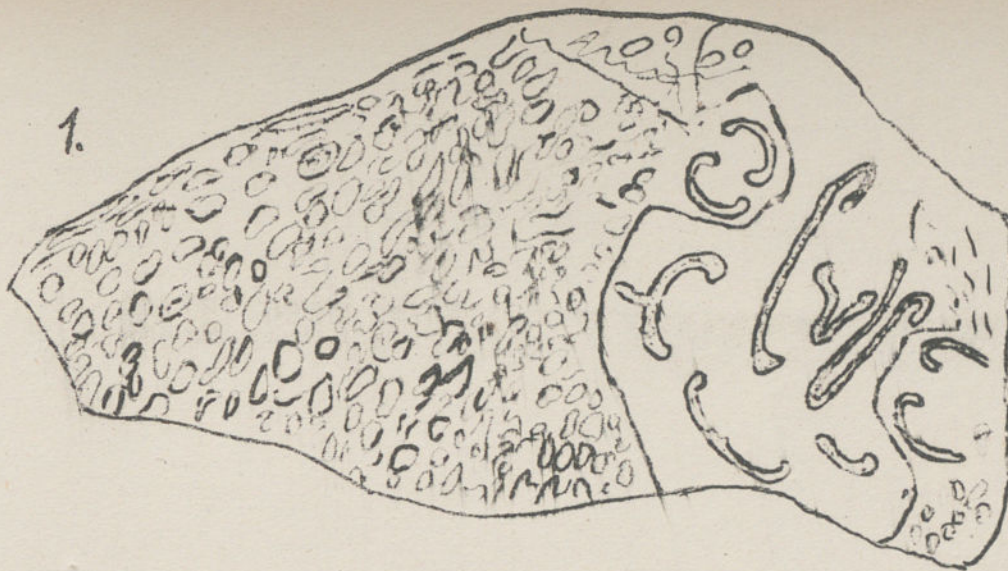
Troncs de fougères fossiles. Du terrain houiller supérieur.

1. *Psaronius conjugatus*, 2, 3. *Psaronius simplex*.



Portion de tronc de fougères fossiles. Du terrain houiller supérieur.

Psaronius cyathaeformis.



Tronc de Fougère fossile. Du terrain houiller supérieur.

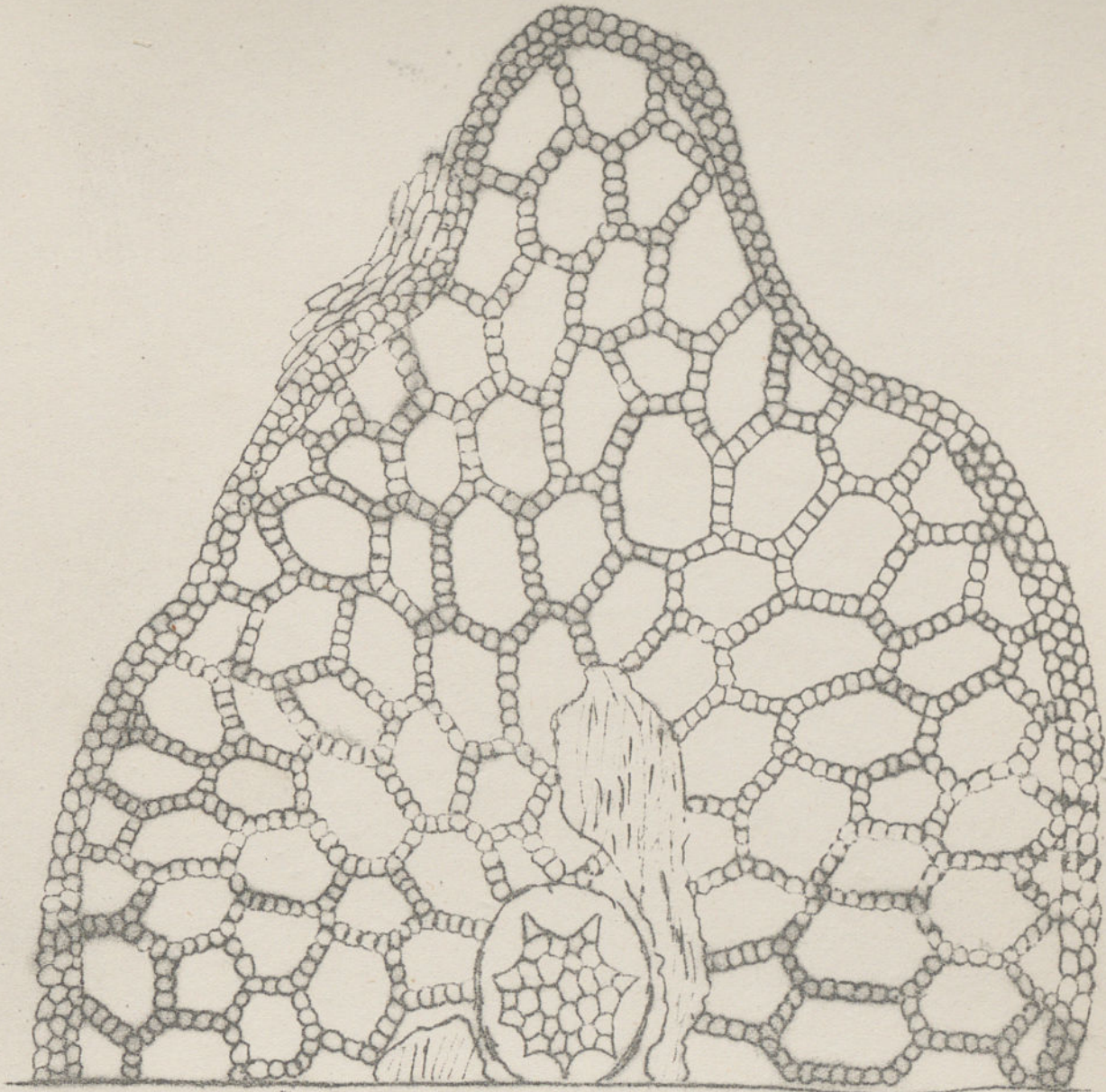
1. *Psaronius speciosus*. 2. Faisceau ligneux de la tige grossi. 3. Racine grossie.



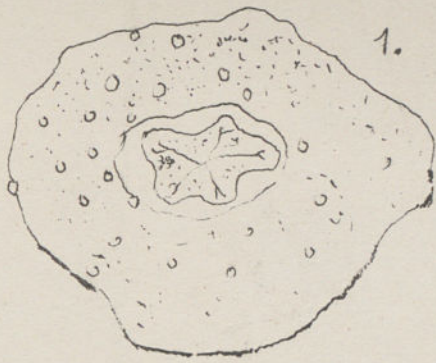
Tronc de Fougère fossile. Terrain houiller. et permien.

1, *Psaronius angustodunensis*, 2. Saisieux de la tige, 3. racine

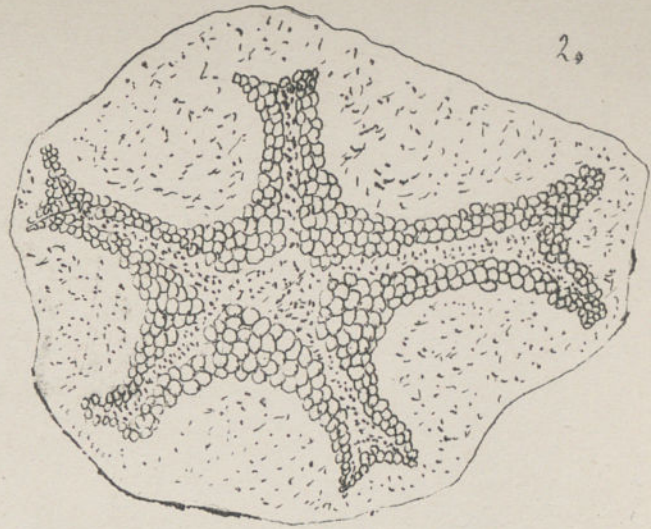
4. *Psaronius infarctus septangulus*



Racine de *Saronius giganteus*. Terrain houiller. et permien



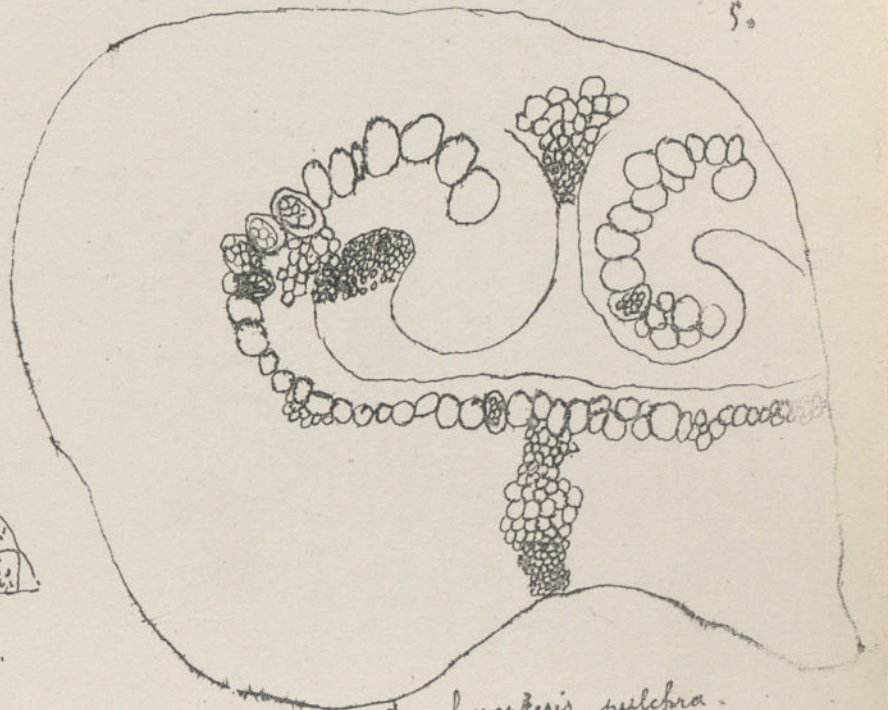
1.



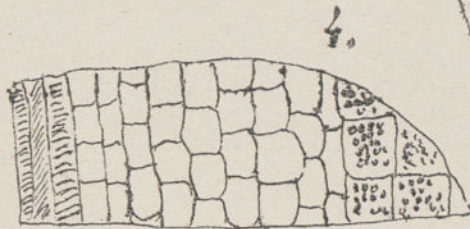
2.



3.



5.



4.

Anachoropteris Decaisnai.

Anachoropteris pulchra.

Feiges et pétioles de fougères. Terrain houiller, supérieur et permien.

1. *Anachoropteris Brongniarti*, 2. Partie centrale, 3. Section d'un pétiole.

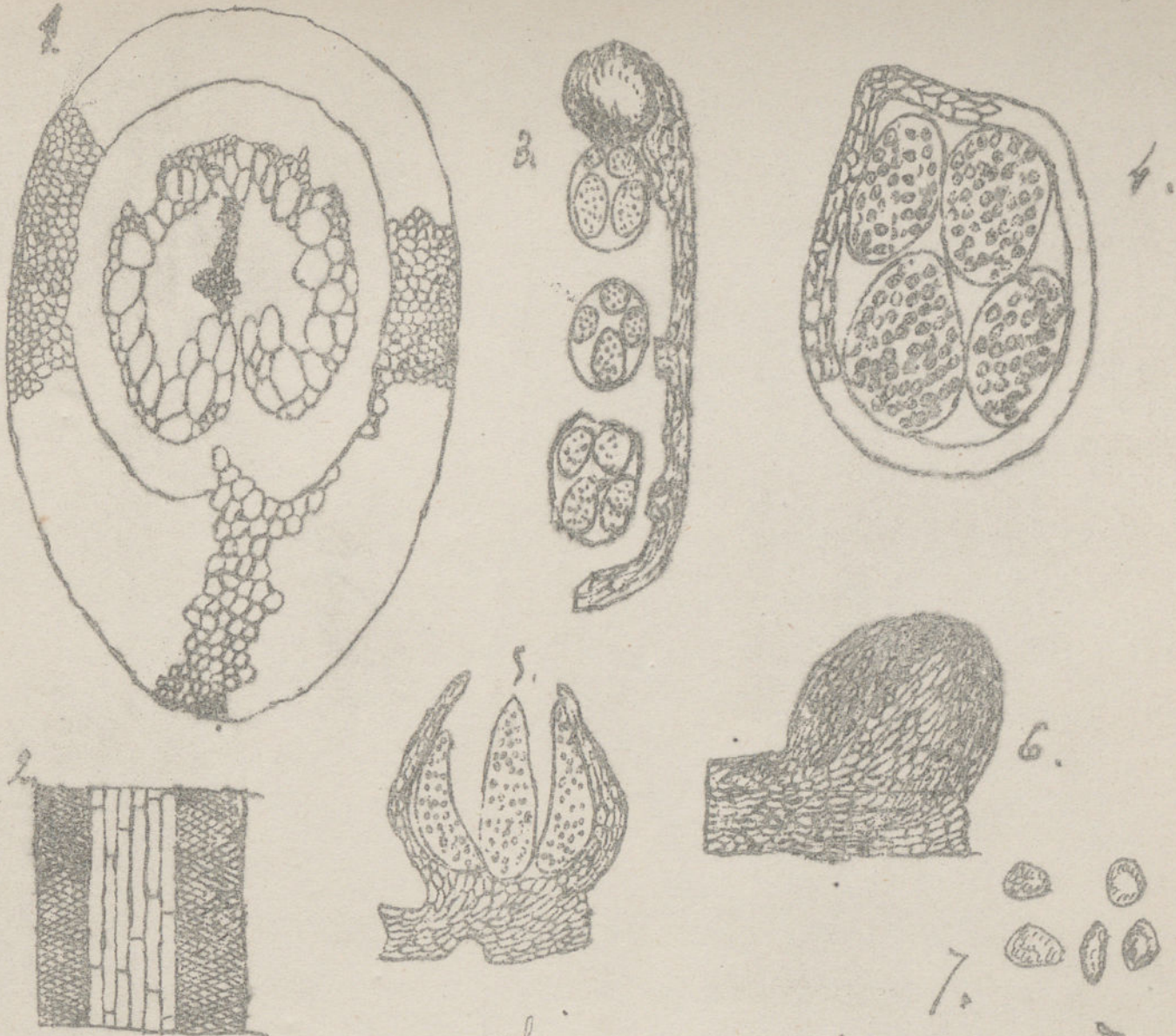
4. Section longitudinale. 5. Section transversale d'un pétiole d'*Anach. pulchra*.



Selenopteris Radnicensis

Petiole de Fougère fossile tertiaire houiller supérieur.

1, Vaisseaux ligneux, 2, et 3. coupe longitudinale du tissu cortical.



Ascheropteris rotundata, 1, 2.

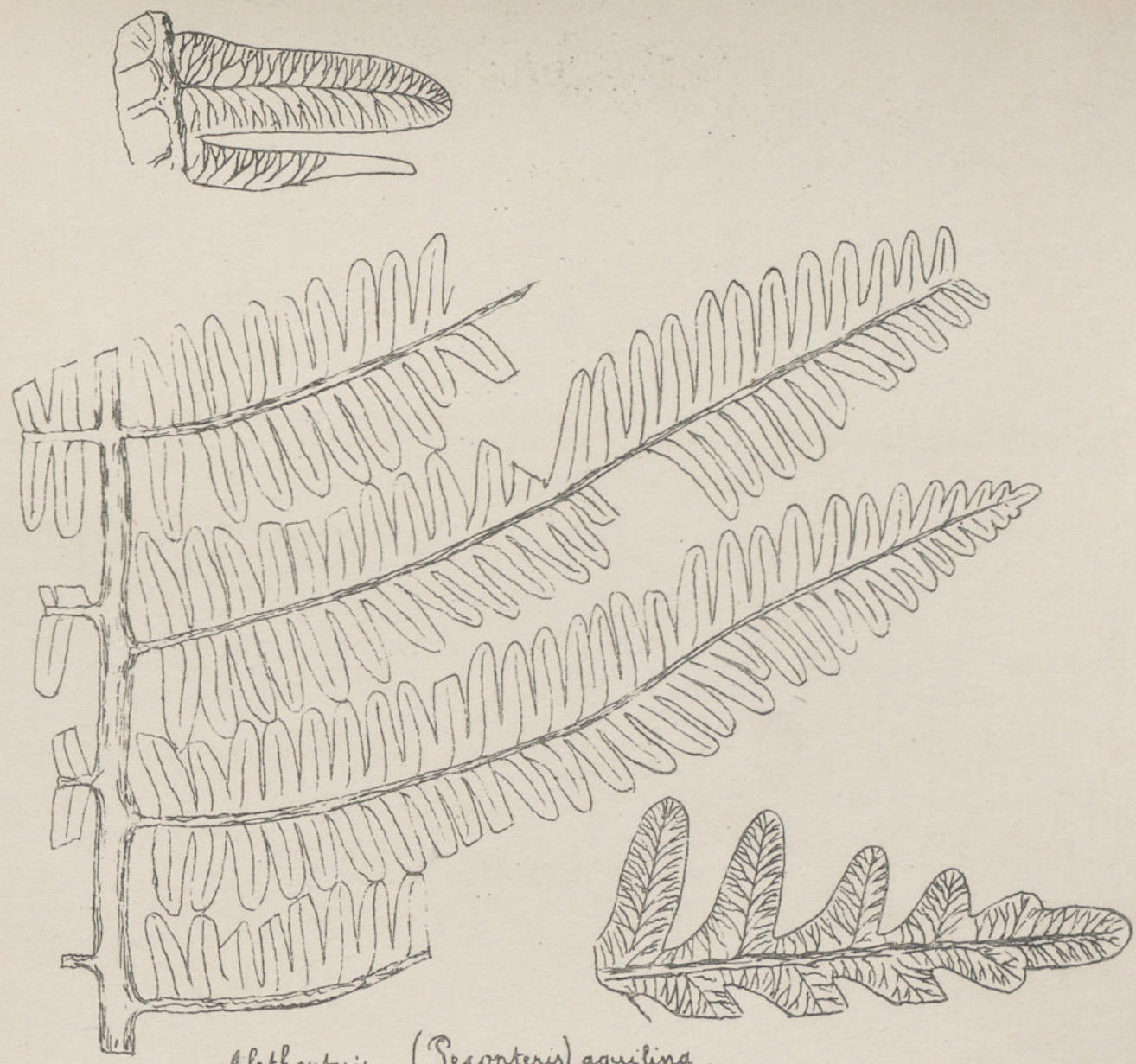
Chromanopteris gleichenioides, 3 à 7.

Coupe de pétioles de Fougères, terrain houiller moyen.

1. Section transversale, 2 Section longitudinale,

3. Pinnule portant des fructifications, 4, 5. coupes transversal et longitudinale

6. Sporangie vu de l'extérieur 7. spores.



Alethopteris (Pecopteris) aquilina.

Portion de fronde de Fougère terrain houiller supérieur.

Pinnules grossies pour montrer le mode de nervation



Alethopteris lonchitica.

Portion de Feuille de Fougère. Terrain houiller moyen.

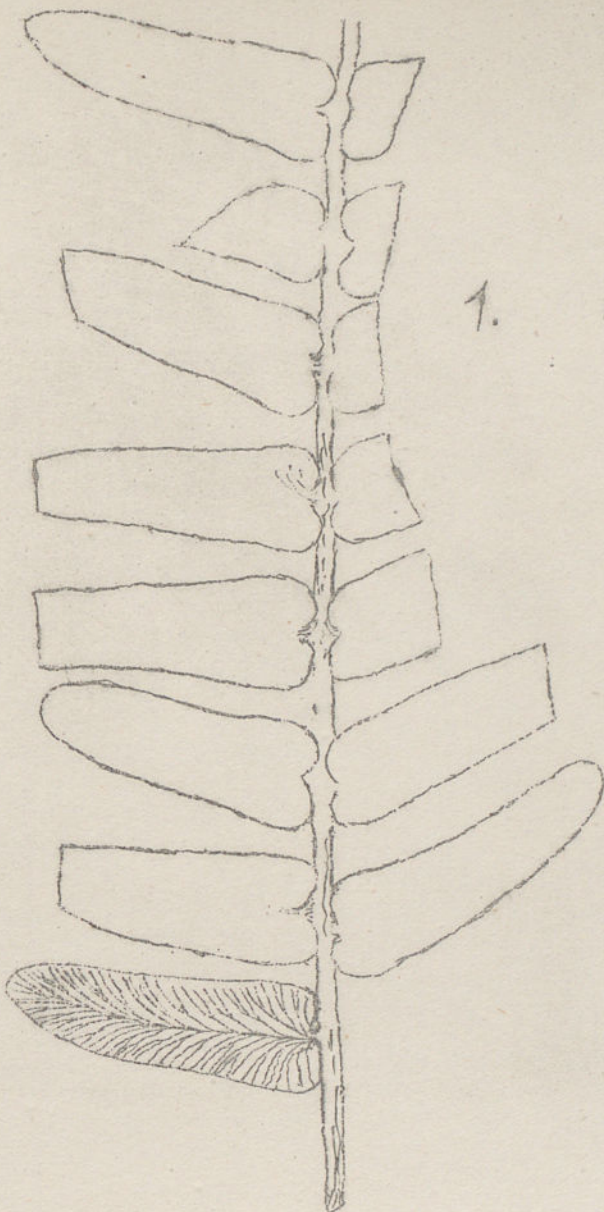
Pinnules grossies pour montrer le mode de nervation.



Neuropteris Lohkii.

Portion de fronde de Fougère — terrain houiller supérieur.

Pinnules grossies pour montrer le mode de nervation.



Nevropteris macrophylla.



Nevropteris flexuosa.

Portion d. fronde d. fougère fossile terrain houiller moyen.

Pinnules grossies pour montrer le mode de nervation.



Neuropteris heterophylla.

Portion de fronde de Fougère fossile. Terrain houiller moyen.

Penne et pinnule grossie pour montrer la nervature.



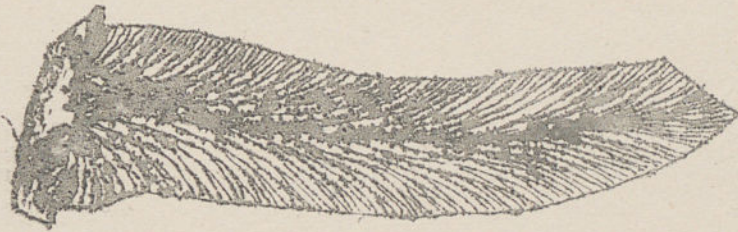
Neropteris auriculata.

Portion de fronde de Fougère fossile - terrain houiller supérieur.

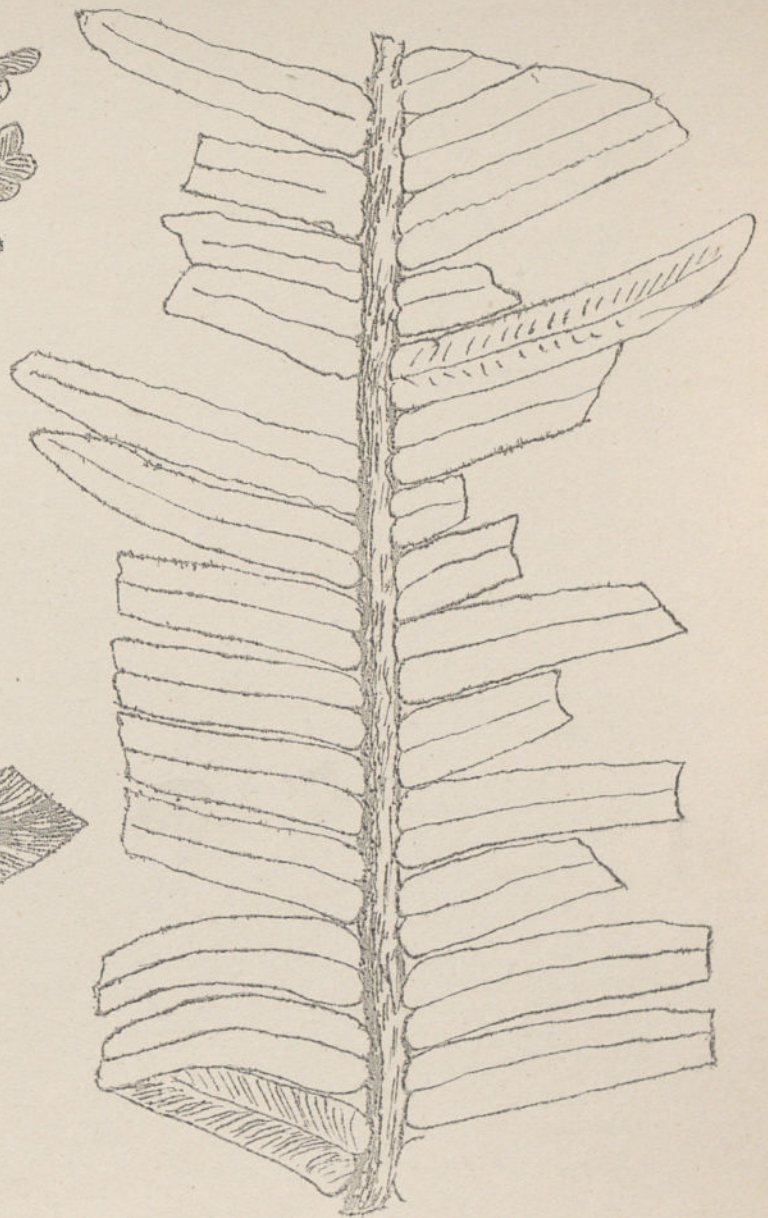
Pinnule grossie pour montrer la nervation.



Odontopteris schlotheimii.

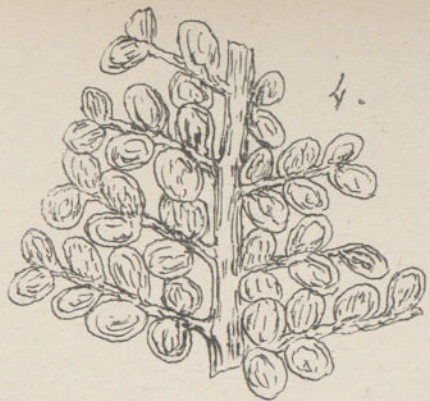


Neuropteris Voltzii.

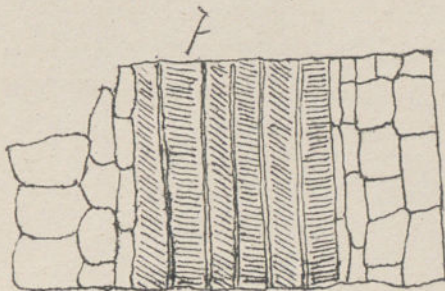
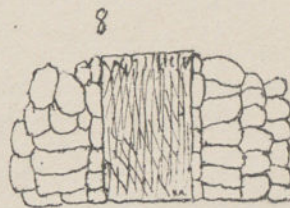
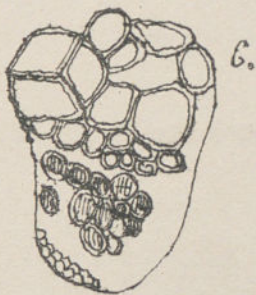
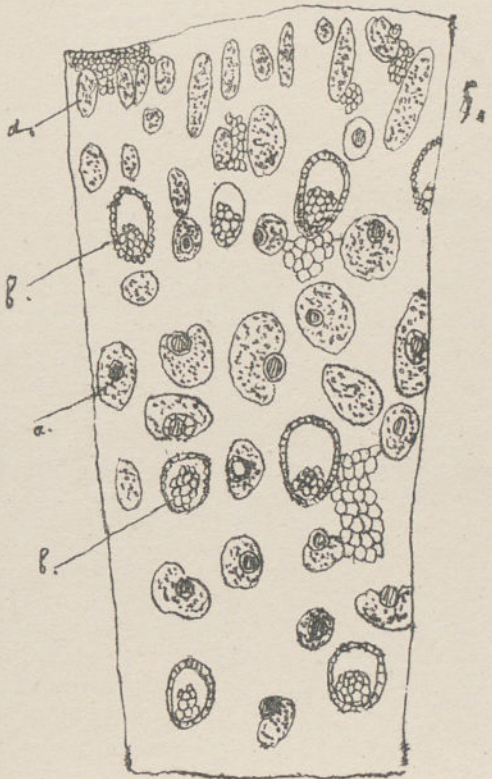
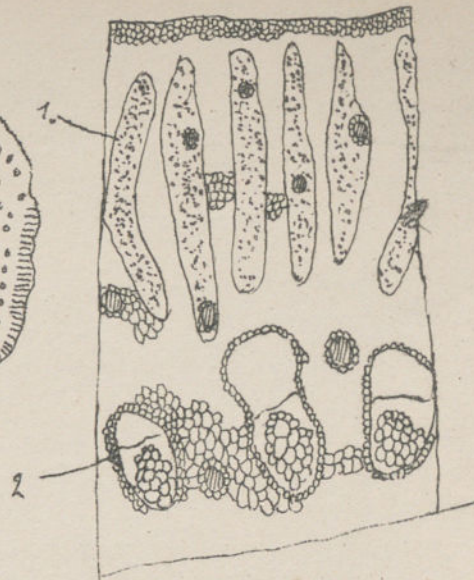
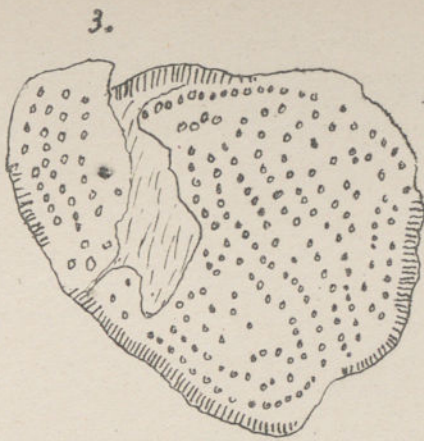


Portion d. fronde de Fougères fossiles - terrain houiller supérieur et magen trias.

Pinnule grossie pour montrer la nervature.



odontopteris vesicularis.

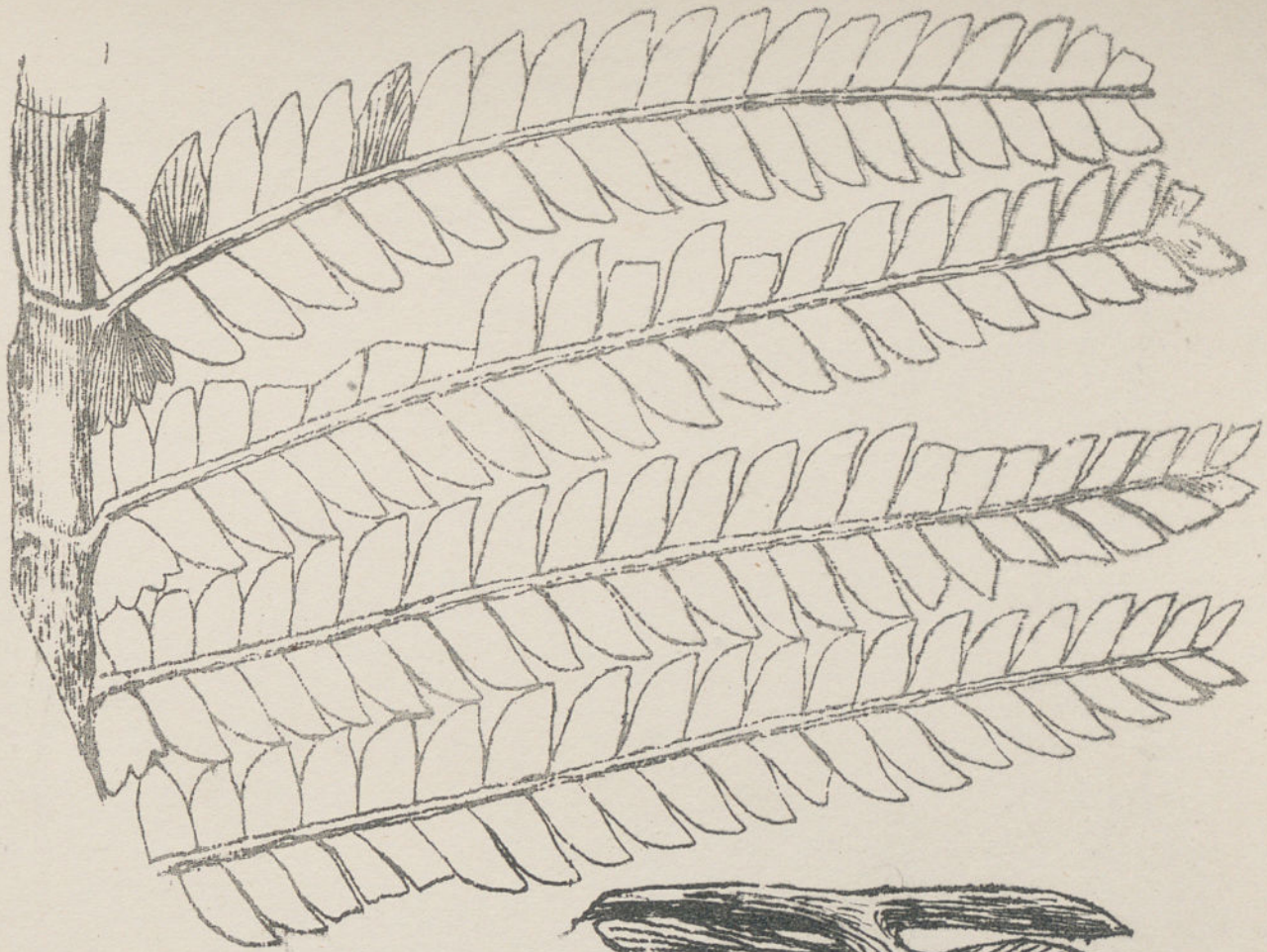


Bâcles de Neuropteridées.

Structure anatomique.

12, *Mylopteris radiata*. 3. Section transversale. 4. *odontopteris fructifié* -

5. *Mylopteris Landriotti*, 6. faisceau vasculaire. 7. coupe longitudinale d'un faisceau, 8 canal gommeux.

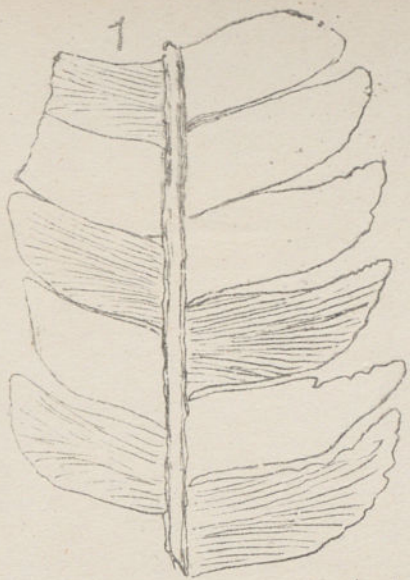


Odontopteris Brandii.



Portion de fronde de Fougère fossile. Terrain houiller supérieur.

Pinnule grossie pour montrer la nervation.



odontopteris crenulata.



Odontopteris obtusa.



Od. Schlotheimii.



Od. minor.

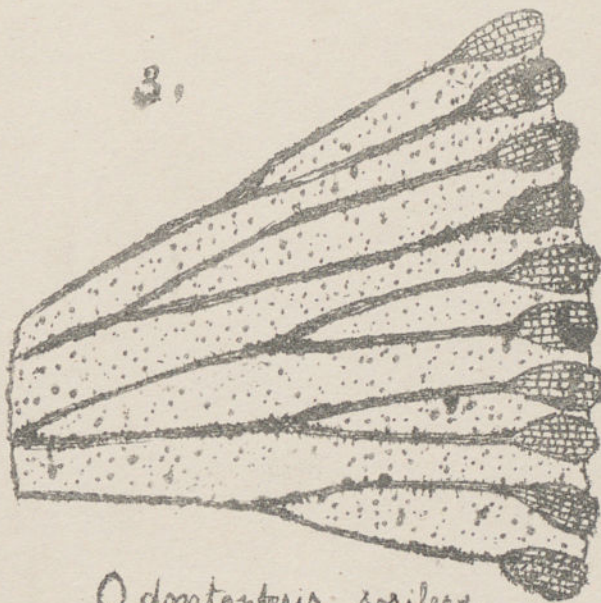
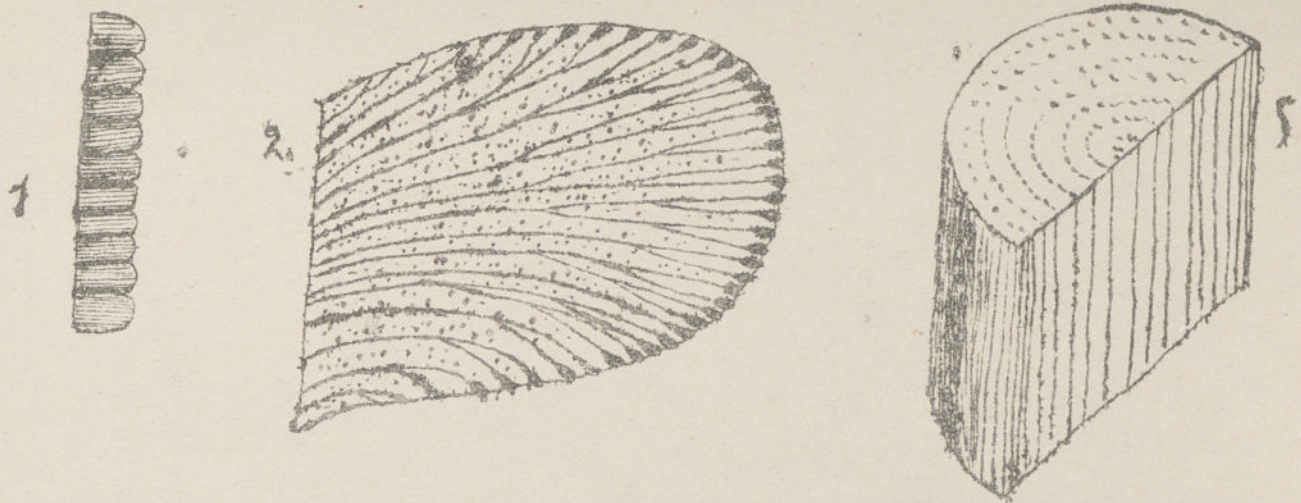
Portion de frondes et pinnules d. Fougères fossiles - terrain permien.



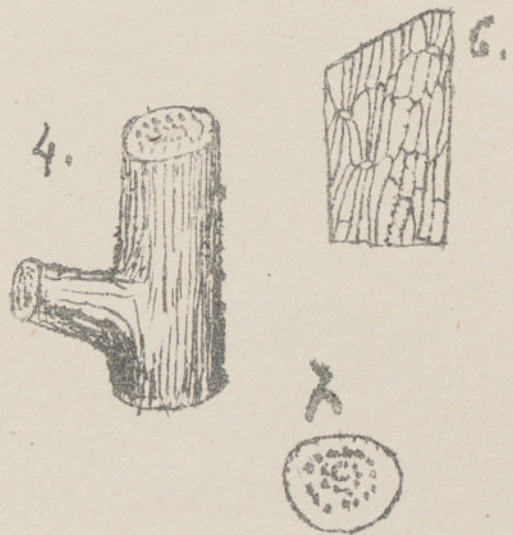
Odontopteris Reichiana,

Sort de fougères fossile. terrain houiller supérieur

Echantillon réduit au centième - tronc - frondes - pinnules.



Odontopteris scirifera

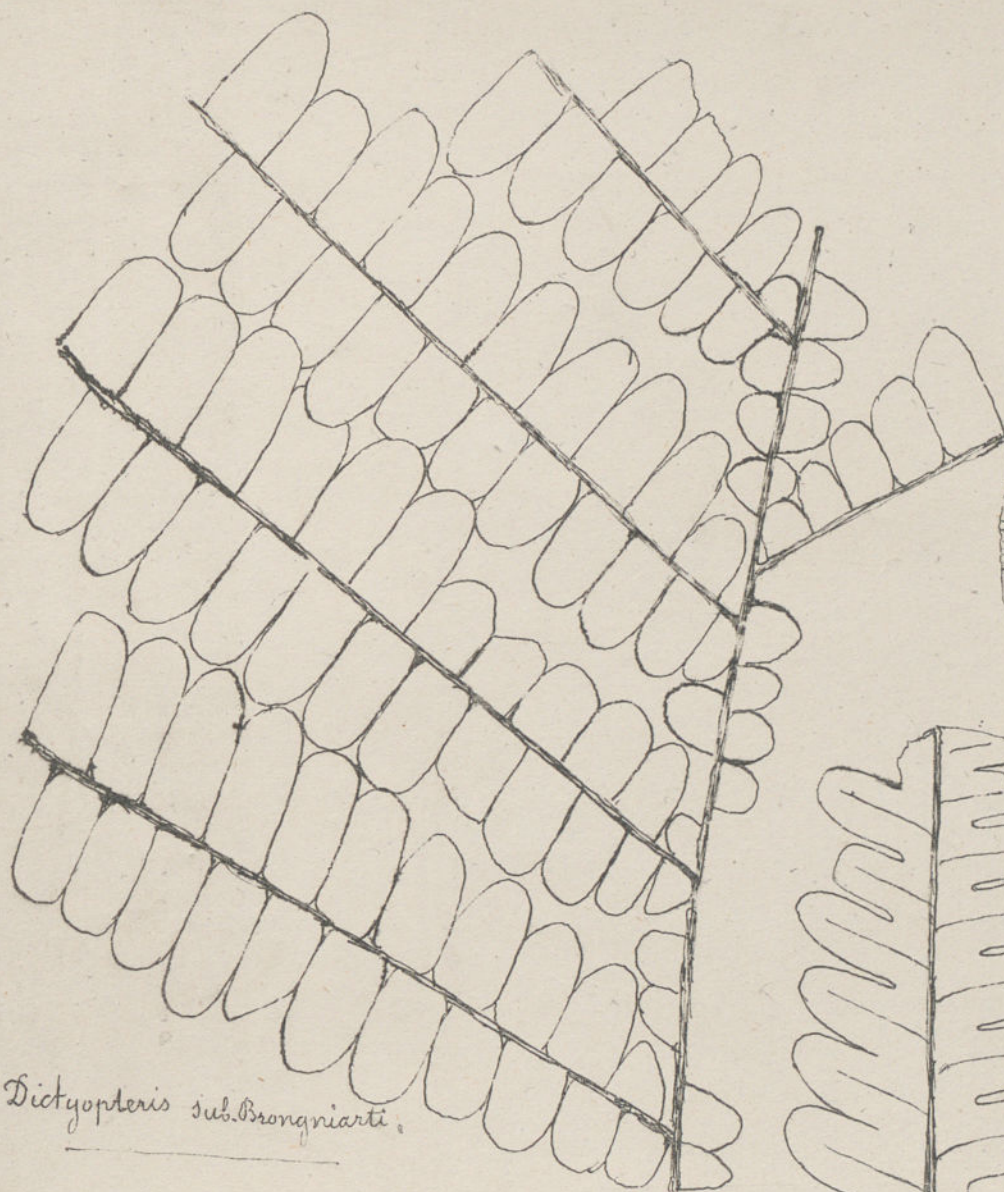


Myelopteris simplex

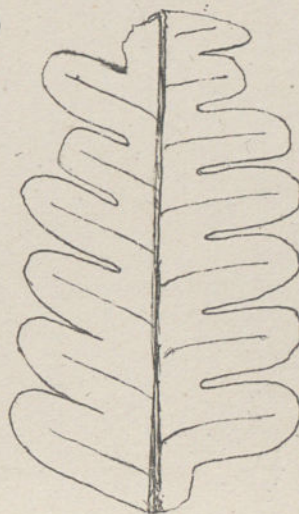
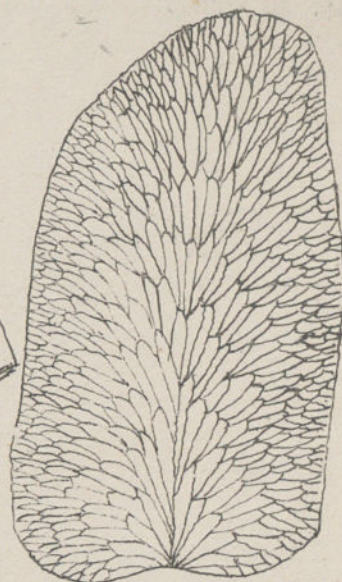
Odontopteris fructific. terrain houiller supérieur.

1 Portion de fronde, 2 pinnule grossie 3. Sores terminant les nervures, 4 embranchement.

6. Epiderme, 7. Section du rachis, 5 Coupe longitudinale d'un stipe.



Dictyopteris sub.Brongniarti.



Lonchopteris Bricii.



Portion d. fronde d. fougère fossile terrain houiller supérieur, et moyen.

Pennes. stériles, pinnules grossies pour montrer la nervation.



Mariopteris nervosa (Br.) Zeiller.

Portion de fronde de fougère fossile - terrain houiller moyen.

Penne stérile, pinnules grossies montrant la nervature.



Sphenopteridium dissectum.



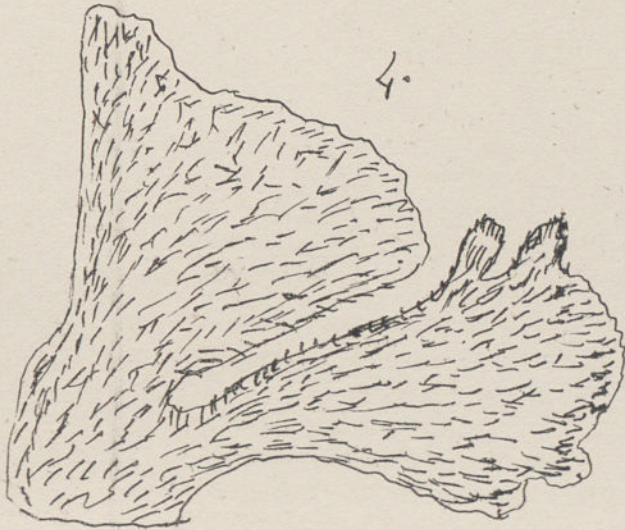
Rhacopteris elegans.



3.



Rhacophyllum flabellatum.



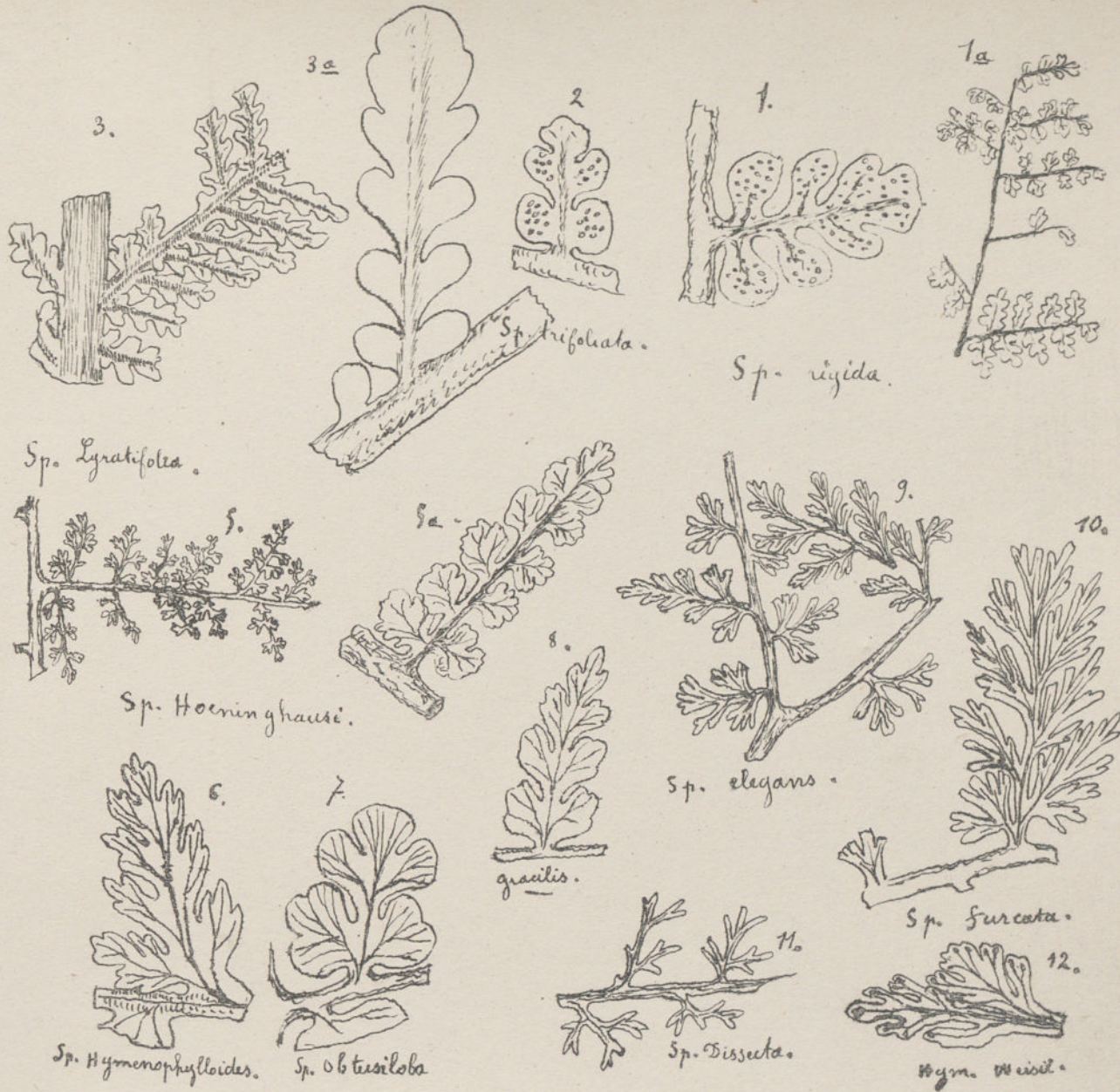
*Spiropteris
Erdmani.*

4.

Fronds of Fossils - and prothalles.

1, 2, terrain houiller inférieur, 4, 5, terrain houiller supérieur.

3, fructifications de Rhacopteris.



Portcons de frondes de Fougères fossiles - Terrain houiller inférieur -

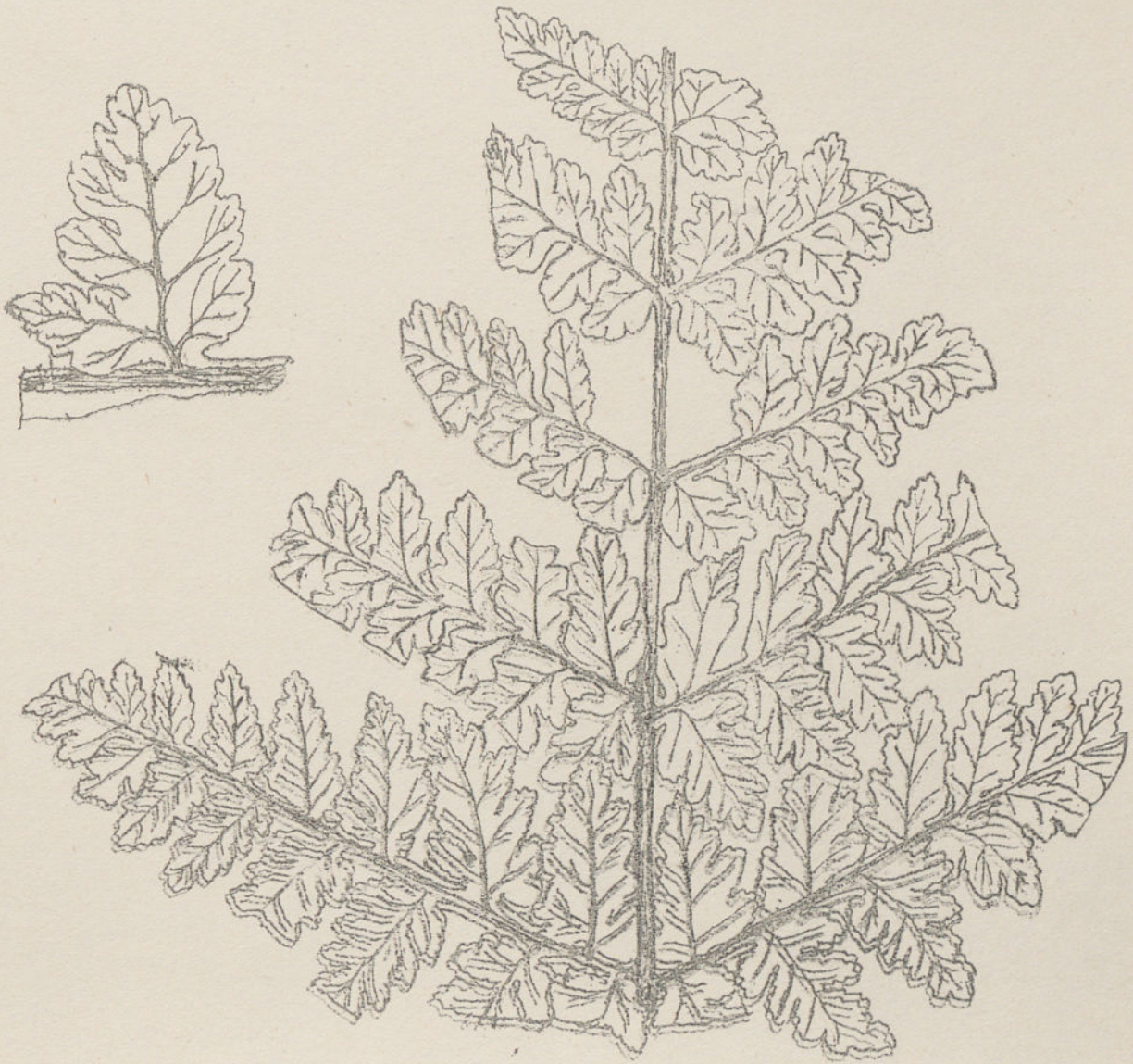
Sphénoptéroides Diverses



Portion de Frond. 3. Fougère - terrain houiller moyen

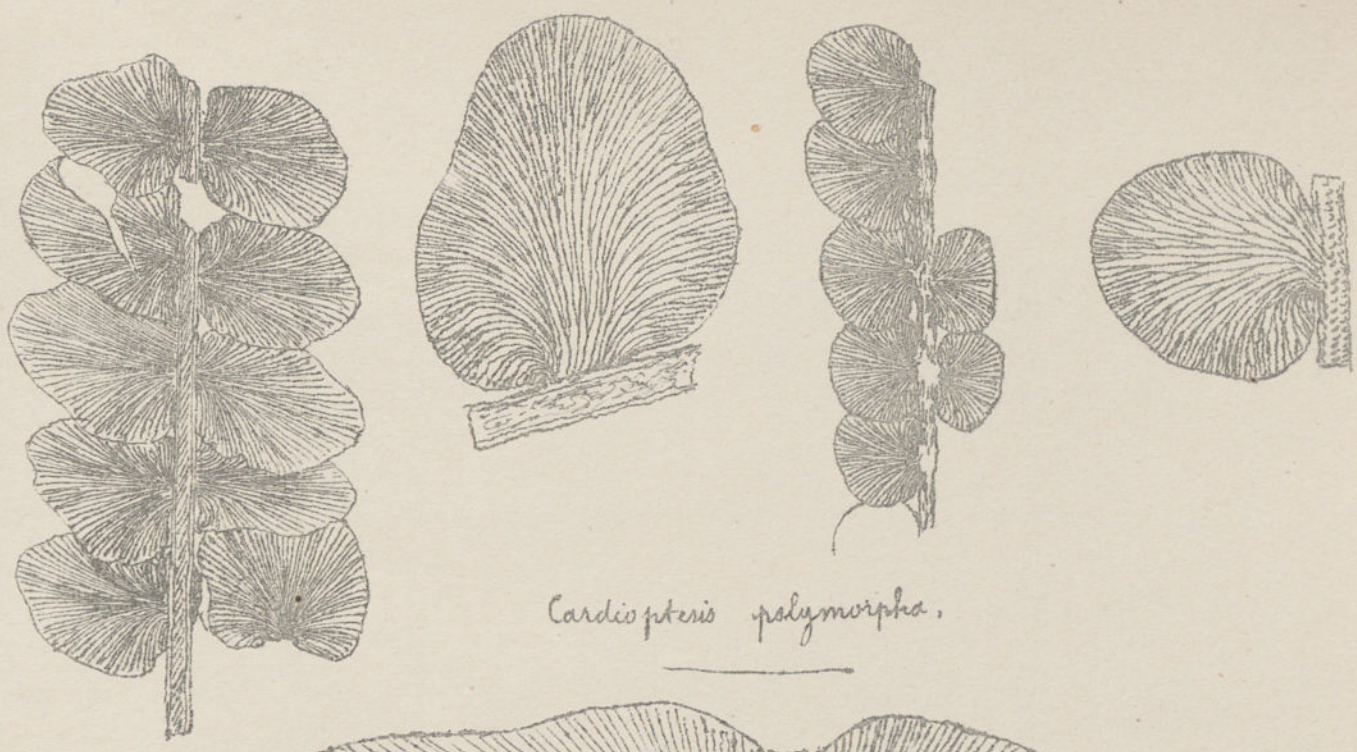
1 frond., 2 Sphenopteris Hoeninghausi, 2 et 3 pennes tertiaires avec leurs pinnules.

Sphenopteris alata.

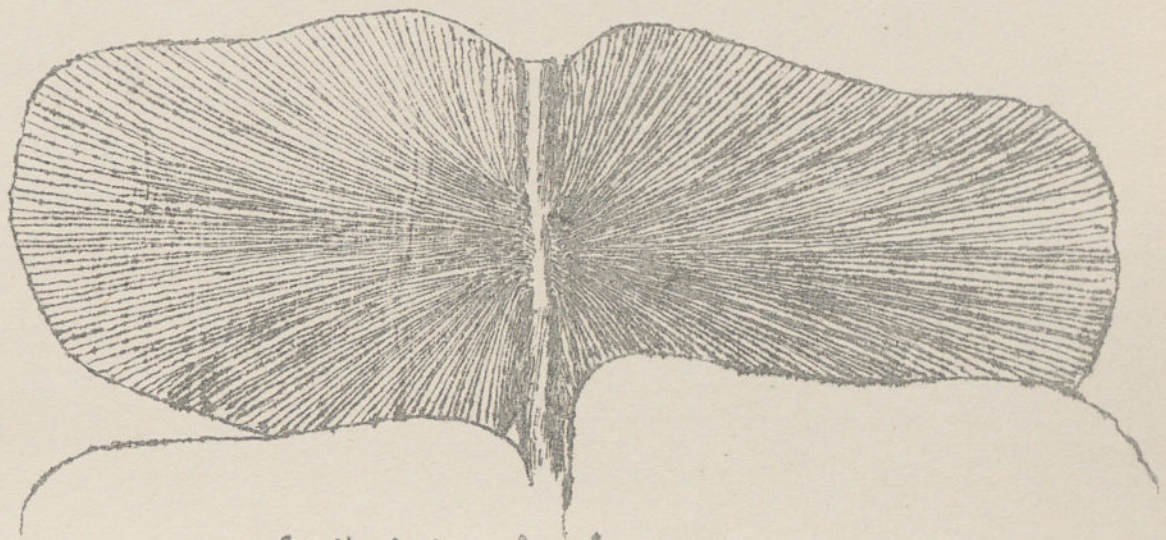


Portion d. frond. de fougère - terrain houiller moyen.

Pinnule grossie montrant la nervature.



Cardiopteris polymorpha.



Cardiopteris frondosa.

Portion d. fronde de fougère du terrain houiller inférieurs.

Pinnules grosses montrant la nervation.



Salaspteris hibernica.

Triphylopteris collombi.

Calymenophyton Stangeri.

Frondes de Fougères du terrain houiller inférieur et du terrain Devonien.

1, 2, 3 Frondes stériles et fructifères, 4 fronde stérile, 5 pinnule fructifère

6. pinnule stérile, 7 pinnule fructifère.



Palaeopteris hibernica.

Portion 1. fronde 2. fougère Du terrain dévonien

2. pousse fructifiée, 3 fructifications.



Types de Fougères Devonniennes.

Fougères du terrain Devonien.

1. *Sphenopteris marginata*, 2 pinnule grossie montrant la nervation, 3. *Sphenopteris splendens*.

4. *Cyclopteris obtusa*. 5 pinnule séparée. 6 *Neuropteris polymorpha*. 7 pinnule séparée

8 *Archaeopteris Jacksoni* 9 fructification de même.