

## KEY TO PLATE I.

## FRUITIFICATIONS OF NEW ZEALAND FERNS.

(FROM SYNOPSIS FILICUM).

1. GLEICHENIA. *a*, fertile pinnule of Eugleichenia. *b*, fertile pinnule of Mertensia.
2. CYATHEA. *a*, fertile pinnule, one sorus open to show the capsules. *b*, sorus when open.
3. HEMITELIA. *a*, part of fertile pinnule of Amphicosmia, with one sorus empty.
4. ALSOPHILA. *a*, fertile pinnule.
5. DICKSONIA. *a*, sorus of Balantium, open and shewing capsules.
6. LOXSOMA. *a*, sorus. *b*, fertile pinnule.
7. HYMENOPHYLLUM. *a*, fertile pinna with open sorus.
8. TRICHOMANES. *a*, sorus inserted in edge of frond. *b*, sorus exserted or stalked.
9. DAVALLIA. *a*, fertile pinnule of Leucostegia. *b*, fertile pinnule of Eudavallia.
10. CYSTOPTERIS. *a*, fertile pinnule. *b*, sorus and involucre.
11. LINDSAYA. *a*, fertile pinnule, showing sub-marginal sorus.
12. ADIANTUM. *a*, fertile pinnule and sori.
13. HYPOLEPIS. *a*, fertile pinnule and sori.
14. CHEILANTHES. *a*, fertile pinnule and sori.
15. PELLŒA. *a*, fertile pinnule and sori.
16. PTERIS. *a*, fertile pinnule of Eupteris. *b*, fertile pinnule of Pœsia. *c*, fertile pinnule or lobe of Litobrochia.
17. LOMARIA. *a*, fertile pinna. *b*, barren pinna.
18. DOODIA. *a*, half of fertile, pinna showing sori.
19. ASPLENIUM. *a*, fertile pinnule of Euasplenium. *b*, fertile pinnule of Darea. *c*, fertile pinnule of Athyrium. *d*, fertile pinnule of Diplazium.
20. ASPIDIUM. *a*, sorus and involucre. *b*, fertile pinnule of Polystichum.
21. NEPHRODIUM. *a*, fertile pinnules of Euneurodium. *b*, part of fertile pinnule of Lastrea.
22. NEPHROLEPIS. *a*, fertile pinna and sori.
23. POLYPODIUM. *a*, fertile pinnule of Phogopteris. *b*, fertile pinnule of Grammitis. *c*, fertile portion of Goniopteris. *d*, fertile portion of Niphobolus. *e*, stellate hairs of Niphobolus. *f*, fertile portion of Phymatodes.
24. NOTHOCHLŒNA. *a*, fertile pinnule and sori.
25. GYMNOGRAMMA. *a*, fertile pinnule and sori.
26. OSMUNDA. *a*, pinnule, partly barren, partly fertile.
27. TODEA. *a*, fertile pinnule of Eutoda. *b*, fertile pinnule of Leptopteris.
28. SCHIZŒEA. *a*, fertile spike. *b*, one limb of spike with capsules.
29. LYGODIUM. *a*, portion of barren frond or limb. *b*, portion of fertile frond or limb.
30. MARATTIA. *a*, portion of fertile frond with synangium and fimbriated inferior involucre. *b*, synangium open, showing chambers containing the capsules.
31. OPHIOGLOSSUM. *a*, portion of barren frond showing veins. *b*, portion of fertile spike with sori.
32. BOTRYCHIUM. *a*, pinnule of barren fronds showing veins. *b*, portion of fertile spoke with sori.
33. CAPSULES, &c. *a*, capsules of Gleicheniaceæ. *b*, capsule of Cyatheaceæ, with escaping spores. *c*, capsule of Loxsoma. *d*, spores very highly magnified. *e*, capsule of Trichomanes. *f*, capsule of Schizœeaceæ.
34. MINOR DETAILS. *a*, section showing capsules arranged on an elevated receptacle. *b*, section showing scale and cell of Lygodium, with included capsule.